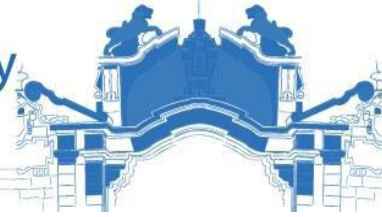




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**COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF
ACCOUNTING AND FINANCE**

**THE EFFECTS OF FOREIGN CURRENCY SHORTAGE ON
PERFORMANCE OF ETHIOPIAN BREWERY COMPANIE**

(BGI Ethiopia PLC)

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A Thesis Submitted to Addis Ababa University,

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SCHOOL OF GRADUATE STUDIES

(The case of BGI ETHIOPIA PLC)

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Statement of Certification

This is to certify that **Keneni Asrat Bekuma** has carried out her research work on the topic entitled, “**Effect of foreign currency shortage on the company performance: the case of BGI Ethiopia PLC**” is her original work and is suitable for submission for the award of Master of Arts Degree in Finance and Accounting.

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Declaration

I the undersigned, declare that the thesis entitled “**Effect of foreign currency shortage on the company performance: the case of BGI Ethiopia PLC**” is my original work and has not been presented for any other University for any other requirements and that all sources of materials used for the thesis have been properly acknowledged.

Declared by:

Keneni Asrat Bekuma

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LIST OF ACRONYMS

ANOVA- Analysis of variance

BGI -Brasseries et Glaciers Internationals

CEO- Chief Executive Officer

FC- Foreign Currency

FDI – Foreign Direct Investment

FE- Foreign Exchange

FMOLS Approach – Fully Modified Ordinary Least Square

Forex- Foreign Exchange

GDP - Gross domestic product

GTP II- Growth and Transformation Plan II

PMG Approach- Pooled Mean Group

RMIP- Raw Material Import Purchased

SACU- Southern African Customs Union

TCA- Thematic Content Analysis

TPM- Total Productive Maintenance

ABSTRACT

Shortage of foreign currency is one of the characteristics of developing countries. Exchange rate changes affect the production level of industries through trade channel effects and variation of the prices of inputs and outputs. One of the major areas which is affected by shortage of foreign currency is the performance of an organization. The aim was to explore the effect of foreign currency shortage on performance of Ethiopian Brewery companies. Mixed research design was implemented to explore the effect of foreign currency shortage on performance of Ethiopian Brewery companies; data were collected from focal persons through Likert scale and open-ended questionnaires. Qualitative data was also collected and analyzed with TAC Data collected from focal persons were analyzed qualitatively whereas data collected from closed ended survey questionnaires analyzed quantitatively by descriptive analysis to examine the effects of foreign currency shortage on the selected company's performance. Study participants (survey, interviewees and Key informants) were selected purposefully and included in this research. Thematic Content Analysis (TCA) technique was used to analyze the data. A total of 22 individuals participated in the study. The triangulated findings (from Survey, document review, interview) showed that the company suffers from high (84.6%) cost of production that can confirm poor company performance. The study found that among the dominant transaction, the company spent more for raw material cost (38.8%) and labor cost (15.4%) which affects seriously the performance of the company. A number of factors are found out but 2 main categories of factors (Internal & External) identified that affect company performances in such a way that shortage of foreign currency affected the performance by declining the company's productivity, machinery efficiency and the profit margin. Overall, the performance of the company found to be relatively low. The study found out higher level of severity company performance was found to be poor as it spent high cost of production indicating foreign currency shortage has effect on the parameters. The firm supposed to revise its plan and devise effective mechanisms to be more competitive as well as resist the dynamic changes as result of shortage of FC in the country. Also, the concerned bodies supposed to give an opportunity of tax reduction and holidays on the imported items and services, on the brewery companies to reduce the effect of foreign currency shortage on industry's performance.

Key Words: *Effects, Foreign Currency, Shortage, Performance, Brewery Companies, BGI Ethiopia, 2023.*

CHAPTER ONE

INTRODUCTION

Introduction into the Chapter

This chapter is presenting background information, statement of the problem, research questions and objectives of the research with regard to main effect of foreign exchange rate shortage on the manufacturing company's performance. Significance and scope of the study, among others, were also be given due emphasis. In addition, it provides brief information how the whole thesis was organized in the end.

1.1 Background of the Study

Foreign Exchange is the trading of one currency for another (Investopedia, 2020). In other words, a currency's value can be pegged to another country's currency, such as the U.S. dollar, or even to a basket of currencies (Lioudis, 2020).

Different sub-Saharan countries have been impacted by a slowdown, if not even a downtrend, in their already very low levels of economic and social development, as a consequence of both internal and external factors(International Monetary Fund, 2001; Stefano Mainardi, 2019) For instance, Nigeria is one of the leading major African countries in foreign reserves in 2018, as the country's gross earnings hit \$47.80 billion, according to data seen by Business Insider Sub-Saharan African from the Nation's central Bank.(Business Insider Africa, 2021).

One of the most important sources of foreign cash for developing economies is international aid. These economies, particularly low-income countries, are highly aid dependent to the extent that they could not even function without it. This is because the problem of economic development is highly linked with shortage of capital, because foreign exchange revenues from the export industry are significantly smaller than the import demand. Ethiopia is one of these countries, where the flow of aid is required to finance budget deficits to a considerable extent (Aye M. AlemuI; Jin-Sang Lee, 2015)

Exchange rate changes impact the production level of industries through trade channel effects and variation of the prices of inputs and outputs.(Habibi, 2019) Moody's Investors Service reported that "Foreign-currency shortages are subsiding but will take time to overcome" while foreign currency shortages in Sub-Saharan Africa stemming from lower oil and commodity prices are easing, it will take time for sovereigns, banks and non-financial companies to restore their financial health (Remit C., 2020).

The manufacturing sector is an avenue for trade expansion, and it is a vital basis of innovation and competitiveness, and it gives rise to outsized contributions to exports and productivity expansion. Manufacturing in SACU countries is hampered by structural shortcomings such as the exchange rate (Mlambo, 2020).

Businesses that trade domestically must also be aware of changes in exchange rates as they will have an indirect or direct impact by virtue of the wider economy. In selling overseas if you run a business that sells products or services to a country abroad, then a change in the exchange rate will have a direct effect on your business. The potential risk here is that your prices may become uncompetitive because of variations to the exchange rate, overseeing to lost market share against foreign oppositions who do not have to incorporate transactional exchange rate. With buying overseas if your business contracts with a supplier from a foreign country, you become vulnerable to fluctuations in the exchange rate. If the exchange rate was to go upper side, you would have to pay more for the same amount of goods. Changes in the exchange rate can also indirectly affect your business, even when you do not buy or sell goods and services overseas. Exchange rate volatility can also have effect on competition. Depreciation of your local currency makes the cost of importing goods more expensive, which could lead to a decreased volume of imports. Domestic companies should benefit from this as a result of increased sales, profits and jobs (Dhaval P., 2019).

Foreign exchange shortages, in particular of continued nature, Such inefficiencies pose entail various challenges for a national economy, ranging from a general slowing of development and impediment to profits inability to import Vital and very essential goods for the livelihood of the people of the country. However, despite seemingly little consideration of the sector's senior officials for impediments that the current legislation poses to their business activities

and development of the sector, comparison with other national economies indicates that the current approach could be optimized. Therefore, not being able to access foreign currency signifies a limitation in products that can be offered and thus narrows scopes for expansion and development (Lloyd & Teshome, 2018).

Ethiopia experience widening current account deficits. The demand for foreign currency to finance import bills of various goods has been growing from year to year, partly due to public and private investment boom. However, the supply side for foreign currency is constrained by poor export sector performance and erratic foreign aid inflow (Tesfaye Boru, 2015). State television, Addis Ababa, reported on April 16,2018 Ethiopia’s new prime minister said that a foreign exchange shortage will last for years and more cooperation with the private sector is essential to solve it, (Aaron M, 2018)

There are certain studies which have assessed the impacts of shortage of foreign currency on the company’s performance (Degefa & Economic, 2001; Privacy Shield, 2019; Tenkara Media, 2020; Studies, 2019). However, these studies have given less emphasis in foreign currency shortage effect on Brewery Company’s performance in Ethiopia. Therefore, this study attempts to address the main effect of foreign currency shortage on the performance of Brewery companies.

1.2 Organizational Background



BGI is an independent global Brewery company, committed to surprise and excite consumers with its brands and products everywhere. It started 1922. Mr. Hal, a Belgian national of Ethiopian descent established St. George Brewery. The Company functions in over 53 countries

and operates more than 155 breweries. BGI is committed to the responsible marketing and consumption of its more than 5 premium and specialty beers and it employees over 1903 permanent and 78 temporary workers. BGI has a long history with Africa and was exporting beer to various African countries like Djibouti, South Sudan as well as USA and Israel.

BGI has been operating in Ethiopia since December 1998 became part of BGI Ethiopia through privatization; arm of France's Castel Group, entered the market and engaged in the production and distribution of beer, wine and beverages. Today, BGI Ethiopia operates the largest number of breweries, owns five breweries including the St. George Brewery in Addis Ababa, the Kombolcha Brewery, the Hawassa Brewery, Zebidar Brewery and Raya Machew Brewery with a combined production capacity of 4.3 million Hectoliters of beer (bottle and Draft) annually, giving it the second-largest market share. The company's aim is to become and remain a leading brewery in each of the markets in which it operates and to have the world's most valuable brand portfolio(BGI Ethiopia, no date)(Asoko Market Insight, 2019).

1.3 Statement of the problem

The United States Dollar (USD) is used to price many goods globally, and is used in many international trade transactions, a dollar shortage can limit a country's ability to grow or trade effectively. Most countries try to manage shortage of currencies, such as U.S dollars or other main currencies, which can be utilized to buy imported goods, manage the country's exchange rate, pay international debts, or make international transactions or investments (Cory Mitchell, 2021).

According to a study which has examined the impact of exchange rates on the performance of the Nigerians' manufacturing, the empirical results of the study shows that a depreciation of the Naira has an antagonistic impact on the performance of the Nigerian manufacturing sector as it was found that exchange rates has a negative significant long run relationship and causal relationship with the performance of the sector (Falaye et al., 2019).

Aside from factors such as interest rates and inflation, the currency exchange rate is one of the most important determinants of a country's relative level of economic health. A higher-

valued currency makes a country's imports less expensive and its exports more expensive in foreign markets (Twin, 2021) Foreign exchange shortages due to weak export performance and increased demand for foreign currency will proceed to present significant market challenges, mainly for potential Ethiopian buyers of U.S. goods and services (Shield, 2020)

Private sector actors widely complain about the shortage of foreign exchange and point out the adverse implications on their businesses.(Shield, 2020) And also, some existing high profile foreign businesses and investors are contemplating to temporarily quit their operation here until the problem with the shortage of foreign currencies is resolved while the representatives of some of new foreign investment projects are having second thoughts, according to the diplomatic sources(Ezega News, 2021). On the report which has assessed Ethiopia's new economic program challenged by foreign-exchange scarcity, it has been stated that investor protections are likely to be strengthened before December 2019, but foreign currency /FX / availability is very unlikely to improve during 2020-21(IHS Markit, 2019)

Samson (2021) an economist with over four decades of experience, states that raw material shortage is an every-day problem to all companies in Ethiopia, Partly, the problem is due to the unavailability of major inputs locally. But it is also a result of the absence of a strong supply-chain management system. Samson added that in order to get foreign currency from banks to import raw materials, factories have to wait for more than a year. Even after getting the foreign currency, it may only be enough to buy a quarter or in rare cases half of their raw materials needed. Due to the existence of such challenges, most factories have been forced to utilize below 50 percent of their production capacity. Even in recent years, especially since mid-2020, the dearth of foreign currency has led to a fall in productivity of factories(Samson Berhane, 2021).

Producers of reinforcement bars, for instance, were not able to get foreign currency for almost two years. Some of the manufacturers halted production as a result. A few are using below 20 percent of their production capability using the inputs they have sourced locally. Meanwhile, the price of the item has more than doubled due to a supply shortage, leading to hoarding and malpractices by traders who tend to profit from such loopholes. The same is true for cement factories. Because of the unavailability of forex to import spare parts for their

machines and chemicals, some plants have either stopped production for days, or still face production interruption (Lloyd & Teshome, 2018a).

And Leather industries and Tanneries are shutting down their processing facilities due to foreign currency shortages. According to the Ethiopian Leather Industries Association, the sector has been facing complex challenges as most factories have been unable to get major inputs raw materials like chemicals as well as spare parts and accessories. Ullah (2020) states that at least four to six factories were already forced to shut down their factories while others are already running on less than 10 percent of their capacity due to input shortages (Ullah, 2020).

The foreign currency liquidity problem has attracted the attention of the government, banks and the public at large. Indeed, the government of Ethiopia has been committed to enhance the inflow of foreign currency by devising a series of various policy measures including export promotion and diversification, export support schemes, tax holiday, preferential rights for foreign currency and bank credit, loose land lease policy, building industrial zones, awards for model exporters, organizing and coordinating some international markets for domestic goods like a patent right for coffee, flowers and the like. The government has also adopted other strategies with the view of augmenting the foreign currency earning capacity of the country. With the intention of controlling the shortage of foreign currency from exacerbating, the government (for sometimes) has further attempted to wipe out the parallel foreign exchange markets in Addis Ababa in the sense that the foreign currency being transacted illegally here would be channeled to the formal market. The Monetary Authority (the National Bank of Ethiopia) has also issued a directive for the establishment and operation of Foreign Currency Account for Non-Resident Ethiopians (Tesfaye B., 2015).

A lack of access to foreign currency has a lesser adverse effect on the production performance of firms that simultaneously engaged in both importing and exporting activities, as they partly finance their imports from their export earnings. When there is a shortage of foreign currency supply in, the lack of access to foreign currency affects the production performance of manufacturing firms particularly the importing firms in Ethiopia. This

suggests that a shortage of foreign currency strongly challenges the ability of firms to strengthen and expand their production capacity (Siraj M., 2020)

Foreign exchange controls are various forms of controls imposed by a government. These controls allow countries to better manage their economies by controlling the inflow and outflow of currency (Wikipedia, 2021). As a result of the critical shortage of foreign currency in Ethiopia, National Bank of Ethiopia regulations require commercial banks to allocate foreign currency to importers based on GTP II priorities, and debt obligations (Shield, 2020). The Ethiopian government on September 2019 announced its newly proposed 'Home Grown Economic Reform Program', which aims to increase foreign-exchange availability and create a more conducive operating environment for foreign investment (IHS Markit, 2021).

Even though efforts have been made by the government state owned enterprises and government sponsored infrastructure projects usually are given priority over the private sector when competing for access to foreign exchange (Shield, 2020). So, some manufacturing companies are complaining that the government of Ethiopia has to address the foreign currency shortage and allow the company to be able to use its full manufacturing potential (Emmanuel I., 2018).

The Ethiopian economy has grown at a rapid pace over the past decade, but the economy remains constrained by foreign exchange scarcity (Ethiopia - Market Challenges, n.d.). Foreign-exchange (FX) shortage is the main impediment to boosting foreign investment in non-agricultural sectors such as construction, manufacturing, and tourism (IHS Markit, 2021). The Ethiopian manufacturing sector is still far from being an engine of growth and economic transformation (Dogruel M, 2020).

One of the major areas to be affected by shortage of foreign currency is the performance of Brewery companies. Since performance is an indication of the means in which the resources of a company are used in the form which enables it to achieve its objectives (Nzioka & Maseki, 2017).

This study assessed the effect of foreign currency shortage on the performance of the selected Brewery and also has showed the current status of foreign currency shortage. Finally, the study gives suggestions and insight for the company's management, policy makers and other researcher to address the problems accordingly.

The following studies help to see how this study differs from others.

Mbubi (2013) try to find the effect of foreign exchange rates on a firm's financial performance in Kenya's listed companies; the listed companies include Agricultural, Automobiles and accessories, commercial and service, insurance, Construction, Investment, Energy and petroleum. And found out that firms listed in the Nairobi Securities Exchange use income statement and owners' equity account to record foreign exchange differences, The study thus conclude that unrealized foreign exchange gains/losses had an effect on the Net Income of multinational companies as it was posted to either income statement or owners 'equity reserves. The study also found that there had been significant percentage change in imports for firms listed in the Nairobi Securities Exchange (Mbubi, 2013).

Zenegaw A. (2010) pursues to find the impact of foreign direct investment on trade of African Countries. It is not uncommon to see African countries struggling to address their foreign currency shortage. FDI is presumed to play a role in addressing the foreign currency shortage problem. With this in mind the main objective of the study is to determine the relationship between FDI and trade balance (import and export) of African countries (Hailu, 2010).

Tesfaye B. (2015) seeks to find the Causes for Foreign Currency Liquidity Gap: a Situation Analysis of the Ethiopian Economy. The study has given more focus on the reasons for the Liquidity Gap; the primary need for foreign currency is to finance the demand for imported goods and services. In the Ethiopian case, the percentage growth rate of the current account deficit has been spreading out through time, due to considerably higher growth of the value of imports over exports. And says Shortage of foreign currency is one of the characteristics of developing countries. And also shows the foreign exchange holdings; this is the level of

net foreign asset holdings has increased at a decreasing rate during the period 2009/10- through historical records (Tesfaye B., 2015)

Therefore, this study was different from other research in that this study gave much emphasis on the manufacturing industries especially brewery companies' by presenting the effect of foreign currency shortage on the company's performance whereas the studies discussed above gave much emphasis on the service giving sector and the company's financial performance.

1.4 Research questions

The main objective of this research was to explore the 'Effects of foreign currency shortage on performance of Ethiopian brewery companies and the current status of foreign currency shortage'. To address the intended objective, the following research questions were formulated.

