



The Dynamics of the Ghanaian Currency Depreciation: A Case Analysis of the Performance of Ghana Cedi (GHC) Against Its Major Trading Currencies

Ibrahim Zubairu^{1,*}, Marim Alenezi², Ahmed Jamal Iddrisu³, Samuel Dawson¹

¹Accounting and Finance Department, Accra Technical University, Accra, Ghana

²Accounting and Finance Department, Prince Mohammed Bin Fahd University, Dhahran, Saudi Arabia

³Banking and Finance Department, University of Professional Studies, Accra, Ghana

Email address:

izubairu@atu.edu.gh (Ibrahim Zubairu), malenezi@pmu.edu.sa (Marim Alenezi), jamal.iddrisu@upsamail.edu.gh (Ahmed Jamal Iddrisu), zakmann41@gmail.com (Samuel Dawson)

*Corresponding author

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Abstract: Depreciation is a currency's exchange rate falling against other currencies. Economic fundamentals, interest rate differentials, political instability, or investor risk aversion can cause currency devaluation. Countries with weak economic fundamentals, such as persistent current account deficits and excessive inflation, have declining currencies. Orderly and progressive currency depreciation increases export competitiveness and may reduce trade imbalance. Ghana imports and exports raw commodities. Ghana needs foreign currency but has a limited supply. The cedi depreciates against major currencies occasionally. In this study, the researchers assessed the performance of the Ghana cedi relative to major foreign currencies such as the U. S. Dollar, the British Pound, the Chinese Yuan, and the Japanese Yen. The following particular goals will be evaluated: This study's population will consist of all business owners in the central region of Accra. A simple random sample of fifty (50) individuals and firms that deal in foreign currencies was conducted. The study revealed a positive relationship between the US Dollar, British pound, Japanese yen, Chinese yuan, and Ghanaian cedi. The link between the US Dollar and the Great British Pound appears to be the strongest, with the Chinese Yuan being the weakest. This indicates that the Ghanaian cedi is unaffected by fluctuations in the US Dollar and British Pound. It was discovered that the Ghana cedi declined continuously versus other international currencies from 2016 to 2022. In 2022, the Ghana Cedi lost approximately 40.05 percent of its value against the US dollar, 21 percent against the British pound, 23.55 percent against the Japanese yen, and 34.98% against the Chinese yuan. The analysis advised that the Bank of Ghana enforce the prohibition on commodity pricing in other foreign currencies.

Keywords: Redenomination, Ghana Cedi, Devaluation, Ghanaian Currency Depreciation, Major Trading Currencies, Foreign Exchange Rate, USD, GBP, CNY, JPY

1. Introduction

According to [48], currency depreciation is a drop in exchange rates. Devaluation is caused by economic fundamentals, interest rate differentials, political instability, or investor risk aversion. Countries with bad economic fundamentals, such as current account deficits and inflation, have falling currencies. Orderly and gradual currency

depreciation can minimize trade imbalance. A substantial currency depreciation may cause international investors to withdraw portfolio holdings [48]. The cedi's exchange rate with the US dollar and Ghana's major trading partners has fluctuated greatly since the mid-1980s, when Ghana's foreign currency market was liberalized (as part of structural

adjustment and economic reforms). Since 1986, the cedi has depreciated. By April 2015, 0.01 Cedis could purchase a dollar, a 98.7% depreciation from 1986, [2]. Bloomberg calls the Ghana cedi Africa's worst currency. Bloomberg estimates the cedi would decline 8.86% from Jan. 1 to Feb. 25, 2022 [36]. Some banks and forex bureaus sell local money for 8 to 1 USD. Since 2022, the cedi has lost over 16% versus the dollar. The local currency lost 1.45% versus the world's most important currency in March. [47], claims Ghana's economy is import-dependent. Despite exports producing less foreign cash, the country continues to buy foreign currency for imports. Export receipts often exceed import expenditures, but these are paper gains. Foreign companies send money home by passing the ineffective retention statute, they may repatriate all earnings. Periodically, the cedi depreciation is at its peak in the months of February to March. During this time, Ghana-based multinationals send money home. Local businesses that borrowed to import goods before the holidays can start over. These factors drove the cedi's decline and the fundamentals have not been altered. Most governments closed their borders during COVID-19 (2020-2021), stabilizing the currency. However, the Ghanaian cedi has fallen 7.6% in the first two months of 2022, the most among the 15 main African currencies [47].

Ghana relies heavily on exporting raw materials and importing completed products. The Ghanaian cedi has a consistent need for foreign currencies while having a limited supply of such currencies. The cedi appears to depreciate every now and then against major foreign currencies [47]. It is the African currency that has performed the worst, second only to the dollar of Zimbabwe. The Ghanaian Cedi to the Japanese Yen on 8th April 2022 was selling for 0.0572 and buying at 0.0375 with a mid-rate of 0.0475. However, on the interbank forex rates of the Bank of Ghana, the cedi was trading against the dollar at a buying price of 7.1084 and selling at 7.1156. The cedi to the Chinese Yuan stood at 0.90932 as the highest points the exchange rate has been at in the last 30 and 90-day periods and 0.84034 the lowest points the exchange rate has been at in the last 30 and 90-day periods. The impact of exchange rates on economies worldwide cannot be overemphasized [17]. Policies implemented to manage exchange rates are very crucial and important in achieving and sustaining long-term economic growth within economies. This had led to a lot of discussions about what optimal exchange rate policy is best to enable and sustain long-term economic growth [20]. However, most prior studies focus on the performance of the Ghanaian Cedi against the US Dollar and the pounds sterling and fail to assess its performance against other important currencies like Chinese YUAN and Japanese YEN, hence our quest to undertake this study considering this subject matter.

1.1. Objectives of the Study

The main objective of the objective of the study is to evaluate the performance of Ghana cedi against major

foreign currencies such as the US Dollar, British Pound, Chinese Yuan, and Japanese Yen. The following specific objectives will be assessed;

1. To find the level of performance of the Ghana Cedis against the US dollars, British Pound, Chinese Yuan and Japanese Yen.
2. To find out the major causes of the depreciation of the Ghana Cedis over the years
3. To assess some of the impact the depreciation of the Ghana Cedis has on trading both locally and internationally.
4. To find out what account for the fall in the rate of the cedi to major trading currencies such as USD, GBP, YUAN, and JPY.

1.2. Research Questions

1. What is the level of performance of the Ghana Cedis against the US dollars, British Pound, Chinese Yuan, and Japanese Yen?
2. What are the major causes of the depreciation of the Ghana Cedis over the years?
3. What are some of the impact the depreciation of the Ghana Cedis on trading activities both locally and internationally?
4. What account for the fall in the rate of the cedi to major trading currencies such as USD, GBP, YUAN, and JPY?

1.3. Scope and Significance of the Study

The results of the study will allow the government to design a policy framework for the exchange rate that will reduce the amount of uncertainty in the market for exchange rates. This will make it possible for both domestic and international investors to make investments in the economy that provide a good return on their money. On the other side, investors will be able to acquire a level of assurance on how much return on investment they can anticipate in real terms, free from the worry that they may lose all of their spread due to a decline in the value of their currency.

This research will be advantageous to the government, Banks and other firm who trade using foreign currencies to understand the trend and dynamics in the variation of the Ghanaian cedi and other major foreign currencies and may serve as a reference point to aid in their quest to minimize their non-performing loans and for future research. Furthermore, this study could serve as the reference point for further research in the depreciation and sustainability of the Ghana Cedis. The study will focus on the performance of the Ghana Cedis against the other major foreign currencies, thus the US Dollar, British Pound, Chinese Yuan and Japanese Yen between a periods of 2010 to 2021 year. It will also consider the cause of the depreciation and its impact on the trading activities both locally and internationally.

2. Literature Review

This section reviews prior studies and consist of a brief

background of the currency depreciation in Ghana, the level of performance of the Ghana Cedis against the US dollars, British Pound, Chinese Yuan and Japanese Yen, the major causes of the depreciation of the Ghana Cedis over the years and some of the impact the depreciation of the Ghana Cedis on trading activities.

2.1. The Concept of Exchange Rate

The value of one country's currency in comparison to the currency of another country or economic zone is referred to as an exchange rate, as stated by [15]. The rate at which one country's currency is traded for another is referred to as the exchange rate for that country's currency. As a result, the exchange rate is what is utilized in order to evaluate the relationship that exists between local currencies in comparison to the currency of the rest of the world. The majority of currency rates are allowed to float freely, and as a result, they will either increase or decrease depending on the supply and demand in the market. There are certain currency rates that are not free-floating and are instead tied to the value of other currencies; these exchange rates may also be subject to regulations [15]. In addition, the value of a nation's currency will devalue relative to other currencies if the amount of domestic currency required to acquire one unit of a foreign currency would increase. On the other side, currency appreciation indicates that fewer units of a nation's domestic currency are required to acquire one unit of a foreign currency. This is because the value of the domestic currency has increased relative to the value of the foreign currency. Currency appreciation frequently results in a reduction in the price of imported goods and services, which in turn has the effect of lowering the nation's level of international competitiveness. This indicates that an appreciation of the real exchange rate results in a relative decrease in the cost of import commodities while simultaneously increasing the cost of export items. In addition, a currency's depreciation makes it more expensive to import goods and services and less expensive to export goods and services, both of which have an impact on productivity. This is because industries that rely on imported raw materials for production in the economy have a difficult time competing because the cost of raw materials is high, which in turn raises the cost of production. Additionally, it results in decreased profits for businesses and industries throughout the economy. Therefore, because it has an effect on both their enterprises and the investments they make in an economy, a fluctuation in the exchange rate frequently creates problems for both the producers and investors of a nation [43].

2.2. History of Exchange Rate System in Ghana

Prior to European colonialism, there was no established monetary system in use in Ghana. The Gold Coast, which is now Ghana, utilized a form of a fixed exchange rate system during the time when it was under colonial rule. Before the West African Currency Board (WACB) was created in 1912

and began issuing the West African Pound, the Bank of British West Africa, which was a private bank and had a branch in Accra, was responsible for the distribution of the British pound, which did not require an exchange mechanism. After 1912, when the WACB pound was first introduced, its value was pegged to that of the British pound sterling at par (thus, one to one). When Ghana gained its independence in 1957, it immediately instituted its own independent monetary policy and currency. A lengthy period of time was spent under the system with a fixed exchange rate until 1983, when it was replaced with a regime that allowed for greater exchange rate flexibility. The Ghana pound was the country's official currency from 1957 through 1965, and it had a value that was equivalent to that of the British pound at that time. The Ghana pound was replaced with a brand-new currency known as the first cedi, which was created by the Bank of Ghana in 1965. The exchange rate for one Ghana pound was set at 2.4 Cedis. Additionally, it was equivalent to one pound of sterling (2.4 Cedis equaled one pound of sterling). The National Redemption Council decided to replace the first cedi with the second cedi in 1967. This took occurred (NRC). The exchange rate for this was determined to be 2 Cedis to 1 Ghana pound. The value of one Ghana pound was equivalent to that of one British pound. Later on, in 1967, the US dollar was used instead of the pound as an intermediate or intervention currency, and the exchange rate was set at 1 cedi = 0.98 US dollars. The value of the cedi was reduced to \$0.55 in 1971, after which it was revalued to \$0.78 in 1972 and to \$0.8696 in 1973 before the currency was allowed to float in 1978. After then, the value of one dollar in Cedis was set at 2.75 Cedis. The period known as the PNDC regime and the Economic Recovery Programme were responsible for the implementation of the controlled floating exchange rate system in 1983. The auction exchange rate mechanism was first made available to importers in August of 1986 and was organized by the Treasury Department. In February of 1987, the Bank of Ghana centralized the Auction and gave formal permission to exchange bureaus to purchase and sell foreign money. At the beginning of 1992, the auction system was done away with and replaced with the inter-bank exchange rate system. Under this new system, the (official) exchange rates are established by the market that exists between different banks. Therefore, as of right now, the systems of foreign exchange rates that are in use are those of forex bureau and interbank exchange rate systems [33].

2.2.1. The Era of Fixed Exchange Rates Before 1983

Prior to the implementation of extensive economic reforms in 1983, Ghana had a system of fixed exchange rates, which was periodically disrupted by devaluations. These devaluations were intended to bring the exchange rate closer to being in accordance with the economic realities of the country. Since its inception in 1912, the currency that was in use prior to the country's declaration of independence was called the British West African pound, and it had circulated in the Gold Coast and the other British West African colonies at a value that was equivalent to that of the British pound

sterling. After gaining its independence in 1957, Ghana quickly moved to create a central bank, which came to be known as the Bank of Ghana. Just one year later, Ghana launched its own currency, the Ghana pound, which ultimately replaced the currency used by the colonial government. Since the Ghana pound traded at the same rate as its predecessor, the relationship between the pound sterling and the local currency remained unchanged. In order to maintain the parity over time, it was necessary to implement appropriate domestic macroeconomic policies, in particular for the government to adhere to strict standards of fiscal and monetary policy. In light of the fact that this was, for the most part, missing during the 1960s, the parity gradually grew more unsustainable. The nation changed its currency from the pound sterling to the cedi in 1965, and the exchange rate was set at 2.4 Cedis to 1 pound sterling. The cedi was not pegged to the pound sterling at the time of its introduction [25]. During this period, the country's position with regard to its external payments was deteriorating as a direct result of dropping world prices of cocoa, which is the primary source of both domestic and foreign revenues. In response, the government decided to implement foreign exchange restrictions rather than letting the exchange rate be modified to absorb some of the external shock. The goal of these controls is to reduce the amount of strain that is being placed on the country's external accounts. As a result of growing inflation and a constant exchange rate, the currency became overvalued, which lowered the price of imports in comparison to the price of local goods and made the difficulty of making external payments even more severe. In 1967, a currency known as the "new cedi" was introduced, and shortly thereafter, its value against the dollar was reduced by 30 percent. In December of 1971, a second round of currency devaluation took place, this time by as much as 45 percent relative to the dollar. This was eventually largely undone by a revaluation in 1972 that was 42% higher than the previous one. The policy of maintaining a fixed exchange rate was maintained throughout the entirety of the 1970s, despite the fact that it was inconsistent with domestic macroeconomic policies and that the majority of developed nations were transitioning to a system in which exchange rates were allowed to float [22]. The value of the currency was subject to a one-time devaluation in 1978, and then it remained unchanged until 1983. In the meanwhile, the strategy of maintaining a constant exchange rate resulted in a variety of unintended consequences. Not only did the official exchange rate become noticeably inflated, but at the same time, a thriving black market for foreign currency developed in spite of restrictions and regulations. The drop in investment and GDP that occurred between 1973 and 1983, a time frame that has been referred to as the "Dark Years" of the Ghanaian economy, was a direct result of the economic impacts that were catastrophic [30].

