

UNIVERSITY OF CAPE COAST

**EXCHANGE RATE RISKS AND PROFITABILITY OF AUTO PARTS
DEALERS IN GHANA**

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GHANA.**

BY

GERALD KOOMSON

Dissertation submitted to the College of Distance Education of the School of Graduate Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Business Administration degree in Finance

MAY, 2016

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:.....

Name: Gerald Koomson

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature:..... Date:.....

Name: Dr. George Domfe

ABSTRACT

Exchange rate volatility has a direct impact on import and export trade. The adoption of a flexible exchange rate regime after the demise of the Bretton Woods system of exchange has become a major source of risk to trade and therefore, negatively affects imports which are critical to the development and growth of third world countries. This study therefore, examined the impact of exchange rate risks on the profitability of auto parts dealers (importers) in Ghana who have carried on their businesses from 2000-2015. The study used qualitative methodology hence descriptive statistics which reveals that the exposure of auto parts importers to exchange rate risks are caused by domestic currency depreciation, excessive demand for foreign exchange, type of foreign exchange market, source of supply, credit sales, credit period, default payment and type of vehicular parts. Auto parts importers in Ghana are thus exposed to exchange rate risks and exchange rate volatility impacts on firms` cash flows, profitability and therefore market value. It is thus recommended that the financial markets should be well developed to accommodate and support the operations of auto parts importers considering the economic importance of the road sector to Ghana`s economy. Also, policy makers should work to control inflation and stabilize the value of the cedi.

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DEDICATION

To my siblings,

Augustina, Michael, Becky

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LIST OF ABBREVIATIONS

UCC	University of Cape Coast
ISO	International Standards Organization
MoFA	Ministry of Food and Agriculture

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CHAPTER ONE

INTRODUCTION

Thirty years under the Bretton-Woods system of exchange rate saw a relatively stable nominal and real exchange rates. However, exchange rates volatility increased from the early 1970s after the collapse of the Bretton-Woods system as the world adopted a flexible exchange rate regime which has been a major source of concern to developing countries such as Ghana. Exchange rates influence trade in many diverse ways. Real exchange rates which reflect relative prices of tradable to non-tradable products have a potentially strong influence on the incentive to allocate resources such capital and labour between the productive sectors. The critical issue is that, exchange rates volatility is very profound under a flexible regime and this constitutes a huge source of risk to trade and therefore can impact negatively on imports which are economically critical to the very survival and growth of developing countries.

Background to the study

Trade in the 21st century is beset with new risks and impacts that threaten the very survival of every organization including the micro and small firms in every country. Since the breakdown of the Bretton Woods system of fixed exchange rates, both real and nominal exchange rates have fluctuated widely from the early 1970`s. This volatility has been cited by the proponents of managed or fixed exchange rates as detrimental, since exchange rate uncertainty would adversely affect the valuation of multinational firms. Models developed by Shapiro (1974) and Dumas (1978) predict that changes in exchange rates negatively impact a multinational cash flows, its profitability, and therefore its market value.

Several African countries in a bid to transform and develop their economies in the 1980s, adopted various economic reforms (such as SAP, PAMSCAD and ERP) with the liberalization of the foreign exchange market as a key consideration. Consequently, Africa has

experienced highly volatile exchange rates since then. Akpokodje and Umojimate (2009) posit that the perceived link between exchange rate volatility and imports raises some pertinent questions as to whether there is any connection between exchange rate volatility and imports and if there is, the degree of effect of exchange rate volatility on imports and the magnitude of this effect. For instance, Warjiyo (2013) posits that the advent of the global financial crunch in 2008 brought in its wake volatile capital flows and increasing risk appetite of international investors. These developments triggered significant exchange rate volatility beyond its fundamental equilibrium path in most small open economies, including Ghana.

Statement of the problem

The role played by firms currently in the economy of all countries is undoubtedly of great importance. However, firms with foreign subsidiaries as well as those that trade internationally are susceptible to global currency fluctuations and therefore movements in foreign exchange rates can wipe out profits or increase gains of private investments. The world has become a smaller market place due to rapid advances and sophistication in communication technology. Technology has therefore helped in reducing international trade barriers thus playing a crucial role in boosting international trade. The elimination of restrictive international trade barriers, capital controls, fixed foreign exchange regimes among many others have contributed to the promotion of free trade across distances and political boundaries. Though international business opens up new and profitable opportunities, it simultaneously brings into play several challenges which include foreign exchange risk management.

A major argument put forward against flexible exchange rates regime has been that exchange rate movements could have negative impact on international trade and investment. In speculating exchange rate movements, if the exchange rate movements are not fully anticipated, an increase in the exchange rate movements which directly increases risk, will result in risk-averse firm agents reducing their import or export activities and redirecting

resources towards domestic markets. With growing involvement and participation of Africa in international trade, market participants which include exporters, importers, producers, traders and investors have become increasingly exposed to exchange rate fluctuations. Basically, volatility of exchange rates is influenced by factors such as weak economic fundamentals (such as Inflation rate, GDP growth rate and unemployment rate), excessive speculative activity and macroeconomic shocks.

Firms engaged in foreign trade, transact business in foreign currency, thus exposing them to the risk associated with adverse movements in foreign exchange rates. Excessive volatility of foreign exchange rates will increase uncertainty regarding returns and therefore makes it difficult to manage current cash flows, project business growth and investments. In the current global competitive market environment, managing foreign currency exposure has become an inevitable but important feature in international trade and investment. With increasing flow of global investment and trade towards Africa in anticipation of higher returns, the associated unpredictability of exchange rate movements is impacting negatively on stakeholders. Hence, there is a need to evaluate and understand the foreign exchange risk facing various stakeholders doing business in Africa and ways to minimize the impact.

The importation of new auto spare parts and accessories as well as used ones is a major industry in Ghana which employs millions of Ghanaians across the length and breadth of the country. Used motor vehicle parts and accessories are heavily patronized by many Ghanaians as well as people from French speaking countries within the West African sub-region. Activities of firms, enterprises as well as individuals in this industry, are concentrated in the regional capitals which include Kumasi “magazine” in the Ashante region, Takoradi “kokompe” in the Western region and Abossey Okine in the Greater Accra region. These are well-known trade centres that control a majority interest in the industry. The location of Abossey Okine spare parts market in the capital city of Ghana, makes it the nerve centre of

both new and used motor vehicle spare parts trade in Ghana. The Abossey Okine spare parts market have been in existence for over forty years and has membership which cuts across West African countries with Ghanaians dominating.

Even though this is an industry that employs millions of Ghanaians (males and females), there is virtually no known research work conducted to assess the economic value of this industry, its` contribution to Ghana`s gross domestic product (GDP), how dealers could finance their import trade with foreign exchange and how revenues of these dealers are adversely affected by exchange rate volatility.