- How severe is the currency shortage in the selected brewery?
- What are the underlying dynamics leading to such shortages?
- What is the major effect that shortage of foreign currency resulted on the performance of the selected Breweries?

1.5 Objectives of the Study

General Objective

The general objective of this study is to explore the effect of foreign currency shortage on performance of Ethiopian Brewery companies

Specific Objectives

The specific objectives of the study include:

- To Assess the severity of foreign currency shortage in the selected brewery,

- To explore the effects of foreign currency shortage on performance of the selected brewery,
- To assess the major factors that leads the company to shortage of foreign currency

1.6 Hypothesis

According to Doruk (2019) the four macroeconomic factors are considered for estimating their roles on firm performance: openness, financial depth, exchange rate, and economic growth rate. The obtained findings show that the macroeconomic conditions have a significant effect on firm performance in the manufacturing sector (*Doruk, 2019*). exchange rate shows the positive effect on firm's performance (*Ullah, 2020*). The manufacturing sector is being severely affected by the shortage of foreign currency, which is affecting competitiveness i.e. affected the manufacturing performance (*Lloyd & Teshome, 2018a*). Since, exchange rate has positive effect on business performance the foreign currency shortage has significant and negative effect on the business performance.

H1: Macro Economic factor; Foreign currency shortage has direct, significant and negative effect on the manufacturing company's performance

The primary need for foreign currency is to finance the demand for imported goods and services. In the Ethiopian case, the percentage growth rate of the current account deficit has been diverging through time, due to relatively higher growth of the value of imports over exports. The demand for foreign currency has been significantly increasing as import grows faster and higher than exports hence widening trade balance gap. In particular, the foreign currency demands for imports of strategic goods and services. Two factors can be cited: the incessant growth in the price of these goods in the international market and the higher import volume of same to the domestic economy for accelerating and sustainable economic development program. For instance, the structure of imports was mainly dominated by consumption and manufacturing inputs (Tesfaye Boru, 2015). As per Mlambo C. (2020) study results showed that the exchange rate, imports and FDI have a negative relationship with manufacturing performance. Exports and inflation had a positive relationship with manufacturing performance (Mlambo, 2020).

H2: Industry level factor, foreign currency shortage has significant on Goods and services import purchase management and has direct and negative effect on the manufacturing company's performance

According to Habibi (2019) no organization can achieve any viable output without proper planning. Production planning is highly demanded in organizational management. Production planning thus facilitates corporate productivity performance (Yasir et al., 2020). Production is a building brick of an economy. Exchange rate changes affect the production level of industries through trade channel effects and variation of the prices of inputs and outputs. Based on Habibi (2019) study findings, there is a positive long-run effect of appreciations and depreciation of USD on the production of non-energy materials (Habibi, 2019)

As per Mushavhanamadi and Selowa (2018) efficient maintenance strategy impacts production capacity of the machines used for making those products. Therefore, maintenance can be contemplated as an organizational purpose that functions in accordance with

production. When busy repeating that production makes products, other also says that maintenance produces the capacity for production. In this way, it can be concluded that maintenance disturb production by increasing the capacity of production at the same time also controlling the quality of the output and quality(Mushavhanamadi & Selowa, 2018).

H3: Industry level factor, foreign currency shortage has significant effect on production cost and has direct effect on the company's performance

In Mushavhanamadi and Selowa (2018) Plant maintenance is the complete management of machines and equipment within the factory. It can involve prevention of machine breakdowns thorough machine lubrication, identifying small faults and replacement of outdated machines. Through the use of plant and equipment maintenance in production, this can lead to high quality products, increased production speed and the overall improvement of the performance of the plant. The implementation of Total Productive Maintenance has to do with making operators involved with maintaining their own equipment and making sure preventive and proactive maintenance will build a foundation for enhanced production, Improvements in Cost reduction as well as cost reduction in total labor results from maximum utilization of maintenance resources. Total Quality Management which has to with monitoring and enhancing production and service quality, it emphasizes increase in product efficiency hence low-cost quality production (Mushavhanamadi & Selowa, 2018). Spare parts are important section of the maintenance, and any leakage in parts could lead to breakdown that is unplanned cost. From another angel of view, having over spare parts will means bad using resources, spare parts cost money, and store them cost money and time. The best set is find the right number or spares for each parts in the right place and right time. Maintenance is a major sector to develop, and spare parts are an important branch in the maintenance. Spare parts management is a good sector for the companies to increase the efficiency where there is a lot of potential in it. The spare parts and equipment that used in the process of maintenance, the actions are the process to prevent breakdowns and restore the production as fast as possible when any fail happen (Al-Bawi, 2016).

H4: Industry level factor, foreign currency shortage has significant effect on machinery maintenance plan and cost incurred and has direct effect on the company's performance

Every manufacturing sector that must attain maximum output with minimum input of resources will result in high marginal profit needs to pay more attention to planning. Production planning enhanced the coordination of production flow, thereby eliminating any constraint that may cause any disruption in the production line, hence highly demanded in organizational management (Yasir et al., 2020).

H5: Firm level factor, Profit margin through foreign currency shortage has significant and has negative effect on the company's performance

As per Lili & Jantyyik (2020) study Tax reduction for breweries introduced in 2012 by the Hungarian government had the most significant positive effect on industrial profitability. In general, Hungarian results also underline the importance of supportive governmental attitude, because similar to other countries (e.g., in the USA), microbreweries are highly dependent on regulation, and on taxation in particular. As the business environment for the food and beverage industry in Central and Eastern-Europe is very similar, our results (except the country-specific taxation environment) might be valid not only in Hungary but also in the wider region (Lili Jantyyik, 2020).

1.7 Significance of the study

This study helps for generated evidence to policy makers, Ministry of trade and economy, National Bank of Ethiopia, Ethiopia's Brewery companies and relevant stockholders. It helps to provide information about the current status or severity of foreign currency shortage on the selected Ethiopian Brewery companies. It can also give insight for other manufacturing companies. In addition, this study attempt to give a better insight, when the company faces a shortage of currency, for the manufacturing business how to resolve the problem and to know the focus area that the company would have to give special attention to increase the company's performance and achieve the company's goal in efficient and effective way. Focusing on the similar issues it will help as a starting point for further implementation and

effect studies and as a means to confirm the efforts being made further related study. Moreover, it gives directions of intervention for other concerned bodies, like company managers, policy makers, researchers, and government as well.

1.8 Scope of the study

The main objective of this research was to study the effect of foreign currency shortage on performance of Ethiopian Brewery companies. To achieve the objective of the research BGI Ethiopia PLC was selected. BGI was selected for it has big market share and production volume and also the company has much experience in beer industry in Ethiopia. The topical scope of the study was limited, was focused on Brewery Company's only due to time and fund constraint, to show the foreign currency shortage effect on other manufacturing companies. Also, the study time was delimited only from year 2018 to year 2020 due to getting data and material constraint. Since, organizational performance measured, interims of manufacturing productivity, efficiency, profitability, sustainability of the firm, labor force, product quality, market value, and competitive advantage, supply chain management etc,(Dametew & Ebinger, 2017); due to resource and time constraint except productivity and profitability other measurements were out of the scope of this study.

1.9 Limitation of the study

As many research works have limitations, this research study was also subjected to some limitations. Due to resource limitation, this study could not incorporate all the brewery companies in Ethiopia. And also was limited to the case of Brewery Company which will not be inferred for other financial companies. And in terms of scarcity most of the information needed by the researcher were classified information and or a corporate policy were not given out for research proposes and got time constraint like the period within which such research has been carried out and the survey questioner collection didn't go well with the staff of the company more time were needed for them to provide all the technical and quality information as per the researcher request.

1.10 Organization of the Study

This research study is organized in five chapters. Chapter one is an introduction of the research. Chapter two contains the literature review, Theoretical and Empirical review, of the study. In the Chapter Three the research methodology, which guides the research, was presented. The collected data analysis and findings were presented in chapter four. The last chapter Five contains the summary of findings, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction to the Chapter

In the following session we will try to see what is exchange rate, what are the theories talked about exchange rates, what Forex shortage is, how it comes, what performance is and how it is related with foreign currency shortage and other important economic variables theoretically and empirically. The task of exchange rate theory is to explain behavior observed in the real world

2.1 Theoretical Literature review

2.2 Definition and types of exchange rate

An exchange rate is the price of a country's currency in terms of another currency. In other words, it represents how many units of a foreign currency a consumer can buy with one unit of their home currency(N. Lioudis, 2020).

Foreign exchange is the trading of one currency for another in the foreign exchange market. It is essential to international trade. The market determines the value, known as an exchange rate, of the majority of currencies. It can also involve trading currency on the foreign exchange market (*Foreign Exchange - Kantox*, n.d.).

There are three basic types of exchange regimes. Exchange rate regime is the way in which an authority manages its currency in relation to other currencies and the foreign exchange market. This are Floating exchange, fixed exchange, and Pegged float exchange. Floating exchange rate is a system where the value of currency in relation to others is allowed to freely fluctuate subject to market forces. Fixed exchange rate is a system where a currency's value is tied to the value of another single currency to a basket of other currencies, or to another measure of value, such as gold. Pegged float exchange rate:, a currency system that fixes an exchange rate around a certain value, but still allows fluctuations, usually within certain values to occur (Alam, Minhaj & Yigzaw, 2020).

There are various theories and models of exchange rate determination applicable to the estimation of the rate of exchange of currencies. These theories and models are very useful tools in explaining the behavior of exchange rates in any given economy.

2.3 Theories and models of exchange rate determination

Purchasing power parity (PPP) is a theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries. This means that the exchange rate between two countries should equal the ratio of the two countries' price level of a fixed basket of goods and services. When a country's domestic price level is increasing (i.e., a country experiences inflation), that country's exchange rate must depreciated in order to return to PPP. The basis for PPP is the "law of one price"(Antweiler Werner, 2019)

The theory of purchasing power parity says that, in the long term, floating bilateral exchange rates should settle at a level that makes goods and services cost the same amount in both countries. In the medium term, movements in an exchange rate reflect things like changes in interest rate differentials, international competitiveness and the relative economic outlook in each economy. On a daily basis, exchange rate movements may reflect speculation or news and events that affect the respective economies(*Reserve Bank of Australia, 2001-2021*).

Relative Purchasing Power Parity (RPPP), an expansion of the traditional purchasing power parity (PPP) theory, is an economic theory that states that exchange rates and inflation rates (price levels) in two countries should equal out over time. Relative purchasing power parity (RPPP) is an extension of absolute PPP in that it is a dynamic (as opposed to static) version of PPP. While PPP is useful in understanding macroeconomics in theory, in practice RPPP does not seem to hold true over short time horizons (*CHEN, 2020*).

Exchange rate movements could affect firm performance through a number of channels, such as the cost of imported inputs relative to other factors of production, price of exports relative to foreign competitors or the cost of external borrowing. Although the impact on firm performance is only one component determining how exchange rate changes affect aggregate

economic growth, it can be an important and significant determinant. Actors such as the degree of import penetration, degree of substitutability between domestic and imported inputs etc. also affect the extent to which exchange rate change affects firm's performance (Dhasmana, 2013).

A major defect of the PPP theory is that it does not hold for all types of goods and that it is just about goods arbitrage and says nothing about international capital movements. Nevertheless, despite this, PPP still has a role to play in exchange rate determination (Kehinde & Peter Kehinde Mogaji, 2018).

Balance of Payments Theory of Exchange is also referred to as demand-supply theory of exchange. The theory stresses that the rate exchange basically relates to the position of balance of payments of the country concerned. This theory of exchange rate holds that the price of foreign money in terms of domestic money is determined by the free forces of demand and supply in the foreign exchange market. It follows that the external value of a country's currency will depend upon the demand for and supply of the currency. According to the theory, a deficit, demand for foreign exchange exceeds its supply, in the balance of payments leads of a fall or depreciation in the rate of exchange, while a surplus, a greater demand for home currency in a foreign country than the available supply, in the balance of payments strengthens the exchange reserves, causing an appreciation in the price of home currency in terms of foreign currency i.e., the rate of exchange improves.

The theory states that equilibrium rate of exchange is determined at a point where the demand for and supply of the country's currency are equal Fig.1 shows this.

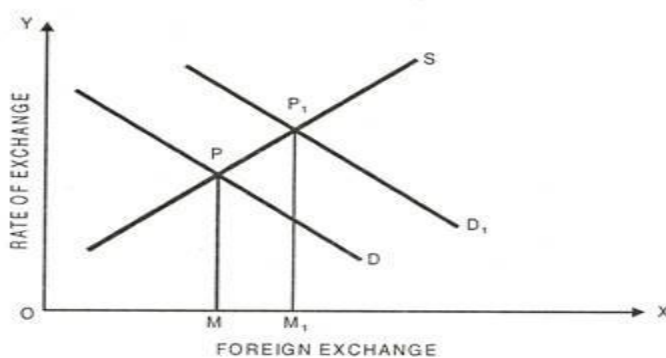


Figure 1- Balance of Payments Theory of Exchange

In Fig. 1 D is the foreigners' demand curve of the currency of the country. It shows that when price of the currency in terms of foreign currency, i.e., rate of exchange, is low, demand for the currency is high and vice versa S is the supply curve of currency with foreign exchange market. Its supply rises with price. PM is the equilibrium rate of exchange, given OM demand and supply. This is how the theory brings the determination of the exchange rate within the purview of the general theory of value (or equilibrium analysis) (Smirti Chand, 2021).

The traditional approach for analyzing exchange rate behavior focuses on the condition of balance of payments equilibrium as the proximate determinant of the equilibrium exchange rate. A common feature of models that adopt this approach is the assumption that an increase in the price of foreign exchange implies an increase in the relative price of a country's imports in terms of its exports and (provided certain elasticity conditions are satisfied) an increase in the net inflow of foreign exchange arising from current account transactions (Mussa, 1984).

The Monetary Theory of the Exchange Rate is based upon the theoretical concept of purchasing power parity; monetary models do not typically trace the influence of the exchange rate through conventional price indices like the consumer price index, the wholesale price index, or even traded goods price indices. Primarily reflect exogenous movements in the expected rate of inflation. Money market equilibrium is consequently brought about through movements in the price level. Again, as in the case of the purchasing-power-parity condition, the recent exchange rate literature presents a different interpretation of the role of speculation in the demand for money than is found in traditional empirical work on the demand for money. The traditional view, most often represented by the adaptive expectations hypothesis, considered the expected rate of inflation as a long distributed lag of past actual rates of inflation, so that current changes in the exogenous variables were assumed to have little or no influence on it (Bilson, 1978).

In other words, the monetary theory of exchange rate determination is fundamentals-based approach to the modeling of exchange rates which is generally built on the construct of the

purchasing power parity (PPP). Monetary models of exchange rate determination formed out of this approach are also referred to as 'structural models' of exchange rate because of their derivation from a system of equation which depicts the market equilibrium relationships between nominal exchange rate and macroeconomic fundamental variables. What is common to all monetary models of exchange rate determination is that they all emphasize the crucial role of relative money supplies in offering explanations about exchange rate (Kehinde & Peter Kehinde Mogaji, 2018).

Asset models of exchange rate determination, the interrelationship between the demand and supply of the specified assets determine exchange rates as the relative price of two currencies. The measurements of these relative prices are in terms of the relative demand for and supply of money. The assets model approach of exchange rate (with perfect capital mobility as basic assumption) can be broken down into two major categories:

Monetary models approach with perfect capital substitutability as core assumption; this exchange rate determination reflects real interest rate as exogenous in the long run and as a variable which is determined in the world markets due to the perfect capital mobility implicit assumption. These imply that the monetary approach two exchange rate determination hinges on two basic assumptions: perfect capital mobility; and perfect market substitutability of domestic and foreign assets. Perfect substitutability of domestic and foreign bonds infers that the rate of return must be equalized across currencies. Therefore, the common assumption shared by the asset market models is perfect capital mobility which entails the absence of significant transaction costs, capital control or international capital flow impediments(Kehinde & Peter Kehinde Mogaji, 2018).

Portfolio balance approaches with imperfect market substitutability as core assumption. This approach is an extension of the monetary exchange rate models focusing on the impact of bonds. According to this approach, any change in the economic conditions of a country will have a direct impact on the demand and supply for domestic and foreign bonds. This shift in the demand/supply for bonds will in turn influence the exchange rate between the domestic and foreign economies. this approach is based on several assumptions: such as the purchasing power parity (PPP) does not hold, the uncovered

interest parity does not hold, the exchange rate is expected unchanged, Only three (3) assets are available for investment for each household: money, domestic bonds, and foreign bonds, Bonds are not perfect substitutes, assumes perfect capital mobility without capital controls and similar barriers to investment, assumes narrow transaction costs and high completion in the money markets; the key advantage of the portfolio approach when compared to traditional approaches is that the financial assets tend to adjust considerably faster to news economic conditions than tradable goods. Nevertheless, based on empirical evidence, the portfolio balance approach is not an accurate predictor of exchange rates (CurrenciesFx.com, 2012-2021)

2.4 Major Factors that Influence Currency Exchange Rates

Numerous factors determine exchange rates. Many of these factors are related to the trading relationship between the two countries. Factors that influence currency exchange rates are important for various reasons. For countries, these factors can affect how one country trades with another. It is worth noting that these factors affect currency exchange rates at a macroeconomic level, meaning they affect global currency exchange rates and not local exchange rates. The following are some of the principal determinants of the exchange rate between two countries(Twin, 2021).

Inflation is the relative purchasing power of a currency compared to other currencies. Countries with low inflation typically have stronger currencies compared to those with higher inflation rates.