2.2.2. The Transition to a Flexible Exchange Rate Regime

In line with the paradigm shift that occurred in economic management in 1983, the Ghanaian exchange rate went

through a process of progressive liberalization. This was done under the auspices of the Economic Recovery Program (ERP), which was designed to, first and foremost, correct the substantial overvaluation that had been placed on it, and then to allow its value to be determined by the forces of the market. In addition, one of the goals of the liberalization was to bring the rates of exchange on the official market and the parallel market (also known as the black market) closer together and eventually include the parallel market into the legal market. There were three stages of implementation for the liberalization [9]. The first phase consisted of a series of devaluations that took place between 1983 and 1986. These devaluations had the cumulative effect of decreasing the value of the cedi in relation to the dollar by 97 percent, from 2.75 Cedis to 90 Cedis for each dollar. The purpose of the devaluations was to realign the exchange rate to a level that was more suitable and competitive, as well as to reduce the extent of the premium that was offered on the parallel market. In the second phase, which began in September 1986, a foreign exchange retail auction market was established, and the nation began operating a dual exchange rate system. This system stipulated that the official fixed rate would apply to certain transactions, while the weekly auction rate would apply to others. Eventually, in February of 1987, the official rate and the auction rate were combined into a single rate, and this new rate became the standard for all financial dealings. The third phase began in February of 1988 and saw the legality of the parallel market through the licensing of private foreign exchange bureau. This phase also marked the beginning of the fourth and final phase. The primary objective of the bureau was to simplify the process of buying and selling smaller amounts of foreign currency, with the end goal of formalizing transactions that would have otherwise taken place in the shadow economy or on the parallel market. The convergence of the parallel and auction rates was the second objective [22]. Two spot foreign currency markets have been essentially formed as a result of the existence of both the bureau and the weekly auction market [35]. A wholesale auction system, in which the involvement of the bureau was required, took the place of the retail auction market in April of 1990. This contributed to the two spot market rates becoming almost identical. The foreign exchange auctions were eventually stopped in March of 1992 when an interbank market was established. On this market, the Bank of Ghana and other banks may trade foreign currency with one another. Since that time, the most important market for trading foreign currency in Ghana has been the interbank market, which is governed by the competition between supply and demand.

2.2.3. Trends in Foreign Exchange Rate in Ghana

The effective exchange rate has been steadily falling against the world's primary trading currency, the dollar, ever since the floating exchange rate changes were first put into place in 1983. This is an indication that a greater number of Ghana Cedis are required to trade for a single dollar. Since Ghana made the transition from using a fixed exchange rate

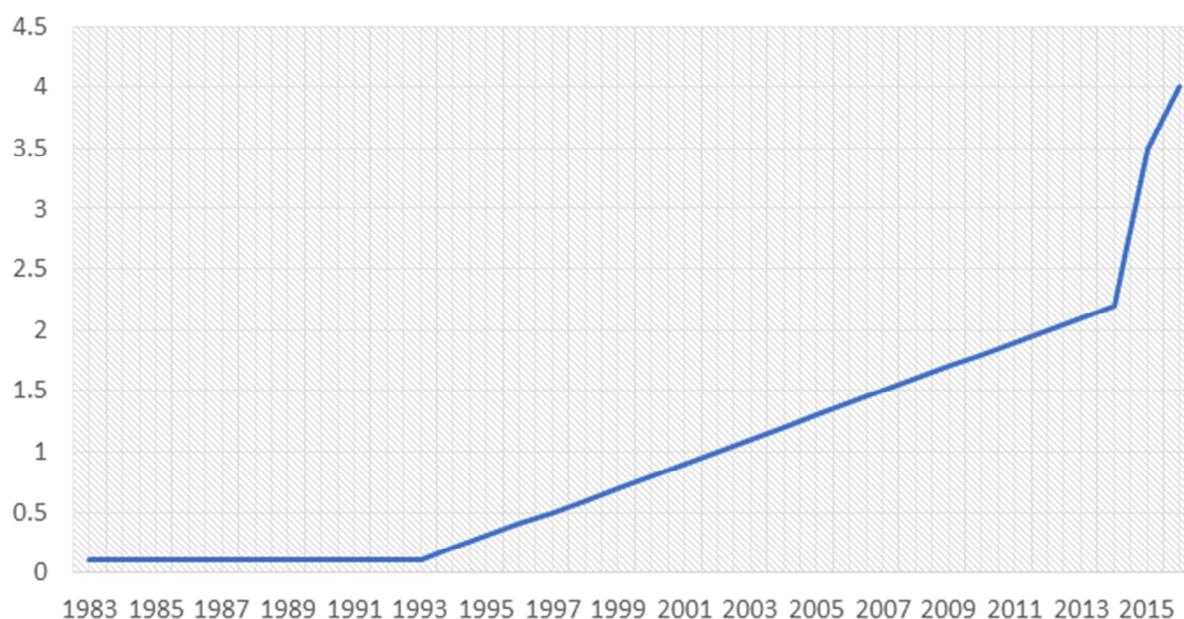
regime to using a floating exchange system in 1983, the value of the Ghana cedi has substantially decreased by a huge amount each year. In 2016, one dollar in US currency was equivalent to GHS 3.992. As of the 24th of February, in 2017, one US dollar was equivalent to GHS 4.552. The conclusion is that more Ghana Cedis are required to trade for a dollar, which is not good news for Ghana because the country imports more than fifty percent of its goods and services from other dollarized nations. According to [21], the vast majority of developing nations are extremely reliant on imported inputs for production, and Ghana is not an exception to this rule. The regular depreciation of the Ghana cedi, in accordance with the conventional theory of trade, is anticipated to stimulate exports while simultaneously discouraging imports. However, in practice, this is not the situation for Ghana, despite the fact that [34] found that a unit depreciation of the Ghana cedi creates a 0.3109 improvement in Ghana's trade balance as a result. The reason for this is that Ghana's imports have consistently been higher than her exports over the whole accounting period. According [34], a one unit rise in Ghana's GDP (income), while maintaining other parameters equal, results in around a 0.5333-point worsening of Ghana's trade balance. This is evidence that Ghana buys more than she exports at the present time. [32] Also found that the amount of food that is produced in Ghana is less than the amount of food that is demanded, and that the gap is supplied by imports. This results in a weaker balance of payments and a greater depreciation rate in Ghana. In Ghana, a very worrisome problem is the regular devaluation of the cedi, particularly when measured against the dollar. This is due to the fact that it has a detrimental impact on her prices, wages, interest rate, production levels, job prospects, and a wide variety of other macroeconomic phenomena [46]. This results in an increase in the price of final products and services priced in Cedis when these goods and services are imported from a country with a lower value of the cedi relative to the dollar. As a result of rising cedi prices for imported commodities, production costs have grown, and these higher costs have been passed on to local pricing levels. The growth in domestic prices, without a commensurate rise in the nominal wage rate of the people of Ghana, results in a reduction in the real wage, and families are need to spend more money in order to maintain the same quality of living. This opens the door for labor to advocate for increases in pay and benefits to the company [21]. Additionally, the sudden increase in the costs of imported supplies might discourage new investments in commercial endeavors, while the upkeep and repair of existing equipment would also represent a major financial strain on contemporary enterprise [3]. Regular drops in the value of the cedi contribute to an increase in the overall level of inflationary pressure. Between June 2008 and June 2009, Ghana was subjected to pressures associated with inflation, which were partially caused by the devaluation of the cedi. Inflation reached its all-time high of 20.7 percent year on year in June of 2009. [39] According to the findings of [14], real depreciation and real interest rate hikes were the primary

contributors to the nearly twofold increase in the cost of capital goods in Ghana from 1983 to 1991, as compared to the GDP deflator. According to [32] research, the primary factors that influence inflation in Ghana are the devaluation of the country's currency and the rise in the wholesale prices of food crops. According to the findings of [16], there is a significantly positive link that holds between the parallel exchange rate and the overall price level in Ghana. The instability of the currency exchange rate has a negative impact, not only on Ghana's national income, but also on employment. According to the Monetary Policy Report (2016) published by the Bank of Ghana, the real growth of the nation's GDP was 3.9% in 2015, down from 4.1% the previous year. The depreciation of the Ghana cedi as well as persistent power supply difficulties, both of which severely impacted the manufacturing sector, were the root causes of the shortfall. [5] Shown that Ghana's exchange rate has a detrimental impact on the country's GDP growth over the course of several years. This indicates that a one percent increase in Ghana's exchange rate will result in a 0.0025 percent decline in Ghana's GDP growth. Additionally, [4] discovered that a one percent rise in the exchange rate volatility results in a 0.8 percent reduction in economic growth in Ghana. According to [1]'s findings, the performance of the manufacturing sector in Ghana improves whenever the currency rate appreciates, and if it depreciates, the industry is badly affected, which in turn has a negative impact on the amount of employment in the nation. According to [37] 's findings, the depreciation of the Ghanaian cedi in comparison to the United States dollar considerably reduces the rate of job growth in the manufacturing sector in Ghana.

Since Ghana does not collect its income in dollar terms, but rather in cedi terms, the rapid depreciation of the Ghana cedi boosts the value of Ghana's foreign debt and the cost of repaying that debt. In 2005, Ghana's total external debt was 7.17 billion dollars in US currency. In 2007, this was reduced to \$3.68 billion US dollars. The reason for this was that because of the redenomination of the Ghana cedi during this time period, the exchange rate managed to remain reasonably constant. In 2009, Ghana's external debt was valued at 7.2 billion US dollars; the following year, it rose to 9.3 billion US dollars. It reached a record high of \$15.8 billion US dollars in 2013, according to [4] In terms of United States dollars, the increase in Ghana's external debt represented a 79 percent increase from US\$7,103.41 million in September 2011 to US\$12,712.02 million; however, in terms of Ghana cedi, the increase represented a 275 percent increase from GH10,814.23 million to GH40,644.15 million. Rises in Ghana's foreign debts are matched by increases in the amount of money that must be paid to service such loans. The interest payment on Ghana's foreign debt was 139.6 million US dollars in 2009; it climbed to 335.7 million US dollars in 2013, up from 128.7 million US dollars in 2011 and 219.9 million US dollars in 2012 [4]. This increased contribution toward debt service has a tendency to compete with other areas of spending, notably capital investment [21]. Increases

in wages as a consequence of inflationary pressures through the exchange rate depreciation have the potential to raise public outlays: the rise in government expenditure generates budget deficits when the revenue collected is insufficient to meet the expansion in expenditure. This is the case in many developing countries, including Ghana, where the government is the primary employer of labor. In 2015, total revenue and grants amounted to GHS31.1 billion, which represented 22.2 percent of GDP, while total expenditures amounted to GHS37.3 billion, which represented 26.7 percent of GDP. Those figures are in Ghana Cedis (GHS) (Bank of Ghana monetary policy report, 2016). In addition, the unstable currency rate that Ghana has been experiencing for the past three decades makes it difficult for the government, companies, and individuals to plan. One of these proofs is the fact that it causes delays in timely repayments. For example, the recent fall in the value of the cedi makes it impossible for those who want to buy homes with mortgages to do so since house prices have risen to unaffordable levels [4]. In addition, the present quick depreciation of the cedi is a sign that Ghana's fiscal or monetary policy posture is unwell. This depicts that either Ghana's fiscal policy is more expansionary or her monetary

policy is not as tight as policy makers are anticipating it to be. The reason for this is because in an open economy such as Ghana, monetary and fiscal policies need to be consistent in order to maintain stability in the country's overall economy [29]. Imports, exports, investments, knowledge transfer, and eventually economic growth might all suffer as a result of these policies on exchange rates, which are incorrect [25]. The advocates of a fixed exchange rate have argued that a flexible exchange rate increases trade uncertainty and may reduce trade volumes because it exposes importers to greater risks as a result of fluctuations. However, positive effects could result in the short term if the flexible exchange rate is implemented [3]. Floating exchange rates have the potential to be both effective and efficient in some contexts, given the right conditions and regulations [46]. As can be seen from the numerous budget statements of Ghana, the goal of Ghana is to achieve and then sustain stable and competitive real exchange rates. The rationale for this is that foreign exchange may be utilized as a weapon to bring about development and stability in economic conditions [29]. On the other hand, the Ghanaian government's efforts to keep the value of the cedi constant in relation to the country's trade currencies have continued to run into obstacles.



Source: International Monetary Fund, International Financial Statistics

Figure 1. Trends in official exchange rate in Ghana, 1983 – 2016.

2.3. Current Depreciation of the Cedi Against Other Currencies

This section considers the most recent depreciation of the Cedi against other currencies under consideration in the study.

2.3.1. US Dollar and the Ghana Cedi

On Tuesday, June 14 2022, the USDGHS exchange rate fell from 7.8000 in the previous trading session to 7.6700. This is a fall of 0.1300, or 1.67 percent. According to the data

presented in figure 2 below, the value of the cedi began to increase from the start of the year 2022 and only had a slight drop in the month of June 2022.