Purpose of the Study

The adoption of a market economy and thus a floating exchange rate regime predisposes developing economies such as Ghana`s to high levels of exchange rate risks, thereby making both export and import trade very risky. Several studies conducted in Ghana have investigated the effect of exchange rate volatility on trade in general but have not considered the automobile sector with particular focus on the auto spare parts industry. Most of these research works used secondary data in examining the effect of exchange rate volatility on trade and also on profitability of firms. This study therefore adopts a descriptive research approach and uses primary data from respondents sampled. This will allow for in-depth knowledge about how exchange rate volatility affects import of auto spare parts into Ghana in order to effectively design and implement policies that will help the industry develop, grow and expand.

Research objectives

The main objective of the study is to examine and explain the reasons why importers of auto spare parts in Ghana are exposed to exchange rate risk which makes it very difficult for them to maximize profits and expand. The study also seeks to assess how other circumstances

affect the profit maximization objectives of dealers in auto spare parts operating in Ghana among other factors. Specifically the study seeks to achieve the following objectives:

- ❖ To examine the determinants of exchange rate risks facing auto parts dealers in Ghana.
- ❖ To assess the impact of exchange rate volatility on the profitability of auto parts importers in Ghana.

Research questions

This study focuses on the following questions to find answers in order to achieve the objectives stated above:

- What are the determinants of exchange rate risk among auto parts dealers in Ghana?.
- Does exchange rate volatility affect the profitability of dealers in auto spare parts in Ghana?.

Significance of the study

Even though there have been several studies on effects of exchange rate volatility on the profitability of firms especially banks and insurance companies, there is very scanty literature on exchange rate risk exposure of businesses in the informal sector particularly those in the import sector and the impact it has on their profitability. In a country where almost every item is imported ranging from used clothes to tooth pick, it is almost impossible for any business entity to thrive without being exposed to exchange rate risk. It is then quite pertinent to note that an industry that employs millions of people has still not received any special attention from government, financial institutions as well as academia to harness the full potential of the industry. As noted by the Association of Youth Auto Spare Parts Dealers (AYAPD) at Abossey Okine (2009), the fast depreciation of the cedi, import duties and other port charges are the main challenges facing their trade with foreign exchange risk having the greatest impact on their overall earnings.

Delimitations

With the exception of only three working papers on determinants of profitability of auto parts business in countries in Africa which include Ghana, all the other theories presented under the theoretical review are on American, European and Asian countries which may not directly relate to Ghana in terms of macroeconomic indicators and industry structures. The study looks at the import business of auto parts dealers in Ghana in general, but with particular attention focused on dealers at the Abossey Okine spare parts market in Accra who have existed for not less than ten years. Other auto parts centres dotted across the length and breadth of Ghana are not covered by the study. The study used exchange rates between the Ghanaian cedi and the three main trading currencies namely; the US dollar (\$), British pound sterling (£) and the Euro (€) to analyse the effect of their movements on the profitability of auto parts importers.

Limitations of the study

The study adopts a qualitative research approach using descriptive research design due to the data type and data source which also inform the choice of sampling procedure. This approach helps to describe variables rather than to test a predicted relationship between identified variables. Qualitative methodology is dialectic and interpretive. During the interaction between the researcher and the research participant, the informant's world is discovered and interpreted by means of qualitative methods (De Vos, 1998). However, qualitative research method has a number of weaknesses which affect results findings and include:

- ❖ Data collection often involves large amounts of handwritten notes, which must be sorted out and organized into meaningful and data.
- ❖ To generate the findings, the researcher needs to examine all the notes and tabulations and to organize them in some way that “makes sense”.

- ❖ There are no fixed steps that should be followed and the study cannot be exactly replicated (Brink & Wood, 1998).

Organization of the study

This study is organised into five chapters which are carefully arranged in the following way: Chapter one, presents an overview of the whole study. It further explains the justification for the study and how its objectives will be achieved. Chapter two presents a review of both theoretical and empirical literature on the concept of exchange rate risk, measures of exchange rate risk and the effect of exchange rate risk on profitability of auto spare parts dealers. Conceptual and theoretical framework are also explained. Chapter three looks at the methodology adopted by the study which includes sections such as the research design, sampling and sampling procedure, data and data collection procedure, instrumentation and method of data processing and analysis. Chapter four contains the analysis and interpretations of the data and findings. Chapter five provides the summary, conclusions of the content of the entire study and draws out recommendations for policy direction.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter discusses the theoretical framework and empirical basis upon which the ideas and opinions developed in this study are built. The chapter reviews part of the relevant academic literature that attempts to model and estimate the impact of exchange rate volatility on import trade. The review therefore, extracts from other important factors that may have a (more or less direct) bearing on the relationship between exchange rates and trade, such as the factors determining exchange rates, the impact of exchange rate regimes, or the relationship between exchange rate policies and global imbalances. The chapter reviews literature containing thoughts and ideas shared by various authors and researchers and some regulatory bodies on the causes of exchange rate risk, the determinants of profitability of auto spare parts industry and the effects of exchange rate risk on auto spare parts dealers' profitability.

Theoretical review

The relationship between currencies and trade has been the focus of a wide policy debate in recent years. Direct links between exchange rates and trade, in particular the heavily debated question as to whether exchange rate uncertainty reduces the incentives to trade internationally, appeared to be a prime focus of academic interest when exchange rate volatility increased after the end of the gold exchange standard (IMF, 1984). The issue of exchange rate misalignment gained greater prominence in the economic debate from the 1990s onwards, when persistent deviations of exchange rates from their equilibrium values were speculated rightly or wrong, causing global current account imbalances.

From a macroeconomic point of view, exchange rates volatility can have strong effects on the economy, as they may affect the structure of output, lead to inefficient allocation of domestic resources, guide external trade, influence labour market and prices, and alter external accounts. Exchange rate movements therefore affect international trade both in direct and indirect ways. The indirect links are however difficult to isolate, complex to describe, and empirically hard to test, as they possess second, third or fourth round effects. This explains why exchange rates are often treated in models as external (exogenous) variables. Excessive volatility in exchange rates could have a direct impact on other segments of financial markets and eventually distort monetary policy signals leading to financial instability. Investments could then be possibly guided by an assessment of exchange rate movements rather than by the underlying expected returns.

The IMF (1984) in a study, clearly identified the channels by which such increased volatility could affect international trade. It described how persistent misalignment of exchange rates away from levels that reflected inflation or cost differentials sent wrong price signals which could disrupt international trade flows; how misalignment could impose adjustment and resource misallocation costs on an economy if it changed investment decisions and resulted in shifts in resources between the sectors of an economy that were not justified by relative cost and productivity differentials; and how misalignment might destabilize levels of protection against foreign competition provided by price-based trade restrictions, thus generating pressure for compensating trade restrictions to protect current patterns of supply.

Auboin and Ruta (2012) postulate that exchange rates can in principle influence trade in several different ways. Real exchange rates which define the relative prices of tradable to non-tradable goods have a strong influence on the incentive to allocate resources (capital and labour for example) between the sectors producing tradable and non-tradable goods. Real exchange rates provide a measure of real competitiveness as they capture the relative prices,

costs, and productivity of one particular country in relation to the rest of the world (IMF, 1984). Thirty years of relative stability of both nominal and real exchange rates under the Bretton-Woods system provoked not much debate on the impact of exchange rates on international trade. Concerns about the increased volatility of exchange rates from the early 1970's after the collapse of the Bretton-Woods system triggered enormous research work into how such exchange rates volatility could affect the real economy.