Interest rates are tightly tied to inflation and exchange rates. Different country's central banks use interest rates to modulate inflation within the country. Central bankers must consistently adjust interest rates to balance benefits and drawbacks **Public Debt**; most countries finance their budgets using large-scale deficit financing. In other words, they borrow to finance economic growth. If this government debt outpaces economic growth, it can drive up inflation by deterring foreign investment from entering the country, two factors that can devalue a currency (Remit C., 2020).

In some cases, a government might print money to finance debts, which can also drive-up inflation. A *politically stable* country attracts more foreign investment, which helps prop up the currency rate. The opposite is also true – poor political stability devalues a country’s currency exchange rate. Political stability also affects local economic drivers and financial policies. *Economic Health* performance is another way exchange rates are determined. For example, a country with low unemployment rates means its citizens have more money to spend, which helps establish a more robust economy. With a stronger economy, the country attracts more foreign investment, which in turn helps lower inflation and drive up the country’s currency exchange rate. *Balance of Trade* or terms of trade is the relative difference between a country’s imports and exports. For example, if a country has a positive balance of trade, it means that its exports exceed its imports. In such a case, the inflow of foreign currency is higher than the outflow. When this happens, a country’s foreign exchange reserves grow, helping it lower interest rates, which stimulates economic growth and bolsters the local currency exchange rate. *The current account deficit* is another factor; it is closely related to the balance of trade. In this scenario, a country’s balance of trade is compared to those of its trading partners. If a country’s current account deficit is higher than that of a trading partner, this can weaken its currency relative to that country’s currency. As such, countries that have positive or low current account deficits tend to have stronger currencies than those with high deficits (Canama, 2020).

Confidence/ Speculation, Currency changes from speculation tend to be irrational, abrupt, and short-lived. For example, traders may devalue a currency based on an election outcome, especially if the result is perceived as unfavorable for trade or economic growth. In other cases, traders may be bullish on a currency because of economic news, which may buoy the currency, even if the economic news itself did not affect the currency fundamentals (*Macroeconomic Management*, 1989). Governments have a collection of tools at their disposal through which they can manipulate their local exchange rate. Primarily, central/National banks are known to adjust interest rates, buy foreign currency, influence local lending rates, print money, and use other tools to modulate currency exchange rates. The primary objective of manipulating these factors is to ensure favorable conditions for a stable currency exchange rate, cheaper credit, more jobs, and high economic growth (Canam, 2020).

2.5 Determinates of manufacturing firm's performance

In this part primarily tried to explore the factors used in three streams as determinants factors which have direct and significant effect on the firm's performance. These are at macro level, industry level and firm level. In macro level there is 5 main macroeconomic variables that policymakers should try to manage. These are Balance of Payments, Inflation, Exchange rate, Economic Growth and Unemployment(Aidan G, 2020). In industry level the researcher took 4 variables the company's management should have to manage effectively and efficiently these are Beer production cost, raw material and spare part import purchase, Machinery maintenance plan. In firm level are Organization Structure, Organization culture, Chief executive officer attributes, Board characteristics, Firm Resources (Kariuki et al., n.d.)

In Macro Level:

The Balance of Payments is the difference between the total amounts of goods a country exports (X) (sells to other countries) and the total amount of goods a country imports (M) (buys from other countries). This can be simplified to $X-M$. If the amount of goods that a country exports (X) is greater than the amount of goods that a country imports (M), there is a balance of payments surplus because $X>M$. If the amount of goods that a country exports (X) is less than the amount of goods that a country imports (M), there is a balance of payments deficit because X.

Inflation is the amount that the cost of goods and services within an economy has increased over a given time period (usually measured over a year). Inflation is damaging to an economy, and this means that policymakers tend to try and keep inflation low. There are 2 types of inflation, cost-push inflation; which is caused by the costs of production for firms increasing, forcing them to put their sale prices up; and demand-pull inflation; which is caused by growing demand for goods that firms produce, allowing firms to increase prices to gain more profit.

Economic growth is the amount that the level of output within an economy increases over a given time period (again usually measured over a year). Economic growth is extremely desirable as it means that, in general, the people within an economy are getting richer. Economic growth can be increased in a number of ways, such as technological improvement,

an increase in the demand for goods and services, and an increase in the size of the workforce (a fall in unemployment)(Aidan G, 2020)

Unemployment is the amount of people within an economy who are willing and able to work, but do not have a job. There are a number of different types of unemployment. Frictional unemployment, which is unemployment caused by the search for a new job or a transition between jobs, structural unemployment is caused by the decline of an industry, the other is seasonal unemployment caused by the time of year, and cyclical unemployment which is caused by a recession, a reduction in the level of output within an economy (Aidan G, 2020).

In Industry level:

Production cost, production means transforming inputs into an output. An input is a good or services that are being used for the production and output is the goods and services that come out of production process. Cost of production refers to the total cost incurred by a business to produce a specific quantity of a product or offer a service. Production costs may include things such as labor, raw materials, or consumable supplies(Sinha, 2013).

According to Oluwagbemiga (2014) the study was to investigate whether there is a significant relationship between manufacturing cost and firm performance of manufacturing organizations using data from the Nigeria stock exchange. 40 firms listed on the Nigeria stock exchange were selected for the period of 2003–2012. Direct Material Cost, Direct Labour Cost, Production overhead Cost and Administrative overhead cost were considered as independent variables while profitability (operating profit) was taking as dependent variable representing firm performance. The results indicate a significant positive relationship between direct material cost, direct labor cost and firm performance. However, production overhead cost and administrative overhead cost were found to be negatively correlated with firm performance. It is therefore recommended that cost management strategies that focus on reduction of production overhead and administrative overhead should be embarked upon by the manufacturing organizations if their profit maximization and wealth creation objectives will be met (Oluwagbemiga et al., 2014)

Raw material and spare part import purchase management, as Al-Bawi (2016) explained; spare parts management (SPM) is an important branch of management which could lead the company to success or bankruptcy. It is also full of potential improvements that can increase the company profits, productivity, and reliability. Wise inventory management would eliminate all the delay risks of unplanned breakdowns, and reduce process time and cost(Al-Bawi, 2016).

Machinery maintenance plan, smart manufacturing (SM) technologies can improve energy efficiency and productivity of machinery and reduce energy costs in process-supporting energy systems. Many breweries are already taking advantage of the increasing capabilities of

technologies such as energy management systems, advanced metering and sub-metering solutions, data analytics, and internet-connected sensors. The authors analyzed studies from the brewery industry to demonstrate the potential of SM technologies to enhance operational performance and improve the energy productivity in this industry (Nimbalkar, 2019). The maintenance is essential part of the production, it has influence in the company productivity, this influence increases with company expansion. Maintenance costs money and time (Al-Bawi, 2016).

From the statistical results it is obvious that TPM or maintenance as a whole has got positive effects or positively impact downtime, productivity, quality and machine availability. So, from the results we can conclude that without the implementation of TPM, the company won't be able achieve the increase in productivity, quality of the product and machine downtime. Improved quality, run rates and machine downtime has been increased as a result of Total Productive Maintenance. So, from this researcher can conclude that there is an increase in the Overall Equipment Effectiveness of the company though reduced downtime and the increase in the availability of plant equipment. Lastly, from the results it shows that the operation and maintenance of plant equipment has been made easier though the implementation of Total Productive Maintenance program (Mushavhanamadi & Selowa, 2018).

In Firm level:

Organization Structure, all organizations have structure. Hall suggested that structure has two basic functions, each of which is likely to affect individual behavior and organizational performance: "First, structures are designed to minimize or at least regulate the influence of individual variations on the organization," and "structure is the setting in which power is exercised; decisions are made, and the organization's activities are carried out. The importance of structure both at the organization and subunit levels for the performance (efficiency, morale, and effectiveness) of organization (Dalton et al., 1980)

Organization culture, Lack of effective organizational culture and poor cultural integration in the corporate group affect organizational performance and decrease shareholders' return. The purpose of this exploratory case study was to explore successful strategies that one corporate

group used to establish an effective organizational culture to improve performance(Tedla, 2016).

Chief executive officer's attributes, Singal and Li (2017) done study on CEO Attributes and Firm Performance in the Hospitality Industry by drawing on upper echelons theory, explore demographic and other attributes of CEOs in the hospitality industry and their impact on firm performance. Our analyses show that while there is some relationship between CEO attributes and firm performance, the sign and significance of this relationship depends on the specific firm performance measure used (Li & Singal, 2017).

Board characteristics, this study focused on the effect of board composition on organizational performance. And it is suggested that since organizations operating in same environment require similar resources, different board compositions will lead to better performance under different environmental conditions (Şener et al., 2011).

2.6 Empirical Literature review

Dogrue, M. et al (2010) tried to assess the effects of exchange rate on the performance of manufacturing sector in Turkey, using econometric model. His study result reveals the importance of import dependency in the competitiveness of the industry(Dogrue.M, 2020).

Dhasmana (2013) explore and find out that, the impact of Real Exchange Rate changes on the performance of Indian manufacturing firms over the period 2000-2012 using empirical analysis, real exchange rate movements have a significant impact on Indian firms' performance through the cost as well as the revenue channel. The impact depends upon the share of imports & exports along with the degree of market power as reflected in the time varying firm level mark up. So, the Main findings of the paper are that real exchange rate changes affect long term and short-term firm level performance through cost as well as revenue channels but the impact is more pronounced for firms with smaller market power. The second finding is that overvaluation in exchange rate negates the beneficial effect of exchange rate appreciation through the `cost` channel even though it does not significantly affect the impact through the revenue channel. This highlights another channel through which an overvalued exchange rate can adversely affect a country's growth performance (Dhasmana, 2013).

Mbubi (2013) try to find the effect of foreign exchange rates on a firm's financial performance in Kenya's listed companies; the listed companies include Agricultural, Automobiles and accessories, commercial and service, insurance, Construction, Investment, Energy and petroleum. And found out that firms listed in the Nairobi Securities Exchange use income statement and owners' equity account to record foreign exchange differences, The study thus conclude that unrealized foreign exchange gains/losses had an effect on the Net Income of multinational companies as it was posted to either income statement or owners 'equity reserves. The study also found that there had been significant percentage change in imports for firms listed in the Nairobi Securities Exchange (Mbubi, 2013).

As the study of Nyasha (2015) concluded that manufacturing firms in Zimbabwe are financially distressed. This view was covered by the Altman Z-Scores calculated for the companies under study. Results indicated that, financial distress being experienced by companies is as a result of the use of aged machinery shortage of funding for both working capital and capital expenditure together with dilapidated infrastructure. Competition from imports, shortage of raw materials together with inappropriate business models complete the factors weighing down on company performance. Financial distress has had negative implications on the performance of companies. In addition, the collapse of companies has resulted in the level of non-performing loans in the banking system going up (Kaseke, 2015).

As per the Celestine E. (2017) research investigation on the effect of tangible assets on the corporate performance of manufacturing firms in Nigeria, found a significant negative relationship between firm performance and property (i.e. land and building), possibly because many of the firms may not have revalued the land acquired several years ago. Also, The findings on the relationship between return on assets (as well as return on equity) and tangible non-current assets, the study concludes that investments in plant and machinery are significantly and positively related to firm performance (measured by return on assets or by return on equity) while investments in land and building are significantly and negatively related to firm performance(Egbuhuzor, 2017)

According to Ike and Ozouli (2014) in their study found out that Earnings Per-Share has a short term negative and insignificant effect on exchange rate while the long run coefficient shows a negative and significant influence. It was found that foreign exchange rate exerts a positive

influence on net asset value per share, though not to a significant extent while the long-term coefficient reveals a negative and also insignificant relationship. In the case of price-earnings ratio, it shares a positive but insignificant relationship with foreign exchange rate in the short run while its long-term coefficient shows a negative and insignificant relationship. Prices of equity shares are positively and insignificantly related to foreign exchange rate in the short run while in the long run, share price and exchange rate relate negatively and insignificantly too. The long-term coefficient of all the variables is negative and this is in tandem with our earlier (a priori) expectations that in the long run, earning per share (EPS), Net Asset per share (NAVPS), P/E Ratio, and Share Price will relate negatively with foreign exchange rate. Earnings prove to have a stronger long run impact on foreign exchange rate(Ike I. & Ozouli C., 2014).

As per Kalash (2021) this research is the first to examine the effect of currency crisis on the financial leverage–financial performance relationship and is one of few that investigate the role of financial distress risk in determining the linkage between leverage and firm performance These firms incur higher debt costs, and then they can benefit more from the decreases in debt ratio in their capital structure. Moreover, the decreases in debt level have more importance in currency crisis times, when the access to external finance becomes more expensive and more difficult (Kalash, 2021).

A study by Mlambo (2020) sought to examine the impact of the exchange rate on manufacturing performance in SACU states. The study employed the panel group FMOLS and PMG approaches for the period 1995–2016. The study results showed that the exchange rate, imports and FDI have a negative relationship with manufacturing performance. Exports and inflation had a positive relationship with manufacturing performance (Mlambo, 2020).

The main purpose of Mbithi (2013) research is to study the effect of foreign exchange rate on the financial performance of listed companies in the Nairobi Securities Exchange /NSE/ and the study found that there had been significant percentage change in imports for firms listed in the Nairobi Securities Exchange; the study thus concludes that use of foreign exchange has an effect on import costs and accounts payables with the net effect on the Net Income of multinational companies. The study also found that there were significant changes in the annual exports by firms listed in the Nairobi Securities Exchange for the last decade(Mbithi, 2013).

2.7 Empirical Ethiopian Literature review

According to Lloyd and Teshome (2018) study finding, the foreign currency shortage reduces competitiveness, hindering the growth and operation of businesses in Ethiopia. And unit production costs are increasing as production stalls. It is resulting in businesses, laying off workers (especially temporary workers), becoming dormant and ceasing expansion. Business that can hold large stocks of inputs due to lack of clarity of when they will get forex. This also affects cash flow; increases warehouse storage costs and risks product loss when inputs expire (Lloyd and Teshome, 2018).

According to Muhammed S. (2020), the research which has been conducted to explore the empirical studies on exchange rate pass-through, access to foreign currency and firm performance; the finding has revealed that the shortage of foreign currency is the primary production constraints of manufacturing firms in Ethiopia as it limits their access to foreign inputs (Siraj Muhammed, 2020).

According to Andualem, Eduardo, and Alexander (2017) study on the impacts of exchange rate movements on prices and behavior for Ethiopian firms show that, for Ethiopian firms, movements of the Birr against the USD, which most trade is invoiced in, matter more in terms of estimates of exchange rate pass-through /ERPT/ and behavioral responses than do movements of the Birr against trading partners' currencies. Furthermore, Their study show that ERPT and volume/expenditure elasticity's vary significantly across sectors in ways that are consistent with different sourcing and selling strategies that firms in different sectors employ (Mengistu et al., 2017)

Zenegnaw H. (2010) in his study also found out that real effective exchange rate /REER/ has negative and significant effects on both import and export. It means that when the local currency appreciates in real terms, both import and export growth rate will decrease. The inverse relationship between export performance and REER is in line with both theory and empirical works but that of import and REER is not intuitive. The positive and significant Foreign Direct Investment /FDI/ elasticity of export implies that FDI has important contribution to the export subsector of the continent. Expanding FDI in the region will have a positive effect for export promotion and subsequently to the trade balance. Another

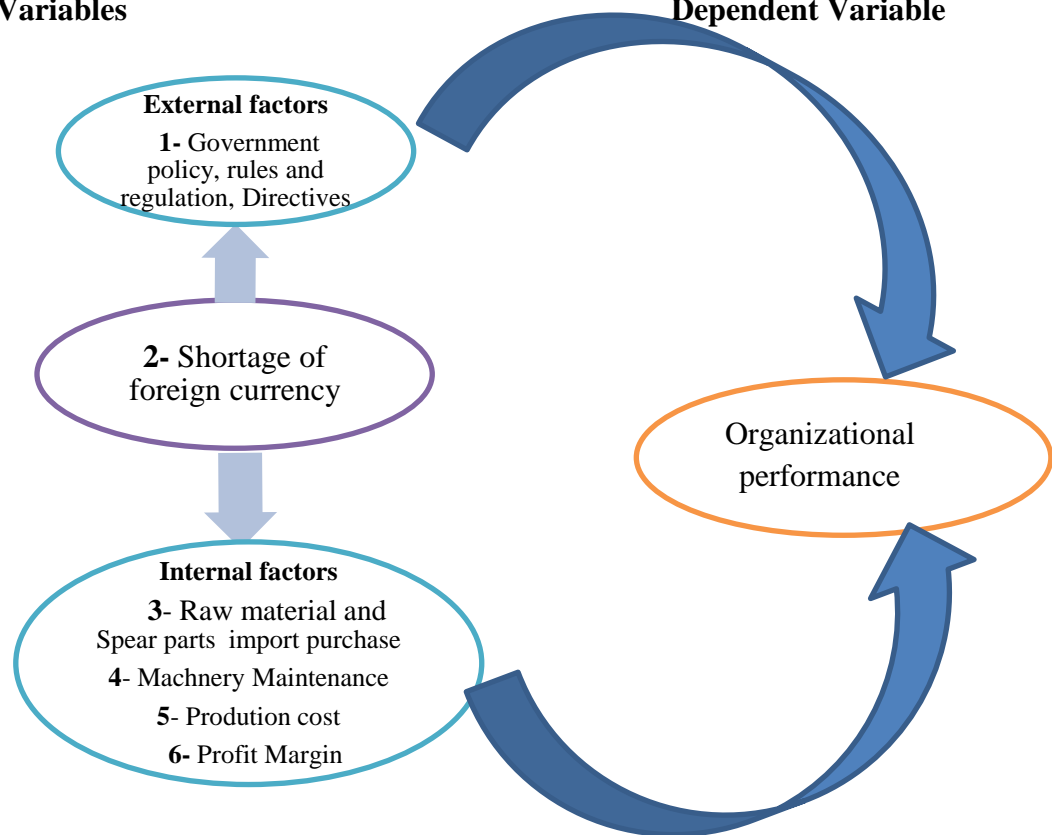
explanation may be that FDIs focus on production of goods or services that are complementary to other import products that increase the import of the complementary product/service (Hailu, 2010).