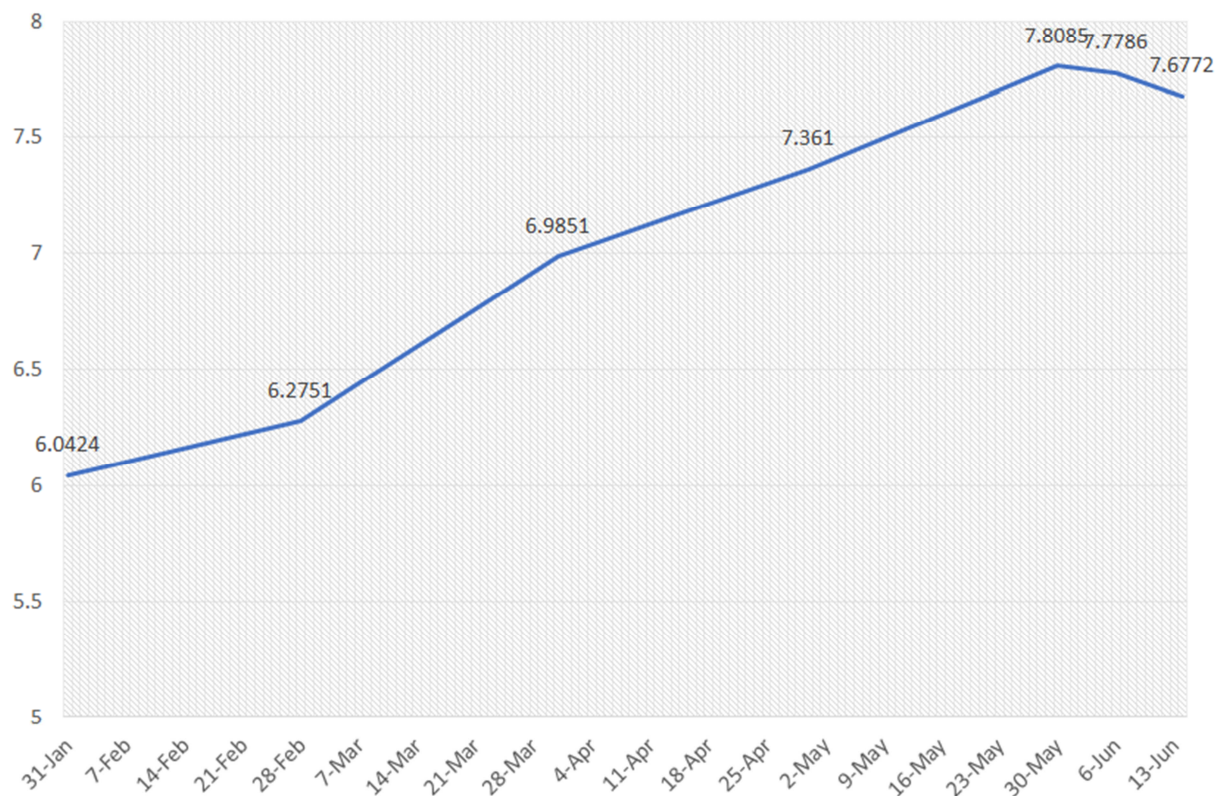
2.3.2. Ghana Cedi to GBP

Since the previous trading session, the British Pound Sterling Ghanaian Cedi exchange rate has decreased by 0.03689, or 0.39 percent, and was last seen trading at 9.42763 on Tuesday, June 14th. When looking back over the past month and a half, GBP/GHS had a loss of 2%. Its price

increased by 16.05 percent during the course of the previous year. According to the projections of global macro models at Trading Economics and the expectations of analysts, the British Pound Sterling Ghanaian Cedi exchange rate is

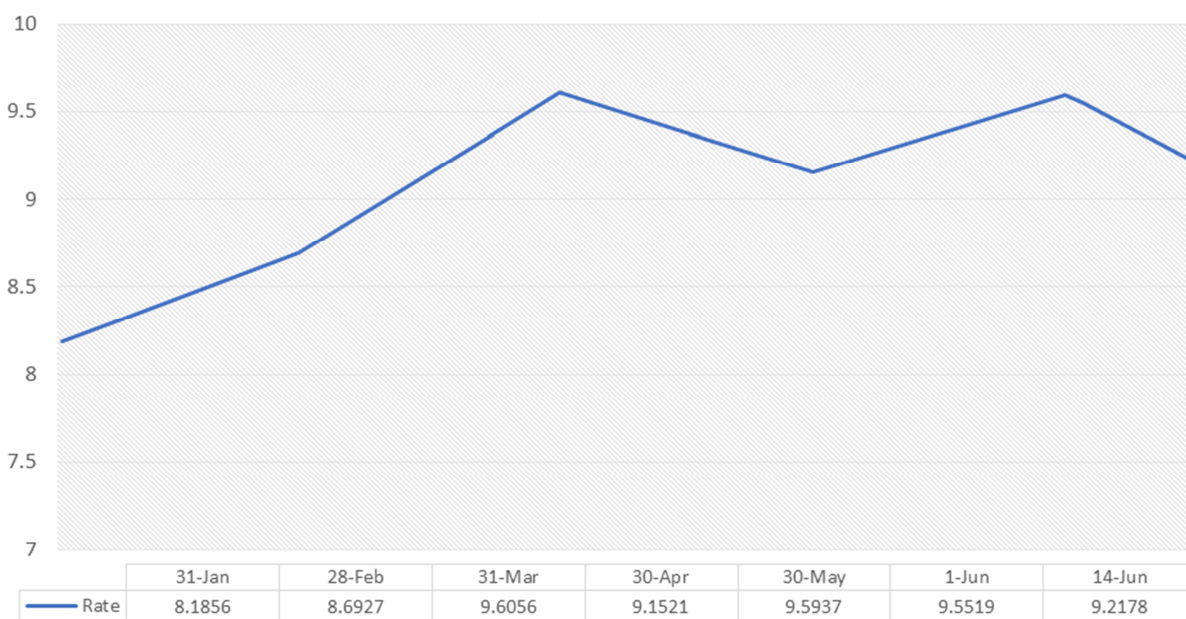
expected to be priced at 9.38052 by the end of this quarter and at 9.60075 in one year. This is according to our outlook for the future [50].

Cedi to USD Variation 2022



Source: Trading Economics, 2022

Figure 2. Ghana Cedi to USD Variation.



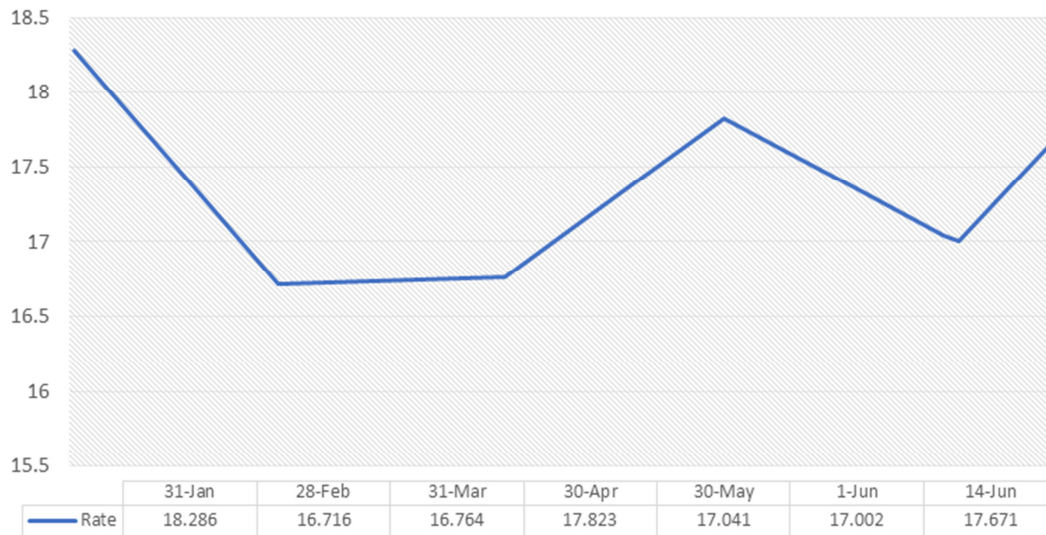
Source: Trading Economics, 2022

Figure 3. Ghana Cedi to GBP Variation.

2.3.3. Ghana Cedi to JPY

The Ghanaian Cedi to Japanese Yen exchange rate reached 17.2400 on Tuesday, June 14th, reflecting an increase of 0.0188, or 0.11 percent, compared to the previous trading session. When looking at the past four weeks, we can see that

the GHSJPY gained 0.33 percent. Its price decreased by 9.64 percent during the course of the previous year. When we look into the future, we anticipate that the Ghanaian Cedi to Japanese Yen exchange rate will be 17.2528 by the end of this quarter and 16.8113 in one year [50].



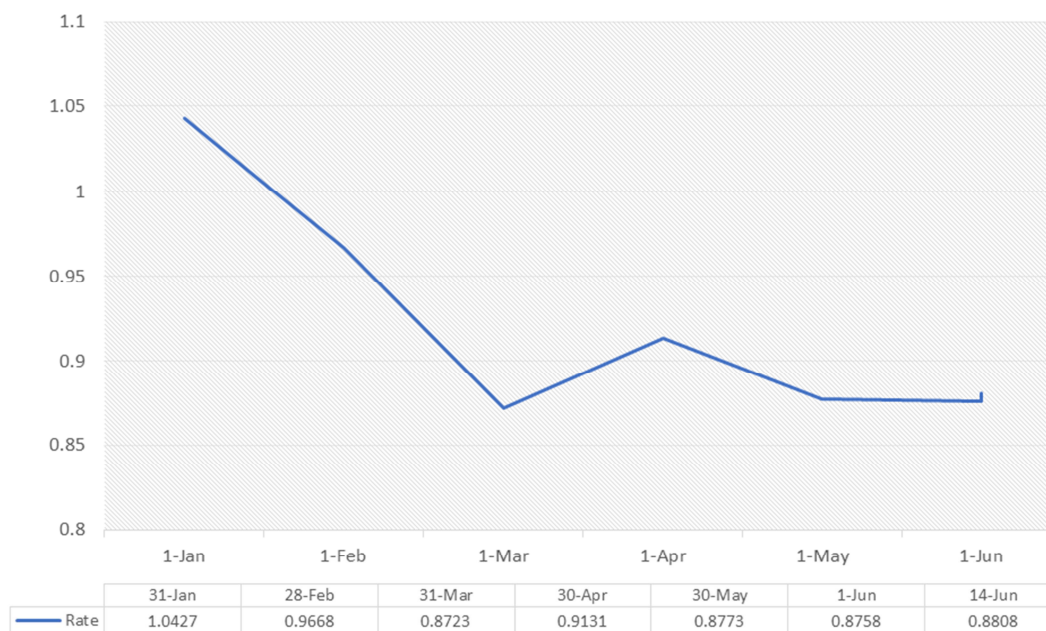
Source: Trading Economics, 2022

Figure 4. Ghana Cedi to JPY Variation.

2.3.4. Ghana Cedi to YUAN

The Ghanaian Cedi Chinese Yuan exchange rate was last seen trading at 0.86538 on Tuesday, June 14th, reflecting a decrease of 0.00389, or 0.45 percent, during the previous trading session. In retrospect, we can see that GHSCNY had a loss of 4.53 percent during the course of the past four weeks.

Its price dropped by 22.07 percent throughout the course of the previous year. According to the estimates of global macro models at Trading Economics and the expectations of analysts, the Ghanaian Cedi to Chinese Yuan exchange rate is expected to be valued at 0.86114 by the end of this quarter, and it is expected to be at 0.82986 in one year [50].



Source: Trading Economics, 2022

Figure 5. Ghana Cedi to YUAN Variation.

2.4. Determinants of the Depreciating Value of the Ghana Cedi

This section discusses the empirical determinants of the depreciating value of the Ghana Cedi from the prior studies. These are presented in the following.

2.4.1. High Importation by Ghanaian Businesses

According to [7], the value of the Ghana cedi has lately fallen by another significant amount. It comes after a spate of losses that have resulted in the local currency falling in value relative to the dollar by approximately 3 percent. Since the start of the year 2011, this has been the case. As of the 9th of February, 2011, one Ghana cedi would be equivalent to 4941 pesewas in order to purchase one dollar. Since it was redenominated in 2007, this is the point at which the value of the currency has dropped by the least amount. One such factor contributing to the devaluation of the cedi is the significant imbalance in the nation's current account balance that has been accumulating recently. The difference between what Ghana imports and what it exports is what constitutes the country's balance of payments. Ghana is considered to be a "net importer" due to the policies of "free market" economics that have been implemented by governments from the late 1980s. In layman's words, this indicates that Ghana today imports anything and everything under the sun, from toothpaste to tomato paste, rice, luxury automobiles, and most importantly, oil. Rice was originally produced in Ghana; however, as a result of policies enacted in the name of the "free market," rice production in Ghana has been discontinued, and the country now imports rice; as a result, thousands of people have lost their jobs. Ghana is now the world's leading importer of rice, with annual sales of up to US\$500 million. Just try to conceptualize what a little portion of that amount could achieve for the economy of Ghana if it were invested in the production of rice in the country. Despite the fact that Ghana has begun its own oil production, the country still spends the majority of its money on oil imports. In order to satisfy both its commercial and its domestic need for oil, Ghana is forced to make annual imports of crude oil worth billions of dollars. Because oil is priced in US dollars, a significant amount of pressure is exerted on the value of the cedi. Oil represents a significant portion of the overall importation expense. As a consequence of the fact that we import nearly everything, which must be paid for in US dollars, the economy is going through a tremendous amount of stress due to the fact that Ghana needs to buy US dollars with cedi in order to pay the importer.

2.4.2. Liberalization of the Capital Market to Foreigners

As a result of the liberalization of our capital market, it is now possible for foreigners to purchase and sell bonds within the nation. As a direct consequence of this, by the end of December 2008, foreign investors held 46 percent of the Government of Ghana's 3-year fixed bond and 87 percent of the country's 5-year fixed bond. When foreign investors sell their bonds to local participants in the capital market, it can

result in significant foreign exchange obligations for the local investors. These obligations have a tendency to put pressure on the value of the national currency. This risk is associated with the participation of foreign investors in the capital market. Since the beginning of the ongoing global financial crisis in October 2008, international investors have sold local investors a total of 145 million USD worth of bonds that they owned. There is further evidence to suggest that the severe depreciation of the cedi in 2008 contributed considerably to the withdrawal of foreign investors from the market for government assets, which in turn caused an even larger decrease in the value of the cedi [37]. The fact that our government does not have any gold bars in its reserves is perhaps the single most important factor contributing to the devaluation of the cedi. In the world of economics, it is usual practice that when a country's currency is under assault, the first thing that the government does to safeguard its currency is to use its gold reserves. This is done so that the country can continue to trade. As a direct consequence of the Ghanaian government's adoption of a free market policy, the nation's entire gold stockpile has been sold to several multinational mining corporations. Because gold is used to bolster a country's currency through tough periods like the one the cedi is presently facing, such as what the cedi is currently suffering, but Ghana as a country we have none, the cedi has been depreciating because we do not have any gold reserves.

