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# Evaluating the Impact of Outsourcing Transport Logistics on Organisational Performance: The Study of Six Alcoholic Beverage Producing Companies in Ghana

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#### Abstract

The importance of outsourcing to the development of firms cannot be overemphasized. Outsourcing reduces cost and increases profitability. The study evaluated the impact of outsourcing transport logistics on organizational performance. The study used the following objectives: To find out the reasons for outsourcing transport logistics in alcoholic beverage producing companies, to identify the challenges associated with outsourcing and to assess the impact of outsourcing on the profitability of the organization. The study used six alcoholic beverage producing companies in Ghana and adopted mixed research approach. A sample size of 100 was used. The study was analyzed through the effect model using Stata version 12. 30 observations were analyzed to evaluate the impact of outsourcing transport logistics on organizational performance. Among the findings, the reasons for outsourcing were identified as follows: improving the company's focus; accessing world class capabilities; helping companies to free resources for other purposes; sharing and minimizing risk; infusing cash into organizations; and helping to reduce and control operating cost of companies. Challenges of outsourcing transport logistics were identified as: loss of control; dissatisfied customers; leakage of confidential information; staff retrenchment and; high switching cost. The study rev<mark>ealed that lower t</mark>ransport cost leads to increased profitability of selected alcoholic beverage producing companies in Ghana. Larger firms can outsource their transportation since by outsourcing, the transport cost become lower. Asset tangibility has a negative coefficient. Based on the above, the study recommended the following: There should be agreement on certain particular quality standards with third party service providers; management should not outsource to service providers engaged in multiple contracts; and staff should be reassigned to other tasks when their function is outsourced.

Keywords: Outsourcing Transport, Logistics, Organisational Performance

# 1.0 INTRODUCTION 1.1 Background

According to Moeen et al. (2013), outsourcing transport logistics is an arrangement whereby an entity engages a service provider to perform transport services for a firm. Elements of logistics include transportation, warehousing, inventory management, packaging and information processing. Transport management deals with the modes of transport, transport infrastructure, geographical location, type of delivery, load planning, routing and scheduling. The primary function of transportation is to move goods from one location to another (Rushton and Walker, 2007). Issues to be considered in undertaking warehousing decisions include location, number, size, type of storage and material handling equipment. According to Hosie (2008), inventory management is a method used for organizing, holding and replenishing stock. Hotler et al. (2008) noted that packaging offers protection and value to the products and information management refers to the collection, management of information system from sources of the information to the distribution of the information. The logistics process is comprised of four levels namely 1st level; 2nd level; 3rd level and 4th level. According to Vorst et al. (2007), first level process involves the execution or of basic activities. Basic activities include transportation and warehousing. Second level process involves value-added activities. Value added activities include packaging. Third level process involves planning and control. The main activities which are outsourced at the third level include inventory and transportation management. According to Rushton and Walker (2007), the fourth level which is also the top level of logistics activities involve the distribution

network design. Factors to consider before outsourcing include: core competencies, critical knowledge, internal human resource, quality, cost and strategic analysis. There are several reasons for outsourcing. By outsourcing certain functions of an organization, there is elimination of certain fixed costs which leads to an enhancement of the organization's efficiency (Hirschheim and George, 2007).

Outsourcing leads to improvement in performance. According to Manono (2012), outsourcing is undertaken with the aim of improving a company's focus. Outsourcing is undertaken where there is world class capability. By outsourcing certain activities to a third party, resources which were used to render the services are freed for other purposes. Outsourcing certain key services to external organizations ensures that risk is shared between the outsourced company and the entity. There are several challenges bedeviling outsourcing certain functions to third parties. For example, outsourcing leads to loss of control over the operation of the organization. Outsourcing also leads to dissatisfaction among clients. According to Sang (2010), outsourcing may lead to leakage of confidential information to competitors. By outsourcing certain business functions to an external service provider, human resource engaged to undertake that particular business function may be retrenched. Lastly, outsourcing may bring about high switching cost.

#### 1.2 Statement of the Problem

Considering the fact that outsourcing logistics improves the operational efficiency of an entity, outsourcing leads to improvement in performance, outsourcing aims at improving a company's focus, outsourcing is undertaken to access world class capability, outsourcing is used to free resources for other purposes, outsourcing is used to share and minimize risk and outsourcing infuses cash into the organization, one would have thought that outsourcing logistics would have been given the needed boost. However, outsourcing logistics is bedeviled with some challenges. Outsourcing leads to loss of control over the operation of the organization. Outsourcing leads to dissatisfaction among clients. According to Sang (2010), outsourcing may lead to leakage of confidential information to competitors which brings about loss of business and lack of trust. By outsourcing certain business functions to external service providers, human resource engaged to undertake that particular business function may be retrenched. Outsourcing may bring about high switching cost.

In the developed countries measures are put in place to address the challenges that outsourcing pose. Some of these measures include: entities agreeing on certain particular quality standards with the third party service providers, management refraining from outsourcing to service providers who are engaged in multiple contracts, low switching cost involved in outsourcing logistics and reassigning staff to perform other duties. However, in Ghana little has been done to address the challenges that outsourcing logistics pose. It is to address these challenges that this study to evaluate the impact of outsourcing transport logistics on organizational performance is being undertaken to fill the gap that exists.

### 1.3 Research Objectives

Research objectives describe what are expected to be achieved in the project. Below are the research objectives which this study seeks to achieve:

- 1. To find out the reasons for outsourcing transport logistics
- 2. To identify the challenges associated with outsourcing.
- 3. To assess the impact of outsourcing transport logistics on the profitability of alcoholic producing organizations.

# 1.4 Research Questions

Research questions are answerable inquiries into specific issues. Below are the questions which this research project seeks to achieve:

- 1. What are the reasons for outsourcing transport logistics?
- 2. What are the challenges associated with outsourcing?
- 3. How does outsourcing transport logistics impact on the profitability of alcoholic producing organizations?

#### 1.5 Significance of the Study

This research will bring to the fore, the main reasons for outsourcing transport logistics. The study will also bring out the challenges associated with outsourcing. The study will contribute to existing literature on outsourcing transport logistics. The study will whip up corporate interest in outsourcing transport logistics. Moreover, the research is an academic requirement for the award of a postgraduate degree. The recommendations will assist policy makers to address the challenges of outsourcing transport logistics in Ghana.

# 1.6 Methodology

This section discussed the research design, population and sampling, the instruments for collecting data, the procedure for gathering data and the method for data analysis. Both primary and secondary data were used for the study. Primary data is usually received from first-hand sources. Primary data is information collected by the researcher purposely for the study. Primary data was collected through the administration of questionnaires. Questionnaires are preprinted forms designed to capture information from respondents.

Secondary data refers to data which is collected for other purposes but can be used for the study. Secondary data is used to gain insight into the research problem. It is time-saving and cheaper to collect

# 1.7 Limitations of the Study

The findings of the research will be limited only to Kasapreko Company Limited, Accra Brewery Limited, Agya Appiah Bitters Limited, GBL Brewery Limited, Heaven Bridge Industries and Macbells Company Limited. This implies that the findings of this research may not be generalized for all alcoholic beverage producing companies in Ghana. There were also resource constraints to carry out the research. Time, logistics and money were identified as the resource constraints for the study. Lastly, respondents' unwillingness to give information to the researcher posed a challenge to the study.

### 1.8 Organization of the Study

The study is organized into five chapters. Chapter one deals with the introduction of the study. It also covers the background of the study, statement of the study, research objectives, significance of the study, as well as limitation of the study. Chapter two, deals with the review of the literature of the study. Chapter three outlines the research methodology in detail. It includes the research method, population, sampling, sampling procedure, data collection, pretesting, method of data processing and analysis and model specification and estimation procedure. Chapter four presents data analysis and findings in line with the objectives. Chapter five, deals with the conclusions and recommendations based on the findings of the study.

# 2.0 LITERATURE REVIEW

#### 2.1 Definition of Outsourcing

Oshri et al., (2011) defined outsourcing as transferring a portion of an organization's activities to a service provider for a period of time. Outsourcing transport logistics is an arrangement whereby a firm contracts a transport logistics service provider to perform transport service for the firm (Moeen et al., 2013). Mulliacet et al. (2011) defined outsourcing as a management decision to hand over non-core business functions to an external supplier. According to Willcocks (2011) non-core business activities which are outsourced include: packaging, transportation, shipping, warehousing and distribution. Outsourcing turns non-core functions over to external suppliers to enable companies to leverage their resource and concentrate on the core mandate of the organization.

# 2.2 Characteristics of Outsourcing

There are various characteristics associated with outsourcing. They include:

# 2.2.1 Cost Efficiency

According to Thomas (2010), cost efficiency is the minimization of cost. An organization is able to achieve cost efficiency provided it is able to reduce its cost (Mclvor, 2010). Companies incur cost on non-core business functions such as packaging, transportation of its raw materials, distribution of its products as well as warehousing. Thomas (2010) revealed that cost incurred on non-core business functions includes investment in capital items such as equipment, infrastructural facilities and staff. Some of the costs incurred include fixed cost and variable cost. Expenses incurred on full-time human resources such as salaries and wages are examples of fixed cost. By outsourcing, companies convert fixed costs into variable costs (Tseng et al., 2009).