2.8 Conceptual framework

Presentation of conceptual framework of the effect of foreign currency shortage on performance of the selected Ethiopian brewery company, case study on BGI Ethiopia PLC, helps as a tool to analyze the expected relationship between variables. For this study the researcher uses for presentation of as a dependent variable, company’s performance; and as an independent variables Foreign currency shortage, Import purchase of goods, spare parts and services, production cost, machinery maintenance and service cost, government policy and profit margin.

Independent Variables

Dependent Variable



Source: Researcher computation from (Dogruel.M, 2020), (Dhasmana, 2013), (Lloyd and Teshome, 2018), (Hailu, 2010)

Figure 2-Conceptual framework of the effect of foreign currency shortage on company’s performance

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

Introduction to the chapter

In this chapter the following areas are discussed, about the research methodology, design, data collection method, data analysis and evaluation, Sampling method, operational definition, validity and reliability of the paper.

3.1 Research Methodology

In this study both quantitative and qualitative research approaches were implemented.. There are four main types of qualitative research approaches: Descriptive, Correlational, Causal-Comparative/Quasi-Experimental, and Experimental Research. This study explores the effect of foreign currency shortage on performance of Ethiopian Brewery companies using quantitative descriptive type of data analysis approach. Since, qualitative research tends to focus on the collection of detailed amounts of primary data from relatively small samples of subjects. One of the main objectives of qualitative research is to gain preliminary insights into decision for problems and opportunities.

3.2 Research design

Cross sectional research design has been implemented to address the objective under discussion on the selected manufacturing company. Since the area of the study topic has not been fully studied on manufacturing sectors before, an in-depth knowledge and understanding is required (of course there are studies conducted on shortages of foreign currency related with financial institutions). To get in-depth knowledge and understanding related to the issue under discussion, and to see the extent of the effects of currency shortage on the company's performance, mixed research design was implemented thinking that the data collected from focal persons and financial records provide all what was mentioned.

3.3 Research Method

This study has used Mixed Methods: combination of qualitative and quantitative through survey questioner and primary and secondary data

2.9 Data Collection method

Secondary data was collected from financial records of the company. Primary data was collected through self-administered using semi-structured questionnaire. Both data were collected from the respondents of the case brewery company's staffs whose responsibilities are directly related with the subject matter of the study and have much knowledge about the operation in their company.

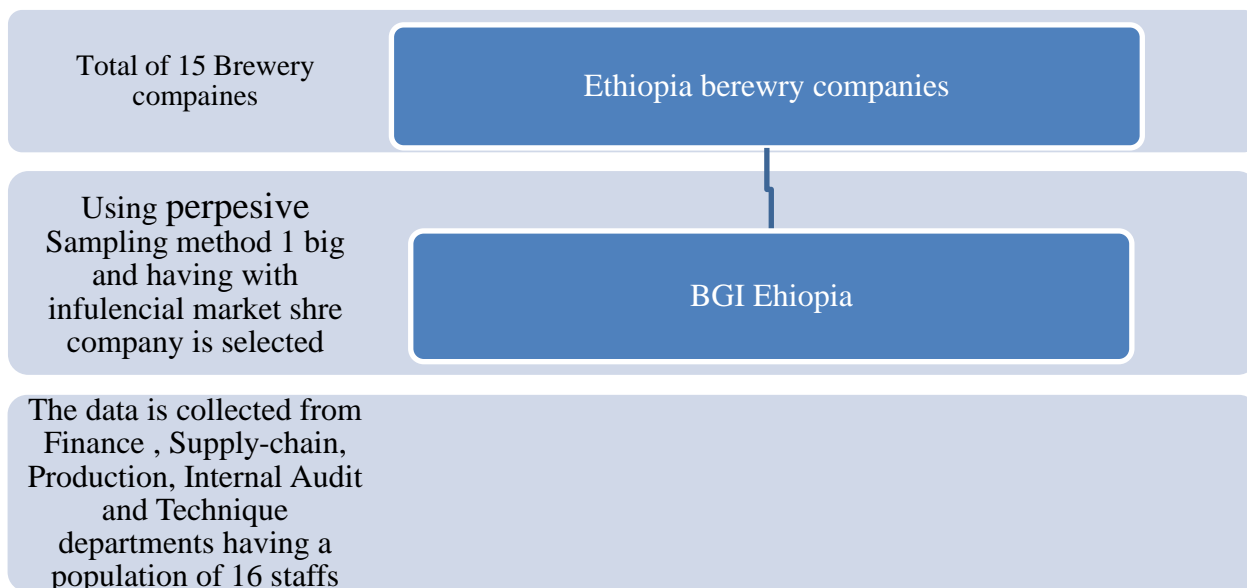
Both qualitative and quantitative data were collected through survey questioner. The data collection tool was consisted of 4 parts with respect of each part it has its own section. Part I contains general overview of the organization and the respondent with Five section. The second part of the questionnaire is assessing factors affecting the company's performance following the shortage of the currency having with 21 section, third part of the questionnaire is Likert-scale type questions for assessing the severity of foreign currency shortage in the selected brewery and the final part is questionnaires' used for collection of data for getting information for the past three years (Year from 2018 to 2020). Data was collected from different departments which are supply-chain, finance, production, internal audit and Technique. The questionnaire adapted by reviewing different literature of similar studies and from a conceptual framework, aiming at to find out the effects of foreign currency shortage on the company performance and the data is collected by the researcher by distributing the self-administered questionnaire.

3.4 Population and Sampling technique

The researcher undertakes purposive sampling in this case study of breweries. It is also called selective or subjective sampling. This sampling technique is in which researcher relies on his or her own judgment when choosing members of population to participate in the study. And purposive sampling enables researchers to squeeze a lot of information out of the data that

they have collected. This allows researchers to describe the major effect their findings have on the population.

Figure 3: Population and sampling diagram



The researcher has selected respondents from the case study brewery/ BGI Ethiopia/ staffs out of Thirteen (13) respondents only Two /2/ of them are in senior level, all the remaining are on managerial/ Executive level.

Table 1- Population and sampling summary

Actors/Departments	Population s	Number of Respondents Self-administered Questionnaire	Percentage
Finance (Accounts, Treasury and IFRS)	4	4	100%
Business control and planning	4	3	75%
Internal Audit	1	1	100%
Supply Chain	4	3	75%
Production	1	1	100%
Technique	2	1	50%
	16	13	81%

3.5 Analysis and evaluation of data

The quantitative data was analyzed using descriptive analysis technique using central tendency. It would be very difficult and hard to visualize if the raw data was presented without interpretation. Descriptive statistics enables us to present the data in a more meaningful way which allows simpler interpretation of the data. Hence, descriptive analysis technique was applied. And also, SPSS is used to analyze the primary data found from respondents to test and analyze the severity of foreign currency shortage in the selected brewery.

3.6 Operational definition

Foreign currency means since the selected brewery is use EURO, in this study when the researcher says foreign currency it means Euro and the local currency is Birr.

Cut-off points

Effects	High , medium and low) or (+ ve or -ve
Performance	High, medium and low) or (rich or poor
Shortage	High , medium and low

3.7 Validity and Reliability

All the information or data used for this study was collected though survey questioner from company employees which has managerial level and have excellent experience on the job and have trustworthiness and accountability. So, it is possible to rely on the data for reasonable analysis and can be trusted the finding and the discussion on the collected data.

In this study for testing of, the severity of foreign currency shortage, the data reliability, it has been used Cronbach's Alpha Based on Standardized Items and the value has got 0.743 since it's more than 6; it shows the tool is reliable. For normality test of, the severity of foreign currency shortage, is tested using SPSS normality test and found the Shapiro-Wilk value 0.716, since the value is greater than 0.05 it shows that the normality of data and also the data is tested by descriptive statistics the value of Skewness is 0.19 and kurtosis value is -0.31 and since the value is between -1.96 and +1.96; it shows the data is normally distributed..

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

Introduction to the chapter

This research work was designed to study on the effects of foreign currency shortage on the performance of brewery companies in case study on BGI Ethiopia. Then after, data obtained from respondents and from company record are presented, analyzed, and interpreted in this chapter.

4.1 RESULT ANALYSIS (DATA ANALYSIS PRESENTATION)

4.1.1 Company profile and socio-demographic characteristics of study participants (Survey)

From six departments, majority of the respondents 4(30.8%) were from finance department. More than half current role was internal audit managers that participated in the study. The company had more 6(46.2%) well qualified management staff. Service years (work experience) of the respondents range from 5-17 years. Majority 6(46.2%) staffs were in the range of 5 – 10 years of work experiences.

Table 2- Profile of the company and respondents (survey)

S/N	Items/Variables	Responses	Frequency(f)	Percent (%)
1	Service Periods of the company	93 Years	13	100%
2	Department	Finance	4	30.8
		Internal Audit	1	7.7
		Supply-chain	3	23.1
		Production	2	15.4
		Technique	2	15.4
		Business control and planning	1	7.7
3	Education Level	4	30.8	4
		9	69.2	9
		Total	13	100%
4	Service Years/Work Experience of the respondents	<= 5	1	7.7
		5 – 10	6	46.2
		10 – 15	4	30.8
		15+	2	15.4
5	Current role in the company	MM	5	38.5
		Internal Audit Manager	8	61.5
		Total	13	100%

The study was conducted by distributing, survey questioner, to 13 BGI employees; from the total population of 16 respondents from different departments; which are concerned and valuable personals for the survey questioner. This are Four (4) from the finance department (Accounts, Treasury & Tax and IFRS), One (1) from Internal Audit department, Three (3) from Business controlling and Planning department, One (1) from Production, One (1) from Technique department, Three (3) from supply chain was served with a questionnaire shown in Annex I. Out of the 13 respondents, 12 filled and returned their questionnaires which make a 99% response rate. Among 12 respondents Two of employees have 1st degree, Two are having MBA with ACCA certification, the remaining Eight respondents have Master's degree in different field of education and Nine (9) respondents are in Managerial level and Three (3) of are Senior staffs. The commendable response rate was achieved after the researcher administered the questionnaires personally and made personal visits and telephone calls follow-up to remind the respondents and clarifying the respondent's question to fill-in

and return the questionnaires. And to summarize and to make it easy manageable, the researcher has prepared the check list table and then descriptive statistics were used to analyze the data.

From six departments, majority of the respondents (30.8%) were from finance department. More than half current role was internal audit managers that participated in the study. The company had more (46.2%) well qualified management staff. Service years/work experience of the respondents, range from 5-17 years. Majority (46.2%) staffs were in the range of 5 – 10 years of work experiences.

4.1.2 Descriptive and inferential statistics to explore the effects FC shortage on company performance

In this section besides to analysis of descriptive statistics , various appropriate statistical tests (Like T-test & Chi-square test , ANOVA, Correlation) were executed to see the presence/absence of statistical significance , differences , direct or indirect relationship and others among the study variables/parameters that were previously formulated in the research hypothesis and questions.

4.2 Research question 1: How severe the currency shortage in the selected brewery?

4.2.1 Severity of foreign currency shortage in BGI Ethiopia

Table 3- Exploring degree of FC Severity in BGI , 2023

S/N	Items	Variables	Frequency	Percent
1	Which of the raw material Seriously affected by FC shortage	RMIP	6	52.1
		PSP	2	10.4
		SPIP	5	38.5
		Total	13	100
2	Which of the ff is most affect by FC shortage	RMIP	1	7.7
		SPIP	1	7.7
		MM	12	84.6
		Total	13	100

As it can depict above, the severity of FC shortage seriously affected RMIP & MM in BGI and it accounted of 52.1% and 84.6% respectively.

Table 4- Likert scale responses result in terms of Severity of shortage of FC of the company

RN	ITEMS	Responses	FREQUENCY	PERCENT
1	Foreign currency shortage has effect on raw material import purchase (RMIP)	Strongly agree	13	100.0
		Agree	-	-
		Neutral	-	-
		Disagree	-	-
		Strongly disagree	-	-
2	Foreign currency shortage has effect on PC	Strongly agree	1	7.7
		Agree	10	76.9
		Neutral	2	15.4
		Disagree		
		Strongly disagree		
3	Foreign currency shortage has effect on PM	Strongly agree	2	15.4
		Agree	9	69.2
		Neutral	2	15.4
		Disagree		
		Strongly disagree		
4	Foreign currency shortage has effect on MM	Strongly agree	9	69.2
		Agree	4	30.8
		Neutral	-	-
		Disagree	-	-
		Strongly disagree	-	-

According to the responses of the participants, the effect of FC shortage on raw materials, they unanimously agreed as 13(100%), 10(76.9%), 9(69.2%) and 9(69.2%) for raw materials, PC, MP, MM respectively.

Table 5- Overall result of raw materials and others related inputs

Overall	Scores	Frequency	Percent
IPRM	19.00	1	7.7
MP	20.00	1	7.7
MM	21.00	3	23.1
PC	22.00	8	61.5
	Total	13	100.0

The overall result indicated that out of all costs the company utilized, production cost (PC) was the highest of all. This study shows the severity of foreign currency shortage in BGI company, the researcher did analysis using SPSS on the data that got from respondents' information and presents the effect of foreign currency shortage on total import purchase of raw materials and spare parts, on the major list of raw materials and chemicals used for beer production, and on the maintenance cost spent for machinery, on the creditors liability balance which will be paid periodically and on the production cost spent for bottle and draft beer production. And it helps to show the foreign currency shortage status in the BGI Company.

Table 6- Descriptive analysis by SPSS - Showing the severity of foreign currency shortage

Items	N	Mean	Mean %age
Import purchase of Raw materials	13	6	100%
import purchase of Spare parts	13	5.31	89%
Production	13	5.08	85%
Machinery Maintenance	13	5.31	89%
profit margin	13	5	83%
government's effort exerts on the manufacturing sector	13	5.08	85%
Creditors payable for import purchase of goods and services	13	4.85	81%
Payments made for Technology and software licenses	13	4.77	80%
expat's salary payable	13	4.38	73%

Source: Researchers' analysis by SPSS (2021)

For analysis of severity of foreign currency shortage within the company purpose, the researcher has analyzed the respondent's response using SPSS by descriptive statistics and the analysis shows the foreign currency shortage has much effect on the above-mentioned transactions which needs more foreign currency to operate the company well and also much helpful to achieve the company's objective in effective and efficient way. As shown in the above Table 4.2, as per the respondent's answer they have strongly agreed that foreign currency shortage had 100% effect on import purchase of raw materials. And as a whole the mean percentage of other items and services also shows that, the respondents have agreed that foreign currency shortage had effect on those transactions by more than 80%. This shows the because of the foreign currency shortage the import purchase of items and services had much affected and the company's import purchase transaction was much affected and disturbed too. Since, those the above-mentioned transactions are affected by the foreign currency shortage, it shows that there was serious foreign currency shortage within the company.

Figure 4- Total and imported raw material purchase



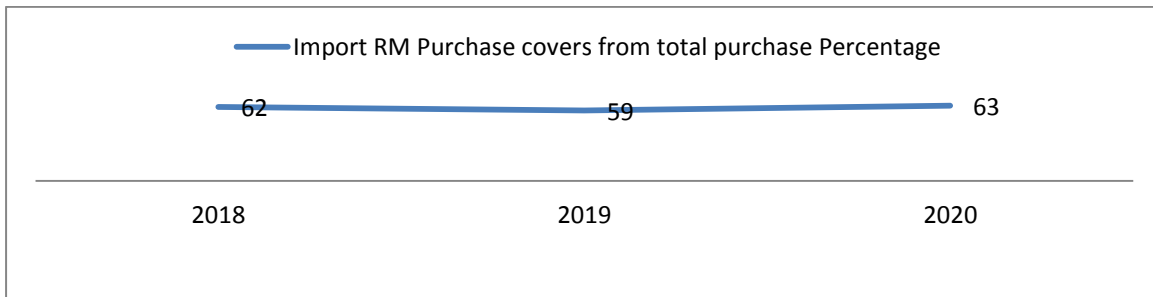
Source: Researcher (2021)

In addition to the above analysis, this study shows the existence of serious foreign currency shortage in the company, which was analyzed as per the data got from the company's record, as shown in the above Graph 1 Total per Imported raw materials purchase; from year 2018 to 2020, out of the total purchase of raw materials more than 50% of it was import purchase of raw materials.

Therefore, it shows as per the respondent's answer and the data got from the company, the company has got serious foreign currency shortage much on year 2019 and goes the shortage in year 2020 too. So, even if the company needs imported raw materials but couldn't import as much as they need because of shortage of foreign currency. And in 2020, the import purchase of raw material cover slightly increases as compared with year 2018 and 2019. Still the above both table and graph indicated that the total value of import purchase increase and total import purchase of raw materials covers also increases from year 2018 to 2020 because of this the company needs much of foreign currency for raw materials purchase however, the company didn't have it as much as they need.

This study further identified that; the company’s total purchase is increased from year 2018 to year 2020. And also, the total import of raw material in value is increased from year to year. As compared with the total raw material purchase cover import purchase of raw materials is decreased in year 2019 and start increase again in year 2020. As per the following Graph4.2, indicated that out of the total purchase of raw materials, import purchase covered 62%, 59% and 63% in year 2018, 2019, and 2020 respectively.