According to Auboin and Ruta (2011), the early 1970s and 1980s theoretical analyses and models of the relationship existing between exchange rates and international trade focused mainly on the commercial risk embedded in international transactions and the uncertainty generated by short-term or longer-term volatility. The impact of this uncertainty on the decision to trade, its expected profitability, and in the long run the allocation of resources between tradable and non-tradable goods and services was then, the main focus of attention. The adoption of a floating exchange-rate regime since 1973, has brought about exchange-rate volatility and has had enormous impact on the volume of international trade. This has been the subject of both theoretical and empirical investigations. Exchange rate volatility describes the risk associated with unexpected movements in the exchange rate. Macroeconomic fundamentals such as the inflation rates, interest rates and the balance of payments, which have become more unstable in the 1980s and early 1990s, are by themselves sources of exchange rates movements.

Hook and Boon (2000) posit that increased cross-border flows of business that have been facilitated by the trend towards liberalization of the capital account, the advancement in technology, and currency speculation have also caused exchange rate to fluctuate. Since the breakdown of the Bretton Woods system of fixed exchange rates, both real and nominal exchange rates have fluctuated widely resulting in contradictory theoretical predictions, by which empirical researchers have examined the effect of both real and nominal exchange rates

volatility on the volume of international trade. This has prompted policy makers and researchers to investigate the nature and degree of the impact of exchange rate volatility on the volume of international trade. However the overall evidence is best regarded as mixed, as the results are sensitive to the very choices of sample time period, model specification, proxies for exchange rate volatility, and countries considered as either developed or developing.

Clark (1973) showed how exchange rates affect trading firms and described the hypothetical case of a firm, producing a single product containing no imported input, under perfectly competitive conditions which is entirely for export markets. The firm receives payment only in foreign currency, making the proceeds of its exports in domestic currency term dependent on the unpredictable level of the exchange rates. In the model, the assumption is that the firm is small and have limited access to currency hedging. Furthermore, since the cost of adjusting its levels of production to other factors other than demand is high, it is also assumed that the firm's output will not change in reaction to either favourable or unfavourable changes in the profitability of its exports arising from exchange rate movements. The unpredictable nature of future exchange rates directly translates into uncertainty about the value and amount of future receipts from exports in domestic currency. Therefore the firm in question is constrained to determine a level of export that takes into account this uncertainty.

The depreciation of a country's currency makes its exports cheaper on the international market and its imports more costly. In the globalized economy, the fact is that industries are vertically integrated, and exported products have a large proportion of imported components which are costly and not necessarily substitutable with domestically-manufactured products. However exchange rate volatility affects firms within a country differently and therefore face a number of risks particularly economic and commercial risks as these firms engage in international trade. Whereas economic risk reflects the risk to the firm's present value of future operating cash flow from exchange rate volatility, commercial risk reflects the variation in

relative prices and sales volume. It occurs when a firm owing, becomes insolvent and therefore unable to pay up its debts or honor its obligation according to the agreed terms of trade.

Exchange rate volatility has been a prominent feature of a flexible exchange rate system after the collapse of the Bretton Wood system. The reason is that, exchange rate volatility makes firms to add some risk premium to cost of traded goods which leads to higher prices and lower external trade. Undoubtedly, dramatic movements in the value of currencies can occur where market forces of demand and supply determine the price of goods and services. Such a system increases the exchange rate risk associated with trade in general. Also, the inevitable volatility in the exchange rate as a result of the floating exchange rate regime worldwide except for China and a few others, has the potential to affect cost, profits and returns on investments of multinational companies (MNC) thereby exposing them to some levels of risk.

Transaction exposure is the risk of adverse movements in the exchange rate and is associated with trade activities that are carried out internationally. Where a Ghanaian firm imports motor vehicle parts from Germany with two months` credit, an appreciation in Euros will mean that the Ghanaian firm will suffer a loss because, it will pay more Euros in domestic currency terms and vice versa. Operational exposure of firms to exchange rate risk is not limited to companies trading globally, but also those operating within their home countries. A European Union (EU) producer of a motor vehicle part, will have a competitive advantage over a Ghanaian producer of a similar type of motor vehicle part if the Euro appreciates against the Ghanaian cedi. The price of the EU motor vehicle part falls when converted to Ghanaian cedis, and therefore will attract Ghanaians to buy EU motor vehicle parts. Translation exposure of firms to exchange rate risk relates to a company that has a subsidiary outside the home country. Profits denominated in foreign currency need to be converted to the local currency based on the prevailing exchange rate.

Schnabl (2007) posits that, the impact of exchange rate volatility on trade among two or a group of countries has both a microeconomic and macroeconomic dimensions. From a microeconomic perspective, exchange rate volatility for instance, measured as day-to-day or week-to-week exchange rate fluctuations is associated with higher transactions costs, because uncertainty is high and hedging foreign exchange risk is costly. Indirectly, fixed exchange rates enhance international price transparency as consumers can compare prices in different countries more easily. If exchange rate volatility is eliminated, international arbitrage enhances efficiency, productivity and welfare. However, these microeconomic benefits of exchange rate stabilization have been a detrimental motivation of the European (monetary) integration process (European Commission, 1990).

Several theories have been propounded with regard to the determinant of future exchange rates. Just like commodities, exchange rate between two currencies determines its price in response to the forces of supply and demand. As people increase their demand for a specific currency, then the price of the currency will rise provided the supply side of the currency remains stable. Conversely, if the supply of a currency increases, the price of the currency decreases provided that the demand for the currency remains stable. Consequently, any excess supply (above the equilibrium point) or excess demand (below the equilibrium point) will force an increase or decrease temporarily in foreign currency reserves accordingly. However there are two importation theories that aptly explain fluctuations in exchange rate: (i) the theory of Purchasing Power Parity (PPP) and (ii) the theory of Interest Rate Parity (IRP).

With the adoption of flexible exchange rates in the early 1970s, it is generally assumed that the exchange rate would quickly adjust to changes in relative price levels (Lan, 2001). The PPP theory is based on the “law of one price” and argues that the price of a good in a foreign currency when multiplied by the exchange rate between the foreign currency and the domestic currency should result in the same price of the good in the domestic currency. This is to prevent

arbitrage, otherwise, profit will occur. However, in the long run the forces of supply and demand interact accordingly to bring the prices in the two currencies to the equilibrium point to reinstate the “law of one price” as well as the purchasing power parity between the currencies. Although the PPP theory describes in a sufficient depth, the determination of exchange rates, it fails to recognize that not all goods are traded internationally, and also the transportation cost should represent a small fraction of the tradable good’s worth. This concept of PPP is often termed absolute PPP.