# 2.2.2 Productivity

Bruce and Useem (2008) identified productivity as the economic measure of output per unit of input. Productivity can be increased by introducing certain technological innovations into the firm. In addition, by empowering employees, productivity can be improved (Klein, 2009). Ren et al. (2010) established that by outsourcing to third-party service providers who have the technological knowhow and well-empowered employees, productivity can be enhanced (Bruce and Useem, 2008). Moreover, by outsourcing, companies can concentrate on their core business functions which may lead to increased productivity.

# 2.3 Logistics

Logistics is concerned with the efficient transfer of goods from the source of supply through the place of manufacture to the point of consumption in a cost efficient manner (CILT, 2012). According to Mangan et al (2008), logistics should be delivered at the right time, right place and at the right price.

#### 2.4 Logistics Outsourcing

According to Laugen et al (2005), logistics outsourcing is concerned with the movement of materials or parts from the supplier to the assembly plant or retail store. Logistics outsourcing involves transmission of information, transportation, warehousing, material handling and inventory management (Bruce and Useem, 2008). Outsourcing logistics activities involves the use of a third party to provide part or all the logistics operations of the organization. Activities constituting logistics include physical distribution and material handling.

# 2.4.1 Physical Logistics

According to Bruce and Useem (2008), physical logistics involves the movement of goods from the point of production to the point of sale and consumption. Physical logistics include food, materials and equipment (Chen, 2009). Logistics of physical items includes material handling, production, packaging, inventory, transportation, warehousing and security. Rushton and Walker (2007) revealed that physical distribution includes all the functions of movement and handling of goods which includes transportation services.

# 2.4.2. Material Management

According to Ballou (2007), material management deals with the tangible components of the supply chain. Material management involves all the processes involved in the acquisition of spare parts and it is a function of management responsible for planning, buying, moving, storing and controlling materials in order to produce goods and services at a lower cost.

# 2.5 Elements of Logistics

Elements of logistics include transport management, warehousing, inventory, packaging and information processing. Details of the elements of logistics have been discussed below.

# 2.5.1 Transport Management

Transport management deals with modes of transport, transport infrastructure, geographical location, type of delivery, load planning, routing and scheduling. The primary function of transportation is to move goods from one location to another (Rushton and Walker, 2007). Transportation is crucial throughout the management of the supply chain. Short lead time is essential for effective operations. Domestic and international transportation are the most outsourced in the supply chain. Organizations with limited need for transport should outsource their transportation to an outside organization, since transport service providers are simple to find and where the cost involved in transportation is quite low. This notwithstanding, (Klein, 2009), Rushton and Walker (2007) established that organizations which require transportation services for most of their activities are not required to outsource their transportation to outside organizations.

# 2.5.2 Warehousing

Warehousing involves taking custody of the stock in a particular location or building. According to Shaharudin (2014), factors which need consideration when taking warehousing management decisions include location, number, size, type of storage, material handling and the requisite equipment. Warehousing management is frequently outsourced in view of the fact that huge capital investment is needed to build a warehouse and acquire equipment for the warehouse to function efficiently (Rushton and Walker, 2007). According to Lysons and Farrington (2013), a company may choose to produce a product in-house or it may decide to outsource. The decision to either outsource or produce in-house may depend greatly on the cost of production as well as the production capability of the firm. If it is cheaper for the entity to purchase the product or service than to produce it, the entity may be required to purchase the product or service. On the other hand, if it is cheaper to produce than to buy, the company may produce. According to Li (2014) the cost of setting up a warehouse makes the cost of production very high.

# 2.5.3 Inventory

Odepidan (2015) defined inventory as the value of stock of raw materials, semi-finished goods and finished goods held by entities to support production or for resale. Inventory includes raw materials for further processing, work in progress and finished goods (Panayidis and Meko, 2007). Inventory control refers to the management of

inventory already in the warehouse. According to Hosie (2008), inventory management is a method used for organizing, holding and replenishing stock. Inventory management includes the type of inventory, ordering procedures and the source of supply. Inventory management revolves around decisions on what to stock, the quantity or level of stock to maintain at any given time, and the location of stock. Inventory management includes monitoring the quantities as well as the quality of stock (Panayidis and Meko, 2007). Monitoring the quantity of stock ensures that records on stock are updated constantly. Hosie (2008) revealed that stock can also be maintained between maximum and re-order levels in order to ensure that clients' needs are promptly met. There is also monitoring of stock by periodic stocktaking. Monitoring the quality of stock ensures that stock is inspected regularly to eliminate any defects. Odepidan (2015) revealed that when inventory management is outsourced to a third-party service provider, stocks are kept up-to-date and they are maintained between maximum and re-order levels. Stock management is usually outsourced to a third party with a view to ensure the efficient management of stock.

#### 2.5.4 Packaging

All products need packaging. The type of packaging to be used depends greatly on the value of the product. Hotler et al. (2008) noted that packaging offers protection to the products which are produced. Good packaging enables the product to get to the customer safely. When packaging of the products is outsourced to a third party, efficiency is enhanced (Odepidan, 2015).

#### 2.5.5 Information Management Practices

According to Parashkevova (2007), information management refers to the collection and organization of information from the source of the information to the distribution of the information to its targeted consumer. Information management is a technique used to collect information, process the information and communicate the information to management for effective decision making (Vorst et al., 2007). Effective management of information systems involves the recording, storage and distribution of information within the organization. Managing an organization's information system involves timely delivery of information (Hotler et al., 2008). According to Odepidan (2015), since information is important for the management of the entity, it should be well-managed to protect the interest of the business. To ensure efficiency, management can outsource its information management practice to a third party service provider.

# 2.6 Classification of Logistics

Rushton and Walker (2007) classified logistics into three categories. They include physical logistics and delivery (Inbound/Outbound); non-physical logistics (Information) and reverse-logistics.

# 2.6.1 Physical Logistics and Delivery (Inbound)

Hou (2009) established that inbound logistics is concerned with the purchasing and arranging the inbound movement of materials, parts and finished inventory from the supplier of stocks to the point of warehousing and manufacture. According to Priem et al. (2012), inbound logistics involves sourcing for raw materials or finished goods to the production line or the warehouse for manufacturing to take place.

# 2.6.2 Physical Logistics and Delivery (Outbound)

According to CSCMP (2010), outbound logistics and delivery includes transportation, packaging and the physical flow of goods. Ju (2008) established that outbound logistics is concerned with the movement of stock from the point of manufacture or storage, to the retail stores or end-user. In outbound logistics, goods are transported to the final consumers to meet their needs (Li, 2014).

# 2.6.3 Non-Physical Logistics (Information)

Rushton and Walker (2007) found out that non-physical logistics involves information technology service and operations management. Hou (2009) revealed that information technology services involve the application of computers to store, retrieve and transmit information for the benefit of the entire organization. Information technology provides innovation and seeks to establish trust through professionalism, honesty and contributes to providing quality and excellent customer service (Ballou, 2007).

# 2.6.4 Reverse Logistics

Rushton and Walker (2007) revealed that reverse logistics involves returns, disposal of goods and flow of physical goods from downstream to upstream. According to Lysons and Farrington (2012), logistics of companies are designed to transfer stock from production to the end-user. This is known as upstream to downstream (Ballou, 2007).

However, reverse logistics comes about as a result of transporting the stock or the product from the end—user to the producer. This can be in the form of product-recall, return or disposal of goods.

# 2.7 Third-Party Logistics

Bauknight and Miller (2009) established that outsourcing to third-party logistics service providers involves the use of external companies to perform certain tasks which were traditionally performed by the organization. In third-party logistics outsourcing, all or part of logistics activities are assigned to external companies. In the manufacturing industry, activities such as distribution and disposal of waste material are outsourced to third-party logistics service providers. Tompkins (2009). Bajec (2009) also revealed that third-party logistics providers offer asset-based services such as warehousing, transportation, and freight forwarding services to its clients.

# 2.8 Levels of Logistics Outsourcing

The levels of logistics outsourcing employed by an organization include, tactical outsourcing, strategic outsourcing and transformation outsourcing.

### 2.8.1 Tactical Outsourcing

Brown and Wilson (2005) revealed that outsourcing is termed as tactical provided it is instituted by an organization to resolve a specific problem in the entity. Hubner and Elmhorst (2007) emphasized that tactical outsourcing is a traditional form of outsourcing which may involve cost comparison in order to decide whether to make-or-buy a product. Tactical outsourcing brings about cost-saving, prevents future investment and resolves staffing costs (Bajec, 2009). When organizations engage in tactical outsourcing, the cost involved in hiring personnel is avoided. Brown and Wilson (2005) further noted that tactical outsourcing involves partnering a particular vendor with the aim of acquiring industry-specific capability that a firm may be lacking. Tactical outsourcing is used for handling large-scale repetitive activities.

# 2.8.2 Strategic Outsourcing

According to Hubner and Elmhorst (2007), strategic outsourcing is used by management to free key staff to focus their efforts and resources on the core business function of the organization. Bolumole et al. (2007) established that strategic outsourcing enables organizations to work with integrated service-providers. Strategic outsourcing enables companies to reinforce their competitive advantage (Caniels and Roeleveld, 2009).

# 2.8.3 Transformation Outsourcing

Hubner and Elmhorst (2007) argued that transformation outsourcing is a type of outsourcing strategy by which ongoing services that are critical to the overall performance of an organization, are outsourced to a third party. Bolumole et al. (2007) revealed that in transformation outsourcing, outsourcing is used to accomplish rapid and sustainable improvement in the organization's performance. In other words, transformation outsourcing is an effective way of improving the organization's performance.