Figure 5- Imported raw material purchase cover percentage as per the total purchase



Source: Researcher (2021)

Table 7- Analysis of variance of severity and department of the company

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.910	5	1.582	3.497	.067
Within Groups	3.167	7	.452		
Total	11.077	12			

Similarly, in firm level, the attributes of staff of the company using ANOVA for severity of FC shortage & the various department of company However, no statistical difference existed.

4.3 Research question 2: What are the underlying forces leading the company to such shortages?

The major factors that lead the company to shortage of foreign currency

There are many factors in macro, in industry and in firm level that leads the companies inter in to or suffer by the foreign currency shortage. In macro level interest rate and inflation is the major factors. However, this study did not cover the macro level factor rather in micro level factors that leads the manufacturing industries in to this shortage. In micro level for manufacturing sector, from external factor government policy issued is one factor and in firm level, internal factor, the increasing of import purchase of inputs for production are the major factors that leads the companies get into shortage of foreign currency, without or minimum amount of export to get foreign currency. i.e., If the shortage not covered by the export earing also another factor that a company is getting in to suffering by the currency shortage. In this study only focus and discussed on from the micro level factor government policy and from firm level factor of having much import purchase with less or no export of products.

The raw materials import purchase

Beer is a weak alcoholic beverage that has been produced for centuries from malted grain, water, and hops with the help of microorganisms, principally brewer's yeast but occasionally other yeast and bacteria. Malt is produced by germinating and drying cereal grains under carefully controlled conditions. In many countries, sugars and adjuncts containing starch are employed as alternatives to malt, particularly during periods of economic hardship, such as in wartime and during the period that follows. Adjuncts continue to be used today because they are less expensive to produce than malt (*Raw Material for Beer Production*, 2020) .

The one and the major item used for production are raw materials. On this section the study tried to present the analysis from the micro level internal factor which leads a company inters to shortage of foreign currency, the import purchase of raw materials that used for production is the major factor.

Table 8- Total and imported raw material purchase

RAW Materials	Value		
	2018 (Birr)	2019 (Birr)	2020 (Birr)
Total RM Purchase	1,790,312,432.00	2,169,972,112.00	2,116,381,573.00
Import RM Purchase	1,108,407,054.00	1,279,947,043.00	1,343,049,768.00
Import RM Purchase %age covers per total purchase	62%	59%	63%

Source: Respondent's response (2021)

To show much of import of raw materials is one of the major forces that lead the company to foreign currency shortage. For analysis purpose the researcher has used the company's annual total purchases and the import purchases for the last 3 years from 2018 to 2020. As per the respondent's response and data shows the foreign currency need for import purchase of raw material as shown in the above Table 3 answers the company how much spend birr for total and import raw material /RM/ purchase and also from the total raw material purchase how much of the percentage is import of raw material purchase.

Raw materials are the input goods that a company needs to manufacture its outputs in good quality and quantity. Since the raw material is the one and major part for the manufacturing company, to produce good quality of output the company has to gain or purchase quality and sufficient number of raw materials.

From the findings shown on Table 4.2, the total RM purchase of BGI in the year from 2018 to 2020 in Ethiopian Birr was from 1.8Billion to 2.1Billion. Which shows there was too much total raw material purchase for beer production out of this almost more than 50%, the company covers the raw materials need was from import purchase. And it is an indication that the company is import purchase oriented and foreign currency dependent. As you can see from above percentage also because of seriousness of foreign currency shortage in the BGI they couldn't import raw materials as much as they need for production use. This means the company was needed more foreign currency for import of raw materials. Because of the company spend much of foreign currency for import purchase of RM it leads for the currency shortage significantly.

Import purchase list of major raw materials for beer production

The raw materials for beer production generally include cereal (barley malt, rice or maize), hops, and yeast. Production methods differ by brewery, as well as according to beer types, equipment, and national legislation. Historically beer was produced from malted barley. However, there is a trend toward a more diverse group of cereals, with modern large breweries increasingly using maize and rice (Berhane, 2021).

In the following table and graph the researcher analyzed the major raw materials and chemicals import purchase which is used for beer production with respect to the quantity purchase with value and its unit price for the last three years, 2018 to 2020. It helps to show the internal factors that lead the BGI Company to foreign currency shortage and also the effect of this shortage on those major items used for beer production in the company.

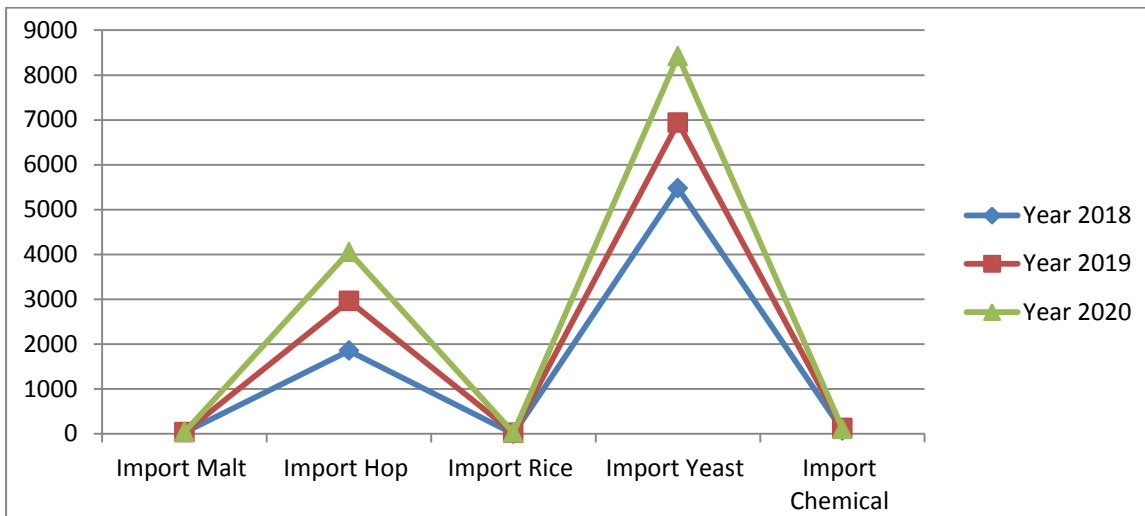
Table 9- Import of major raw materials in terms of quantity and unit price purchase

Years	2018			2019			2020			
	RM Materials	Qty	Value (Birr)	Unit Price	Qty	Value (Birr)	Unit Price	Qty	Value (Birr)	Unit Price
Import Malt		29,891,124	975,255,538.39	32.63	30425231	1,004,015,837.34	33.00	31,147,429.00	1,174,660,601	37.71
Import Hop		44,880.00	83,057,637.55	1,850.66	67318	199,414,636.81	2,962.25	38,290.00	155,260,589.4	4,054.86
Import Rice					12000	257,040.00	21.42	137,000.00	3,149,857.36	22.99
Import Yeast		600.00	3,285,029.74	5,475.05	750	5,205,107.35	6,940.14	670.00	5,643,165.27	8,422.63
Import Chemical		652,506.00	46,808,848	71.74	554543	71,054,422.28	128.13	400,107.55	42,625,630.41	106.54

Source: Respondent’s response (2021)

In the above Table 4 the study found out that, major raw materials of import purchase unit price increases from year 2018 to 2020. Malt purchase, starting from year 2018 unit price Birr 32 per kg increase to Birr 37 per Kg in year 2020, as per the above data that on average raw materials import purchase price of Malt, Hop, Rice, Yeast and chemicals increases by birr 34.45, 2,622.59, 14.80, 6,945.94 and 102.13 respectively

Figure 6- Import of major raw materials in terms of unit price purchase



Source: Researcher (2021)

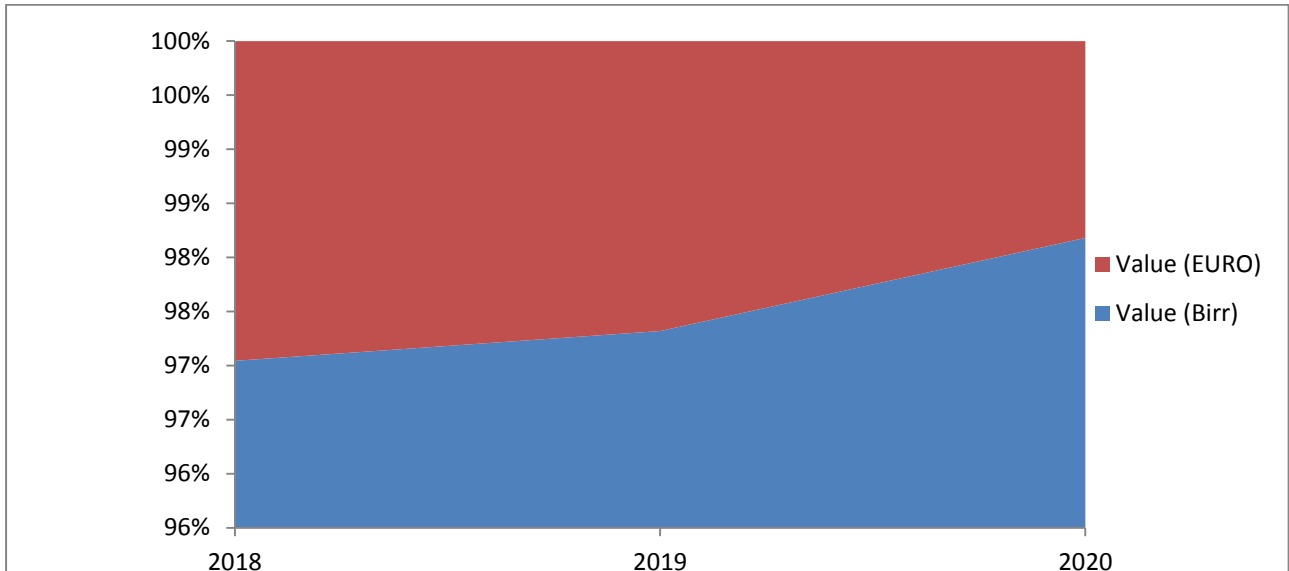
The above Graph 4.3 indicated that since above mentioned major raw materials is imported items, because of foreign currency shortage existed in the company much on year 2019 the unit price of each of raw materials increased from year 2018 to 2020. The study found out that when the quantity purchase increased

Table 10-Foreign Creditors Liability in Birr and foreign currency

Foreign Creditors Liability	Value			Total
	2018	2019	2020	
In Birr	419,984,202.07	165,335,153.48	476,836,434.14	,062,155,789.69
In EURO	12,793,358.73	4,554,280.17	8,837,732.13	26,185,371.03
Rate	32.83%	36.30%	53.95%	40.56%

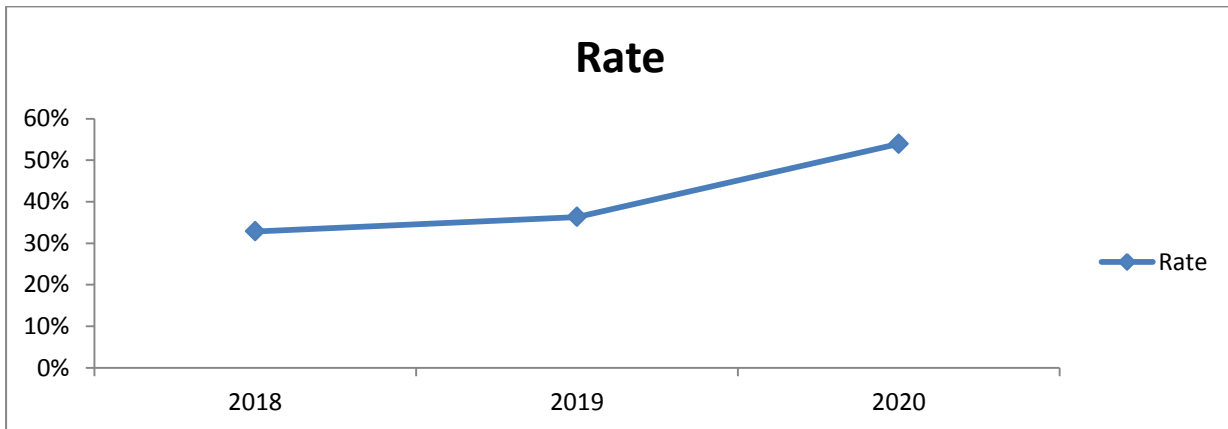
Source: Researcher (2021)

Figure 7-Foreign Creditors Liability in Birr and Euro



Source: Researcher (2021)

Figure 8- Foreign Creditors Liability in Birr per Euro cover percentage



Source: Researcher (2021)

As per respondent's response for survey questioner section 3.3 they said the company has a very high shortage of foreign currency since the end of year 2018. It's because the company has, out of the total purchase, more than 60% is import purchase done by the group company

abroad, so there is a high amount of foreign creditors liability which will be settle in the future when the company gets currency periodically. This study found out as per the above Table 4 the liability increased from year 2018 to 2020 and this indicated that because of the shortage of foreign currency the company incurred too much foreign creditors liability. Because of the company import raw materials, chemicals, spare parts, technical services, update of soft wares, and also paid monthly salary for expats in foreign currency, needs too much foreign currency to expend for those mandatory costs. However, because of shortage of foreign currency the company incurred too much foreign creditor’s liability. As you can see from the above table the average exchange rate for the last three years is birr 40.56 per Euro.

Table 11- Total export and import of items and spare parts

Materials	Value		
	2018 (Birr)	2019 (Birr)	2020 (Birr)
Total Export	0.00	42,200,000.00	51,450,000.00
Total Import Materials, Spare parts & Service and others	1,361,105,940.00	1,608,378,791.00	1,507,058,036.91

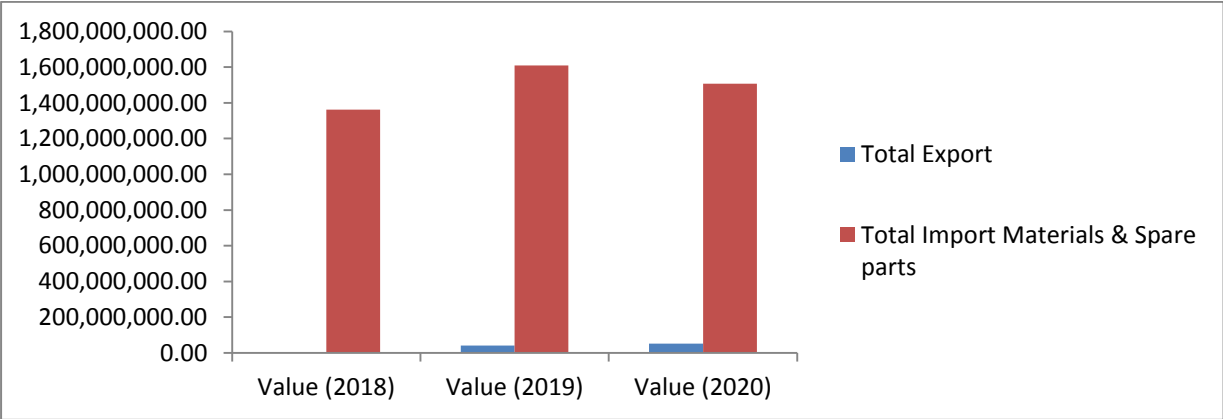
Source: Researcher (2021)

This study found out that from data has got from the respondent in terms of import and export of items, show that the company has serious shortage of foreign currency. In Table 6 since the export has started in 2019 it does not enough to cover the import purchase.

As per respondent’s answer for the survey questioner, the company has realized the Seriousness of foreign currency shortage at the end of year 2018 and took measure, to minimize the severity of foreign currency shortage, by get in to export items starting from the year 2019 to get a foreign currency. As we can see on Table 4.5, in the year 2019 & 2020 from the total import purchase of materials and spare part, total export covers only 3% of it. This shows that the foreign currency shortage was not covered by the export of items even couldn’t minimize the severity of foreign currency shortage

According to Rachel H. (2020) export and import is interrelated and export has much support on import. One of the advantages of exporting products internationally is accessing millions of potential customers. This means having greater production and an increase in sales volume and much helpful to get much foreign currency. It also brings more opportunities to learn about different markets and grow the business in new directions. Exporting again much helping to reduce business costs and increase profit margins of the firm (Hands, 2020).

Figure 9-Total exports VS Total import purchase



Source: Researcher (2021)

As per the balance of payment theory Mirti C. (2021) stated in the balance of payment theory, the demand and supply of country’s currency, that increasing to improve the country’s foreign currency reserve, when the home currency of the country have more value/demand in foreign exchange market the country has got more foreign currency reserve. It’s supported by appreciating the companies inter into more export and less import. According to this theory, a deficit in the balance of payments leads weaken the foreign currency reserve, while a surplus in the balance of payments strengthens the exchange reserves, causing an appreciation in the price of home currency in terms of foreign currency.