2.4.3. Falling of Prices Cocoa and Gold Commodities

According to forecasts provided by experts working for Gold Coast Securities (GCS), the value of one Ghanaian cedi relative to one US dollar is expected to continue falling throughout the first half of 2009. They explain that the key variables that have given rise to a steady run down of the local currency are elements that are beyond the control of monetary and fiscal policy in the near term. This is because these factors have given rise to a consistent run down of the local currency. Collins Appiah, Head of Research at Gold Coast Securities, recently gave an interview in which he explained that falling prices of cocoa and gold on international markets have contributed to the local economy's excessive demand for the dollar, which in turn has led to a significant depreciation of the cedi in relation to the dollar. Appiah made this statement in response to a question regarding the factors that have led to this situation. He made the observation that the decline in the pricing of these key exports had led to a drop in the amount of foreign exchange that was brought into the country.

2.4.4. Inflation

The value of money suffers as a direct consequence of inflation's presence. The pace at which the value of money (Ghana Cedi) depreciates is determined by price increments. This is true whether cost push or demand-pull inflation is the primary driver of price increases. The decrease in value can be directly correlated to the rise in price increase (Depreciation of the currency). Ghana is still dealing with the effects of this crisis right now. Low productivity, a high

population growth rate, an excess money supply, imported inflation such as the recent increase in the price of fuel on the international market, high demand against a lower supply of goods and services, and high government expenditure, particularly capital investment are some of the prominent factors that contribute to inflation. Also, the adoption of the Single Spine Salary Structure by the government is believed to be one of the primary causes of the devaluation of the country's currency (the Ghana cedi). This excess supply of money in the economy is not backed by a matching expansion in output, and the outcome is more money chasing fewer commodities in the country [51].

2.4.5. The Timing of the Redenomination of the Cedi

Since the Ghana Cedi was first introduced into circulation, there has been a considerable decline in the value of the currency. This is due to the fact that before its introduction, the economic fundamentals (balance of government finances and foreign reserves) that were necessary to support the value of the cedi at its appropriate level were all very weak. This made it impossible for the cedi to maintain its value at its appropriate level. The overall composite indicator of economic activity was indicating strong expansion in the opposite direction. It is alleged that the central bank disbursed a total of \$288 million in USD between July 2007 and December 2007 in order to support the value of the currency. Despite this, by the end of 2007, the value of one new Ghana cedi was reduced by 5.1 percent. It had been put into circulation at that point alongside the previous currency. 2008 was distinguished by a consistent and steep decline throughout the year, as well as by the central bank's intervention to prop up the value of the currency. The nation's central bank intervened to support the value of the cedi with a total of 918 million US dollars throughout 2008. The value of the cedi fell by 25.3% against the dollar in 2008 as a result of the weak economic fundamentals that continued to exist in the economy [51]. These fundamentals included high spending by the government and the associated growing fiscal deficit, surging monetary growth, rising inflation, and declining foreign reserves. The conclusion that can be drawn from this is that by the end of 2008, the value of the cedi had already been significantly eroded, which led to a further depreciation of 13.6 percent during the first three months of the year 2009.

2.5. Effects of the Depreciating Value of the Ghana Cedi on the Economy

This section presents the effects of the depreciated value of Ghana Cedi on the Ghanaian economy, considering the critical microeconomic issues.

2.5.1. Balance of Payment Deficit

The value of the difference between what Ghana imports and what it exports is known as the balance of payments. Ghana has been a "net importer" of goods as a direct result of the "free market" policies that have been implemented by successive administrations since the late 1980s. This basically implies that Ghana today imports everything under the sun, from toothpaste to tomato paste all the way through

rice, luxury automobiles, and most importantly oil. Oil represents the majority of Ghana's costs associated with importing goods. Because oil is priced in US dollars, it places a significant strain on the value of the country's currency. This is a significant portion of the overall importation expenditure. Because of this, the nation is forced to make an annual investment of billions of dollars in the importation of oil in order to meet the demands of both its commercial and domestic sectors. Because almost everything we buy is imported and the seller expects to be paid in U. S. dollars, the economy of Ghana has been put under a significant amount of strain as a result. This is because Ghana needs to buy U. S. dollars using its own currency, the cedi, in order to pay the importer. Due to the low commodity prices and low royalty payments that are generated by Ghana's primary exports (gold, timber, cocoa, bauxite, and some agricultural items), the nation earns very little in export revenues [37]. According to the Think Tank, Centre for Economic Policy Analysis (CEPA), Ghana's overall balance of payment has significantly deteriorated over the course of the past five years, plunging into a massive deficit that was the equivalent of 5.8 percent of GDP in 2008. This deficit was a total of US\$940.8 million. This shortfall in the balance of payments puts pressure on the country's foreign reserves since it is sometimes used to offset the country's obligations. The country's debts are a significant burden. On the other hand, it is thought that the finding of oil in Ghana will, in a short amount of time, cause an overflow and maybe address the problem of Ghana needing to import high volumes of oil from other oil-endowed countries.

2.5.2. Inflation

A weakening of the cedi results in an increase in the cost of products and services that are brought into Ghana from other countries. Even though the government subsidizes the majority of our imports in order to lessen the overall impact that it has on Ghanaians, this does not cover the total cost of the imports. As a result, Ghanaians are required to pay for these imports due to the inelastic demand for the products that are brought in. This is notably evident in the cost of many items derived from petroleum. Recent increases in the cost of gasoline have had an effect on practically every economic activity in the economy, including but not limited to the transportation sector, the agricultural sector, and even the industrial sector. The increased price of imported components and raw materials might subsequently be passed on to the final customers by the manufacturers. This contributes to inflation by pushing up costs. In reaction to this, wages may go up, which might set off the prospect of a wage-price spiral. The degree to which a weakening of the Ghana cedi leads to an increase in inflation is directly proportional to how manufacturers price the imported goods they sell and how much of the increase they pass on to end customers [51].

2.5.3. Adverse Effects on the Manufacturing and Industrial Sector

During the previous two months, the value of the cedi has been decreasing in comparison to the main currencies. This

trend has caused considerable anxiety in the country's business community, particularly in the manufacturing sector, which imports the vast majority of its raw materials. This new development has given the business community cause for concern, particularly because some offshore investors are selling government bonds, recouping cedi, and converting them into dollars. This is putting pressure on the cedi, which had been stable within the range of 1.42 to 1.44 for the majority of the year 2010. A great number of businesses, especially some that operate in the informal sector, are concerned that the unpredictable nature of the value of the Cedi would result in a narrowing of their profit margins. Companies, particularly those that are required to account for some inputs in a foreign currency, are left with exchange losses in the translation from cedi to dollars as a result of the depreciation of the cedi. This is the primary characteristic of the situation. Posting exceptional items such as exchange losses in financial statements is nothing new; however, when this becomes extremely significant and out of control even after making contingent provisions for its occurrence in budgetary allocations, it is difficult for accountants and business managers to plan for the future of the company. Additionally, the high cost of oil has contributed to the devaluation of the currency by driving up the import bill and, as a result, the price of imported raw materials for the manufacturing sector. The expenses of production will inevitably go up as a result of this. The only choice left for businesses is to pass the increased costs on to customers in the form of higher pricing for goods that are created locally. Again, these manufacturing companies are unable to compete with foreign industries that produce similar products because the price of their goods is significantly lower than the price of the product that is produced locally, which is significantly more expensive. If this situation continues for an extended period of time, it could result in the closure of these industries [37].

2.5.4. The Adverse Effect on Government and the Agricultural Sector

Agriculture in Ghana is the most important contribution to the country's economy in terms of both jobs and money. It is essential to the expansion of the other part of the economy that it helps fuel. According to data collected over the past several years, this industry continues to play an important role in the economy, as it is responsible for more than one third of all jobs in the formal sector. Cocoa, lumber, and other atypical forms of agricultural export are the primary drivers of growth in agricultural foreign exchange profits. The government makes investments in agricultural subsectors like as crop production, livestock, fisheries, cocoa production, and so on. The decline in the value of the cedi compared to the dollar, on the other hand, leads the government to spend a proportionally larger amount of its earnings in the agricultural sector. This is because the agricultural sector is the primary driver of the expansion of the economy. However, because Ghana's industrial sector does not have sufficient resources to process the raw material, the country

exports the materials in their unprocessed form, which does not result in a particularly high level of income creation. As a result, the government invests more money in the industry, but it sees a correspondingly less return on its investment. In addition, the reduction in value of the cedi will lead the key input of the production to grow, which will make it impossible for many of the impoverished smallholders who dominate the sector to purchase them. This is because the cedi's value would have decreased. This, in turn, has implications for productivity, and as a result, producers pass on their high production costs to ultimate consumers, which has an effect on the quality of life in general.

2.5.5. Low Investment and Unemployment

Both domestic and international investors have less confidence as a result of the depreciation of the cedi and the instability of the exchange rate in relation to other major currencies. This is because they anticipate incurring more losses. These things discourage investments in the nation, which makes it more challenging to generate more employment opportunities within the nation. In the end, it is one of the factors that leads to Ghana's high unemployment rate.

2.5.6. Positive Effect on Exports

The devaluation of the Ghanaian cedi relative to the world's other main currencies, on the other hand, may have a beneficial impact on the export of products and services. This fact has to be brought to your attention. This is due to the fact that when importers are discouraged from importing more goods from other countries, it provides an opportunity for local producers to increase their supply of goods in order to supplement the demand for goods, and eventually export some of those goods to other countries. This is the reason why this is the case. Also, after selling their items in other countries, exporters earn foreign currencies (such the US dollar), which, when translated to the Ghanaian cedi, amount to a significant sum of money for exporters. This results in an increase in the capital base of exporters, which may then be re-invested to boost the productivity of those exporters.

2.6. Measures to Help Stabilize the Ghana Cedi and the Economy

Because of the impact that the Ghana Cedi's depreciation against other major international currencies (particularly the US Dollar) has had on the economy, we believe that the following actions should be taken in order to assist in stabilizing the Ghana Cedi and, as a consequence, the economy as a whole

2.6.1. Increase Exports and Curb Imports

As a result of the fact that Ghana's balance of payment account has been showing a deficit balance as a result of Ghana's participation in international trade, it stands to reason that we spend more Ghana cedi to exchange for other foreign currencies before trade is made possible, which results in a decline in the relative value of our currency. Putting limits on the number of products and services that

may be imported is one approach that might be taken to address this issue. Tariffs, embargoes, quotas, regulatory trade restrictions (government-imposed procedural rules), voluntary restraint agreements (agreements in which countries voluntarily restrict their imports), and the establishment of efficient import substitution firms are all examples of international trade policies that the government has the ability to adopt and implement. Because of all of these steps, imports are made to be relatively expensive and limited, which in turn encourages local entrepreneurs to engage in successful companies, which in turn boosts the government's capacity to acquire income. This also encourages the exporting of both traditional and non-traditional goods with added value, which demands high prices on the international market, resulting in an influx of foreign cash that can be employed on infrastructure and other developmental projects throughout the economy [51]. A Nationalistic Appeal might be made by the government in the form of 'Friday wear promotions,' 'Buy made in Ghana products,' 'Ghana in me,' and other similar initiatives in order to educate Ghanaians on the importance of purchasing locally produced items. All of these things go a long way toward preventing the persistent balance of payment deficit that was putting downward pressure on the value of the Ghana cedi. The following is a simple explanation of the various ways that export may be increased while import can be decreased:

2.6.2. Export Taxes and Subsidies

Export levies and subsidies offer a method for shielding an economy from the internal volatility that would be produced by variations in exports, and they are also capable of having a significant impact on an economy's capacity to maintain a sufficient level of foreign reserves. For instance, if there is an increase in the demand from other countries for a country's exports, the application of an export tax will cause part of the additional cash that would otherwise be taken into private hands to instead be given to the government. On the other hand, when there is a downturn in international demand, the reduction of export taxes helps to mitigate the loss in private earnings, which, in turn, tends to maintain both internal incomes and economic activity. It is possible to employ export subsidies for both the purpose of boosting domestic economic activity by growing export profits and of boosting foreign currency earnings for the purpose of achieving a more favorable balance of payment. There is a school of thought amongst certain economists that suggests faster economic growth and structural shifts in an economy are sometimes correlated with higher inflation. This is correct; nevertheless, in our opinion, if a developing economy is experiencing persistently greater inflation, then the country may be on the verge of economic, social, and political disaster. This is because a developing economy often has higher unemployment rates. In light of this, the decision-makers in charge of policy need to pull out all the stops to get a handle on the problem right away, before it is too late [51].

2.6.3. The Demand Side Exchange Rate Management

Although several governments have recognized that the

reliance on raw material exports was never enough, insufficient efforts have been made to improve the supply of foreign reserves through the diversification of income sources and the necessity of adding value to our raw materials, which is something that many of us have known since the 1960s. After it became abundantly clear that we could not depend on the supply of foreign currency that could be generated from exports in order to meet the needs of our nation's development, successive governments have resorted to substantially depending on bilateral sources from countries such as the United Kingdom and the United States. One of the recurring themes in the academic literature on Ghana's economic management is the fact that around forty percent of the country's annual budget is supported by donations from outside sources. This is common knowledge. Given what has been discussed above, it is reasonable to deduce that the supply side of foreign currency has been the primary focus of our exchange rate control techniques. Because of this substantial focus on the supply side (particularly via the assistance of donors), one persistent issue is that its long-term viability cannot be assured at all times. The issue that has to be answered is, for how much longer are we able to continue to rely on such donor sources in order to put a stop to the depreciation of our domestic currency in comparison to the main international currencies? As a result, it is imperative that the nation initiate a determined effort to "walk on two legs" by putting some kind of strategic program into place to deal with the demand-side of currency rate management.