#### 2.9 Theoretical Review

Theories of outsourcing include resource-based view, transaction cost economies, core competency and contractual theory.

# 2.9.1. Transaction Cost Economies Theory

According to Shaharudin et al, (2014) transaction cost economies theory is a decision-making strategy based on specific assets, environmental uncertainty and other factors. Human and physical capitals are conditions which are captured under environmental uncertainty. Asset specificity refers to investment in transactions. According to Reuben et al (2007), the relationship between service receiver and service provider enables economic transaction to take place. Transaction cost include human resource, time, money etc. (Shaharudin et al, 2014)

#### **2.9.2** Core Competency Theory

Sinchi-Levi et al (2004) revealed that the core competency theory is a collective learning in an institution which involves production skills and technology. According to Reuben et al (2007), a firm's activities can either be performed internally or externally depending upon its core competencies. Under this theory, non-core activities should be outsourced while core activities should be produced internally. Core competency is concerned with the collective knowledge of the production system and ways to integrate and optimize them (Sinchi-Levi et al., 2004). Where the firm has certain core competencies, it may make the product or render the service. However, where the firm lacks the

core competencies required to produce the service or product, it may outsource to a third party. Make-or-buy decisions are considered in core competency theory.

# 2.9.3 Contractual Theory

According to Luo (2002), to ensure a smooth implementation of outsourcing decisions, there is the need to ensure that legally binding contracts are enforced. Duties, rights, and responsibilities are clearly spelt in contractual obligations. In contractual theory strategies, policies and goals are clearly spelt out in legally enforced contracts. Contractual theory set out conflict resolution measures (Kem and Willcocks, 2000).

# 2.9.4. Resource-Based Theory

According to Semchi-Levi et al. (2004), the resource-based view theory considers the internal strengths and weaknesses of the organization before outsourcing certain functions to a third party. According to Luo (2002) the resource-based theory views outsourcing as a strategic decision and it is used to fill the gap in the firm's resource capability deficiencies. A particular area where the organization is weak is outsourced to enable the entity to concentrate on its internal strengths.

#### 2.9.5 Transaction Cost Economic Theory

According to the transaction cost economic (TCE) theory, the balance of power between transacting parties should not shift (Reuben et al., 2007). Transaction cost economies theory is premised on the fact that decisions are made based on transaction-related factors. Transaction-related factors include asset specificity and environmental uncertainty. Environmental uncertainty includes human and physical capital. Asset specificity refers to investments in transactions. In the transaction cost economies (TCE) theory, the relationship between service receiver and service provider exists basically to ensure that economic transactions take place to the mutual benefit of both parties (Shaharudin et al., 2014). The relationship between service receiver and service provider is integrated with the view to reduce cost which can be classified as time, money and human resource.

# 2.10 Levels of Logistics

The logistics process is made up of four levels namely 1st level; 2nd level; 3rd level and 4th level.

# 2.10.1 1st Level Logistics

According to Vorst et al. (2007), the first level process involves the execution or implementation of basic activities. Basic activities include transportation and warehousing. Transportation is used to move goods from one location to another (Rushton and Walker, 2007). Organizations with limited need for transport services are required to outsource their transportation requirements to a third party. Warehousing involves the housing of stock (Shaharudin, 2014). Warehousing decisions include location, number and size.

# 2.10.2 2<sup>nd</sup> Level Logistics

Second level logistics process involves value-adding activities. Value-adding activities include packaging. The packaging of a product depends greatly on the value of the product. Hotler et al. (2008) noted that packaging adds value to the product. Packaging also offers protection to the products. Good packaging enables the product to get to the customer safely. When packaging of the products is outsourced to a third party, efficiency is enhanced (Odepidan, 2015).

# 2.10.3. 3rd Level Logistics

Third level process involves planning and control. The main activities which are outsourced at the third level include inventory and transport management. Sub-activities at the third level which are outsourced include stock control, sales, forecasting and inventory control. Route planning and scheduling also form part of transport management. According to Odepidan (2015), inventory control refers to the management of inventory already in the warehouse. Inventory management is a method used for organizing, holding and replenishing stock. Inventory management includes the type of inventory, system of ordering and the source of supply (Hosie 2008). In Inventory management, the third party takes decision on what type of stock is desired, the quantity of stock needed at any point in time, and the location of stock. Inventory management includes monitoring the quantity and quality of stock (Panayidis and Meko, 2007). The third party service-provider also monitors the quantity of stock to ensure that records on stock are updated. Stocks are maintained between maximum and re-order to ensure clients' needs are met (Hosie (2008). There is also monitoring and inspection of stock by stocktaking. Third level process involves the housing of stock. According to Shaharudin (2014), warehousing management involves decisions centering on the location of the

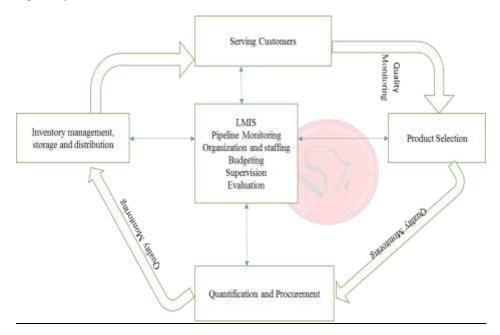
stock, the number, size, type of storage and material handling equipment. Warehousing is frequently outsourced in view of the fact that huge capital investment is required to build a warehouse and acquire equipment for the management of the warehouse (Rushton and Walker, 2007).

# 2.10.4 4th Level Logistics

According to Rushton and Walker (2007), the fourth level which is also the top level of logistics activities involve the distribution network design. Decisions undertaken at this level involve road carrier, selection, location, site analysis and network management. Transport management includes the modes of transport, transport infrastructure, geographical location, type of delivery, load planning, routing and scheduling (Rushton and Walker, 2007). Organizations with limited need for transport are required to outsource their transportation requirements to an outside organization mainly because transport providers are relatively easier to find. Moreover, the cost involved in transport is quite low (Klein, 2009). Rushton and Walker (2007) established that organizations which require transportation for most of their activities are not required to outsource their transportation to outside organizations.

# 2.11 Logistics Cycle: Organizing Logistics System Activities

According to Shaharudin et al. (2014), logistic cycle refers to the relationship between the activities in the logistic system.



# 2.11.1 Major Activities in the Logistics Cycle

Serving Customers: Selection, procurement, storage and distribution of products are intended to meet customer needs and expectations. According to Chen (2009), storekeepers are responsible for providing consumables and spare parts with the aim of meeting the needs of customers. Storekeepers provide customers the required service when they issue parts and other consumables. Product Selection: According to the logistics cycle, there should be product selection. The procurement department of the organization is responsible for product selection (Hou, 2009).

Procurement: According to Chen (2009), procurement is undertaken after a quantification process has been developed. As part of measures to procure products or services, there should be openness and transparency in the procurement process. The cost of procuring the product or service should be well-negotiated to enhance the company's profitability.

Inventory Management: After the products have been procured, they are transported to the destination where the clients may receive them. Inventory management ensures that stock records are kept up-to-date. Adequate stock is also maintained to satisfy the needs and expectations of customers (CSCMP, 2010). Other Activity in the Logistic Cycle: According to Ballou (2007), there should be periodic budgeting to enable management take important decisions. The budget should also be compared with actual figures realized in transactions in order to determine any variances. There should also be effective supervision of the organization's activities and remedial actions are taken when planned targets are not achieved.

# 2.12 Empirical Review

In a study undertaken by Adebambu, Omolola and Dosunum (2015), titled "The impact of logistics outsourcing services on company transport cost in selected manufacturing companies in South Western Nigeria", the study revealed that outsourcing enables manufacturing companies to reduce transport cost. Quality of transport service also had a tremendous impact on the entity's supply chain. In a study undertaken by Denisa, Lucie, Eva and Leona (2010), titled "The analysis of the use of outsourcing services in logistics by Czech manufacturing companies," the study revealed that Czech companies outsourced transportation, warehousing or customs brokerage. The main reasons for outsourcing were identified as cost reduction and lack of capacity. In a study titled "Effects of outsourcing decisions on organizational performance in the manufacturing industry: A case study of Unilever Group Limited in Kenya," Masinga and Kiarie found out that core competencies have a positive relationship with organizational performance. Information technology adoption, cost reduction and top management support and commitment were positively correlated to organizational performance.

Kamanga and Ismail (2016), undertook a study titled "Effect of outsourcing on organization performance in the manufacturing sector in Kenya: A case of Del Monte Kenya Ltd," the study revealed that cost, quality and technology had a positive and significant relationship on organizational performance. The study recommended that organizations should outsource to third-party service providers, the technical and managerial aspects where they are deficient in capacity in order to enable them carry out on their core functions effectively.

#### 2.13. Factors to Consider Before Outsourcing

Below are the factors to consider before outsourcing\

# 2.13.1 Core Competencies

According to Liu et al. (2014), core competencies are what an organization use to sustain competitive advantage. Organizations use their core competencies for their core business functions. Core businesses are less likely to be outsourced. However, companies are more likely to outsource non-core business activities or functions. According to Ju (2008), a manufacturing company whose core business function was the production of coffee, outsourced their transportation which was a non-core business function.