Lumby and Jones (1999) state “the currency of the country with the higher rate of inflation will depreciate against the other country’s currency by approximately the inflation differential”. Relative PPP is said to hold when the rate of depreciation of one currency relative to another, matches the difference in aggregate price inflation between the two countries concerned (Lan, 2001). If the nominal exchange rate is defined simply as the price of one currency in terms of another, then the real exchange rate is the nominal exchange rate adjusted for relative national price level differences. When PPP holds, the real exchange rate is a constant, so that movements in the real exchange rate represent deviations from PPP. The relative PPP theory focuses on the change over time in the relative prices of trade baskets of similar goods and services in two countries. At any point in time, the exchange rate between the two currencies is related to the rate of change in the price of the similar market baskets.

According to relative PPP theory, as prices change in one country relative to those prices in another country for a trade basket of similar goods and services, the exchange rate will tend to change proportionately but in the opposite direction. The rationale for this theory is that, if one country experiences rising prices while its international trading partners do not, its exports will become expensive and therefore less competitive. Similarly, imports will become more attractive because of their relatively lower prices. The exchange rate will change as citizens purchase currency of the country with falling prices and sell the currency of the

country with rising prices (Gallagher & Andrew 2000). However, volatility occurs in both nominal and real exchange rates. Real exchange rate changes translate into deviations from PPP which, for a domestic firm with local competitors, should have a direct effect on firm value.

The theory of IRP posits that, premium or discount of one currency against a trading currency should reflect the interest differential between the two currencies. Consequently, the currency of the country with a lower interest rate should be at a forward premium relative to the currency of the country with a higher interest rate. In an efficient market where transaction costs are nonexistent, the interest rate differential should approximate the forward differential. If this condition is satisfied, then the forward rate is said to be at interest rate parity and there is equilibrium in the money market. Therefore the forward discount, or premium is closely related to the interest differential between two currencies. The spot price and the forward price of a currency includes any interest rate differentials between two trading currencies with the assumption that there are no transaction costs or taxes.

The Balance of payments (BOP) method involves the recording of all international monetary transactions of a country during a specific period of time. These transactions are categorized into: the current account transactions, the capital account transactions and the central bank transactions. These accounts may show a deficit or a surplus depending on the differences between the volume and value of exports and imports. Theoretically, the overall BOP should be zero, but this rarely occurs. The depreciation or appreciation in the value of a currency directly affects the volume of a country's imports and exports and therefore any fluctuations in the exchange rates can cause discrepancies in the BOP account. A depreciation in a country's currency implies that the nominal value of debt denominated in foreign currencies increases relative to the country's resources in the local currency,

whereas its local-currency denominated debt decreases in value for foreign creditors. (Huchet-Bourdon & Korinek, 2011).

Basically, the theoretical foundations for the analysis of the impact of currency depreciation on trade, hovers around the Marshall-Lerner condition and J-curve effect. The Marshall-Lerner condition has been cited as a technical reason explaining why a fall in the value of a country's currency need not immediately improve its balance of payments. The condition states that, for a depreciation of a currency to have a positive impact on trade balance, the aggregate sum of price elasticity of exports and imports in absolute value must be greater than one. The devaluation of a currency or depreciation of the exchange rate means a reduction in the price of exports resulting in increased volume of exports as demand increases. Conversely, this results in increases in the price of imports making their demand in the domestic market fall.

The J-curve effect theory states that, following a depreciation of the national currency, an initial deterioration of the trade balance is then followed by growth or improvement. The occurrence of depreciation triggers a price effect as a result of imported goods or components. The existence of possible delays in the delivery of goods ordered some months before, increases the value of imports in the short-term. The passage of time allows traders and business firms to change their input strategy and make their goods for export competitive to cover their losses. A quantity effect is triggered, and therefore the volume of imports is scaled downward while local production rises to meet increased demand. In this regard, adjustments in quantities traded are slower to respond than are changes in relative prices. The expectation is that the ultimate effect in the longer term is a net improvement in the trade balance. This is the J-curve phenomenon, because when a country's net trade balance is plotted on the vertical axis and time plotted on the horizontal axis, the reaction of the trade balance to a devaluation or depreciation looks like the curve of the letter J.

Parkin and King (1992) posit that according to the monetary theory, exchange rates adjust to ensure that the quantity of money in each currency supplied is equal to the quantity demanded. In the monetary approach to the determination of exchange rates, attention is focused to the stock of currencies in comparison to the willingness of people to hold these stocks. The quantity theory of money (QTM) is essentially a hypothesis about the main cause of changes in the value or purchasing power of money which theorizes that, the value of money is determined chiefly by changes in the quantity in circulation. Consequently when money becomes abundant, its value or purchasing power falls and conversely, if money becomes scarce, its purchasing power rises and as a result general prices fall. Basically, QTM states that the stock of money (M) is the main determinant of the price level (P).

Both PPP theory and QTM have been used in most research works to support the monetary approach in determining exchange rates. It is therefore evidential that, an increase in the money supply leads to inflation, which in turn reflects in the value of money or purchasing power. At the international level of trading, the implication of a rapid increase in the money supply in home currency which leads to inflation, will set into motion the purchasing power parity effect, resulting in the deterioration in the home currency's exchange rate. Also, a higher interest rate will result in the depreciation of the home currency, because of the positive relationship between interest rates and money supply. The portfolio balance approach looks at the diversification of investors' portfolio assets by investing among various financial instruments and across national borders in an attempt to reduce risk. The theory argues that, an increase in the money supply will lead to a depreciation of the exchange rate. However the extent of the depreciation depends on the changes in the combinations of domestic interest rates and exchange rates.

Goldberg and Knetter (1997) define exchange rate pass-through as the percentage change in local currency import prices resulting from a percentage change in the exchange rate

between the exporting and importing countries. In the exchange rate pass-through literature, pass-through impact is considered complete only when the response is one-for-one. For instance, when one percent change in the exchange rate results in a one percent change in the import price. Krugman (1987) posit that, exchange rate changes could be passed through to prices of traded goods, or absorbed in producer profit margins or mark-ups (pricing-to-market). However, Gagnon and Ihrig (2004) point to the role of fiscal policies and monetary authorities which partially offset the effect of changes in the exchange rate on domestic prices while Krugman (1986) cites “pricing-to-market” by foreign suppliers as the reason why US imports prices do not fully mirror exchange rate movements. Cross-border production is another reason cited for low exchange rate pass-through effect.

Empirical review

Abor (2005) posit that the prevalence of outsourcing activities to foreign countries exposes corporations to incur costs such as wages, materials and taxes in foreign currency and thus very imperative for corporate financial managers to be aware of the extent of this exposure. Empirical research has shown that volatile exchange rates affect the revenue and profits of both multinational and local corporations (Muller & Verschoor, 2006). In addition, corporations which are not involved in foreign trade or outsourcing of activities to foreign providers are also exposed to unstable exchange rates through competition with multinational corporations, foreign competitors, and macroeconomic conditions. Consequently, many local and multinational corporations find their income statements and business performance affected by fluctuating exchange rates in spite of their having only indirect financial exposure (Parsley & Popper, 2006).