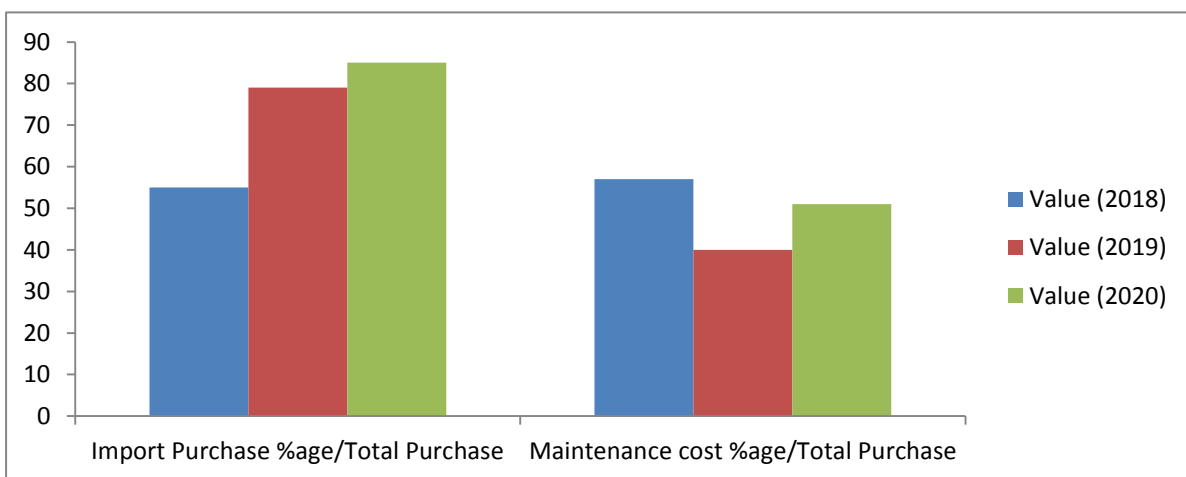
This study presents the analysis as we can see from the above graph 4.6 the import of items and spare part was much exceeds from the export with the year from 2018 to 2020. This

indicated that the BGI company inters much importing than exporting, it minimizes the foreign currency reserve of the company and leads to foreign currency shortage.

The effect of foreign currency shortage on machinery maintenance

The purpose of equipment maintenance in manufacturing is simple: to minimize costly breakdowns and ensure that machinery operates at its top functionality. Yet there’s still a faction of the production world that views maintenance as an unnecessary consumption of manufacturing hours (Wagstaff, 2020). As per the CMM group, the main benefits of machinery maintenance are extend equipment lifespan and reduce the need for having to purchase new equipment, prevent unplanned downtime, keep equipment running without interruption, which can be costly, avoid the need for expensive repairs, ensure that systems are working efficiently to reduce energy consumption and operating cost, prevent small issues from growing into big problems that are time-consuming and costly to fix since complex repair often comes with a bigger price tag and longer downtime, increase the resale value of the equipment with a proper service record, Increase equity and borrowing power by up keeping the value of your assets, reduce injuries and fatalities, and therefore liability, due to faulty equipment and maximize warranty coverage by having detailed service records to demonstrate that maintenance is up to date (The CMM Group, 2020)

Figure 10- Machinery maintenance per import purchase %age for the year from 2018 to 2020



Source: Researcher (2021)

Therefore, Spare parts play a major role in maintenance of equipment's as without appropriate spares no equipment can be restored to original condition for better and correct functioning. And since machinery is the one and major equipment for the manufacturing company which needs special focus, even if the company has enough raw materials for production, since the machinery don't have got continuous and good maintenance, the firm don't able to get quality product and also decline the quantity, increase the wastage and this leads the company to out of the market and finally is going to be bankrupt. So, because of this machinery maintenance is mandatory and essential.

Table 12- Total spare part purchase and import of items and spare parts

Materials	Value		
	2018 (Birr)	2019 (Birr)	2020 (Birr)
Total Spare part purchase	188,178,820.15	421,889,313.45	561,388,916.10
Total Import Purchase Spare parts	02,706,100.00	204,049,202.90	306,313,100.00
Total Local-Import Purchase Spare parts	-	143,879,291.37	193,029,826.70
Import Purchase %age/ Total Purchase	55%	82%	89%
Total Technical Assistance	18,494,711.00	8,005,244.00	15,709,645.00
Total Machinery maintenance cost	107,204,996.31	167,640,725.86	284,887,035.00
Maintenance cost %age/Total Purchase	57%	40%	51%

Source: Researcher (2021)

As per the above Table 7 the researcher found out that, import purchase of spare part covers more than 75% from the total purchase. As you can see from the above table the total import of spare part as per the total purchase of the spare part it covers from year 2018 to 2020, 55%, 82% and 89% respectively. And also find that because of foreign currency shortage the company couldn't import spare part as much as they want to use for the machinery maintenance. Since the import purchase of spare part not enough for the machinery maintenance it affects the company's maintenance plan. This indicated that import purchase

of spare part has much influence on the machinery maintenance plan of the company, and also shows because of the shortage of foreign currency, BGI couldn't meet the annual maintenance plan of the company effectively and efficiently. As per the respondents answer for researcher's survey questioner summarized on the Table 4.6, indicated that the maintenance cost of machinery increased year to year from year 2018 to 2020 and on average increased by more than 50% likewise the technical service that have got the service from abroad also increased from year to year.

As you can see from the above Table 4.5 because of foreign currency shortage to overcome in addition to Exporting items to gain foreign currency, the company enters a contract with Local- importer by paying some marginal price to import spare part using their own foreign currency.

Table 13- Leading/underlying dynamics (factors) shortage of foreign currency in the company

Rn	Items	Variables	F	Percent	Mean	Sd
1	Which of the following highly affected by foreign currency shortage in your company?	Import Malt	9	69.2	1.7692	1.48064
		Import Hops	2	15.4		
		Chemicals	2	15.4		
		Imported				
2	Which of the following is/are main raw materials & items used for Beer production?	Hops	4	30.8	2.6923	1.49358
		Water	2	15.4		
		Yeast	3	23.1		
		Spare part	2	15.4		
		Chemicals	2	15.4		
3	Which of the following is/are directly affected by shortage of foreign currency shortage?	Malt (Maze, Barley)			4.0	2.23607
		RMP	2	15.4		
		PC	2	15.4		
		MM	2	15.4		
		ER	2	15.4		
		PV	1	7.7		
		PM	1	7.7		
		Others	3	23.1		

As it can be seen in table 5 ,among the various factors considered in the study Raw material import Purchase , Production and sales plan , Spare part import purchase , Machinery maintenance (RMP , PC, MM & PV) are more (15.4%) equally and directly affecting factors/dynamics of company performance in relation to shortage foreign currency. Among the raw materials & items used for beer production, majority (30.8%) of the raw material used was found to be hop .

Table 14: Effect of FC on raw material in BGI company

RN	ITEMS	VARIABLES	F	PERCENT	MEAN	SD
1.	Which of the raw material Seriously affected by FC shortage	RMIP	6	52.1	5.08	0.49
		PSP	2	10.4		
		SPIP	5	38.5		
		Total	13	100		
2.	Which of the ff is most affect by FC shortage	RMIP	1	7.7	5.08	0.49
		SPIP	1	7.7		
		MM	12	84.6		
		Total	13	100		

Among the raw material and other cost, raw material import purchased (RMIP) comprised of **52.1%** while machine maintenance (MM) accounted of 84.6%.

Table 15- Over all result (Sum up score or Transformed) of Likert scale in terms of severity of shortage of FC of the company

Sum Score	Frequency	Percent	Mean	SD
1.00(19-20)	2	15.4	1.8462	0.3755
2.00(21-22)	11	84.6		
Total	13	100.0	.	

Each of the 5 point Likert scale items (Ranging from Strongly Agree=5 to Strongly Disagree =1) by the respondents was transformed (Sum Score Technique) , also recoded into 1 and 2 values (Recode into the same variable) and finally two cut points(High & Low 21-22 and 19-20 respectively) were determined (Visual Binning) using SPSS.

All in all , the company performance was poor as it spent (suffer) high cost of production. Out of 13 respondents 11(84.6%) of them scored (21-22) the highest in the Likert scale and mean and standard deviation of 1.846 and 0.375 respectively. In turn, it indicated confirmation that foreign currency shortage has effect on the parameters.

Table 16- Analysis of variance of severity and qualification of the company

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.744	3	0.581	0.560	0.654
Within Groups	9.333	9	1.037		
Total	11.077	12			

In firm level , the attributes of staff of the company make a difference in company performance so ANOVA was executed for severity of FC shortage with employers service years(qualifications) of the company. However, no statistical difference existed between the mean of the variables in consideration.

4.4 The major effect that shortage of foreign currency resulted on the performance of the selected Brewery

4.4.1 Research question 3: What is the major effect that shortage of foreign currency resulted on the performance of the selected Brewery?

4.4.1.1 The major effect that shortage of FC resulted on the company performance

The manufacturing company performance is measured by different ways, manly by Productivity, machinery effectiveness and efficiency and profit margin. Therefore, the shortage of foreign currency was affected, by declining, the company’s productivity,

machinery efficiency and the profit margin from the year 2018 to 2020. As a result the company performance was significantly affected by the above mentioned items. In the following session this study shows the analysis of those items using the primary and secondary data collected.

Table 17- Independent Samples Test of transaction cost in relation to the performance of company business

		Independent Samples Test									
		Levene's Test for Equality of Variances				t-test for Equality of Means					
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Which one is the most dominant transaction cost in relation to the performance of your business	<u>Equal variances assumed</u>	2.475	0.144	0.221	11	0.830	0.12500	0.56684	-1.12260	1.37260	
	Equal variances not assumed			0.246	10.974	0.810	0.12500	0.50841	-.99432	1.24432	

To see effect of transaction and performance, t-test was executed and it indicated that (Df= 12, F=2.475, p-value = 0.144) , the variation between the variables was more than **2 folds**. However no statistical significance difference exists between them.

Table 18- ANOVA of transaction cost in relation to the performance of company business

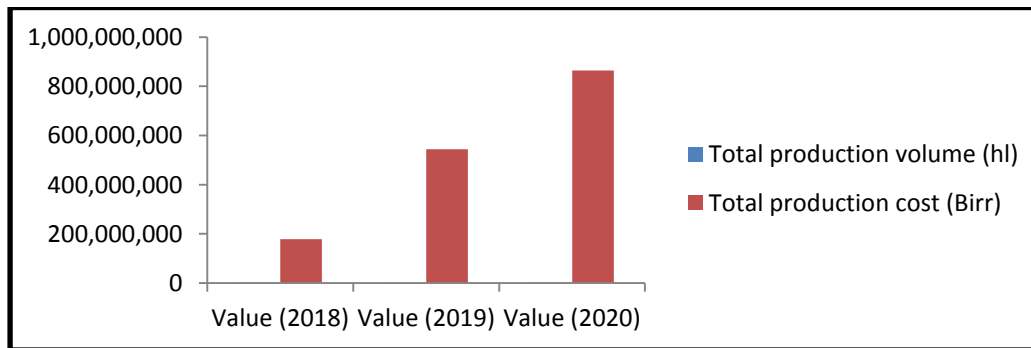
ANOVA (SUMUP)					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.276	3	0.092	0.584	0.641
Within Groups	1.417	9	0.157		
Total	1.692	12			

To analyze and see any statistical mean difference or variation in the study variables ANOVA test was executed. however, the test found out and confirmed that there was no statistical significant mean difference within and between group , respondents & dominant transaction cost (df =12, F=0.584 & p-value = 0.641)either between the parameter or within the participants.

4.4.1.2 Productivity and Import purchase of Raw material

Productivity is the one and the major area that the manufacturing company need to give due attention to grow the company’s performance. It is a measure of the efficiency of production. High productivity can lead to greater profits for the company. The company’s productivity growth is important because it leads to higher profits.

Figure 11- Total production volume (hl) VS Total production cost

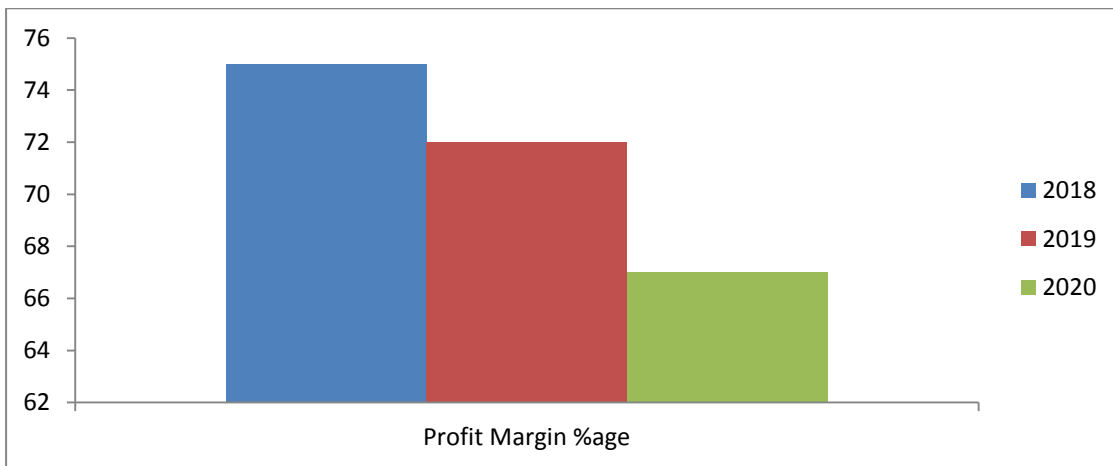


Source: Researcher (2021)

As per Aki (2011), many factors can affect productivity, including external conditions such as a supplier going bust, or an increase in the costs of raw materials. Internally, management decisions around resource allocation, budgeting and procedures are most likely to impact productivity. And Productivity can affect profitability when, the company don't produce as many goods as per the company's production plan, facing increasing of the cost of raw material and other goods and services purchase, the labour cost increases more than expected etc (Aki, 2011)

As per the respondent's answers on the survey questioner indicated that the foreign currency shortage has much effect of the production efficiency of the company and since the manufacturing company's performance is measured by productivity, therefore, it leads that the foreign currency shortage has effect like reduce the machineries production efficiency and decline the quality of products because of lack of to get imported spare part items on time and hard to get enough to meet the maintenance plan and reduce the production volume because hard to get imported raw materials and other necessary items for production. Therefore, in one or another way the foreign currency shortage affects the company's performance through productivity

Figure 12- Profit margin %age from year 2018 to 2020



Source: Researcher (2021)

Since, productivity determines profit margins in most cases; when the company's productivity declines the profit margin also decline. As show on the above Graph4.8 computed from the company's data; the company profit margin is declining form year 2018 to 2020. It show the company's couldn't produce as per their plan and also because of the foreign currency shortage the cost of imported raw materials, spare parts and other consumables purchase costs also have increased. As Brain B (2021) presented the most direct factor that affects profit margins is the company's net gross profit. Since, to calculate the profit margin of the company is dividing of net income to sales (revenue) and if the company gets decline of profit margin, the fastest way to adjust profit margins is adjusting of product's sailing price. However, in the competitive market of beer industry in Ethiopia increasing selling price is not practicable.

4.4.1.3 The effect of foreign currency shortage on production cost

Table 19- Production cost incurred/consumption for direct materials and chemicals

Materials	Value		
	2018	2019	2020
Total production volume (hl)	3,432,900	1,796,196	2,849,345
Total production cost (Birr)	178,901,304	544,301,220.70	863,437,084.12

Source: Researcher (2021)

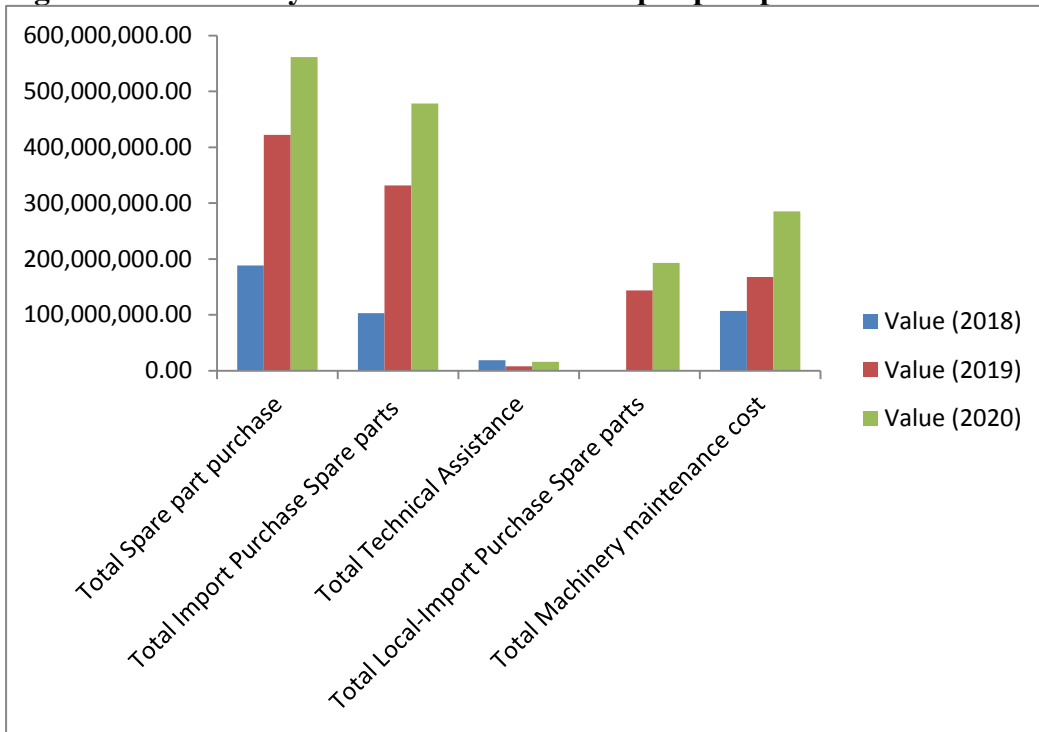
As per the respondent, the brewery company has worked in too much competitive market. So, to keep competent in the market the company can't increase the selling price of the product/Beer and Draft/. As per J. Zachary Klingensmith, cost increases as the firm produces higher quantities of output. This is pretty intuitive, since producing more output requires greater quantities of inputs, which cost more dollars to acquire (Klingensmith, 2019). Because of this, in this competitive environment and the

currency shortage happened in the company, to be competent and cover the costs and get profit the company has to plan to produce more as minimize the cost of production as much as possible without affecting the quality of the product. However, as per the respondent's answer indicated and see on the Table 8 that, even if the company plan to increase the production volume, the volume decreases from year to year it's because of currency shortage the cost of production increases; beside this the profit margin also decreases. Since the import purchase price of materials increase because of foreign currency shortage simultaneously the cost of production increases. So, the above table show or indicated that the increase production cost doesn't comes only from the increase in production volume it's also comes from the foreign currency shortage of the company too. I.e., even the production volume decreases from year to year the production cost has increased. On average the cost increased by 75%. This directly affects the performance of the company.