It was explained that the factors of demand and supply are responsible for influencing the exchange rate. This nation should keep its focus on the supply components, but it should also start to look at the demand side so that it may reap the connected advantages that are consequential to those benefits. When a country focuses on the demand side of managing its currency rate, it must put in place policies and procedures that will de-emphasize the aggregate demand for foreign currencies. A national import-substitution plan will need to be developed if the nation is going to put in place the proper policies and procedures that will reduce the overall demand for foreign currency. Import-substitution was part of Dr. Kwame Nkrumah's original plan for Ghana, but it was scrapped after the country was taken over by the military in 1966. In most cases, the implementation of an import-substitution plan with the objective of lessening the overall demand for foreign currency will need the creation of alternatives to things that are already being brought into this nation in significant quantities. As soon as the alternatives are made accessible and people begin using them in large quantities, the overall demand for foreign currency will begin to fall, and as a consequence, the price of the foreign currency (the exchange rate) will start to shift in Ghana's favor [51].

2.6.4. Review of Fiscal and Monetary Policies

The significant depreciation of the Ghanaian cedi in comparison to the United States dollar and other global currencies is the focus of this discussion. Also discussed are

the steps that the government and other institutions involved in economic stabilization plan to take. Inferences to this effect can be drawn from statements made by the Chairman of FABAG (Food and Beverage Association of Ghana). The Chairman of FABAG has requested that the government conduct an audit of the country's fiscal and monetary systems, but not of the cedi. The chairman stated that "we FABAG also encourage governments to dive deep into their economic arsenals in order to prevent the economic slump that devastated the world, particularly Europe between 2007 and 2008." In addition, the chairman of FABAG, suggested that the government should increase investment in the production of staples such as maize and yam in order to reduce the amount of food that is imported into Ghana. This would allow Ghana to emerge as a major producer of food on the African continent. The organizations that are responsible for the nation's fiscal and monetary policies are outlined below, along with what each of them can do to contribute to finding a solution to this problem.

2.6.5. Government and the Political-Will

The government, on its own, is responsible for cutting its budget. A decrease in domestic expenditure will lead to a certain reduction in prices, which may make the process of adjusting the balance of payments and domestic spending easier. Because of price reductions, goods destined for export will become more appealing to buyers from overseas. Because of the lower prices that they offer, domestic alternatives to things that are imported become more appealing to locals as well. It's possible to make the case that the elasticity of consumer demand will determine whether or not this measure is successful in causing a positive shift in the nation's current account. If foreign demand for the nation's export is inelastic, then the decrease in price will lead to a smaller total foreign expenditure on the exports, and the increase in the physical volume of exports will not be large enough to offset the unfavorable effects on the volume of exports that resulted from the fall in the prices of the exports. In other words, the decline in price will lead to a smaller total foreign expenditure on the exports. On the other hand, an elastic demand indicates that there is a greater than proportionate increase in the physical volume of purchases when prices fall, which results in an increase in the overall spending made by international customers for the export. We are obligated to point out that the state of the balance of payment will improve even if the demand from other countries for exports is inflexible; this will be the case if the value of imports falls even further than the reduction in the value of exports. For this reason, the government has to promote exports, such as in the area of unconventional goods. Again, the government should provide financial assistance to our farmers and put up an enticing package to encourage domestic and international investors to increase the amount of money they invest in our agricultural industry. This is of the utmost importance and bears the secret to having a favorable influence on both the pace of inflation and the value of the cedi (exchange rate) [51].

2.6.6. Bank of Ghana

In light of the current state of the global economy, the Bank of Ghana decided to raise the prime interest rate from 17 to 18.5 percent not too long ago. It's possible that the goal of this essential step is to restrict the supply of loanable funds and regulate excess liquidity (more money in circulation) in the system. This would be a significant step forward. Whether or whether higher interest rates constitute an effective limit on expenditure is one of the most important questions that arise in connection with this monetary strategy. Higher interest rates, it is said by some, have little impact on investment and, as a result, have little impact on consumer spending and borrowing since the interest rate only accounts for a tiny portion of the total cost of running a firm. Others minimize the effectiveness of higher interest rates by arguing that borrowers' expectations of continually rising prices will offset higher interest charges as far as profit expectations are concerned. As a result, there is little incentive to reduce borrowing because borrowers anticipate that higher prices will offset higher interest charges. We are a part of a world that is still in the process of evolving, and as a result, the government cannot brag about having a lot of income due to the structural and administrative issues that arise when trying to collect taxes. It is impossible to overstate how important the role of investments from the private sector is. As a result, we need to urge the private sector to advocate investment in order to create more employment for our jobless people as our very own home-grown stimulus package. This will allow us to break out of the poverty trap in which we find ourselves. We are able to accomplish this by reducing the cost of borrowing money while at the same time having the government place restrictions on expenditure that is not productive.

2.6.7. Adoption of a Fixed Exchange Rate System

The policy of a fixed exchange rate is characterized by the circumstance in which the government makes a commitment to maintaining the exchange rate at a predetermined level. The government has the ability to create a legislation that makes it illegal to possess international money and prohibits the buying and selling of foreign currencies at any rate other than the rate that the government establishes. When this occurs, it makes it difficult to engage in international trade since the currency in question cannot be readily swapped for other currencies; such currencies are referred to be "non-convertible." The exchange rate of the non-convertible currency is unaffected by changes in the supply and demand for the currency. Buying the money (GH) directly from the government is frequently the only authorized method of obtaining it, as all other methods are seen to be unlawful. Such capital control, which is the limitation on the outflow and inflow of a country's currency, would assist avoid the need to make the economic adjustment that Ghana would otherwise be forced to make as a result of international considerations.

1. The long-term goal of exchange rate policy should be currency stabilization (the buying and selling of a

currency by the government to effect temporary fluctuations in demand and supply for currencies). With this, the government does not modify the long run equilibrium but rather attempts to maintain it at that long run equilibrium. To successfully stabilize the currency, the government must possess the ability to select the appropriate long-run equilibrium. However, if the government runs out of reserves, it will need to begin employing other indirect tactics that will impact its economy in order to alter the private supply and needs of the market. Therefore, in order to conform its economy to the fixed exchange rate.

2. Stabilization of the Ghanaian Cedi through the use of Critical Currency Management, which involves buying and selling at strategic periods in order to influence expectations regarding supply and demand; this method may also be used to stable the currency.

2.6.8. Controlling of Excessive Inflation

Where the government expect to see an increase in the value of the Ghanaian cedi on international markets, we will also need to take steps to combat inflation, which may be defined as an ongoing and discernible increase in the overall price level of goods and services (appreciate). There is a connection that works in the other direction between the price and the worth of the money. As prices are high, the value of money is low since the same quantity of products and services cannot be purchased with the same amount of money when prices grow, providing that the consumer's income remains the same. There is a need for attempts to be made to control, if not totally eradicate, the various economic variables that cause this problem (inflation) in Ghana, particularly due to the fact that the rise in prices are not equivalently off-set by higher output, lower unemployment, and more growth. Since the country faces a higher rate of unemployment coupled with this price hikes, the majority of goods and services are imported with an inflationary effect being imported into the country. Excess liquidity (money supply), which is obtained by the government's expansionary monetary and fiscal policies in order to boost the economy by embarking on long-term capital investments [51]. Controlling investments in areas such as education, health, and security, as well as transportation, and among other critical economic sectors whose benefits are not immediately reaped must be a top priority. Inflation in the country can be brought under control by a variety of techniques, the most notable of which include increasing direct taxes, investing in productive industries, and providing subsidies to productive industries. Other actions may also be used. Since the supply of and demand for a country's currency are what determine its exchange rate, it is in the best interest of the government to initiate policies that reduce the pressure for the demand of foreign currency while at the same time increasing the demand of the local currency (Ghana Cedi) by foreigners. The ever-increasing wage or salary bills in 1982 by the National Redemption Council (NRC) as well as construction of the Kpong Hydroelectric Pump (1974-1976) to augment

the power supply from the Volta Dam sparked the inflation rate to as high as 40.5 percent. For instance, statistics show that in 1978, the money supply was approximately 4 billion, but it rose to 9 billion in December 1984. This rise was subject to the ever-increasing money supply (GCB Quarterly Economic Review, 1974).

2.7. Empirical Review

Empirically, some study work done in Ghana and elsewhere has further uncovered the underlying causes of the mixed tendencies in a country's currency relative to those of its key trade partners. This was accomplished by comparing the Ghana cedi to other currencies throughout the world. From 1980 to 2022, researchers [4] looked at the impact of exchange rate fluctuation on Ghana's economic development. Their major goal was to find out what causes the exchange rate volatility and how it affects Ghana's economic growth in the long run. They used the co-integration approach. There was a correlation between the real exchange rate and the terms of trade, real GDP, trade openness, money supply, domestic credit and exports. There was also a correlation between the real exchange rate and the terms of trade and the terms of trade. They discovered that higher productivity reduces volatility over the long term; terms of trade have a negative and significant relationship with real exchange rate volatility; FDI has a positive and significant relationship with exchange rate volatility; government expenditure has a positive and significant relationship with exchange rate volatility; and money supply has a positive relationship with long-term exchange rate volatility. They determined that Ghana's currency rate volatility is mostly driven by the country's output. According to [6] the variables that account for fluctuations in the Ghanaian Cedi's exchange rate were identified. From 1985Q1 to 2006Q4, they used the Johansen cointegration approach for their research. Nominal GDP, government spending, domestic credit, imports, the consumer price index, and the nominal exchange rate were all included in the model as regressors. Expenditure by Ghana's government was shown to be an important factor in predicting currency swings, as was the country's historical experience with currency fluctuations. Actual exchange rates and real misalignment in Ghana were analyzed by [33] from 1980 to 2010. The Error Correction Model (ECM) was used by him. The real effective exchange rate was his dependent variable in the model, and productivity, trade openness, the real relative interest rate, government spending, terms of trade, and foreign reserves were all explanatory factors. Real exchange rate depreciation was found to be correlated with productivity, trade openness, real relative interest rate, and foreign reserves, while total government expenditure, terms of trade, domestic credit and fiscal deficit were found to have a positive (appreciating) effect on real exchange rate. There were no statistically significant impacts of domestic credit and budget deficit on the real exchange rate. From 1983Q1 to 2006Q3, a study was done by [24] to estimate a behavioral equilibrium exchange rate model for Ghana. Their primary goal was to calculate Ghana's genuine equilibrium exchange

rate. BEER and vector error correction models were employed. Regressors in their model included per capita growth rates between Ghana and its trade partners, real interest rates, and weighted average real-world export prices for Ghana's primary commodities. Real exchange rates were employed as a dependent variable in their model design. They determined that a rise in per-capita growth, real interest rates, and real-world prices led to an appreciation in the exchange rate. Ghana's real effective exchange rate from 1965 to 2004 was investigated by [4] the primary goal of this research was to identify the most basic factors that influence the equilibrium exchange rate in Ghana. Terms of trade, net capital inflow, and commercial policy were among the variables they considered when estimating the equilibrium exchange rate (openness). According to the findings, a decrease in trade terms, an increase in openness, and a rise in capital inflows all devalue the currency. In Ghana, [42] used the Monetary Approach to study the factors that influence the Cedi/Dollar exchange rate. From 1992: 12 to 2003: 11, they collected data. Co-integration and error correction modeling was used by them. Explanatory factors were Ghana's money supply, US money supply, Ghana's gross domestic product (GDP), US gross domestic product (GDP), and the real interest rate disparity between the two countries. There is a correlation between monetary growth and currency depreciation; a 1 percent increase in the real interest rate differential results in a 0.23 percent depreciation in the cedi/dollar rate; and a 1 percent increase in the domestic inflation rate relative to foreign inflation causes depreciation of the cedi/dollar. [45] Conducted research on Ghana's actual exchange rate as well as the flow of foreign aid into the country. The primary purpose of his research was to construct an empirical model for Ghana's real exchange rate, with a particular emphasis on foreign aid as the independent variable. The model makes use of time series analysis techniques and encompasses the years 1962 to 1996 in its scope. As explanatory variables in the designated long-run model, the research utilized terms of trade, net foreign assistance inflows, government consumption, openness, and technical advancement. According to the findings, higher levels of external trade and net inflows of foreign aid are associated with a depreciation of the currency exchange rate, whereas higher levels of government consumption, openness, and technological advancement are associated with an appreciation of the currency exchange rate. [41] Conducted research on the empirical examination of the fluctuations of the Indian rupee versus the United States dollar during the post-liberalization period in India, which lasted from 1991 to 2013. His primary objective was to determine the nature of the relationship that exists between the exchange rate in India and the factors that influence it, as well as whether or not and to what extent the value of the rupee depreciates or appreciates in response to an increase or decrease in the number of independent variables. The exchange rate was the dependent variable in the model that was specified, and the independent variables were the inflation rate, interest rate, foreign portfolio investment, foreign direct investment,

current account, capital account, foreign exchange reserves, trade balance, and invisibles (all in US\$ million). It was determined to use the multiple regression model and the backward elimination procedure. According to the findings of the study, the respective effects of FDI, invisibles, interest rate, and capital account on exchange rate are not significant, whereas the respective effects of forex reserves (+), current account balance (-), foreign portfolio investment (-), trade balance (+), and inflation (-) on exchange rate are significant. FDI, invisibles, interest rate, and capital account were found to have no effect on exchange rate. [40] Looked at the relationship between a number of different macroeconomic factors and the erratic behavior of India's exchange rate for foreign currency. Her academic career spanned the years 1991 through 2010. She used a technique called Pearson's correlation analysis as her strategy. The exchange rate served as her dependent variable, while interest rate, balance of trade, inflation rate, foreign direct investment, GDP growth, and Current Account balance served as her independent variables respectively. Her research showed that there is a significant negative correlation between the interest rate and the exchange rate; there is a significant moderate negative indirect correlation between inflation and the exchange rate; there is a significant positive relationship between GDP and the exchange rate; however, this relationship is indirect, and the significance level for this relationship is 0.05; there is no relationship between the current account and the exchange rate, and this correlation is not significant; and finally, there is no significant relationship between the current account and the exchange rate. [46] conducted research in Pakistan to investigate the factors that influence the exchange rate of the Pakistani rupee to the United States dollar. The exchange rate was utilized as the dependent variable, and the factors used to explain it were the relative stock of money, relative foreign currency reserves, relative total debt, and political instability. The time period covered by the data set was from January 1982 to April 2010, and the time series collected was on a monthly basis. The Autoregressive Distributive Lag (ARDL) method of co-integration was utilized in this study. According to the findings of the study, there is co-integration between the macroeconomic variables and political instability with the nominal exchange rate in Pakistan; the coefficient of relative stock of money at first lag is positive and significant; the coefficient of the relative foreign exchange reserve is negative and significant; the coefficient of the relative debt is positive and significant; and the coefficient of political instability is positive and significant. [49] Looked at how the degree of openness, government expenditure, relative productive activity, real money supply, and Renminbi exchange rate were all connected to one another and how their interactions impacted the economy. The study lasted from the first quarter of 1994 through the fourth quarter of 2010. The Cointegration test, which was based on the time-series rank transformation developed by [13], was the methodology that was used for this research. According to the findings of the study, factors such as the degree to which an economy is open, the ratio of government