#### 2.13.2 Critical Knowledge

According to Ballou (2007), critical knowledge describes the business function of the organization. Business functions which produce critical knowledge are less likely to be outsourced. However, business functions which do not produce critical knowledge are more likely to be outsourced to third party service providers (Chen, 2009).

# 2.13.3 Internal Human Resource

Chen (2009) revealed that internal human resource is one of the factors to be considered before outsourcing. When an organization lacks the requisite human resource it is more likely to outsource certain business functions since there may not be personnel to undertake that function. However, if an organization has the desired human resource, it likely that it may not outsource certain business functions (Li, 2014). An organization which is restricted from hiring competent staff is more likely to outsource.

# **2.13.4 Quality**

According to Holcomb (2007), quality refers to the ability of a product or service to meet customers' needs and expectations, by giving value for money. Organizations which are interested in quality are customer-centered organizations. According to Odepidan (2015), an organization which is concerned with high quality is less likely to outsource. However, organizations that are less concerned with quality are more likely to outsource.

#### 2.13.5 Cost

The organization needs to consider the cost implications associated with insourcing and outsourcing. Bajec (2009) revealed that insourcing involves investments in core activities, management times and increased staff cost. Through outsourcing, the resources required to be invested in outsourced activities are freed to be invested in other activities. Staff cost which involve salaries and wages and social security contribution are avoided and thereby giving the organization more flexibility to operate (Hosie, 2008). By outsourcing direct operating cost, general overhead cost is reduced. For example, fixed cost which may be incurred by the acquisition of haulage trucks are transformed into variable cost such as transportation expenses. According to Ojala and Jamsa (2006) outsourcing is undertaken to save money through reduction in cost.

# 2.13.6 Strategic Analysis

According to Hosie (2008), strategic analysis involves three steps namely: relevance, difficulty in limitation and breath of application. In identifying core competences, there must be something relevant that influences the customer to choose a particular product or service. What influences the customer to choose a particular service or product is the core competence (Liu et al., 2014). According to Ju (2008), it is extremely difficult to imitate core competences. By making it extremely difficult to imitate core competences, companies are able to produce products or services that are of high quality. Core competencies open up a number of potential markets, in view of the unique nature of products or services provided by the entity

# 2.14 Process of Outsourcing

The processes of outsourcing which are discussed below include:

# 2.14.1 Deciding to Outsource

According to Anoop (2013), decisions to outsource certain aspects of a company's activities need consideration by the Board of Directors for approval. In outsourcing, there is a divestiture of certain business functions (Stock, 2009). The business function may involve the transfer of people and sale of assets to the suppliers. According to Zafar (2013), the first step involved in the decision to outsource certain business functions to third parties is to identify those functions through a cost-benefit-analysis. After identifying the function to outsource, there is the need for management to justify the reasons why those particular business functions need to be outsourced for approval by the Board of Directors (Anoop, 2013). Anoop (2013), further states that once the company has decided to outsource such business functions, there is the need to identify partners to outsource the business function to. Some clients resort to specialists to assist them to price and agree on the terms and conditions.

#### 2.14.2 Supplier Proposal

Annop (2013) argued that supplier proposal is a formal request made to a supplier of the product or service to submit proposal on a specific commodity. A supplier proposal is normally submitted through a bidding process (Zafar, 2013).

# 2.14.3 Supplier Competition

Zafar (2013) established that supplier competition involves marking and scoring the proposal submitted by a supplier. In supplier competition, there is clarification of the client's requirements and supplier responses. In supplier competition, suppliers are finally selected through a process known as down select. The suppliers submit offers for the client to make their final selection of the supplier for negotiation (Anoop, 2013).

### 2.14.4 Negotiation

According to Zafar (2013), negotiations are carried out to convert the agreement into contractual obligations between the client and the supplier. After the negotiation, there is documentation and a final pricing structure.

#### 2.14.5 Contract Finalization

Zafar (2013) revealed that contract finalization is a legal binding document which spells out the terms and conditions of the contract. Contact finalization involves the parties agreeing to the terms, signing the contract, effective date of the contract and service commencement data (Anoop, 2013).

# 2.14.6 Transition

Anoop (2013) identified one of the processes of outsourcing as transition. Transition begins with the commencement date of the contract and runs through to the fourth month (Zafar, 2013). Transition may involve staff transfer and take-over by the service provider.

# 2.14.7 Transformation

Transformation is yet another process of outsourcing. According to Zafar (2013), transformation involves the execution of projects. Transformation involves the changes in service with the aim of reducing cost.

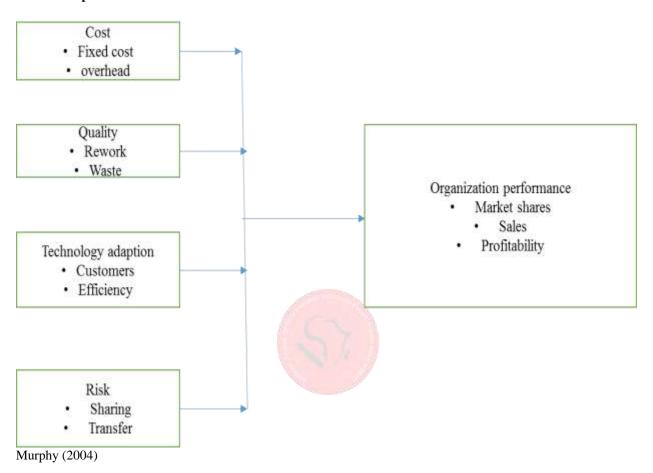
# 2.14.8 Ongoing Service Delivery

Anoop (2013) revealed that ongoing service delivery refers to the execution of the agreement. In the process of outsourcing, agreements and contracts are reached and signed. Zafar (2012) postulated that ongoing service delivery ensures that the agreements reached are implemented.

# 2.14.9 Termination of Contract

Outsourcing contract can be terminated or it could be renewed before the termination of the contract. According to Anoop (2013), termination involves taking back the service or transferring the outsourcing contract to another supplier.

# 2.15. Conceptual Framework



#### 2.15.1 Independent Variable

Cost: From the diagram above, the independent variables include: cost, quality, technology adaption and risk. For the variable to work efficiently, the service provider must offer a competitive cost of the product or service being offered (Mulphy, 2004). The cost of the product or service being offered must be compared to the cost of the insourcing or budgeted cost of in-sourcing in order to make a decision. The cost of the product or service should be reviewed depending upon market changes. Boundaries should be drawn so far as cost is concerned so that certain costs which are not related to the service or product are eliminated from the cost buildup of the product or service being supplied. According to Vorst et al (2007), when the product or service is outsourced, it frees up cash needed for investment activities in other crucial areas. In addition, it helps the organization to concentrate on its core competencies, free management time needed to take a decision on the product or service being outsourced and there is also elimination or reduction in the staff cost (Lysons, 2006). According to Murphy (2004), cost minimization can be achieved provided direct operating cost and overhead cost can be reduced tremendously. Moreover, cost can be minimized provided fixed cost such as staff cost in the form of salaries wages and employee's contribution can be converted into variable cost. Fixed cost can be converted into variable cost by paying for the service instead of buying equipment and having big inventories. Performance can also be enhanced by increasing productivity, enhancing new capabilities and technological development through external sources. By outsourcing, efficiency is enhanced and there is financial saving through reduction in staff cost and other resources (Lysons, 2006).

**Quality:** According to Ren et al. (2010), quality refers to the ability of the product or service being rendered either in-house or outsourced, to meet customer needs and expectations. A product is said to be of high quality when

there is value for money (Han et al., 2008). In achieving quality, the service provider should carry out periodic repair services and maintain defective equipment in order to reduce downtime. Ren et al. (2010) established that in rendering quality service, there should be reliability and timeliness. The service being rendered must be reliably produced on time. In addition, they must be free from defects in order to meet customer expectations. By outsourcing, there would be improvement in the service quality in view of the fact that service-providers, who have the requisite expertise and experience, would be contracted to execute the task. According to Lysons (2006), the service-provider should implement changes which are brought about by modifications in technology. Service outsourcing cannot be avoided especially when the organization does not have the capacity to perform non-core activities but has the option to outsource. According to Han et al (2008), outsourcing enables companies to achieve their organizational objectives and build up its competitive advantage.

**Technology Adoption:** Due to a lack of technological know-how, organizations outsource non-core service activities to service providers (Holcomb & Hitt, 2007). With the rapid advancement in technology, more knowledge is required to diagnose, solve and manage production-related issues. Moeen et al. (2013) argued that technological adoption or adaptation enables service providers to render services and produce goods which are free from defects and which meet the needs and expectations of customer.

**Risk:** Outsourcing enables risk-sharing. According to Weele (2010) management shares the risks associated with the product with their service providers. When management outsources non-core business functions to a service provider, it liberates management from certain risks and enables them to take up different risks in the core areas of their business function (Murphy, 2004). By outsourcing, the risk associated with operational exposure is shared or sometimes transferred to the third party. One big risk associated with outsourcing is a lack of strategic clarity when contracting a service provider. Failure to ensure strategic changes when outsourcing, may result in huge capital outlays which has inherent risks.