4.4.1.4 Machinery maintenance and Import purchase of spare part

As per Thomas D. definition first Predictive maintenance, which is analogous to condition-based maintenance, is initiated based on predictions of failure made using observed data, second Preventive maintenance, which is related to scheduled maintenance and planned maintenance, is scheduled, timed, or based on a cycle. Third Reactive maintenance, which is related to run-to-failure, corrective maintenance, failure-based maintenance, and breakdown maintenance, is maintenance done, typically, after equipment has failed or stopped (Thomas, 2020).

Figure 13- Machinery maintenance cost with spar part purchase



Source: Researcher (2021)

As per the respondent’s response in BGI there are three types of maintenance for equipment’s, which are Preventive, Speculative, and curative maintenance. To do those maintenance types of the company uses more of imported purchase spare parts. To meet the company’s goal the company’s machineries should have to work effectively and efficiently. However, this study found out that from the information/data got from the respondents because of the foreign currency shortage they couldn’t meet the maintenance plan of the company. This leads to decrease the production capacity and the quality as well. Therefore, this indicates the shortage of foreign currency affect the company’s performance through the machinery production efficiency.

4.4.1.5 Profit margin

As we have known that profit margin is the amount of revenue left after paying for all the costs to deliver products or services. As per Brian B. (2021) profit margin considered to be one of the most important indicators of the sustainability of a business to continue to exist as a going concern. Net profit margin is a better

representation of financial health than revenues alone. The decreasing profit margin indicated that the company is becoming relatively less efficient, meaning the company's performance is declining (B. BRIAN & KHARTIT, 2021)

Table 20- Profit margin of the BGI from year 2018 to 2020

Materials	Value		
	2018	2019	2020
Profit Margin %age	75%	72%	67%

Source: Researcher (2021)

As per the respondent have given on the survey questioner and looking, the decrease in profit margin, on the above Table 9 indicated that since the Company import its raw materials, spare parts, and consumable from abroad using foreign currency which inflates the materials and service birr costs. Also, the salary of foreigners who works in production and the technical assistance service were paid in foreign currency which increased the production cost and to keep the higher market share and to be best competent, the company needs not to increase the selling price of the product. However, the selling price of product is fixed. Since, the company was offering products that aren't highly unique in this very competitive industry, a low profit margin means that the selling price set by the company for a good isn't much higher than its cost. The higher production cost come because of there is much import purchase of materials used for the production process in the past three years the company inters into a serious foreign currency shortage and the import purchase price of materials and service increases. So, it leads increases the production cost of the company. As the Table 9 indicated that the profit margin has decreased from 75% to 67% on average with in the past Three years it decreased by 71%. When the profit margin decreases it shows that the company makes less money which means the company starts to get less per product sold and this has much affected the performance of the company.

Table 21- Foreign currency shortage and performance of BGI

Rn	Items	Variables	F	%	Mean	Sd
1	Which one is the most dominant transaction cost in relation to the performance of your business	LC	4	30.8	8.75	3.18
		PCRMC	5	38.5		
		VHC	3	23.1		
		FHC	1	7.7		
2	Does the foreign exchanges have effect the performance of Business	Yes	11	84.6	5	0.58
		No	2	15.4		
		Total	13	100.0		
3	Does the foreign exchanges have affect the performance of Manufacturing Company	Yes	12	92.3	5.31	0.48
		No	1	7.7		
		Total	13	100.0		

As it can be seen above (Table :4) among the dominant transaction, the company relatively suffered more from raw material cost was 5 (38.8%) while labor cost was 4(15.4%) which in turn affecting the performance of the company seriously. The effect of FC was high both in company (84.6%) and manufacturing level(92.3%).

Table 22- Company performance Vs Foreign Currency shortage

RN	ITEMS	RESONSES	F	PERCENT	MEAN	SD
1.	Does the foreign currency affect your company's MM plan	Yes	8	68.5	1.38	0.51
		No	5	31.5		
		Total	13	100		
2.	RMIP	IM	9	69.2	1.5	0.71
		IH	2	15.4		
		Chemicals imported	2	15.4		
		Total	7	53.8		
3/	Does the company have any export items ?	System	6	46.2	1.3846	0.50637
		Yes	8	61.5		
		No	5	38.5		

In firm level, internal factor , the currency shortage from firm level factor of having much import purchase with less or no export of products the increasing of import purchase of inputs for production & without or minimum amount of export to get foreign currency. So, to cover FC shortage the company exported more than half (61.5%) export items as alternative mechanism.

CHAPTER FIVE

Result analysis (Case study)

5.1 Socio-demographic characteristics of the respondents (Interviewees & Key Informants)

To explore the effect of foreign currency shortage on performance (Among BGI Ethiopian Brewery companies) 6 in depth interview and 3 KIs from senior management body were involved .

Table 23- profile of the respondents (In-depth interview) in BGI Ethiopia

RN	Interviewee code	Sex	Age	Marital Status	Current role in the company	Educational status
1	001	M	55	Married	Manager	M.Sc.
2	002	F	42	Married	Internal Audit Manager	M.Sc.
3	003	M	58	Married	Manager	B.Sc.
4	004	F	45	Married	Manager	M.Sc.
5	005	M	47	Married	Manager	M.Sc.
6	006	M	52	Married	Manager	M.Sc.

Table 24- profile of the respondents (Key informants) in BGI Ethiopia.

RN	Code	Sex	Age	Current role in the company	Educational status	Marital Status
1	001	F	62	Manager	B.Sc.	Married
2	002	F	40	Internal Audit Manager	M.Sc.	Married
3	003	F	30	Manager	M.Sc.	Married

5.2 Exploring the effect of foreign currency shortage on performance (case study) and TCA

As it is well known, case study needs in depth understanding. So to explore more information from senior management body 6 in depth interview and 3 KIs were involved. So out of the business groups of BGI Ethiopia, St. George brewery company that is found in Addis Ababa was chosen to be studied assuming company performance as a key case. Data was analyzed using thematic content analysis techniques after developing categories & codes which represent the research topic , variables and data respectively So, based on the research questions (and/or research objectives) of the study data from interview was collected and interpreted accordingly(Table: 25)

5.3 Explanation of generated categories & codes for the themes (Effect, Shortage, Factors, Performance, Severity, & Effort) on the company respectively

Effect of FC on performance of the company

As one of the respondents replying to the question about effect of FC/FE on company performance, he explicitly put his ideas as follows:

“Yes there is effect, the cost of direct & indirect materials, technical service charges, and expiates salary are paid in foreign currency. Thus, shortage would result in both adverse financial and operational impact.” (I-4)

One of the interviewees also enhanced the point of effect of foreign exchange by the following statement:

“Has direct relationship- which means when foreign exchange increase or decrease the import purchase is affected this leads to affect the profit margin too.”(I-5)

“If the foreign exchange rate is high, the cost of raw material supplier also high.”(I-4)

Similarly. A male audit manager interviewee also reinforced the above statement by saying:

“The company produced the product mostly not by using local materials, because of shortage of currency they can't produce and meet the need of the market because the market in the country is very competitive therefore, the company can't get good profit margin.” (I-5)

“YES, by applying CSR working with local farmers, i.e purchase local malt for beverage production.”

“Inters a contract with the local importers to purchase the import items and tries to use local goods.”(KI-1)

Shortage of FC on performance of the company.

Most of the respondents repeatedly replied & confirmed that both significantly affected the company performance and the FC and material cost are directly related

“Exhibited by delay for payment of raw materials and technical service suppliers/providers (KI-3)

“Direct-raw materials are purchased using limited balance of foreign currency.”(I-3)

“Import purchase done by group, and it leads increase the foreign creditors liability.”(I-6)

Major factors affecting the performance of the company

The following points were the responses that the study participants described as the major factors affecting company performances related to raw materials import purchase & foreign currency as well as and the relationship of raw materials import purchase & foreign currency.

So, explaining the relationship of raw materials import purchase & foreign currency in the company. It was mentioned by the participants as follows:

“The relationship is direct. Raw materials are purchased using limited balance of foreign currency.” (I-2)

Overall of performance of the company (Trends, Severity & Status)

The manufacturing company performance is measured by different ways, mainly by Productivity, machinery effectiveness and efficiency and profit margin. Therefore, the shortage of foreign currency was affected, by declining, the company's productivity, machinery efficiency and the profit margin from the year 2018 to 2020.

Below is the statement made by one of the managers of the company on whether there is effect of foreign exchange on profit margin or not. He confirmed and also explained the way how foreign exchange affects the margin of profit of the company:

“Yes, because much of the direct and indirect materials are imported using foreign currency. Including labor charges for technical support, salary and benefits for expatriates.” (I-2)

Concerning the mechanism of control the company has on operational activities that help to grow the performance of the company, the operational manager said :

“There are various types control mechanisms :control on production ,control on procurement ,control on storage of production materials control on inventory management and control on over machines.” (KI-2)

Performance at organization and individual level could be explained in terms of Inefficiency and Ineffectiveness. So, attributes of organizational structure, culture and capability are important determining factors of performance in firm level

5.4 Discussion (*Interpretation*) with literature review

To get in-depth knowledge and understanding related to the issue under discussion, and to see the extent of the effects of currency shortage on the company's performance, mixed research design was implemented thinking that the data collected from focal persons and financial records provide all what was mentioned. Triangulation and Interpretation of findings from qualitative with quantitative data (Testing Research Hypothesis & Answering Research Questions accordingly)

5.5 Severity of foreign currency shortage in BGI Ethiopia

According to quantitative data of the respondents, it is indicated that the company suffered more from PCRM (38.8%) and labor cost (15.4%) which in turn affecting the performance of the company seriously. Similarly, the in-depth interview result of senior managers indicated that there were significant effects due to FC/FE on company performance. The cost of direct & indirect materials, technical service charges, and expiates salary are paid in foreign currency. Thus, shortage would result in both adverse financial and operational impact. The shortage of FC was mainly exhibited by delay for payment of raw materials and technical service suppliers/providers.

An important internal factor of organization to prevent bankruptcy from currency shortage at firm level is having much import purchase with less or no export of products the increasing of import purchase of inputs for production & without or minimum amount of export to get foreign currency. So, to cover FC shortage the company exported more than half (61.5%) export items as alternative mechanism

Production cost, production means transforming inputs into an output. An input is a good or services that are being used for the production and output is the goods and services that come out of production process. Cost of production refers to the total cost incurred by a business to produce a specific quantity of a product or offer a service. Production costs may include things such as labor, raw materials, or consumable supplies(Sinha, 2013).

According to Oluwagbemiga (2014) the study was to investigate whether there is a significant relationship between manufacturing cost and firm performance of manufacturing organizations using data from the Nigeria stock exchange. 40 firms listed on the Nigeria stock exchange were selected for the period of 2003–2012. Direct Material Cost, Direct Labour Cost, Production overhead Cost and Administrative overhead cost were considered as independent variables while profitability (operating profit) was taken as dependent variable representing firm performance. The results indicate a significant positive relationship between direct material cost, direct labor cost and firm performance. However, production overhead cost and administrative overhead cost were found to be negatively correlated with firm performance. It is therefore recommended that cost management strategies that focus on reduction of production overhead and administrative overhead should be embarked upon by the manufacturing organizations if their profit maximization and wealth creation objectives will be met (Oluwagbemiga et al., 2014)

Raw material and spare part import purchase management, as Al-Bawi (2016) explained; spare parts management (SPM) is an important branch of management which could lead the company to success or bankruptcy. It is also full of potential improvements that can increase the company profits, productivity, and reliability. Wise inventory management would eliminate all the delay risks of unplanned breakdowns, and reduce process time and cost (Al-Bawi, 2016).

Machinery maintenance plan, smart manufacturing (SM) technologies can improve energy efficiency and productivity of machinery and reduce energy costs in process-supporting energy systems. Many breweries are already taking advantage of the increasing capabilities of technologies such as energy management systems, advanced metering and sub-metering solutions, data analytics, and internet-connected sensors. The authors analyzed studies from the brewery industry to demonstrate the potential of SM technologies to enhance operational performance and improve the energy productivity in this industry (Nimbalkar, 2019). The maintenance is essential part of the production, it

has influence in the company productivity, this influence increases with company expansion. Maintenance costs money and time(Al-Bawi, 2016).

From the statistical results it is obvious that TPM or maintenance as a whole has got positive effects or positively impact downtime, productivity, quality and machine availability. So, from the results we can conclude that without the implementation of TPM, the company won't be able achieve the increase in productivity, quality of the product and machine downtime. Improved quality, run rates and machine downtime has been increased as a result of Total Productive Maintenance. So, from this researcher can conclude that there is an increase in the Overall Equipment Effectiveness of the company though reduced downtime and the increase in the availability of plant equipment. Lastly, from the results it shows that the operation and maintenance of plant equipment has been made easier though the implementation of Total Productive Maintenance program(Mushavhanamadi & Selowa, 2018)

5.6 Effect of foreign currency shortage on performance of BGI Ethiopia

Concerning performance , as the statement made in TCA by one of the managers of the company on whether there is effect of foreign exchange on profit margin or not. He confirmed and also explained the way how foreign exchange affect the margin of profit of the company. It was confirmed that there effect on the company performance because much of the direct and indirect materials are imported using foreign currency. Including labor charges for technical support, salary and benefits for expiates.

Besides to this, the result obtained from the quantitative data of the company three year report checklist also indicated similar facts and stating the shortage of foreign currency was affected, by declining, the company's productivity, machinery efficiency and the profit margin from the year 2018 to 2020.)

According to Likert scale score analysis ,out of 13 respondents 11(84.6%) of them scored the highest (21-22) indicating poor company performance as it spent (suffer) high cost of production.

As per the respondent the survey showing the decrease in profit margin, since the company import its raw materials, spare parts, and consumable from abroad using foreign currency which inflates the materials and service birr costs. Also, the salary of foreigners who works in production and the technical assistance service were paid in foreign currency which increased the production cost and to keep the higher market share and to be best competent, the company needs not to increase the selling price of the product. However, the selling price of product is fixed. Since, the company was offering products that aren't highly unique in this very competitive industry, a low profit margin means that the selling price set by the company for a good isn't much higher than its cost. The higher production cost come because of there is much import purchase of materials used for the production process in the past three years the company inters into a serious foreign currency shortage and the import purchase price of materials and service increases. So, it leads increases the production cost of the company. As the current study indicated the profit margin has decreased from 75% to 67% on average with in the past. Three years it decreased by 71%. When the profit margin decreases it shows that the company makes less money which means the company starts to get less per product sold and this has much affected the performance of the company.

In this study ,it was also shown that as per the respondent's answer and the data got from the company, the company has got serious foreign currency shortage much on year 2019 and goes the shortage in year 2020 too. So, even if the company needs imported raw materials but couldn't import as much as they need because of shortage of foreign currency. And in 2020, the import purchase of raw material cover slightly increases as compared with year 2018 and 2019. Still it was indicated that the total value of import purchase increase and total import purchase of raw materials covers also increases from year 2018 to 2020 because of this the company needs much of foreign currency for raw materials purchase however, the company didn't have it as much as they need(Table :2).

Finally analyze and see any statistical mean difference or variation in the study variables. ANOVA test was executed. However, the test found out and confirmed (within the Variables/dominant transaction $df=3$ & respondents $df=12$, $F=0.584$, $p\text{-value} = 0.641$) that there is no a significant mean difference either between the parameter or within the participants. The manufacturing company performance is measured by different ways, manly by Productivity, machinery effectiveness and efficiency and profit margin. In the company there was no dominant transaction cost in connection to the company business performance. This result most probably shows that the business was running almost constantly and was stagnant due to the inaccessibility of FC/FE shortage or other related factors.

The manufacturing company performance is measured by different ways, manly by Productivity, machinery effectiveness and efficiency and profit margin.

The current study goes in line with a research which examined the impact of exchange rates on the performance of the Nigerians' manufacturing, the empirical results of the study shows that a depreciation of the Naira has an antagonistic impact on the performance of the Nigerian manufacturing sector as it was found that exchange rates has a negative significant long run relationship and causal relationship with the performance of the sector (Falaye et al., 2019).

Similarly, a study finding, Lloyd and Teshome (2018), the foreign currency shortage reduces competitiveness, hindering the growth and operation of businesses in Ethiopia. And unit production costs are increasing as production stalls. It is resulting in businesses, laying off workers (especially temporary workers), becoming dormant and ceasing expansion. Business that can hold large stocks of inputs due to lack of clarity of when they will get forex. This also affects cash flow; increases warehouse storage costs and risks product loss when inputs expire (Lloyd and Teshome, 2018).

5.7 Major factors associated with FC shortage in BGI company

According to in depth interview result of this study, the participants described the major factors in 2 main categories (Internal & External) and affecting company performances in relation to raw materials import purchase & foreign currency as well as and the relationship of raw materials import purchase & foreign currency.

Performance at organization and individual level could be explained in terms of Inefficiency and Ineffectiveness. So, firm's attributes such as organizational structure, culture and capability are important determining factors of performance in firm level. The relationship between the factor and performance is direct. Raw materials are purchased using limited balance of foreign currency.