The opinion that an increase in exchange rates volatility will have adverse effect on the volume of international trade, is relatively extensive in many studies conducted throughout the 1970s and 1980s in addition to Clark (1973), Hooper and Kohlagen (1978), see also, inter alia,

Baron (1976), Cushman (1983), De Grauwe and Verfaillie (1988), Giovannini (1988), Bini-Smaghi (1991) and others, at a period of increased volatility (IMF, 1984). In spite of the very large volume of empirical studies on the effects of exchange rates volatility on the volume of trade, there is no clear consensus on the exact nature of the impact. Indeed, research findings which find positive, negative or zero effect of exchange rate volatility on the volume of international trade are based on varied underlying assumptions and only holds in certain situations.

Hodge (2005) posits that if the conclusions of theoretical models of the relationship between exchange rates volatility and trade are ambiguous, then empirical studies of the relationship are even more so. Through a meta-analysis of the conclusions in the literature that range from strong negative to strong positive effects, Coric and Pugh (2008) find 33 studies that conclude that, exchange rate variability exerts a negative impact on trade volumes, while 25 other studies examined conclude that exchange rate volatility has no impact on trade volume. However, six of those studies conclude that exchange rate variability rather enhances trade. Detailed surveys of the early empirical work by Farrell, De Rosa and McCowan (1983) and the IMF (1984) conclude that the majority of the studies carried out are unable to establish a progressively significant correlation between measured exchange rate variability and the level of trade.

Cote (1994: p13) asks “What is the best proxy for the uncertainty and adjustment costs that traders face as a result of the exchange movements?”. Here the measurement of exchange rate is called to question, as to whether bilateral, nominal, effective or real exchange rate should be used. Also Cote reviews empirical work published between 1988 and 1993 and observes that results of the studies are difficult to compare because the sample period, countries, economies and risk measure vary significantly. However the conclusion is in line with earlier surveys that the evidence on the effect of exchange rate volatility on trade is mixed. Majority

of the studies conducted, seem to support the theory that, exchange rate volatility depresses trade, but in most of these findings the effect is small. Other studies find evidence of a positive effect of exchange rate volatility on export volumes (Kroner & Lastrapes, 1993).

The absence of a strong exchange rate effect on trade Cote admits, may be due to over reliance on aggregate data in most studies conducted. In a single study using sectorial trade volumes, Cote also finds out that exchange rate effect on trade is insignificant. The main challenge is how to obtain good quality disaggregated data. Cote suggests that exchange rate volatility might only affect trade volumes indirectly by influencing investment decisions regarding where to invest. The implication is that, the lag between exchange rate movements, adjustment in production capacity and trade volumes would be an extended period and therefore difficult to detect. McKenzie (1999), confirms the conclusions by Cote (1994) regarding theory and empirical evidence. A general conclusion drawn from the literature is that, a fundamental ambiguity exists which remains unresolved. Theoretically, models have been developed by researchers that show how exchange rate volatility may exert a positive or negative impact on trade.

Using data from 6 industrialized OECD nations, McCarthy (1999) investigates the effect of exchange rate volatility and imports prices on producer and consumer prices in recursive vector autoregressive (VAR) model. He discovers that, exchange rate movements have modest impact on domestic consumer prices. Leigh and Rossi (2002) investigate the impact of exchange rate movements on prices in Turkey using a recursive vector autoregressive model and find that: (i) the impact of the exchange rate volatility on prices is felt in the first four months but abates after a year, (ii) the pass-through to wholesale prices is more visible compared to the pass-through to consumer prices, and (iii) the estimated pass-through is complete in a shorter period and is larger than that estimated for other main emerging economies. In exploring the reasons why some U.S import prices change so little relative to a

change in the value of the dollar, Jabara (2009), concludes that, exchange rate pass through to US import prices are particularly low for consumer goods and that estimates of exchange rate pass through for various countries vary by import source.

Although available literature has focused essentially on the impact of exchange rate uncertainty on the incentive to trade, a few writers have examined the "reverse" correlation on the effects of international trade on exchange rates. Mundell's (1961) optimal currency hypothesis suggests that a reverse causality exists, and that trade flows stabilize real exchange rate fluctuations, hence reducing real exchange rate volatility. Broda and Romalis (2003) set out in the introduction of their paper that, such a causality ought to be resolved, as most of the existing studies have focused on the effects of exchange rate regimes or volatility on trade by assuming that, the exchange rate process is driven by exogenous shocks and is not affected by other variables. This implies that, the effect of trade on exchange rate volatility is nonexistent, but ignoring the causal effect of trade on volatility results in overestimates of the true impact of exchange rate volatility on trade.

Although concerns about the increased volatility of exchange rates from the early 1970's after the breakdown of the Bretton-Woods system triggered enormous research work into how such exchange rates volatility could affect the real economy, both real and nominal exchange rates have fluctuated widely resulting in contradictory theoretical predictions, by which empirical researchers have examined the effect of both real and nominal exchange rates volatility on the volume of international trade. The general presumption that trade is adversely affected by an increase in the exchange rate fluctuations depends on a number of specific assumptions and does not necessarily hold in all cases, especially in general equilibrium models where other variables change along with exchange rates.

All over the world, there is no obvious association between periods of low exchange rate volatility and periods of fast growth in trade. In other words, at an aggregate level, there is

no evidence of a negative effect of exchange rate volatility on world trade. Review of results obtained from empirical work on exchange rate volatility on trade published between 1988 and 1993 are difficult to compare, because the sample period, countries, economies and risk measures vary significantly. However, the conclusions affirm earlier surveys that the evidence on the effect of exchange rate volatility on trade is mixed. Therefore, the absence of a strong exchange rate effect on trade may be due to over dependence on aggregated data in most studies. The major challenge is how to obtain disaggregated data. However, exchange rate volatility might simply affect trade volume indirectly by influencing investment decisions regarding where to invest. Implications of the main points suggest a need to examine how exchange rate volatility affect import trade in a developing economy.

CHAPTER THREE

RESEARCH METHODS

The study investigates the effect of exchange rate volatility on trading activities of auto parts dealers in Ghana. Every year, tons of both new and used automobiles, auto parts and accessories are imported from Europe, United States of America (USA) and Asia into Ghana, and this has helped to sustain the road transportation system in Ghana over the years. The study therefore seeks to examine and assess the effect of the volatile nature of the exchange rates between the Cedi and the major trading currencies including the US dollar (USD), the British pound sterling (£) and Euro (€) to help inform participants in the industry to grow and expand. This chapter looks at the methodology adopted by the study to help obtain the appropriate responses to research questions for analysis and interpretation to achieve the stated research objectives. The chapter thus discusses the research design, study area, population of interest, sampling procedure, data collection instruments, data collection procedures, data processing and analysis.

Research Deign

Research results do not provide any information in themselves, unless they are organized, manipulated and analysed into meaningful facts which can be quickly and easily understood by the researcher and the target audience. Majority of researchers conduct their studies within either a quantitative or a qualitative methodology or both. These methodologies guide the work of the vast majority of researchers in the social sciences. Thomas Kuhn who is associated with the term ‘paradigm’ describes a paradigm as: An integrated cluster of substantive concepts, variables and problems attached with corresponding methodological approaches and tools. Also, Farber (2001) postulates that a paradigm is a philosophical stance that informs the methodology, provides the arena in which the lucidity and structure of research

are embedded and guides the process of research. Research paradigms include positivism, symbolic interactionism, ethnomethodology and phenomenology.