# 2.15.2 Dependent Variable

The dependent variable is identified as organizational performance and can be measured in terms of production output, profitability, sales turnover and market shares. According to Gathungu and Mwangi (2012), profitability as a performance measure may include return on assets, return on equity, and market share. Non-financial performance measures of organizational performance include Corporate Social Responsibility, innovation, responsiveness and employee development. CSCMP (2011) defines logistics management as part of supply chain management that plan, implement and control the flow and storage of goods and service between the point of origin and the point of consumption in order to meet customer requirements. Logistics activities of supply chain management include quantification, procurement, inventory management, transportation and fleet management. Brulot (2007) revealed that a firm's performance can be measured by assessing the success of the organization's outsourcing strategies. According to Heller and Quaing (2008), institutions that outsource parts of their operation can strategically obtain benefits in the form of profit maximization. Such companies benefit from development of core competences which would create barriers against its competitors and enhance customer satisfaction.

# 2.16 Reasons for Outsourcing

Reasons for outsourcing are discussed below

# 2.16.1. Cost efficiency

Kamanga and Ismail (2016) concluded that outsourcing improves the operational efficiency of an entity. By outsourcing certain functions of an organization, there is elimination of certain fixed costs which enhances the organization's efficiency (Hirschheim and George, 2007). Fixed cost such as staff cost incurred on human resource engaged to provide the service which have been outsourced are considerably reduced. The company may either lay-off such staff or reassigns them to carry out other tasks. This move enables the entity to reduce and control operating cost (Kamanga and Ismail, 2016). Outsourcing also involves an external provider taking over activities previously carried out in-house by the firm. The main objective of outsourcing is to bring down cost involved in that particular business function.

# 2.16.2 Improvement in Performance

Outsourcing leads to improvement in performance. According to Kamanga and Ismail (2016), outsourcing leads to high quality services. Outsourcing is appropriate where an organization lacks the required expertise in delivering a service efficiently. A company may outsource particularly where it lacks the requisite skill needed to undertake the activity (Hirschheim and George, 2007).

# 2.16.3 To Improve Company Focus.

According to Manono (2012) outsourcing is undertaken with the aim of improving a company's focus. Companies have certain core mandate to accomplish. By outsourcing certain activities to external companies, companies are able to concentrate on their core mandate (Kamanga and Ismail, 2016). According to McIvor et al. (2008), financial institutions usually outsource the cleaning of their premises to an external company in order to concentrate on their core mandate of providing financial services to their clients.

#### 2.16.4 To Access World Class Capabilities

Kamanga and Ismail (2016) established that outsourcing is undertaken to meet world class expectations. Activities are only outsourced provided the external company has the capabilities as well as the capacity to undertake the project. Companies which have the ability to provide the service or produce at a least cost, are contracted to provide the services (Mclvor et al., 2008).

# 2.16.5 To Free Resource for Other Purposes

According to Liu et al. (2014), by outsourcing certain activities to a third party, resources used in rendering the service are freed for other purposes. Resources are invested for the production of certain services and products (Anoop, 2013). Resources including human resources, materials and infrastructure are acquired for the provision of certain services. (Zafar, 2013).

# 2.16.6 To Share and Minimize Risk

By outsourcing certain services of the company to external providers, there is risk sharing which leads to a minimization of the risk that a company faces. Kamanga and Ismail (2016) argued that by outsourcing certain key services to an outsider, risk is shared between the outsourced company and the entity.

# 2.16.7 To Infuse Cash into the Organization

Kamanga and Ismail (2016) established that by outsourcing certain activities to a third party, resources used to produce such goods and services are freed for other purposes in the organization. In other words, when an entity outsources certain business functions, cash can be infused into the organization to increase the profitability of the firm. The cash can be invested in the core mandate of the business in order to increase profitability (Anoop, 2013). By outsourcing transport logistics to a third party, capital investment in the form of buying and maintenance of fleets of vehicles, are freed up to be used for other purposes which would increase or enhance the profitability of the company

# 2.17 Challenges of Outsourcing

Challenges for outsourcing include:

#### 2.17.1 Loss of Control

According to Stevenson (2007), outsourcing leads to loss of control over the operation of the organization. Brulot (2007) argued that when an entity outsources certain business functions such as warehousing, transportation etc. to third party service providers, the entity loses control over those particular business functions.

# 2.17.2 Dissatisfaction among Customers

Outsourcing leads to dissatisfaction among clients. According to Brulot (2007), companies usually terminate outsourcing contracts due to dissatisfaction. It is in line with this phenomenon that most companies who are interested in quality service do not outsource certain business functions to third parties (Kamanga and Ismail, 2016).

# 2.17.3 Leakage of Confidential Information

According to Sang (2010), outsourcing may lead to leakage of confidential information to competitors. If an organization outsource to a service provider engaged in multiple contracts it may lead to leakage of confidential information. Leakage of information may lead to loss of business and lack of trust (Kamanga and Ismail, 2016).

#### 2.17.4 Staff Retrenchment

According to Sang (2010), outsourcing may lead to staff retrenchment. By outsourcing certain business function to an external service provider, human resource engaged to undertake that particular business function may be retrenched. The organization may be required to pay end-of-service benefit to such employees who may be caught up in this exercise.

# 2.17.5. High Switching Cost

According to Brulot (2007), outsourcing may bring about high switching cost. Entities enter into contractual agreement with third parties before outsourcing certain business functions. The cost to be incurred before switching to another service provider may be so high that the entity may not have the means to switch (Kamanga and Ismail, 2016).

#### 3.0 METHODOLOGY

This chapter discusses the method adopted for the study. It describes the research method, target population, sample and sampling procedure, data collection instrument and data analysis plan.

# 3.1 Research Design

The study used the mixed research approach. Quantitative research was mainly used to evaluate the impact of transport logistics on performance of selected alcoholic beverage producing companies in Ghana. Financial data was collected through the administration of a structured survey instrument from selected alcoholic beverage producing companies in Ghana. The study also used the case study approach. Case study involves qualitative research. The researcher used questionnaires to gather primary data for the study.

# 3.2 Population and Sampling Frame for the Study

The population of the study comprised managers, staff and investors in the alcoholic beverage producing industries in Ghana. According to estock analysis blog (2013), the population of personnel in the alcoholic beverage producing companies in Ghana is estimated to be about 2000 workers. Additionally, the study relied on published financial statements of six alcoholic beverage producing companies in Accra, over a five-year period spanning from 2012 to 2016 through the administration of questionnaires.

# 3.3 Sample and Sampling Procedure

The population of the study was limited to investors, staff and managers of Kasapreko Company Limited, Accra Brewery Limited, Agya Appiah Bitters Limited, GBL Brewery Limited, Heaven Bridge Industries and Macbells Company Limited. In view of the fact that the entire population could not be reached for the study, a sampling technique was used to determine a sample size for the study. The study employed the Devaus (2002) technique to arrive at the sample size. The formula is stated as  $\mathbf{n} = \frac{N}{1+N(a)^2}$ : where 'n' is the sample size determined for the study, 'N' is the population, and 'a' is the significant level or the confidence interval.

Based on the formula a sample size of one hundred respondents was used for the study. The respondents comprised one hundred management and staff of the selected alcoholic beverage producing companies in Ghana. Purposive sampling was employed to select all one hundred staff and management of Kasapreko Company Limited, Accra Brewery Limited, Agya Appiah Bitters Limited, GBL Brewery Limited, Heaven Bridge Industries and Macbells Company Limited. Additionally, financial data of 6 selected alcoholic beverages in Ghana spanning from 2012-2016 were used for the study.

# 3.4 Data Collection

Primary and secondary data was relied on for the study. Primary data was collected through the administration of questionnaires. The secondary data was collected from the financial statements of six selected alcoholic beverage producing companies namely: Kasapreko Company Limited, Accra Brewery Limited, Agya Appiah Bitters Limited, GBL Brewery Limited, Heaven Bridge Industries and Macbells Company Limited.

# 3.5 Pre-Test of the Study Instrument

A pilot test was conducted with a small group representative of the population to access the validity of the data. The data was pretested with ten questionnaires. The reason for the choice of ten questionnaires for pretesting was based on the fact they were the first batch to be collected.

# 3.5.1 Validity and Reliability

According to Polit & Hungler (1993), validity of an instrument refers to the degree to which an instrument measures what it is designed to measure. Reliability refers to the degree of consistency with which an instrument measures what it is designed to measure. Data collection biases were minimized by the researcher. Reliability paved way for privacy, confidentiality and general physical comfort.

# 3.5.2 Ethical Considerations

Since divulging information is unethical, respondents in the selected alcoholic beverage producing companies were assured of confidentiality of the information. They were informed that the exercise was for academic purposes and were given the chance to opt out if they were not interested in the survey.

#### 3.6 Method of Data Processing and Analysis

The qualitative data was analyzed with the help of statistical package for social science. The data was presented in tabular, graphical and narrative forms. The quantitative data was analyzed using a quantitative approach. Panel regression method was used for the study. Panel data increased efficiency by combining time series and cross-section data. Panel data involved the observation of effects that cannot be detected using purely cross-section analysis or time series data. The Stata Mp was used for the statistical analysis.

# 3.7 Model Specification and Estimation Procedure

To establish the relationship between outsourcing represented by cost and performance of selected alcoholic beverage producing companies in Ghana, the estimation procedure as propounded by Kuznetsov and Muravyev (2001) was adopted and modified as follows:

$$Y_{it} = \alpha_i + \beta_1 X_{it} + e_{it}$$

Where:

Y<sub>it</sub> is performance measure (ROE)

 $\alpha_i$  = refers to time-invariant firm-specific effects

X<sub>it</sub> are the independent variables

β1 coefficients

eit is error term.