The firm in this study, St. George brewery company has established 97 years before having high reputation. One of the internal factor seen is the firm personnel capability and its performance. This relationship depends on the specific firm performance measure used. *Chief executive officer's attributes is an important factor. So, in this study* one of the good attributes is the company had more 6(46.2%) well qualified management staff. From micro level factor point of view, the finding of qualitative study of case study show that the company produced the product mostly not by using local materials, because of shortage of currency they can't produce and meet the need of the market because the market in the country is very competitive therefore, the company can't get good profit margin. In turn, this significantly & directly limited company capacity to reach desired level.

There is some relationship between CEO attributes and firm performance, the sign and significance of this relationship depends on the specific firm performance measure used (Li & Singal, 2017).

There are many factors in macro, in industry and in firm level that leads the companies inter in to or suffer by the foreign currency shortage. In macro level interest rate and inflation is the major factors. However, this study did not cover the macro level factor rather in micro level factors that leads the manufacturing industries in to this shortage. In micro level for manufacturing sector, from external factor government policy issued is

one factor and in firm level, internal factor, the increasing of import purchase of inputs for production are the major factors that leads the companies get into shortage of foreign currency, without or minimum amount of export to get foreign currency. i.e., If the shortage not covered by the export earning also another factor that a company is getting in to suffering by the currency shortage. In this study only focus and discussed on from the micro level factor government policy and from firm level factor of having much import purchase with less or no export of products.

As Brain B (2021) presented the most direct factor that affects profit margins is the company's net gross profit. Since, to calculate the profit margin of the company is dividing of net income to sales (revenue) and if the company gets decline of profit margin, the fastest way to adjust profit margins is adjusting of product's sailing price. However, in the competitive market of beer industry in Ethiopia increasing selling price is not practicable

In firm level, Organization Structure, and Organization culture are important factors. Hall suggested that structure has two basic functions, each of which is likely to affect individual behavior and organizational performance: The importance of structure both at the organization and subunit levels for the performance (efficiency, morale, and effectiveness) of organization (Dalton et al., 1980) Organization culture, Lack of effective organizational culture and poor cultural integration in the corporate group affect organizational performance and decrease shareholders' return. The purpose of this exploratory case study was to explore successful strategies that one corporate group used to establish an effective organizational culture to improve performance(Tedla, 2016).

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATION

6.1 Summary of Findings

The collected data and information to show the effect of foreign currency shortage in company's performance, case of BGI Ethiopia Brewery company, were analyzed, and findings is presented in the previous chapter Four. And in this chapter the study presents summary of the analysis, conclusion on the findings, and give possible and practicable recommendation for the company's management, external users, and other researchers.

As per the qualitative and quantitative data analysis, the company's performance is affected by foreign currency shortage. And the company recognizes the shortage is start happened at the end of year 2018 and start to take minimizes the effect by using firstly by starting to inter in to exporting of items in mid of year 2019. And till then the company were suffered by shortage of foreign currency to import raw materials, spare parts, chemicals, and other consumables. In addition, since the company inters credit purchase by the group, it leads the company's creditors liability increased from year 2018 to 2020.

According to the data and information collected from respondents, the company needs much foreign currency for the import purchase of raw materials, spare parts, Chemicals, and other consumables and to made payment for technical assistance service, for expat's salary and software license renewals too. Since all those have direct relation with production and have significant effect on productivity of the company, study found out that the company performance was much affected.

As the quantitative data from the year from 2018 to 2020 shows that, foreign currency shortage has direct and significant effect on the import purchase, production, profit margin, and machinery maintenance of the company.

As per the primary data collected from the BGI Company, the study showed that profit margin percentage was declined from year 2018 to 2020. In addition to above all, as per the respondent's answer this study found out that the Ethiopian government has not exerted enough effort for the sector.

6.2 Conclusions

This research by descriptive statistics was conducted using purposive sampling method for which both primary and secondary sources of data are used. Primary data are collected from BGI company employees through survey questionnaire, and secondary data was collected from company's record. Therefore, according to the data collected from the respondent's responses on the questioner was undertake analysis and drawn the following (inferences based on the findings) conclusions on the findings of the study.

- The foreign currency shortage has a direct and significant effect on the activities and international transactions of the company such as import purchase, Machinery maintenance, getting technical assistance service, financial software and other license updating and salary payments for expat workers.
- The increasing of costs for import purchase of raw materials, spare parts, and direct materials consumed for production, machinery maintenance from year 2018 to 2020 was affected by the shortage of foreign currency and it had direct and significant effect on the company's performance.
- The foreign currency shortage effect on the import purchase was the cost of purchase of raw materials increased from the year 2018 to 2020
- The cost of spare part import purchase increased from the year 2018 to 2020, therefore, the machinery maintenance cost also increased.
- Profit margin of the company is declined from year 2018 to year 2020 it was result of a lower sales price or higher cost, or both. Higher cost comes because of foreign currency shortage and the price was not dynamic. It shows the company's performance is less efficient.

- Because of foreign currency shortage, the company has forced to enter into additional contract with import-local suppliers, to import raw materials, spare parts, and other consumables by paying markup on the value of cost of the imported items.
- Concerning the performance of the company, the result obtained from the quantitatively data of the company three year report checklist also indicated similar facts and stating the shortage of foreign currency was affected, by declining, the company's productivity, machinery efficiency and the profit margin from the year 2018 to 2020.) .
- The study revealed higher level of severity in that the company performance was found to be poor as it spent high cost of production indicating foreign currency shortage has effect on the parameters.
- The study found that among the dominant transaction, the company spent more for raw material cost (38.8%) and labor cost (15.4%) which affects seriously the performance of the company.
- The internal or firm level factors were identified that affect company performances in relation to raw materials import purchase & foreign currency as well as and the relationship of raw materials import purchase & foreign currency. Among the various factors considered in the study Raw material import purchase, production and sales plan, spare part import purchase, machinery maintenance (RMP, PC, MM & PV) were found to be leading affecting factors of company performance in relation to foreign currency.

6.3 Recommendations

To minimize the foreign currency shortage effect on the company's performance, the company management must give special attention for import substitution goods. It helps the company to increase the effectiveness and efficiency of productivity, by getting the raw materials, chemicals, and other consumables goods, as per the company's

production plan. Also, the management should have to try to substitute the import purchase of spare parts by local purchase. It's very mandatory to meet the maintenance plan as per their schedule and it helps to keep the quality of equipment's so, it leads the company to grow in productivity and the quality of outputs too.

Increasing the export volume is another mechanism, to minimize the effect of foreign currency shortage on the company's performance. Since, the company engaged in the export of goods has much helpful to get the foreign currency. Therefore, the BGI Company would have to give serious and special attention for to increase the export volume of products.

The company managements have to take profit margin so seriously because it contains huge amount of information about to see the company's efficiency and it's easy-to-understood the numbers. There are many factors that influence profit margins, the one and main is net profit of the company. To adjust the profit margin of the company at increasing rate; the company management need to give serious attention on minimization of the cost of goods sold and other production costs and increasing the net income with increasing of selling price of the product. It helps to overcome the effect of foreign currency shortage on the company's performance, through by increasing the profit margin of the company.

Performance is an indication of the means in which the resources of a company are used in the form which enables it to achieve company's objectives. Since, BGI has huge market share in the industry the researcher selects the company purposely. Therefore, purposive sampling technique was used, and the study attempts to assess the current status of foreign currency shortage through SPSS descriptive statistics by using the major variables which are raw materials and spare part import purchase, machinery maintenance, production and profit margin, of the effect on the performance of the selected brewery. Besides, the followings points were explicitly recommended to other researcher and concerned bodies

= To manufacturing sectors controlling bodies: As the effect of FC is high both at company and manufacturing level , it urges due attention from policy & decision making bodies on manufacturing level in general and brewery companies in particular.

=To firms(BGI Ethiopia brewery companies) :Revising the existing firm plan, devising effective mechanisms to be more competitive as well as resist the dynamic changes as result of shortage of FC in the country were made. Besides, to cover the currency shortage from firm aspect - having much import purchase with more export of products the increasing of import purchase of inputs to get foreign currency- the company should have more export items.

= To researchers: Those researcher that intend to do further research on the topic in the future should design longitudinal study (especially giving due attention to government policies ,strategies and directives as one parameter) together with skilled and ample time and budget to analyze a vast array of information, triangulating in detail can help them to get better result.

6.4 Limitation of the study

This study, as many research works it has its own limitations, this research work could not incorporate all the breweries found in Ethiopia. It was due to resource and time limitation. The study shall be undertaken as a comprehensive and case study which could show the aggregate performance of breweries in Ethiopia.

The research work also done with subjective measures rather than with an objective measure. Practitioners could give emphasis on doing research works through objective measures so that the performance of the breweries shall be measured in terms of other variables which was not used in this study, for instance, Return on Asset, machinery down time, Human resource capacity, competitiveness etc. therefore, future studies shall consider those and additional variables in their studies. As the research design was cross sectional and together with the presence of skill limitations in the principal investigator to analyze a vast array of information and also time and finance shortage , the result is mainly related to point time and the result was not triangulated in detail.

This study did not cover one of the major factors , macro level, that comprises of interest rate and inflation as entity.

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ANNEX 1

SURVEY QUESTIONNAIRE

COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF ACCOUNTING AND FINANCE

Title

THE EFFECT OF FOREIGN CURRENCY SHORTAGE ON PERFORMANCE OF ETHIOPIAN BREWERY COMPANIES

(Case study on BGI Ethiopian PLC)

SURVEY QUESTIONNAIRE

This questioner is prepared for the partial fulfillment of the MA program, Addis Ababa University, in field of Finance and accounting, in the title of “The Effect of foreign currency shortage on performance of Ethiopian Brewery companies” to show the effect of foreign currency shortage on performance and all the respondents and the company’s information is confidential and used for academic purpose only.

Thanks for agreeing to give your response for this questionnaire

Instructions:

- For the multiple-choie questions indicate your answers with an (X) in the appropriate block.
- For the multiple-choice questions when it needs leveling indicate your answers by numbering starting with 1 in the appropriate block
- For the open-ended questions express your answers freely
- For Likert scale questions indicate your answers with (X) in appropriate block
- Any terms not understood by respondents, the researcher will carefully explain
- Please attach Excel sheet, PDF or hardcopy of the document for questions which needs the Three years data; year from 2018 to 2020

PART I

Section 1: Biographical details

The purpose of this section is to establish the general profile of the company and the respondent.

S1.1 Period of business operating since

S1.2 Department- Respondent

S1.3 Educational Level- Respondent

S1.4 Years of Service- Respondent

S1.5 Your Current Role- Respondent

PART II

Section 2: Self-administered, multiple choose and Open-ended questions

S2.1 Which of the following is/are the major factors that have a direct influence on the performance of your business? (Level your answer by numbering)

- 1. Raw material Purchase
- 2. Production cost
- 3. Machinery maintenance
- 4. Exchange rate
- 5. Production volume
- 6. Profit margin
- 7. Other Factors -----

S2.2 Which one is the most dominant transaction cost in relation to the performance of your business? (Level your answer by numbering)

1. Labor costs
2. Raw materials costs
3. Variable Overhead costs
4. Fixed overhead costs
5. Other Costs -----

S2.3 Which of the following is/are directly affected by shortage of foreign currency shortage?

1. Raw material import Purchase
2. Production and sales plan
3. Spare part import purchase
4. Machinery maintenance
5. Others -----

S2.4 Which of the following highly affected by foreign currency shortage in your company?
(Level your answer by numbering)

1. Imported Malt
2. Imported Hops
3. Imported Yeast
4. Imported Spare part
5. Chemicals Imported
- Other goods Imported -----

S2.5 which of the following is/are main raw materials & items used for Beer production?

Malt (Maze, Barley) (Level your answer by numbering)

1. Hops
2. Water
3. Yeast
4. Spare part
5. Chemicals
6. Other -----

S2.6 What are the production plan that are important for the growth of your business?

S2.7 Does the foreign exchange have effect on profit margin of your company?

YES NO

If YES, How -----

If NO, Why -----

S2.8 Do the company have any export of items?

YES NO

S2.9 Does the foreign exchange have effect on the performance of the business?

YES NO

If YES, How -----

If NO, Why -----

S2.10 Does the shortage of foreign currency affect the performance of the manufacturing company?

YES NO

S2.11 Do your company; have any mechanisms to reduce the effect of foreign currency shortage in your company's performance?

S2.12 what does the main relationship of raw material import purchase and foreign currency?

S2.13 Does the foreign currency affect your company's machinery maintenance plan?

YES NO

S2.14 How foreign currency shortages affect the machinery maintenance plan of the Brewery Company?

S2.15 Do the spare part import purchases affect the machinery maintenance plan?

YES NO

If YES, How -----

If NO, Why -----

S2.16 Do you have formal planning for Raw material purchase, production, and Maintenance plan in your business?

YES NO

S2.17 Do you have any control mechanisms in your operational activities, which help to grow the company's performance?

S2.18 Has the Ethiopian government done enough effort to address the currency shortages in the Brewery companies?

YES NO

If Yes How -----

S2.19 what are the Ethiopian foreign currency policies that are most helpful on the development of Brewery Company's performance?

S2.20 what kind of policy, strategy, rules and regulation or directives are there by Ethiopian government to overcome the currency shortages for the manufacturing companies?

S2.21How do you show the currency shortage in your company?

PART III

Section 3: Likert-scale type questions

The purpose of this section helps to show the severity of foreign currency shortage in the selected brewery company

Items	Strongly Disagree	Disagree	Slightly Agree	Slightly Disagree	Agree	Strongly Agree
Rate	1	2	3	4	5	6
Foreign currency shortage has effect on:						
S3.1 import purchase of Raw materials						
S3.2 import purchase of Spare parts						
S3.3 production						
S3.4 Machinery Maintenance						
S3.5 profit margin						
S3.6 government's effort exerts on the manufacturing sector						
S3.7 creditors payable for import purchase of goods and services						
S3.8 expat's salary payable						
S3.9 Payments made for Technology and software license						

PART V

Section 4: Three years data request questions – From year 2018 to 2020

S4.1 How much of raw materials and spare part purchase on the past three years (2018-2020)

S4.2 How much of raw materials, spare part, consumables, chemicals, and other import purchase on the past three years (2018-2020)

S4.3How much of export sales have from the year 2018 to 2020?

S4.4How much of foreign currency requested and received for raw material, chemicals, spare part and for other import purchase use in your company on past Three years (2018, 2019& 2020)?

S4.5How much profit margin earned for Bottle beer and Draft beer on past Three years (2018, 2019& 2020)?

S4.6 How much costs spend for major material which has direct relation with Beer production, Import and local purchase on the past Three years (2018, 2019 & 2020)?

S4.7In your company, what was the cost incurred for machinery maintenance and technical assistance cost incurred on years (2018, 2019 & 2020)?

S4.8 How much of the production cost spend to produce bottle beer and Draft Beer on the past three years (2018-2020)

S4.9 How much of the production volume in “hl” spend to produce bottle beer and Draft Beer on the past three years (2018-2020)

ANNEX 2

CHECK LIST SUMMARY

SECTION	Description	YEARS		
		2018	2019	2020
	Production actual			
	Bottled Beer			
	Draft Beer			
	Foreign Currency Requirement			
	Request			
	Actual			
SECTION 1	Production cost			
	Production Cost			
	Production Volume			
	Profit margin			
SECTION 2	Raw material imports Purchase			
	Malt			
	Hops			
	Yeast			
	Chemicals			
	Other goods			

	Raw material Local Purchase			
	Malt			
	Hops			
	Yeast			
	Chemicals			
	Other goods			
SECTION 3	Maintenance & Spare part cost			
	Machinery maintenance			
	Spare part			
SECTION 4	Profit Margin			

Annex-3 : Thematic Content Analysis

Table :25 Thematic Content Analysis To Explore The Effect Of Foreign Currency Shortage On Performance In Bgi Ethiopian Brewery Companies <u>theme</u> : Exploring The Effect Of Foreign Currency Shortage On Performance (Among Bgi Ethiopian Brewery Companies) (Particularly /The Case Of :St. George Brewery In Addis Ababa) , 2022						
<u>Categories</u>	Effect/ Impact/Influence	Shortage	Underlying Dynamics/Efforts	Performance	Factors	Severity/Status
<u>Codes</u>	<i>High</i>		<i>Policies</i>	<i>Low</i>	<i>Industry</i>	<i>High/Low</i>
	<i>Direct</i>	<i>Production Capacity</i>	<i>Proclamations (Pro No. 591/2008)</i>			
	<i>Significant</i>		<i>Directives(Fxd/6 7/2020 & Fxd/48/2017)</i>		<i>Currency(Euro, (Foreign Currency) & Birr (Local Currency)</i>	

	<i>Indirect</i>	<i>Dalliance Or Delay For Payment (Raw Materials & Technical Services)</i>		<i>-Reduction (Productivity) -Declining (Machinery Efficiency And Profit Margin)</i>	<i>-Macro Level -Interest Rate -Inflation -External Factor -Micro Level -Government Policy - Firm Level -Internal Factor</i>	<i>-Limited Balance Of Foreign Currency</i>
	<i>Cost (.Indirect & Direct)</i>	<i>-Minimizing Imported Raw Materials</i>	<i>-Increased Foreign Creditors Lability</i>	<i>-Very Competitive Market Env't</i>	<i>-High Foreign Exchange Rate</i>	

	<i>Direct Re/Ship</i>	<i>-Local Material Substitution</i>		<i>Inefficiency</i>	<i>-High Material Cost</i>	
	<i>-Direct Relationship</i>			<i>Infectiveness</i>	<i>Policies</i>	
				<i>-Applying Csr</i>	<i>Proclamations</i> <i>(Pro No. 591/2008)</i>	
	<i>-Maintenance Plan</i>				<i>Directives</i> <i>(Fxd/67/2020 & Fxd/48/2017)</i>	<i>-Delay Of Arrival Or Absence Of Item</i>
			<i>Rule & Regulations</i>			