The positivist paradigm is based on the philosophical ideas of August Comte who underscored observation and reason as a means of understanding human behaviour. To Comte, true knowledge is based on experience of senses and can be obtained by observation and experiment. However, anti-positivism theorizes that, social reality is seen and interpreted by individuals according to the ideological positions held. Consequently, anti-positivists believe that reality is multi-faceted and complex and therefore, a single phenomenon has multiple interpretations. Three schools of thought in the social science research under the anti-positivism paradigm are: symbolic interactionism, ethnomethodology and phenomenology. These anti-positivism paradigms emphasize human interaction with phenomena as a key factor and suggest qualitative rather than quantitative approach to social inquiry.

Phenomenology presents a theoretical view point which suggests that, individual behaviour is influenced by the experience gained out of one's direct interaction with the phenomena. It therefore rules out any kind of objective external reality. Human beings interpret various phenomena through interaction with them and attach meanings to different actions and or ideas and thereby construct new experiences (Dash, 2005). Ethnomethodology developed by Harold Garfinkel and his compatriots deals with the world of everyday life ,and according to ethnomethodologists, theoretical concerns centre around the process by which common sense reality is constructed in everyday face-to-face interaction. The main trust of this paradigm lies in the interpretation people use in making sense of social settings. Dewey, Cooley and Mead pioneered the `symbolic interactionism` paradigm. It suggests that, human interaction in the social world is mediated by the use of symbols (such as language, gesture, cues and others) which enable humans to give meanings to objects.

Quantitative research methods generally focus on the documentation of subjects' attributes which are expressed in quantity, magnitude or robustness, and also guaranteeing among other things objectivity, accuracy, validity, measurability, predictability and reliability. Quantitative methods enable the researcher to measure variables and come up with figures which will allow for assessment as to the significance of the variables used, which will in turn allow for further processing and comparisons and permit replicability. Common methods include; surveys, observation, documentation approach and experiments. However, in many research studies, quantitative researchers employ qualitative methods in their studies and eventually adjust them to meet quantitative research criteria.

Qualitative research methods are characterized by lack of strict structure, loosely planned designs, expressive language and stresses on subjectivist approach to studying social phenomena. It places premium on a range of research techniques which focus on qualitative analysis and these include; personal interviews, participant observation and personal construct among others. Nevertheless, the methods employed by qualitative researchers are in most cases same methods employed by quantitative researchers, which they adjust to meet their methodological standards. Qualitative research thus sets researchers close to reality, uses open methods of data collection, employs naturalistic methods and captures the world in action.

The study adopted an anti-positivist paradigm and thus employs a qualitative research design. The choice of a descriptive research design was carefully selected to help obtain the primary qualitative data needed to answer the research questions and to achieve the research objectives. The primary data source obtainable from fieldwork from respondents, require the use of questionnaire administration, interviews, observation and content analysis among others. To allow for qualitative analysis, the study employs personal interviews and questionnaire administration to obtain the primary data required. The choice of sampling technique and

sample size determination was informed by the qualitative research design adopted by the study.

A qualitative research design is naturalistic because, the research is undertaken in a natural setting (field focused). This introduces dynamism into the research work as it focuses on processes and structural characteristics of settings, thereby striving to capture reality in interaction through contact with respondents in the field. Qualitative research design is open as it underscores the principle of openness. It enables the researcher to enter the field with no preconceived ideas or pre-structured models and patterns. Therefore there is no strict design; no hypotheses; no limits in its focus, scope and operation. Consequently, design, methods and processes are open to change. It focuses on the entire study object and values subjectivity and personal commitment of the researcher.

The main features of qualitative research design as espoused above, also represent its core strengths as well as advantages over other research models of inquiry. Notwithstanding, qualitative research design also has its drawbacks. Qualitative research design does not enable the study of relationships between variables with the degree of accuracy required to validly establish social trends. Qualitative research design focuses on small samples and therefore does not produce representative results. Consequently, findings from qualitative studies cannot be generalized. Qualitative studies also do not produce comparability of data and given the subjectivist nature of its model, replicability of studies is not possible. Qualitative research design is time consuming and relatively expensive as the researcher and respondents are inseparable.

Study Area

The study looks at the business activities of auto parts dealers who are involved in the importation of second-hand auto parts and accessories located at Abossey Okine in the capital city of Ghana, Accra. Abossey Okine is a suburb within the central district of Accra which

serves as a nerve centre of auto parts market in Ghana. Located in the capital, Abossey Okine auto parts market, plays host to the sub-region`s auto parts market especially for land-locked countries North of Ghana.

Population

The target population for the study consists of importers of various brands of second hand auto parts who deal in Japanese auto parts, German auto parts and Korean auto parts. Population units are between the ages of 25 and 60 years and they are both males and females. They have varying levels of education and training which include elementary, secondary and tertiary levels. However, greater number of the population units have some appreciable levels of technical education with some earning their training through apprenticeship. Some of the population units manage their own businesses with others working in partnerships. Some units within the target population participate both in the upstream business of importing and also downstream business of retailing at the auto parts market. There are others who only import and distribute to dealers at the Abossey Okine auto parts market as well as other markets dotted across the length and breadth of Ghana. Units within the target population have average turnover from GH¢200,000 and above.

The study estimates the size of the target population to be 60 importers who have been identified as very active and well established by the Abossey Okine auto parts dealers association. Importers of auto parts in Abossey Okine can however be grouped according to the make of vehicle, and within each group are dealers in auto parts and accessories ranging from windscreen to the gear box. Consequently, the accessible population of respondents vividly reflects the characteristics of the target population. The only likely limitation may be that, respondents from these homogenous groups may be impacted by exchange rates volatility differently because of their sources of supply.

Sampling Procedure

With a target population of 60 auto parts importers, the sample size was calculated using the online sample size calculator from www.checkmarket.com. The sample size calculated was 53 respondents. The study adopted both probability and non-probability sampling methods in selecting respondents. The stratified sampling method as a probability sampling method, was first used to select the various groups of importers dealing in Japanese auto parts, German auto parts and Korean auto parts. The purposive sampling technique was then used in selecting respondents from each group. The purposive sampling technique enables researchers to purposely choose subjects or respondents who, in their opinion are relevant to the study. The choice of respondents was guided by the judgment of the researcher or the field worker (investigator). The important criterion of choice is informed by the knowledge and expertise of respondents and their suitability for the study. Respondents selected comprise importers who have been in the auto parts business for not less than five years.

Data Collection Instruments

The study used the following data collection instruments:

- questionnaire
- interview guide

A questionnaire can be described as a kind of written interview which can be carried out face-to-face, by telephone or by post. It is a research instrument consisting of a series of questions (either closed-ended or open-ended) which is designed by the researcher purposely for gathering facts, opinions or information from sampled respondents. A distinction is made between open-ended questions and closed-ended questions. Another distinction is between structured questionnaires and unstructured questionnaires. The structure of closed-ended or structured questionnaires is highly rigid with standardized questions allowing respondents no

flexibility in answering questions. Consequently, responses are strictly directed at questions in the questionnaire, and no other ideas, views, propositions or alternative answers are allowed. These questionnaires are mostly employed in quantitative research. The structure of open-ended or unstructured questionnaires is less rigid with well-defined questions but open and allowing for unstructured responses. They are predominantly used in qualitative research.