#### 3.8 The General Model

Based on the above general model, the effect of outsourcing on financial performance was evaluated using the model outlined below

$$ROE_{it} = \beta_0 + \beta_1 \frac{TCit}{Cit} + \beta_2 Age_{it} + \beta_3 Git + \beta_4 AT_{it} + e_{it}$$

Where:

 $\begin{array}{lll} ROE_{it} & = & Return \ on \ Equity \\ TC_{it} & = & Transport \ Cost \\ Age_{it} & = & Age \ of \ the \ firm \\ G_{it} & = & Growth \end{array}$ 

 $\begin{array}{lll} AT_{it} & = & Asset \ tangibility \\ e_{it} & = & Stochastic \ error \ term \end{array}$ 

VARIABLES	DEFINITION	SYMBOL
DEPENDENT		
ROE	Measures the ability of the company	$ROE_{it}$
	to earn profit from investments in	
	the company, in a period t, it is	
	calculated as	
	ROE = PAT / EQUITY	
INDEPENDENT	Measures company's transportation	
TC	cost. It is calculated as	$TC_{it}$
	Transport cost as a percentage of	
	the company's revenue	
Control variable	Measures the period the company	
Age	has been in operation, i at the end of	$AGE_{it}$
	the time t, it calculated as the <b>sum of</b>	
	years the company has been in	
	operation	
Growth	Measures the change in a company's	Git
	revenue i at the end of the t,	
	calculated as <b>the log of sales.</b>	

Asset tangibility	Measures fixed asset in relation to total assets of a company i at the end of time t, calculated as fixed assets/	$AT_{it}$
	total assets	
Stochastic error term	Measure the stochastic error	E <sub>it</sub>

# 3.8.1 Dependent Variables

Dependent Variables are variables that can be measured in an experiment (Kenny, 2011). According to Frank and Goyal (2003), dependent variables are affected by independent variables. From the model above the dependent variable is identified as Return on Equity (ROE).

#### 3.8.2 Independent Variable

Independent Variables are variables that affect the dependent variable in a model (Almazari 2012). Independent variables are variables that the researcher wishes to change or manipulate in an experiment. The main independent variable in the model is cost.

# 3.8.3 Controlled Variable

Controlled Variables are variables that are held constant in an experiment (Abor, 2009) and therefore remain constant throughout an experiment (Almazari, 2012). From the model above controlled variables are identified as age, growth and asset tangibility.

# 4.0 DATA ANALYSIS

#### 4.1. Introduction

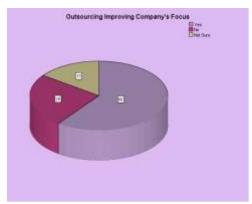
This chapter describes the analysis of the data and discusses the various research findings. The finding relates to the research questions that guided the study. Data was obtained from hundred respondents. The questionnaires comprised three sections, namely: the demographic characteristics of the respondents, reasons for outsourcing and the challenges involved in outsourcing. Panel data was used to analyze the impact of outsourcing transport logistics on profitability.

# 4.2 Objectives for Outsourcing Transport Logistics

The objectives for outsourcing transport logistics were identified as follows: to improve company's focus; to access world class capabilities; to free resource for other purposes; to share and minimize risk; to infuse cash into the organization; and finally to reduce and control the operating cost of the company.

# 4.2.1 Outsourcing Improves Company's Focus

Responses on whether outsourcing improves company's focus are presented in figure 4.1



Source; Field study (2017)

From figure 4.1 above, 60 of the respondents representing 60% indicated that outsourcing improved their company's focus. On the other hand, 25 respondents representing 25% indicated that outsourcing did not improve their company's focus. 15 of the respondents representing 15% were not sure whether outsourcing improved their company's focus or not.

The result shows that most of the respondents indicated that outsourcing improves company's focus. This finding is in line with Manono (2012) research which revealed that outsourcing is undertaken with the aim of improving a company's focus. Companies have certain core mandate to provide. By outsourcing certain activities to third party service providers, the companies are able to concentrate on their core mandate to satisfy their clients (Kamanga and Ismail, 2016).

# 4.2.2 Outsourcing Helps Companies to Access World Class Capabilities

Table 4.2 presents responses on whether outsourcing helps companies to access world class capabilities.

Table 4.2: Outsourcing helping companies to access world class capabilities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	77	77.0	77.0	77.0
	No	13	13.0	13.0	90.0
	Not sure	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Source: Field study (2017)

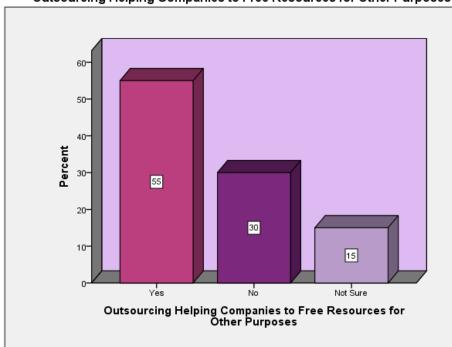
From table 4.2 above, 77 of the respondents representing 77% indicated that outsourcing helped their company to access world class capabilities. 13 respondents representing 13% indicated that outsourcing did not help their company to access world class capabilities while the remaining 10 of the respondents representing 10% were not sure whether outsourcing helped their company to access world class capabilities. The results of the analysis show that most of the respondents indicated that outsourcing helped their company to access world class capabilities. This finding is in tandem with Kamanga and Ismail (2016) research finding which established that outsourcing is undertaken where there is a world class capability to deliver quality services.

#### 4.2.3. Outsourcing Helps Companies to Free Resource for Other Purposes

Figure 4.2 presents responses on whether outsourcing help companies to free resource for other purposes

Figure 4.2: Outsourcing helping companies to free resource for other purposes

Outsourcing Helping Companies to Free Resources for Other Purposes



Source: Field (2017)

From figure 4.2 above, 55 of the respondents representing 55 % indicated that outsourcing helped their companies to free resources for other purposes. 30 respondents representing 30% indicated that outsourcing did not help their companies to free resources for other purposes. 10 of the respondents representing 10% were uncertain whether outsourcing helped their company to free resources for other purposes or not. The result shows that most of the respondents indicated that outsourcing helped their company to free resource for other purposes. This research finding is in line with Liu et al. (2014) research finding. According to Liu et al. (2014), by outsourcing certain activities to a third party, resources used to render the service are freed for other purposes. Resources are invested for the production of certain services and product.

# 4.2.4 Outsourcing Helps Companies to Share and Minimize Risk

A question was posed to elicit responses on whether outsourcing helps companies to share and minimize risk. Details of the responses are found in table 4.5.

Table 4.3 Outsourcing helping companies to share and minimize risk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	80	80.0	80.0	80.0
	No	7	7.0	7.0	87.0
	Not sure	13	13.0	13.0	100.0
	Total	100	100.0	100.0	

Source: Field study, 2017.

From table 4.3 above, 80 of the respondents representing 80 % indicated that outsourcing helped their company to share and minimize risk. 7 respondents representing 7% indicated that outsourcing did not help their company to share and minimize risk. 13 of the respondents representing 13% were uncertain whether outsourcing helped their company to share and minimize risk. The results show that outsourcing helped their company to share and minimize risk. The finding is in tandem with Kamanga and Ismail (2016) research which revealed that by outsourcing certain service of the company to external providers, there is risk sharing and minimization of the risk that a company bears.

# **4.2.5** Outsourcing Infuse Cash into Organizations

Table 4.4 presents responses on whether outsourcing infuse cash into your organization

Table 4.4 Outsourcing infuse cash into your organization

-					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Yes	50	50.0	50.0	50.0
	No	20	20.0	20.0	70.0
	Not sure	30	30.0	30.0	100.0
	Total	100	100.0	100.0	

Source: Field study (2017)

From table 4.4 above, 50 of the respondents representing 50 % indicated that outsourcing infused cash into their organization. 20 respondents representing 20% indicated that outsourcing did not infuse cash into their organization. 30 of the respondents representing 30% were uncertain whether outsourcing infused cash into their organization or not. The results show that outsourcing infused cash into organization. This finding is in line with Anoop (2013). According to Anoop (2013), by outsourcing certain activities to a third party, cash used to pay certain fixed costs are freed for other purpose in the organization.

#### 4.2.6 Outsourcing Helping to Reduce and Control Operating Cost of Companies

Responses on Outsourcing helping to reduce and control operating cost of companies are presented in table 4.5.

Table 4.5: Responses on Outsourcing helping to reduce and control operating

cost of companies.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	81	81.0	81.0	81.0
	No	13	13.0	13.0	94.0
	Not sure	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

Source: Field study (2017)

From table 4.5 above, 81 of the respondents representing 81 % indicated that outsourcing helped to reduce and control operating cost. 13 respondents representing 13% indicated that outsourcing helped to reduce and control operating cost. 6 of the respondents representing 6% were uncertain whether outsourcing helped to reduce and control operating cost. The result shows that most of the respondents indicated that outsourcing helped to reduce and control operating cost of their organization. The findings are in line with Hirschheim and George (2007) research finding which revealed that outsourcing improves the operational efficiency of an entity. By outsourcing certain functions of an organization there is the possibility of eliminating certain fixed costs which enhances the organization's efficiency.