expenditure to gross domestic product, the relative productive activity differential, and real money supply all have a depreciating effect on the real exchange rate and are significant for the long-run equilibrium of the Renminbi exchange rate. The dynamic link between Pakistan's nominal exchange rate and macroeconomic factors was studied by [12], who did their research there. The variable that regressed was the exchange rate, and the regressors were total reserves minus gold, inflation as measured by the wholesale price index, imports, exports, industrial production, stock price index, and money supply. The exchange rate itself was the regressor. The analysis included the years beginning in 1998Q1 and ending in 2012Q4. Estimations were determined with the use of the cointegration and Granger causality tests. The research concluded that there is a long-term association between the exchange rate and inflation at a significance level of 10 percent, and the Granger-Causality test indicates that the direction of influence is more from inflation to exchange rate than from exchange rate to inflation; money supply granger-cause exchange rate; a bi-directional causality exists between exchange rate and total reserve; a bi-directional causality exists between exchange rate and industrial production; and a bi-directional causality exists between exchange rate and industrial Granger causality brings about a balance of trade in the short run. The trend performance of some of the leading factors of exchange rate, which were considered by some of the (empirical) studies (above), may have changed over time, and its current causal relation and impact on exchange rate in Ghana is not yet known. This is something that can be deduced from the empirical studies that were discussed previously. Also, numerous of the key factors that effect on the exchange rate in Ghana have been discovered; nevertheless, the main purpose of this study is to establish which variables are the most essential and have the biggest and most significant impact on the frequent depreciation of the Ghana cedi. In addition, there are other macroeconomic predictive variables that could significantly influence the depreciation of the exchange rate in Ghana; however, their relative causal relation and strength on exchange rate have not yet been discovered in Ghana. These variables could have a significant impact on the depreciation of the exchange rate. Therefore, one of the goals of this study is to identify some of the important unknown macro explanatory variables that may have contributed to the devaluation of the cedi, and then to evaluate the degree to which these variables have a relative impact on Ghana's exchange rate. Furthermore, some of the explanatory variables that were utilized in the aforementioned empirical studies that were reviewed were measured in totals; this study will break open some of these totals into smaller units, and then determine the relative effect that each of these smaller units have on the exchange rate. This information will be helpful to policy makers in directing particular strategies towards the internal stabilization of the Ghana cedi. Again, the process of formulating and implementing policy is dependent on time, and the times have changed. Therefore, as of right now, why

has the Ghana cedi devalued so often throughout the course of time? What steps can we take to slow down the rate at which the Ghana cedi falls in value? The focus of this investigation is on this aspect. In terms of the way of estimate approach, cointegration is utilized often in each and every one of the researches that were evaluated concerning Ghana. Because not a single one of them can be assigned to the estimate methodology known as backward elimination and stepwise regression, this strategy was selected instead.

3. Data and Methodology

A planned sequence of the processes involved in conducting a research is referred to as a research methodology. This section discusses the research design used in the report, population size and sample design, data collection methods, testing processes and analysis of data.

3.1. Research Design

The research design, according to [19], is the general approach selected to integrate the many components of the study coherently and logically, so assuring a successful study. The performance of the Ghanaian cedi relative to other foreign currencies is investigated in this study using a descriptive research approach. Descriptive research designs assist in addressing who, what, when, where, and how issues connected to a specific research topic; but a descriptive study is unable to definitively determine why. Descriptive research is used to learn about a phenomenon's current state and to characterize "what existing" in terms of its many components or circumstances [19].

3.2. Population

Finding a subset or sample that is representative of an entire population is the objective of a research project because it is extremely challenging to gather data from every individual in a population or on any other topic. The term "population" is used to refer to the entire collection of persons, events, or things that share particular observable qualities. It is the total of everything that satisfies a certain standard. It is the aggregate of all the factors upon which conclusions can be drawn [27]. The population in this study will include all of the proprietors of businesses located in the Accra Central Area.

3.3. Sampling Design

The term "sample design" refers to the plans and techniques that need to be followed in order to pick the target population sample, as well as the formula of the estimate methodology that has to be used in order to calculate the sample statistics. These are the numbers that are utilized to determine the parameters of the population [27]. The elements of the population each have an unknowable chance or potential of being picked as samples, which is why a probability sample will be taken instead of a simple random one. When there is a need for individuals of the sample to

contribute to a more comprehensive generalization, this strategy is utilized.

3.3.1. Sampling Frame

The research will focus on the small businesses located within Accra Central as its sample frame. A list of the sampling units from which the sample was collected is what's known as a sampling frame. A sampling frame is a complete enumeration of all of the persons or units that make up a population from which one may draw a sample. A list of objects serves as the sampling frame, and these are the things from which the sample will be selected. The simplest form of framework is a list of members of the population (ideally the whole population) along with the required contact information [27].

3.3.2. Sampling Technique

According to [27], the sampling technique defines the procedures that have to be followed in selecting the sample units. The objectives of the study, the availability of financial resources, the time restrictions, and the nature of the problem that has to be explored all have an impact on the selection of the sampling technique that will be used. For the purpose of this investigation, a straightforward method of random sampling will be utilized. The most fundamental method of sampling is known as a simple random sampling, and it involves selecting a group of people, or a sample, for the purpose of research from a larger group, also known as a population. Each person is selected based only on random chance, and every member of the population has an equal opportunity to be a part of the sample.

3.3.3. Sample Size

The sample size provides a representation of a portion of the overall population. It refers to a selection of entities taken from a larger population for the purpose of analyzing their characteristics. It is a portion or subset of a population that has been selected in such a way that it accurately reflects the characteristics of the full population. It is the number of individuals that are included in a research study in order to provide an appropriate representation of a population [28]. A sample size of fifty (50) people will be selected with the goal of accurately reflecting a greater proportion of the population in order to carry out an analysis of the factors that led to and were exacerbated by the devaluation of the Ghana cedi.

3.4. Data Source and Collections Methods

3.4.1. Data Source

Secondary data, which are data that already exist and can be retrieved from the journal articles, annual reports, bank of Ghana exchange rate reports, and other research work that is in line with the objectives of this study are the main source of the data for the study, while the primary source which represent the raw data gathered through the fieldwork as considered in this study.

3.4.2. Data Collection Methods

A data collection instrument is a device used to collect

data objectively and systematically. Primary data will be collected using a structured questionnaire. This collection tool is appropriate because it is stable, consistent, and uniform. The study will be self-administered using either a printed copy or online through google forms. Ample time will be given to respondents to fill in the questionnaires. The online questionnaires will be downloaded and checked for accuracy and consistency. The questionnaire will be subdivided into two sections. The first section will address the demographic of respondents, the second section will address relating to research objectives.

3.5. Data Analysis Method and Presentation of Result

The process of translating a large amount of raw data into tables, charts, and the like, complete with frequency distribution and percentages is known as data analysis. The data that will be gathered from the field will be organized, and then a summary will be drawn up using tables and graphs. When doing data analysis, both the Statistical Package for the Social Sciences (SPSS) and the excel tool will be utilized. There were several steps involved in the process of data analysis. The surveys that have been filled out in their whole will be revised for uniformity and completeness. After then, the data will be coded, and any mistakes or omissions will be looked through carefully. In order to display the findings, bar graphs and pie charts were utilized.

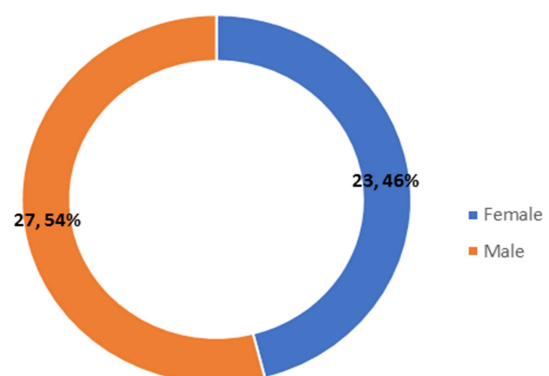
4. Results and Discussion

4.1. Introduction

This section presents the data analyses and discussions of the findings of the study. It also presents and analyses the data gathered in line with the specific objectives. It includes the basic information of the respondents, evaluates the performance of the Ghana cedi against other foreign currencies, the causes of the cedi depreciation, the impact and some measures to control the depreciation.

4.2. Basic Information

4.2.1. Gender



Source: Field Date, 2022

Figure 6. Gender.

From figure 6 above it shows that 27 of the respondents representing 54% were male while 23 of them representing 46% were female. This implies that majority of the respondents were male.

4.2.2. Age

Table 1 present the results on age groups of the respondents. The results show that majority of the respondents were between the age group of 26 to 30 years representing 62%. The other respondents were in the age group between 18 to 25 years, 31 to 40 years, and 41 to 50 years which represents 28%, 6% and 4% respectively. The results revealed that more of the respondents who participated were young and in their energetic age.

Table 1. Respondents' Age.

Age Range	Frequency	Percentage
18 - 25 years	14	28.00%
26 - 30 years	31	62.00%
31 - 40 years	3	6.00%
41 - 50 years	2	4.00%
Grand Total	50	100.00%

Source: Field Date, 2022

4.2.3. Field of Operation

Table 2 Shows the Field of Operation of the respondents. From the survey, majority of the respondents representing 34% were from the retails field of operation. The other respondents representing 22% and 12% were from the wholesales and import & export respectively. However, the survey shows that, respondents which represents 2%, 4%, 6%, 2%, 6%, 8%, and 4% where from the Banking, Exchange, Health care, Restaurant, Travel and Tour, Service and HealthCare Respectively. This shows clearly that the study to a large extent covered most of the field of operation within the study area.

Table 2. Field of Operation.

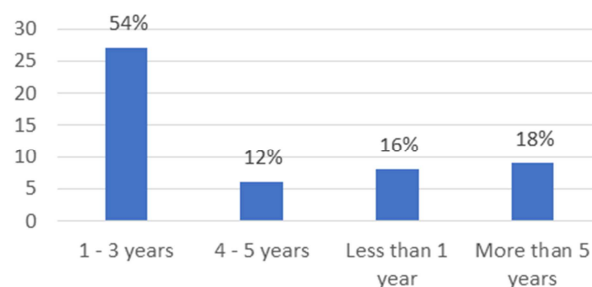
Field of Operation	Frequency	Percentage
Banking	1	2.00%
Exchange	2	4.00%
Health care	3	6.00%
Import & Export	6	12.00%
Restaurant	1	2.00%
Retail	17	34.00%
Travel & Tour	3	6.00%
Wholesales	11	22.00%
Service	4	8.00%
Healthcare	2	4.00%
Grand Total	50	100.00%

Source: Field Date, 2022

4.2.4. Duration of Operation

Figure 7 shows the number of years the respondents have been in business. From the survey, majority of the respondents representing 27.54% have been in business between 1 to 3 years. The other respondents which represent 6.12% and 8.16% have been in business between 4 to 5 years and less than 1 year respectively. However, 9.18% of the respondents have been in business for the past 5 year and

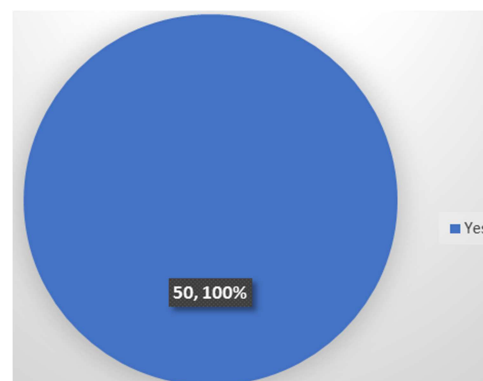
above. This implies that majority of the respondents had being in operation for at least 1 – 3 years. This means that these respondents were likely to provide the necessary and more accurate information for the study.



Source: Field Date, 2022

Figure 7. Duration of Operation.

4.2.5. Trading in Foreign Currency



Source: Field Date, 2022

Figure 8. Trading in Foreign Currency.

Figure 8 shows that all of the respondents representing 100% revealed that they trade using other foreign currencies. This implies that the respondents will in good position and more likely to provide the relevant information needed for the study.

4.2.6. Type of Foreign Currencies Trading in

Table 3. Type of Foreign Currencies.

Foreign Currencies	Frequency	Percentage
Arab Emirates Dirham	1	2.00%
British pound	7	14.00%
Euros	5	10.00%
Naira	2	4.00%
US Dollar	25	50.00%
YEN	4	8.00%
YUAN	6	12.00%
Grand Total	50	100.00%

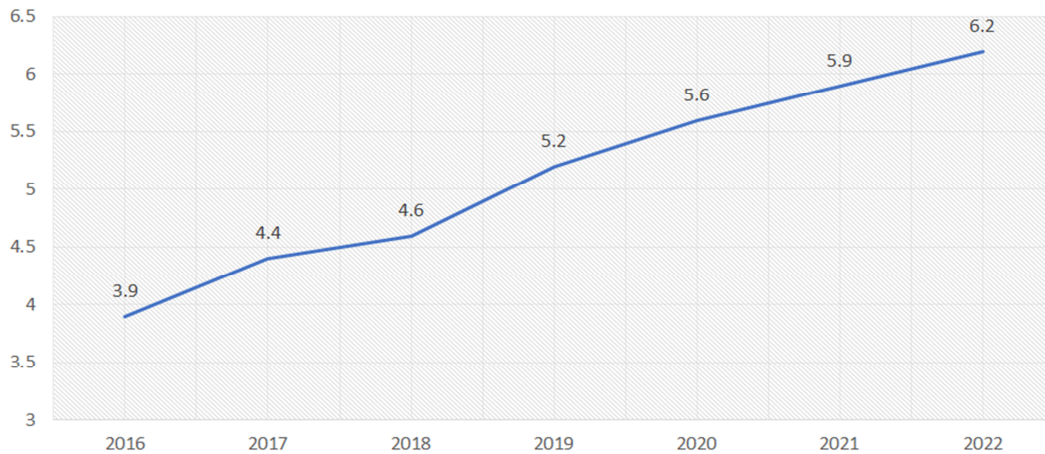
Source: Field Date, 2022

Table 3 shows that only 1 of the respondents representing 2% uses the Arab Emirates Dirham in their trading activities while, 7 of them representing 14% use the British pound and 5 of them representing 10% use the Euros. However, 2 of them representing 4% use the Naira currency while 25 of

them representing 50% use the US dollar and 4 of them representing 8% of the Japanese Yen and 6 of them representing 12% use the Chinese Yuan in their trading activities. It can be seen that majority of the respondents use the US Dollar in their trading operation compared to all the other currencies identified.