Interviews are in the form of questionnaires which are presented verbally to respondents and can be classified into structured interviews, unstructured interviews and semi-structured interviews. Structured interviews employ structured questionnaires which are verbally presented to respondents, with responses recorded in the questionnaire by the interviewer. Unstructured interviews on the other hand, employ unstructured questionnaires (interview schedules) which contain a number of open-ended questions, and offers the interviewer the flexibility to change the order and wording of questions in the course of interviewing. The structure is thus flexible with minimal restrictions and in most instances, taking the form of guides rather than rules. Semi-structured interviews is a fusion of the structured and the unstructured interview types and thus contain elements which are closer to structured interviews and others closer to unstructured interviews.

The development of the questionnaire started by deciding on the most suitable type of questionnaire and the appropriate way it will be administered. There was a search for relevant questionnaires that have been developed by other investigators. Suitable questionnaires found were adopted and subsequently used as guides in preparing the new questionnaire. A number of questions were formulated which included questions directly related to aspects of the research topic, questions of methods testing reliability and wording, secondary as well as tertiary questions. Questions developed were tested for relevance, balance, clarity and ease among other principles as well as for compliance with the basic rules of questionnaire construction. Questions were subsequently given to experts for scrutiny and suggestions. The

critique offered by the experts as well as my supervisor, were eventually considered and changes implemented. The contents of the questionnaire were informed by the need to obtain data necessary to enable the researcher to achieve the objectives of the study.

Test items can be written in many different formats, and these include multiple choice, matching, true/false, short answers and essay. The study adopted the multiple choice item format, and this was determined by looking at how the questionnaire should have a professional appearance and give the impression of a document that deserves respect. The multiple choice format lends itself to detailed analysis of responses where even incorrect answers can provide information on respondents' skills and knowledge. The questionnaire was also presented in such way that encouraged respondents to complete and return it. Print and color of paper were considered to give the questionnaire an attractive appearance and was subsequently presented as a complete document with reassuring introductory cover note.

Sufficient instructions and inquiries were provided where necessary. The questionnaire is structured to cover the important aspects of the auto parts business. The questionnaire is thus divided into three main sections covering the basic business information about the companies, business process and prospects for the auto parts dealers. The basic information about the companies is to enable the researcher identify and select companies which are well established and have been in the auto parts business for a good number of years. This enables the researcher to obtain appropriate but relevant primary information from relevant sources and this allows for proper analysis which leads to valid conclusions.

The content of each question and how it was structured allows for the researcher to guide respondents to provide the exact information needed for the attainment of the objectives of the study. The construct validity and reliability were assured by carefully looking at the nature and sequence of questions which enabled respondents to understand and provide the

required response. Questionnaires as method of data collection have strengths and weaknesses, meaning that there exist advantages and limitations. Some of the advantages include the following:

- They minimize the opportunity for bias or errors caused by the presence or attitude of the researcher.
- They give a stable, consistent and uniform measure, devoid of variation.
- They give a greater assurance of Anonymity.
- They are less expensive than other methods of data collection.

The limitations of questionnaires comprise the following:

- The true identity of the respondent and the conditions under which questions are answered are not known.
- Due to lack of participation by the researcher, partial or non-response is quite possible.
- They offer no opportunity to obtain additional information while they are been completed.

Interviews as a method of data collection has also several advantages as well as disadvantages.

Some of the advantages of face-to-face interviews include:

- The individual being interviewed is unable to provide false information during screening questions such as gender, age, or race.
- Interviews are useful for gaining insight and context into a research topic.
- The interviewer has absolute control over the interview and can keep the interviewee focused and on track to completion.

Face-to-face interviews have some disadvantages as other data collection methods. They include the following:

- Cost is a major disadvantage for face-to-face interviews. Field assistants are needed to conduct the interviews, which means there will be personnel costs.
- The quality of data gathered will often depend on the ability of the interviewer, as some people have the natural ability to conduct an interview and gather data well, whereas others have their own biases that could impact the way they input responses.
- The size of the sample is limited to the size of interviewing staff, the area in which the interviews are conducted and the number of qualified respondents within that area.

Data Collection Procedures

Data for the study were elicited from sampled respondents from February, 23rd to March, 1st, 2016. Questionnaires were administered during the first two days while interview guide was used to collect data during working hours in the day by the researcher and a field assistant. During the questionnaire administration, it was detected that, most respondents have very little knowledge about the benefits of social research and therefore were a bit apprehensive to the team. It also emerged that, respondents have little interest in the activities of researchers as they perceive that, their findings will inform authorities to increase their tax burden and also put them under the spotlight for government policies. It was quite exacting trying to explain certain concepts and rational for soliciting for responses on certain variables. Respondents who were willing to answer questionnaires requested that they remain anonymous, and therefore personal names as well as company details were not obtainable.

In all 53 questionnaires were administered, but only 25 respondents completed and returned them, while 20 respondents failed to fill and return them. 8 other questionnaires which were eventually returned were not completed with very important questions not attended to.

The study therefore used the 25 completed questionnaires for analysis to obtain answers to the research questions and hence to achieve the objectives of the study.

Data Processing and Analysis

The reliability of data refers to the notion that, the data file actually contains the exact information the researcher needs to provide the decision maker. Therefore, data reliability extends to the fact that data obtained from fieldwork have been edited and properly coded. Any errors within the data thus harm data integrity. As fieldwork in social research often produces data containing mistakes, strenuous effort was made at checking and adjusting data for omissions, consistency and legibility. Preliminary field editing was conducted on data collection days aimed at identifying technical omissions such as an uncompleted page on an interview form, checking for legibility of handwriting for open-ended responses and clarifying responses that obviously are logically inconsistent. In checking for errors and omissions on questionnaires and interview guides, the editor in discovering problems adjusted the data to make them more complete, consistent and verifiable. It is therefore most probable that subjectivity can enter the editing process. Care was thus taken through the adoption of a systematic procedure that limited the chance for the data editor's subjectivity to influence responses.

All research work involves the collection of data of some kind, and in order to make any meaning out of them, the data must be analysed. This starts with labeling of data as to its source, the collection procedure, the kind of information obtained, the category of data points and others. This is premised on the fact that, working with original data could be cumbersome and for this reason, data are often coded. Although, not all data need be coded, coded data allow the researcher to reduce large amounts of information into a form that can be more easily handled especially by computer programmes. The study adopted the numeric format to code each questionnaire for data entry.

CHAPTER FOUR

RESULTS AND DISCUSSION

Advance Organiser

The purpose of this study is to examine the causes of exchange rate risks and how exchange rate volatility impact on the profit margins of auto parts dealers (importers) in Ghana in general with particular focus on auto parts dealers at Abossey Okine in Accra. The study employed anti-positivist paradigm paving the way for the adoption of a qualitative research approach. The sampling methods employed involve both probability and non-probability methods. Specifically the stratified method and the purposive technique were used paving the way for a smaller sample size. The study accordingly used descriptive statistics as the analytical technique in describing and summarizing data in a meaningful manner which allowed for simpler interpretation of the data collected.