# 4.3 Challenges of Outsourcing Transport Logistics

The challenges associated with outsourcing transport logistics were identified as loss of control, customer dissatisfaction, leakage of confidential information, staff retrenchment as a result of outsourcing and high switching cost.

Table 4.6: Rating the challenges of outsourcing transport logistics

	Scale 5	Scale 4	Scale 3	Scale 2	Scale 1
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	Frequency	Frequency %	Frequency	Frequency	Frequency
	%		%	%	%
Loss of control			T. T.		
	40 (40%)	30 (30%)	15 (15%)	10 (10%)	5 (5%)
Dissatisfied					
customers	30 (30%)	35 (35%)	5 (5%)	20 (20%)	10 (10%)
Leakage of					
information	56 (56%)	19 (19%)	15 (15%)	7 (7%)	3 (3%)
Retrenchment					
	30 (30%)	35 (35%)	13 (13%)	17 (17%)	5 (5%)
switching cost					
	43 (43%)	20 (20%)	7 (7%)	20 (20%)	10 (10%)

Source: Field Survey, 2017.

From the table 4.6 above, a Likert Scale marked 1-5, 5 being "strongly agree" 4 for "Agree", 3 for "Undecided", 2 for "Disagree" and 1 for "Strongly Disagree"

The respondents were to indicate which of the following was among the challenges of outsourcing transport logistics:

- Outsourcing resulting in loss of control
- Customers dissatisfied with outsourcing.
- Outsourcing leading to leakage of confidential information to people outside the organization.
- Most staff are retrenched as a result of outsourcing.
- Outsourcing brings about high switching cost.

On the issue of loss of control being a challenge of outsourcing, 40 of the respondents representing 40% indicated that they strongly agreed that outsourcing led to loss of control over certain sectors of the organization, 30 respondents representing 30% also indicated that they agreed that outsourcing led to loss of control over certain sectors of the

organization. This means that the respondents generally agreed that outsourcing led to loss of control over certain sectors of the organization. 15 of the respondents representing 15% neither agreed nor disagreed that outsourcing led to loss of control over certain sectors of the organization. 10 of the respondents representing 10% disagree that outsourcing led to loss of control over certain sectors of the organization. 5 respondents representing 5% also strongly disagreed that outsourcing led to loss of control over certain sectors of the organization. This finding is in line with Brulot (2007) research finding which revealed that when an entity outsources certain business functions such as warehousing, transportation etc. to third party service providers, the entity losses control over those particular business functions.

On the issue of customer dissatisfaction being a challenge to outsourcing, 30 of the respondents representing 30% indicated that they strongly agreed that customer dissatisfaction posed a challenge to outsourcing. 35 respondents representing 35% also indicated that they agreed that customer dissatisfaction posed a challenge to outsourcing. This implies that the respondents generally agreed that customer dissatisfaction posed a challenge to outsourcing. 5 of the respondents representing 5% were undecided whether customer dissatisfaction posed a challenge to outsourcing. 7 of the respondents representing 7% disagree that customer dissatisfaction posed a challenge to outsourcing. 10 respondents representing 10% also strongly disagreed that customer dissatisfaction posed a challenge to outsourcing. This finding is in line with Brulot (2007). 51% of client had wanted to terminate outsourcing contract due to dissatisfaction among clients.

On the issue of leakage of confidential information being a challenge of outsourcing, 56 of the respondents representing 56% indicated that they strongly agreed that outsourcing lead to leakage of confidential information. 19 respondents representing 19% also indicated that they agreed that leakage of confidential information was among the challenges of outsourcing. This implies that the respondents generally agreed that outsourcing led to leakage of confidential information. 15 of the respondents representing 15% were undecided whether outsourcing led to leakage of certain confidential information or not. 7 of the respondents representing 7% disagree that outsourcing led to leakage of confidential information. 3% also strongly disagreed that outsourcing led to leakage of confidential information. This finding is in tandem with Sang (2010) which found out that outsourcing may lead to leakage of confidential information to competitors.

On the issue of staff retrenchment being a challenge to outsourcing, 30 of the respondents representing 30% indicated that they strongly agreed that outsourcing leading to staff retrenchment was a challenge. 35 respondents representing 35% also indicated that they agreed that outsourcing leading to staff retrenchment was among the challenges of outsourcing. This implies that the respondents generally agreed that outsourcing leading staff retrench was a challenge. 13 of the respondents representing 13% were undecided whether staff retrenchments posed a challenge to outsourcing or not. 17 of the respondents representing 17% disagreed that staff retrenchment posed a challenge to outsourcing. 5 respondents representing 5% also strongly disagreed that staff retrenchment posed a challenge to outsourcing. This finding is in line with Kamanga and Ismail (2016). By outsourcing certain business function to an external service provider, the organization's human resource engaged to undertake that particular business function may be retrenched (Kamanga and Ismail, 2016).

On the issue of outsourcing leading to high switching cost, 43 of the respondents representing 43% indicated that they strongly agreed that outsourcing led to high switching cost. 20 respondents representing 20% also indicated that they agreed that high switching cost was among the challenges of outsourcing. 7 of the respondents representing 7% were undecided whether high switching cost was among the challenges of outsourcing. 20 of the respondents representing 20% disagreed that high switching cost was a challenge to outsourcing. 10 respondents representing 10% also strongly disagreed that high switching cost was a challenge to outsourcing. This finding is in line with Brulot (2007) research finding. Brulot noted that entities enter into contractual agreement with third parties before outsourcing certain business functions.

# 4.4 Effects of Outsourcing on the Performance of Selected Alcoholic Beverage Producing Companies in Ghana

Descriptive statistics showing mean, standard deviation, minimum and maximum values of selected alcoholic beverage producing companies in Ghana are listed below. Table 4.9 gives the summary statistics of the main variable that have been included in the model including; minimum, maximum, mean, standard deviation. From Table 4.7, the average value of performance ratio measured by ROE is 26.7% (0.2679597). This implies that selected alcoholic beverage producing companies in Ghana earned a net income of about 27% on equity with a maximum and minimum value of 1.528123 and 0.0185899 respectively. There is a standard deviation of 21.5% percent from the average value which reflects the presence of variation among selected alcoholic beverage producing companies in Ghana.

The main independent variable namely, transportation cost has an average ratio of 21.2%. This implies that selected alcoholic beverage producing companies in Ghana have a transportation cost of about 21% with a maximum

value of 2.980298. There is a standard deviation of 46.3% from the average value which reflects the presence of moderate variation among selected alcoholic beverage producing companies in Ghana.

Table 4.7 also shows that the average growth is 56.7%. This implies that the percentage change in revenue is high among selected alcoholic beverage producing companies in Ghana with maximum and minimum values of 11.98496 and -0.1277169 respectively. There is a standard deviation of 167% from the average value which reflects the presence of major variation among selected alcoholic beverage producing companies in Ghana. The average age of selected alcoholic beverage producing companies in Ghana have been in operation for the past ten years with maximum and minimum value of 22 years and 1 year respectively. There is a standard deviation of 5.78 years from the average age which shows a moderate dispersion among selected alcoholic beverage producing companies in Ghana. The average asset tangibility of selected alcoholic beverage producing companies in Ghana is 21% with maximum and minimum values of 1.888301 and 0.072444 respectively. There is a standard deviation of 32% from the average value which reflect the presence of moderate variation among selected alcoholic beverage producing companies in Ghana.

**Table 4.7 Descriptive Statistic** 

Variable	Obs.	Mean	Stand Deviation	Minimum	Maximum
ROE	30	0.2679597	0.2154924	0.0185899	1.528123
Transport cost	30	0.2124067	0.4626031	0	2.980293
Growth	30	0.567173	1.679184	-0.1277169	11.98496
Age	30	10.12727	5.780089	1	22
Asset. Tang.	30	0.2107367	03258207	0.072444	1.888301

Source: Computed from the financial statement of some selected alcoholic beverage producing companies in Ghana.

#### 4.5 Correlation Matrix

The coefficient or correlation provides an index of the direction and magnitude of the relationship between two sets of variables, without implying causality. The sign of the coefficient is an indication of the direction of the relationship. A correlation test is carried out in regression-related research to determine whether collinearity exists among the independent variables employed in the work or not, since it is capable of distorting the true relationship of dependent variables and independent variables. Multicollinearity is the situation where some explanatory variables are highly related thus making it difficult to tell which of them is influencing the dependent variable.

The table 4.10 presents the correlation matrix for all variables incorporated in the study. The correlation stable shows the relationship between the independent variables. The correlation coefficient shows value below 0.8 and this is indicative that there is no strong relationship between independent variables, a situation representing multicollinearity.

From table 4.10 transport cost is negatively correlated with asset growth and age with co-efficient estimate of correlation -0.0102, -0.4046. Transport cost is positively correlated with asset tangibility with co-efficient of 0.7354. Growth is negatively correlated with age with co-efficient of correlation of -0.2232. Growth is positively correlated with asset tangibility with co-efficient of correlation of 0.0464. Age is positively correlated with asset tangibility with correlation co-efficient of 0.2415.