4.3. The Performance of the Ghana Cedi Against Other Foreign Currencies

This section assessed the performance of the Ghana cedi against other foreign currencies such as the US Dollar, British Pound, Chinese Yuan and Japanese Yen over a period of 2016 – 2022.

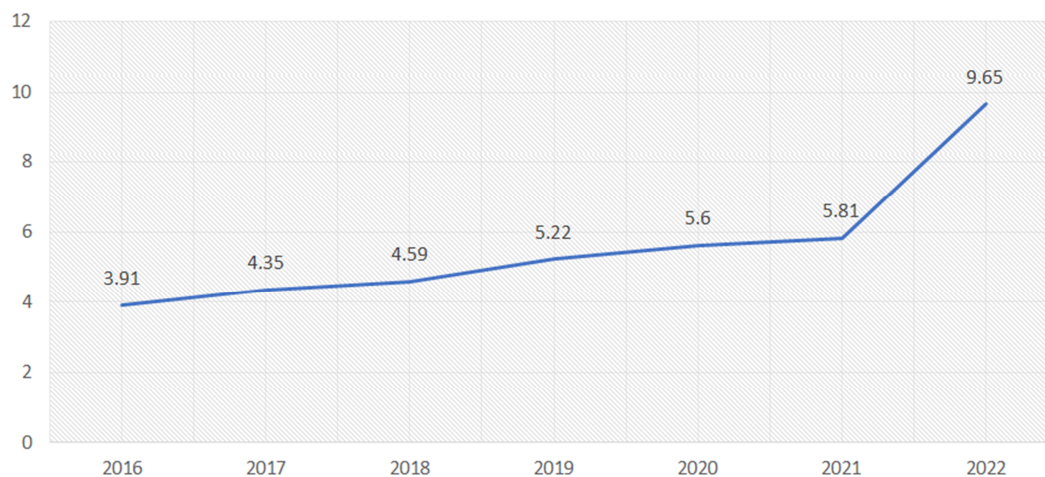


Source: Field Date, 2022

Figure 9. Average Exchange Rate US Dollar in Ghana Cedi.

Figure 9 above shows that \$1.00 on the average in 2016 was GHS3.90 and this increased to GHC4.4 in 2017 and 4.6, 5.2, 5.6, 5.9 and 6.2 for the 2018, 2019, 2020, 2021 and 2022 respectively. In 2022, one U. S. dollar was forecast to be exchanged for GHS6.20, on average. By the steadily increasing exchange rate, a person with 100 U. S. dollars was

expected to receive approximately GHS620.00 in 2022. It can be seen that over the years, the cedi has increased consistently depreciated with an average rate of 8% over since 2016 – 2022. According to [31], Bloomberg tracking of African currencies revealed that the Ghana Cedi placed 14th on the league of African currencies in 2021.

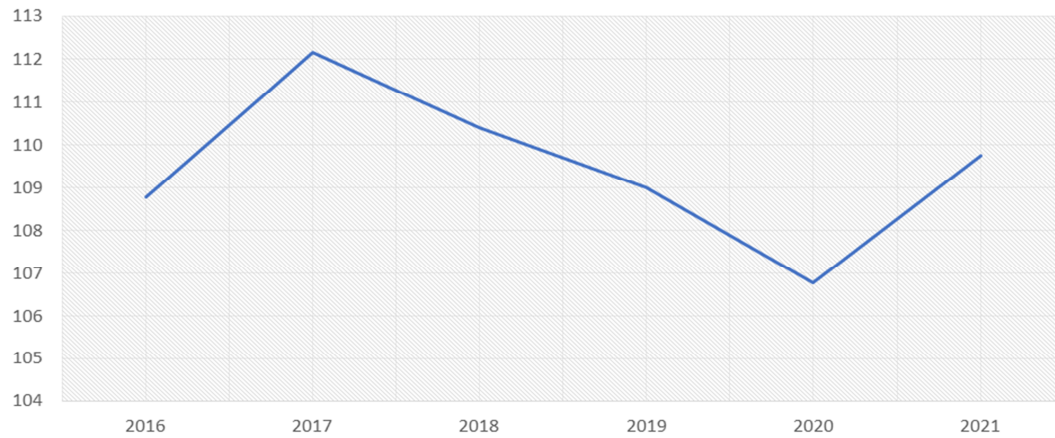


Source: Field Date, 2022

Figure 10. Average Exchange Rate GBP in Ghana Cedi.

Figure 10 above shows that the British Pound to the Ghana cedi rate increased consistently from the 2016 to 2022 period. In 2016 it was 3.91 but increased to 4.35, 4.59, 5.22, 5.60, 5.81 and 9.65 in 2018, 2019, 2020, 2021 and 2022 respectively. On the average the rate has depreciated by 18%

over the 2016 – 2022 period. This implies that consistently a trader trading in this foreign currency will need more Ghana cedi to be able to fulfil his/her debt obligation or to be able to buy the needed goods.



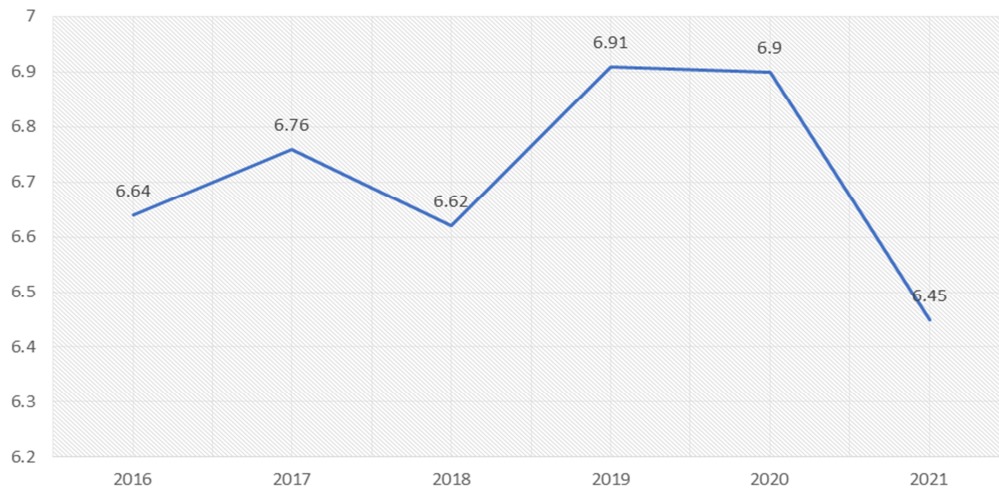
Source: Trading Economics, 2022

Figure 11. Average Exchange Rate JPY in Ghana Cedi.

Figure 11 shows also that the average Japanese Yen to the Ghana cedi on depreciated between 2016 and 2017 and 2020 and 2021. However, it saw an improvement from the 2017 to the 2020 year. In the 2022 year, the Ghanaian Cedi Japanese Yen traded at 14.2091 this Monday October 3rd, decreasing 0.0511 or 0.36 percent since the previous trading session. Looking back, over the last four weeks, GH\$JPY lost 0.80 percent. Over the last 12 months, its price fell by 23.55 percent. This shows clearly that majority of traders in Ghana do not use the Japanese Yen as compared to the US Dollar and British Pounds hence the cedi performance between this period.

Figure 12 shows that the Chinese Yuan to the Ghana cedi has over the 6 years period has fluctuated. In 2017 it

increased slightly and declined in 2018 but this was not sustained and increased again in the 2019 period. However, this was sustained in 2020 year and improved tremendously in the 2021 year. This implies that traders who trade in the Chinese Yuan are not consistent and may be attributed to available alternative source of countries where their products would be purchased from or may be as a result of the covid-19 restriction in China during the 2020 and 2021 period. In 2022 however, Ghanaian Cedi Chinese Yuan traded at 0.70070 this Monday October 3rd, decreasing 0.00290 or 0.41 percent since the previous trading session. Looking back, over the last four weeks, GH\$CNY lost 0.96 percent. Over the last 12 months, its price fell by 34.98 percent.



Source: Trading Economics, 2022

Figure 12. Average Exchange Rate CNY in Ghana Cedi.

Table 4 shows that there is a positive relationship between the other foreign currencies and the Ghanaian cedi. However, the US Dollar and Great British Pound appear to have the strongest relationship as their Multiple R is more than 50% with the Chinese Yuan the weakest relationship. This means that a little variation in the US Dollar and Great British Pound will lead to the same variation in the Ghanaian cedi.

Table 4. Regression Statistics of the Exchange Rate.

Regression Statistics	USD	GBP	JPY	YUAN
Multiple R	99%	85%	38%	7%
R Square	99%	73%	14%	1%
Adjusted R Square	99%	67%	-7%	-24%
Standard Error	10%	110%	186%	20%

Source: Field Date, 2022

4.4. Causes of the Depreciation of Ghana Cedi

Table 5 shows the challenges that cause the fall of the Cedis currency, from the survey, 16 of the respondent representing 62% strongly agree that high importation by businesses caused the cedi currency to fall, while only 1 of them representing 2% disagree and 1 of them representing 2% were on neutral background and 31 of them representing 61% strongly agree while only 1 of them representing 2% strongly disagree. This implies that majority of the respondents supports the assertion as revealed by [7], that the Ghana cedi depreciation could be linked to the high importation by businesses. Also, the result from the survey shows that, majority of the respondents which represent 62% strongly agree that liberalization of the capital market to foreigners also depreciate the Cedis currency. In addition, the survey shows that, majority of the respondents which represents 78% strongly disagree that inflation was a major cause of the depreciation of the Cedis currency. This however contradicts the findings of [44], which revealed that the value of money suffers as a direct consequence of inflation's presence and the pace at which the value of money (Ghana Cedi) depreciates is determined by price increments. However, 13 of the respondents representing 26% strongly agree that the black market cause the cedi currency to fall, while only 6 of them representing 12% disagree and 2 of them representing 4% were on neutral background and 22 of them representing 44% strongly agree while only 7 of them representing 14% strongly disagree. Nevertheless, 10 of the respondents representing 20% strongly agree that Pricing goods and services in foreign

currencies cause the cedi currency to fall, while only 4 of them representing 8% disagree and 30 of them representing 60% strongly agree while only 6 of them representing 12% strongly disagree. However, 9 of the respondents representing 18% strongly agree that companies repatriate their huge profits to their respective countries cause the cedi currency to fall, while only 6 of them representing 12% disagree and 2 of them representing 4% were on neutral background and 29 of them representing 58% strongly agree while only 4 of them representing 8% strongly disagree. Nevertheless, 18 of the respondents representing 36% strongly agree that interest rate differential cause the cedi currency to fall, while only 5 of them representing 10% disagree and 1 of them representing 2% were on neutral background and 25 of them representing 50% strongly agree while only 1 of them representing 2% strongly disagree. However, 23 of the respondents representing 46% strongly agree that Trade deficits cause the cedi currency to fall, while only 3 of them representing 6% disagree and 1 of them representing 2% were on neutral background and 20 of them representing 40% strongly agree while only 3 of them representing 6% strongly disagree. However, 14 of the respondents representing 28% strongly agree that supply and demand cause the cedi currency to fall, while only 1 of them representing 2% disagree and 5 of them representing 10% were on neutral background and 25 of them representing 50% strongly agree while only 5 of them representing 10% strongly disagree.

Table 5. Causes of Cedi depreciation.

Causes of Cedi Depreciation	A	%	D	%	N	%	SA	%	SD	%
High Importation by Businesses	16	32%	1	2%	1	2%	31	62%	1	2%
Liberalization of The Capital Market to Foreigners	15	30%	1	2%	0	0%	31	62%	3	6%
Inflation	8	16%	3	6%	0	0%	0	0%	39	78%
Black market	13	26%	6	12%	2	4%	22	44%	7	14%
Pricing goods and services in foreign currencies	10	20%	4	8%	0	0%	30	60%	6	12%
Companies repatriate their huge profits to their respective countries	9	18%	6	12%	2	4%	29	58%	4	8%
Interest rate differential	18	36%	5	10%	1	2%	25	50%	1	2%
Trade deficits	23	46%	3	6%	1	2%	20	40%	3	6%
Supply and demand	14	28%	1	2%	5	10%	25	50%	5	10%

Source: Field Date, 2022

4.5. Effects of the Depreciation of Ghana Cedi

Table 6 shows that 18 of the respondents representing 36% strongly agree the depreciation of the cedi affects the balance of payment deficit, while only 0 of them representing 0% disagree and 0 of them representing 0% were on neutral background and 30 of them representing 60% strongly agree while only 2 of them representing 4% strongly disagree. However, 6 of the respondents representing 12% strongly agree the depreciation of the cedi cause a weakening of the cedi results in an increase in the cost of products and services that are brought into Ghana from other countries, while only 1 of them representing 2% disagree and 1 of them representing 2% were on neutral background and 38 of them representing 76% strongly agree while only 4 of them representing 8% strongly disagree. But, 23 of the respondents

representing 46% strongly agree the depreciation of the cedi cause an adverse effect on the manufacturing and industrial sector, while only 1 of them representing 2% disagree and 0 of them representing 0% were on neutral background and 25 of them representing 50% strongly agree while only 1 of them representing 2% strongly disagree. Nonetheless, 12 of the respondents representing 24% strongly agree the depreciation of the cedi leads to Low Investment and Unemployment, while only 0 of them representing 0% disagree and 1 of them representing 2% were on neutral background and 34 of them representing 68% strongly agree while only 3 of them representing 6% strongly disagree. Nonetheless, 15 of the respondents representing 30% strongly agree the depreciation of the cedi has Positive Effect on Exports, while only 4 of them representing 8% disagree and 3 of them representing 6% were on neutral background

and 12 of them representing 24% strongly agree while only 16 of them representing 32% strongly disagree. It can be seen that majority of the respondents disagree with this positive effect as was revealed by [44]. However, 10 of the respondents representing 20% strongly agree the depreciation of the cedi leads to Balance of Payment Deficit, while only 2 of them representing 4% disagree and 1 of them representing 2% were on neutral background and 33 of them representing 66% strongly agree while only 4 of them representing 8%

strongly disagree. In summary, majority of the respondents agree with [44] that the depreciation of the cedi affects balance of payment deficit, a weakening of the cedi results in an increase in the cost of products and services that are brought into Ghana from other countries, adverse effects on the manufacturing and industrial sector, the adverse effect on government and the agricultural sector, low investment and unemployment, and balance of payment deficit.

Table 6. Effects of the depreciation of Ghana Cedi.

Impact of Cedi Depreciation	A	%	D	%	N	%	SA	%	SD	%
Balance of Payment Deficit	18	36%	0	0%	0	0%	30	60%	2	4%
A weakening of the cedi results in an increase in the cost of products and services that are brought into Ghana from other countries	6	12%	1	2%	1	2%	38	76%	4	8%
Adverse Effects on the Manufacturing and Industrial Sector	23	46%	1	2%	0	0%	25	50%	1	2%
The Adverse Effect on Government and The Agricultural Sector	13	26%	1	2%	3	6%	30	60%	3	6%
Low Investment and Unemployment	12	24%	0	0%	1	2%	34	68%	3	6%
Positive Effect on Exports	15	30%	4	8%	3	6%	12	24%	16	32%
Balance of Payment Deficit	10	20%	2	4%	1	2%	33	66%	4	8%

Source: Field Date, 2022

4.6. Measures of Control the Depreciation of the Ghana Cedi

Table 7 shows that 10 of the respondents representing 20% strongly agree to control the depreciation of the cedi, there must be increase exports and curb imports while only 2 of them representing 4% disagree and 1 of them representing 2% were on neutral background and 33 of them representing 66% strongly agree while only 4 of them representing 8% strongly disagree. However, 19 of the respondents representing 38% strongly agree to control the depreciation of the cedi, there must be export taxes and subsidies while only 2 of them representing 4% disagree and 0 of them representing 0% were on neutral background and 26 of them representing 52% strongly agree while only 3 of them representing 6% strongly disagree. However, 16 of the respondents representing 32% strongly agree to control the depreciation of the cedi, there must be review of fiscal and monetary policies while only 0 of them representing 0% disagree and 2 of them representing 4% were on neutral background and 31 of them representing 62% strongly agree while only 1 of them representing 2% strongly disagree. However, 14 of the respondents representing 28% strongly agree to control the depreciation of the cedi, the government, on its own, is responsible for cutting its budget while only 2 of them representing 4% disagree and 1 of them representing 2% were on neutral background and 28 of them representing 56% strongly agree while only 5 of them representing 10% strongly disagree. However, 19 of the

respondents representing 38% strongly agree to control the depreciation of the cedi, there must be an adoption of a fixed exchange rate system, while only 2 of them representing 4% disagree and 0 of them representing 0% were on neutral background and 26 of them representing 52% strongly agree while only 3 of them representing 6% strongly disagree. However, 6 of the respondents representing 12% strongly agree to control the depreciation of the cedi, by Controlling of Excessive Inflation, while only 1 of them representing 2% disagree and 1 of them representing 2% were on neutral background and 41 of them representing 82% strongly agree while only 1 of them representing 2% strongly disagree. However, 18 of the respondents representing 36% strongly agree to control the depreciation of the cedi, the Bank of Ghana to restrict the supply of loanable funds and regulate excess liquidity, while only 1 of them representing 2% disagree and 1 of them representing 2% were on neutral background and 24 of them representing 48% strongly agree while only 6 of them representing 12% strongly disagree.

In summary, the study revealed that to control the depreciation of the Ghana cedi, there must be an increase exports and curb imports, export taxes and subsidies, review of fiscal and monetary policies, the government, on its own, is responsible for cutting its budget, adoption of a fixed exchange rate system, controlling of excessive inflation, and the bank of Ghana to restrict the supply of loanable funds and regulate excess liquidity.

Table 7. Measures of control the depreciation of the Ghana Cedi.

Measures to improve the Ghana Cedi	A	%	D	%	N	%	SA	%	SD	%
Increase Exports and Curb Imports	10	20%	2	4%	1	2%	33	66%	4	8%
Export Taxes and Subsidies	19	38%	2	4%	0	0%	26	52%	3	6%
Review of Fiscal and Monetary Policies	16	32%	0	0%	2	4%	31	62%	1	2%
The government, on its own, is responsible for cutting its budget	14	28%	2	4%	1	2%	28	56%	5	10%
Adoption of A Fixed Exchange Rate System	19	38%	2	4%	0	0%	26	52%	3	6%

Measures to improve the Ghana Cedi	A	%	D	%	N	%	SA	%	SD	%
Controlling of Excessive Inflation	6	12%	1	2%	1	2%	41	82%	1	2%
Bank of Ghana to restrict the supply of loanable funds and regulate excess liquidity	18	36%	1	2%	1	2%	24	48%	6	12%

Source: Field Date, 2022

5. Conclusions

The primary purpose of the study was to assess the performance of the Ghana cedi against key international currencies such as the U. S. Dollar, the British Pound, the Chinese Yuan, and the Japanese Yen. Exhaustive review of the literature, considered the theoretical and empirical literature on currency depreciation, exploring the reasons and implications of the depreciation of the Ghana cedi, as well as currency volatility and the Ghana cedi's connection with other major international currencies. The methodology employed in this study describes approaches for acquiring data, with emphasis on secondary data, the results were finally analyzed and discussed to reach conclusions from the result of the study and recommendations are drawn from the study's findings and experiences from practice.

The study revealed that the US Dollar, British pound, Japanese Yen and Chinese Yuan and the Ghanaian cedi have a positive relationship. The US Dollar and Great British Pound appear to have the strongest relationship, with Chinese Yuan having the weakest. This means that little changes in the US Dollar and British Pound affect the Ghanaian cedi. It was observed that the Ghana cedi depreciated consistently through 2016 - 2022 period against the other foreign currencies. In 2022 alone the Ghana Cedi lost approximately 40.05% in value to the US Dollar, 21% to the British pounds, 23.55% to the Japanese Yen and 34.98% to the Chinese Yuan. The findings of this study was corroborated those of previous research suggesting that a weaker cedi contributes to a higher balance of payment deficit, higher prices for imported goods and services, negative effects on Ghana's manufacturing and industrial sectors, negative effects on the government and the agricultural sector, low investment and unemployment, and a larger overall deficit. The study revealed that to control the depreciation of the Ghana cedi, there must be an increase in exports and a reduction in imports, export taxes and subsidies, a review of fiscal and monetary policies, the government's own budget cuts, the adoption of a fixed exchange rate system, the control of excessive inflation, and the bank of Ghana's restriction of the supply of loanable funds and regulation of excess liquidity.

5.1. Summary of Findings

According to the findings of the study, the majority of respondents (54%) were of the male gender. On the other hand, it was discovered that the majority of respondents who took part were young people between the ages of 26 and 30 years old. Even though the majority of the respondents came from the wholesale and retail sectors, it did take into account those from other fields of activity as well. This demonstrates

quite clearly that the study covered a significant portion of the operational field that was contained inside the study region. However, the majority of these traders had been operating for at least one to three years, which meant that they were likely to offer the essential information for the study and that it would be more accurate when provided by them. All of the respondents were engaged in business transactions utilizing many different currencies, which significantly raised the possibility that they would provide the required information. However, the results of the study showed that the majority of respondents use US dollars in their business transactions when compared to other currencies such as the Chinese yuan, the Chinese renminbi, the British pound, the Japanese yen, and the Arab Emirates dirham.

5.2. Performance of the Cedi Against Other Foreign Currencies

The study revealed that that over the years, the cedi has increased consistently depreciated with an average rate of 8% over since 2016 – 2022. However, in 2022 alone with the first 9 months, the Ghana Cedi has lost approximately 40.05% in value to the US Dollar according to data from Bloomberg which ranked the Ghana cedi as the worst among the 30 top-performing currencies on the African continent. In 2021 however, Bloomberg tracking of African currencies ranked the Ghana Cedi the 14th on the league of African currencies. However, the study revealed that on the average the Ghana cedi to the British pound rate has depreciated by 18% over the 2016 – 2022 period. In just July, August and September 2022, the Ghana cedi lost approximately 21% in value to the US Dollar and British pounds. This implies that consistently a trader trading in this foreign currency will need more Ghana cedi to be able to fulfil his/her debt obligation or to be able to buy the needed goods. It was observed that the average Ghana cedi Japanese Yen depreciated between 2016 and 2017 and 2020 and 2021. In the 2022 year, the Ghanaian Cedi Japanese Yen traded at 14.2091 this Monday October 3rd, decreasing 0.0511 or 0.36% since the previous trading session. Looking back, over the last four weeks, GHSJPY lost 0.80%. Over the last 12 months, its price fell by 23.55%. This show clearly that majority of traders in Ghana do not use the Japanese Yen as compared to the US Dollar and British Pounds hence the cedi performance between this period. The study revealed that the exchange rate between the Ghana cedi and the Chinese Yuan has changed over the past six years. A little gain in 2017 was followed by a decline in 2018, which was not repeated in the 2019 season. This was, however, maintained in 2020 and further enhanced in 2021. This shows that dealers who utilize the Chinese Yuan are inconsistent, which may be a result of the availability of

other suppliers in countries where their products are obtained or the restriction on covid-19 in China between 2020 and 2021. The Ghanaian Cedi Chinese Yuan crossed hands at 0.70070 on Monday, October 3, 2022, a fall of 0.00290 or 0.41 percent from the previous trading session. GHSCNY has declined 0.96 percent in the past four weeks. The price of this item has fallen by 34.98% over the past year. The study revealed that majority of respondents supported [7]'s argument that the Ghana cedi depreciation could be linked to the large importation of businesses, as indicated by the study's finding that high business imports caused the cedi currency to depreciate. However, 78% disagree strongly that inflation was a major factor in the cedi's decline. Contrary to the conclusions of [44], the value of money declines as a direct result of the presence of inflation, and the rate at which the value of money (Ghana Cedi) depreciates is controlled by price increases. However, 44% strongly believe that the black market contributed to the depreciation of the cedi, and 60% strongly agree that the pricing of goods and services in foreign currencies contributed to the depreciation of the cedi. 46% of respondents strongly agree that trade deficits lead the cedi currency to decrease, while 68% agree that supply and demand are to blame.

The study revealed that majority of the respondents agree with [44] that the depreciation of the cedi affects balance of payment deficit, a weakening of the cedi results in an increase in the cost of products and services that are brought into Ghana from other countries, adverse effects on the manufacturing and industrial sector, the adverse effect on government and the agricultural sector, low investment and unemployment, and balance of payment deficit.

5.3. Managerial Implications and Recommendations

The following recommendation and suggestions are made based on the findings of the study for consideration.

1. The report recommends that the government develop policies that encourage the purchase of locally made items. Local producers should get subsidies and imports should be subject to levies. These measures will ensure that Ghanaians shift their spending from imports to locally produced items thus Made-in-Ghana as locally produced goods become more affordable than imports. Since an excess of imports over exports results in a trade deficit, a shift away from imports will improve the trade balance. This will result in a trade balance improvement.
2. The Bank of Ghana must enforce the restriction on the pricing of commodity in other foreign currencies. Instead of just issuing directives to warn people entities from pricing commodities in other foreign currencies especially the US Dollar, it must implement incentives for whistleblowers who report businesses that charge or price commodities or services in other foreign currencies.
3. It is recommended that the government establish export duties and subsidies. This will provide a mechanism for protecting the economy from the internal instability

that would be caused by changes in exports, and they can also have a substantial impact on an economy's ability to retain enough foreign reserves.

4. Last but not least, it has been urged that the government make an effort to reduce its budget. This is due to the fact that a drop in domestic expenditure will result to a certain decrease in prices, which may make the task of balancing domestic spending and the balance of payments easier. Because of the decreases in price, consumers located in other countries will find it easier to justify purchasing goods that are destined for export.

5.4. Limitations to the Study

The limitations of this study is generally related to the methodology when the primary data was used and the challenges associated with collecting primary data in Ghana, either the respondent are too tight with work schedule to answer questionnaire or they do not have the interest in participating in anything extra activity apart from their job schedules and this limits amount of data collected for this study. Also, the use of a single country currency (Ghana Cedi) as the study sample for the analysis places a limitation on the generalization of the findings of this research study to other countries. However, this study despite these limitations, can serve as a source of information for other countries to draw lessons from Ghanaian evidence to assess the causes of value depreciation of their currency.

Again, although this study is contextually limited to the Ghanaian currency (Ghana Cedi), with the currencies of its major trading partner countries it is very important to other parties out of Ghana because, the experiences from the case of Ghana Cedi can guide other countries to guard against high inflation and unstable macroeconomic conditions. It also provides the insights into policy lapses that creates artificial depreciation of the Ghana Cedi.

5.5. Further Research

The research that has been undertaken for this paper has highlighted a number of interesting areas on which further research would be beneficial. In many cases where the data and information are lacking were highlighted in the literature review. The current study examines the performance of Ghana Cedi against the currencies of its major trading partners and particularly looking at key international currencies such as the U.S. Dollar, the British Pound, the Euro, the Chinese Yuan and the Japanese Yen and essentially exploring the reasons and implications of the Ghana Cedi depreciation and the interrelated consequences to the Ghanaian Economy. It is essential to conduct more profound and thorough research to gain a deeper insight into the internal socioeconomic causalities of the Cedi depreciation against all the currencies of the international trading partners of Ghana. However, this study has provided a useful insight on the consequence of the cedi depreciation against the major international trading currencies on the Ghanaian economy.

Conflicts of Interest

The authors declare no conflicts of interest.

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