**Table 4.8 Correlation Matrix** 

	Transport cost	Growth	Age	Asset Tang
Transport cost	1000			
Growth	-0.0102	100		
Age	-0.4046	-0.2232	1000	
Asset tang.	0.7353	0.0464	0.2415	1.000

Source: computed from the financial statement of some selected alcoholic beverages companies in Ghana

# **4.6 Regression Results**

Details of the regression results are presented below.

# 4.6.1 Return on Equity

The regression results proved to be statistically significant at 0.05 for each performance ratio measured by Return on Equity (ROE). From the table 4.11 below, transport cost has a negative coefficient and is statistically significant at 0.05. This implies that the lower the transport cost, the more profitable selected alcoholic beverage

producing companies in Ghana become. This means that larger firms can outsource their transportation requirements since outsourcing lowers the transport cost of firms. The lower the transport cost the more profitable companies become.

Growth has positive coefficient and is statistically insignificant to the performance of alcoholic beverage producing companies in Ghana. Age on the other hand, has a negative coefficient and is statistically insignificant to the performance of alcoholic beverage producing companies in Ghana. It is worth noting that asset tangibility has a negative coefficient and is statistically significant. This implies that the lower the asset tangibility the more profitable alcoholic beverage producing companies in Ghana become.

Table 4.9 Regression results: ROE dependent variable

	Coefficient	Std. Err	Z	p> z
Transport cost	-0.0931509	0.0489676	-1.90	0.05
Growth	0.0006381	0.0020462	0.31	0.755
Age	-0.0060672	0.0038825	-1.57	0.118
Asset tang.	-0.2447216	0.0868272	-2.82	0.005
Cons	5.663	1.131	1.534	0.02

Source: Computed from financial statement of some selected alcoholic beverage companies in Ghana.

#### **4.7 Discussion of the Results**

In this section the effect of each variable used in this study is discussed and analyzed based on the theoretical predictions, prior to the empirical studies.

# **4.7.1 Transport Cost**

As presented in table 4.9, panel data results for the analysis using random effects models show a negative and significant impact on profitability of selected alcoholic beverage producing companies in Ghana with a regression coefficient of -0.0931509, P-value of 0.05. This result can be interpreted to mean that the lower the transport cost of alcoholic beverage producing companies in Ghana, the higher the companies' profitability. The result confirms the transaction cost economies theory. According to Reuben et al. (2007), Transaction cost economies theory is premised on the fact that decisions are made based on transaction related factors. Transaction cost economies (TCE) or theory view the relationship between service receiver and service provider are to ensure economic transactions take place (Shaharudin et al., 2014). The relationship between service receiver and service provider is integrated due to cost. The cost includes time, money and human resource. By using Transaction cost economies, companies outsource their transport logistics to third-party service providers who produce at least cost.

# **4.7.2 Growth Opportunities**

As seen from the analysis, this study shows that growth opportunities have positive impact on profitability of selected alcoholic beverage producing companies in Ghana. The panel random effect estimation regression result shows insignificant and positive relationship between growth and profitability of alcoholic beverage producing companies in Ghana with a regression coefficient of 0.0006381 and p-value of 0.755

# 4.7.3 Asset Tangibility

There is a negative relationship between asset tangibility and performance of selected alcoholic beverage producing companies in Ghana. The panel estimation result in this study, shows a statistical significant negative relationship between tangibility of assets and profitability of selected alcoholic beverage producing companies in Ghana with a regression coefficient of -0.2447216 and p-value of 0.005. This means that selected alcoholic beverage companies in Ghana with high ratio of fixed assets to total asset leads to lower profitability of the alcoholic beverage producing companies in Ghana.

# 4.7.4 Profitability

Profitability is measured by return on equity. Profitability is enhanced when transportation cost of alcoholic beverage producing companies in Ghana is very low. This means that selected alcoholic beverage companies in Ghana can reduce their transport cost by outsourcing and thereby increasing their profitability.

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the research findings, conclusions and recommendations. The findings have been presented in line with the objectives of the study and recommendations have been made based on the findings.

### **5.2. Summary of the Findings**

Summary of the findings are discussed below. They include:

# 5.2.1. Reasons for Outsourcing Transport Logistics

Outsourcing improves company's focus: The study revealed the reasons for outsourcing transport logistics and concluded that outsourcing improves a company's focus. This was supported by 60% of the respondents.

Outsourcing aids companies to access world class capabilities: The study revealed that outsourcing transport logistics help companies to access world class capabilities. In other words, by outsourcing, companies could contract capable institutions to provide the service they intend to outsource.

Outsourcing helps companies to free resource for other purposes: The study revealed that one of the reasons for outsourcing transport logistics is to help companies to free resources for other purposes. Invariably, by outsourcing, funds incurred as fixed cost could be freed and reassigned to other sectors of the entity.

Outsourcing helps companies to share and minimize risk: The study revealed that outsourcing transport logistics helps companies to share and minimize risk. This was supported by over 80% of the respondents.

Outsourcing infuses cash into the organization: The study revealed that outsourcing infuses cash into organizations. By outsourcing certain activities to a third party, cash used to pay certain fixed costs are freed for other purposes in the organization.

Outsourcing helps to reduce and control operating cost of companies: The study established that outsourcing helps to reduce and control operating cost of companies. This was supported by over 80% of the respondents. By outsourcing certain functions of an organization there is elimination of certain fixed costs which enhances the organization's efficiency.

# 5.2.2. Challenges of Outsourcing Transport Logistics

Outsourcing results in loss of control: The study identified loss of control as a challenge of outsourcing transport logistics. When an entity outsourced certain business functions to third party service providers, the entity loses control over certain particular business functions.

Customers become dissatisfied with outsourcing: The study identified customer dissatisfaction as a challenge of outsourcing transport logistics. This was supported by 65% of the respondents.

Leakage of confidential information: The study identified leakage of confidential information as a challenge of outsourcing transport logistics. Outsourcing may lead to leakage of confidential information to competitors, which may lead to loss of business and trust.

Staff retrenchment: The study identified staff retrenchment as a challenge of outsourcing transport logistics. By outsourcing certain business functions to external service provider, the organization's human resource engaged in those particular business functions, may be retrenched.

*High switching cost:* The study identified high switching cost as a challenge of outsourcing transport logistics. This was supported by over 60% of the respondents.

# 5.2.3. The Effects of Outsourcing on the Performance of Selected Alcoholic Beverage Producing Companies in Ghana

The study revealed that transport cost has negative coefficient and is statistically significant at 0.05. This implies that the lower the transport cost, the more profitable selected alcoholic beverage producing companies in Ghana become. This means that larger firms can outsource their transportation since by outsourcing they are able to lower their transport cost and the lower the transport cost the more profitable companies become. Asset tangibility has negative coefficient and is statistically significant. This implies that the lower the asset tangibility the more profitable alcoholic beverage producing companies in Ghana become.

The result confirms the transaction cost economies theory. Transaction cost economies theory is premised on the fact that decisions are made based on transaction related factors. Transaction related factors include asset specificity, environmental uncertainty. Transaction cost economies (TCE) or theory view the relationship between service receiver and service provider are to ensure economic transactions take place. The relationship between service receiver and service provider is integrated due to cost. The cost includes time, money and human resource. By using Transaction cost economies companies outsource their transport logistics to third party service providers who produce at least or lower cost.

# 5.3. Conclusion

The reasons for outsourcing were identified as follows: outsourcing helps to improve a company's focus; outsourcing helps companies to access world class capabilities; outsourcing helps companies to free resource for other purposes; outsourcing helps companies to share and minimize risk; outsourcing infuses cash into organizations; and outsourcing helps to reduce and control operating cost of companies.

Challenges of outsourcing transport logistics were identified as: loss of control, dissatisfied customers, leakage of confidential information, staff retrenchment and high switching cost. The study revealed that transport cost has a negative coefficient and is statistically significant at 0.05, implying that the lower the transport cost, the more profitable selected alcoholic beverage producing companies in Ghana are. Larger firms can outsource their transportation needs since by outsourcing, transport cost reduces significantly.

Asset tangibility has a negative coefficient and is statistically significant, implying that the lower the asset tangibility the more profitable alcoholic beverage companies in Ghana become. The result confirms the transaction cost economies theory. Based on the above, the study recommended the following:

#### **5.4. Recommendations**

Agreeing on certain particular quality standards with third party service providers: Before organizations outsource to third-party service providers, they should agree on certain particular quality standards with third-party service providers. By agreeing on certain particular quality standards, third-party service provider will be committed to the terms of the agreement or contracts and thereby ensure that quality goods and services are provided.

Management should not outsource to service providers engaged in multiple contracts: When organizations outsource to service providers engaged in multiple contracts, it may lead to leakage of confidential information. Since leakage of information leads to loss of business and lack of trust, there is the need for organizations to outsource to service providers who are not engaged in multiple contracts.

Low switching cost: Due to high switching associated with outsourcing, organizations are unwilling to outsource to third parties. However, if the cost of switching is low, most organizations would outsource to third parties and reap the full benefit of outsourcing.

Staff should be reassigned: By outsourcing certain business functions to external service providers, human resource engaged to undertake those business functions may be retrenched. However instead of cutting back staff, they should be reassigned to other areas in order to help grow the business.

# 5.5. Further Research

Due to financial constraints the sample size used for the study was relatively small and therefore future research could be undertaken using a bigger sample size. Further research could also be undertaken across the ten regions of Ghana to find out whether there are regional differences in assessing the impact of outsourcing transport logistics.

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