The actual sample used by the study was taken based on certain parameters. The various groups identified which constitute the target population, deal in various brands of auto parts and accessories imported from various countries and are homogenous. Therefore, three to four respondents in each group were purposefully selected to respond to questions. Respondents so selected were identified as key players in the industry who have established and operated for more than fifteen years and who also are involved in both upstream and downstream sectors of the auto parts industry. These respondents do import, distribute and also carry out direct sales. Their distribution activities which involve the granting of credit facilities to wholesalers, retailers and other vendors have been identified as the most vulnerable business area to exchange rate volatility thereby increasing exchange rate risks to their business operations.

There are several means by which a business can be started and this has major implications for future operations of the business, specifically how capital can be raised to finance business activities. Table I shows that more than half of businesses of respondents within the auto parts industry have started through friends who either offered direct capital or helped through the supply of goods. With 7 respondents indicating that they started their businesses through personal savings suggests that about a quarter of businesses in the auto parts industry have started through personal savings with just few others starting as partnerships and other forms. The interpretation from these findings is that, there are enormous difficulties in starting a business in Ghana. Apart from several administrative bottlenecks, the financial market is most unfriendly to the private sector as most banks and other financial houses are just not forthcoming with funding for private businesses. Several businesses within the auto parts industry do not have any capital structure that requires prudent use of available resources to develop and take advantage of opportunities the capital market offers. The implication is that majority of auto parts dealers do not take advantage of the tax deductible expense of interest paid on loans which goes to reduce their tax burden.

Table 1
How was your business started?

Start-up	Freq	% of	Cummulative
Capital		Total	% of Total
Personal savings	7	28	28
Friends	13	52	80
Partnership	3	12	92
Others	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 2 shows that majority of businesses in the auto parts industry are owned by individuals, making them sole proprietors. Partnerships form a little over a quarter of auto parts businesses with a few others been private limited liability companies. These findings reveal that several other sole proprietorships after a while, come together to form partnerships to help expand their activities into other brands of vehicle parts. A very small number of businesses were found to exist in a hybrid form whereby members help each other link up customers. The implication is that expansion becomes difficult as majority of auto parts participants conduct their business activities based on how and where they are able to raise finances and also how business practices are controlled to minimize the impact of economic fallouts such as foreign exchange rates depreciation.

Table 2
What form of business ownership do you have?

Ownership	Freq	% of Total	Cummulative % of Total
Sole Proprietorship	15	60	60
Partnership	7	28	88
Private Ltd Liability	2	8	96
Others	1	4	100
Total	25	100%	

Source: Field survey, Koomson (2016)

As all auto parts are imported into Ghana, auto parts dealers are always at the forefront of seeking foreign exchange to finance their imports. For importers of auto parts from around the world, the availability of foreign exchange is crucial to their survival and growth. With the deregulation of the financial market, importers are able to obtain foreign exchange from the

open market through the forex bureau, and are able to negotiate for better exchange rates which impact on their returns and therefore profitability. Table 3 indicates that 4 out of every 25 auto parts dealers representing 16% are able to obtain foreign exchange from the inter-bank market. This suggests that, a smaller number of importers are able to secure foreign exchange from the banks. The black market which continues to serve as a readily available source of foreign exchange is also patronized by auto parts importers as shown by 7 out of the 25 respondents compared to the forex bureau. The forex market gives enormous opportunity to importers to access foreign exchange to finance their imports on time, and are able to offer rates that reflect open market exchange rates which helps to reduce foreign exchange risk of transaction exposure. The implication is that once all auto parts importers do not obtain foreign exchange from one market, they are exposed to different levels of foreign exchange risks which has the potential to affect their returns and therefore profitability.

Table 3
Where do you obtain foreign exchange to import goods?

Market	Freq	% of Total	Cummulative % of Total
Inter-bank market	4	16	16
Forex market	12	48	64
Black market	7	28	92
Others	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 4 shows that it is quite difficult for the majority of auto parts importers to obtain foreign exchange from the banking sector or the inter-bank market as importers indicated their frustration and the ordeal they go through anytime they require foreign exchange to buy stocks or import auto parts. Next to the inter-bank market, is the forex market which offers auto parts importers easier source of foreign exchange. The black market as indicated by a low response rate of 3 out of 25 respondents, seems to offer auto parts importers pretty much easier source of foreign exchange for their import activities as compared to both the inter-bank market and the forex market. A respondent indicated that there are some other sources of foreign exchange which are less known but very popular with importers. For instance an importer can go for foreign exchange from another dealer, and will pay back with interest after selling off his or her goods.

The introduction of stringent foreign exchange regulations in the banking sector by the bank of Ghana has further compounded the problem of obtaining foreign exchange from the banks. The implications are that majority of auto parts dealings are done outside the banking sector which makes it difficult for any government agencies to track and measure the volume of trade in any financial year regarding the level of demand for foreign exchange. Banks require businesses to provide their financial statements before any credit is given. This enables the central bank to track, monitor and obtain data regarding the level of demand for foreign exchange and determine how foreign exchange transactions should be limited and controlled to minimise the impact of foreign exchange risks to importers in the country as a whole.

Table 4

Which market is the most difficult to obtain foreign exchange?

Market	Freq	% of Total	Cummulative % of Total
Inter-bank market	15	60	60
Forex market	6	24	84
Black market	3	12	96
Others	1	4	100
Total	25	100%	

Source: Field survey, Koomson (2016)

As the USD continues to be internationally accepted as a legal tender for payments and settlement of debts, imports of auto parts are mostly paid for in USD and therefore has enormous influence on business activities all over the world. Table 5 indicates that more than half of respondents carry out their business activities in direct relationship with the US dollar in terms of its cedi value. However, a fifth of the respondents indicated that their trading activities are influenced by how the cedi performs against the Euro with 4 other respondents representing 16 percent indicating that their trading activities are actually dominated by the cedi. 8 percent of respondents however indicated that their business activities are actually dominated by the British pound sterling. This means that auto parts importers have their businesses dominated by the currencies of countries from where they import their goods. The implication is that the performance of the US dollar against the cedi has a major impact on the auto parts industry, as majority of auto parts importers carry out their businesses heavily dominated by the US dollar and therefore stand to perform better if exchange rates are stable rather than volatile.

Table 5

Which trading currency dominates your trading activities?

Currency	Freq	% of Total	Cummulative % of Total
US dollar	14	56	56
British pound sterling	2	8	64
South Korean Won	0	0	64
Euro	5	20	84
Ghanaian cedi	4	16	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 6 indicates that auto parts are imported into Ghana from several countries with South Korea topping the list followed by Japan. This is as a result of the relatively cheaper auto parts from South Korea where KIA, Hyundai and Daewoo vehicles are manufactured and also, Japan where Toyota, Nissan, Mazda, Suzuki, Honda and Isuzu are manufactured. Although, auto parts are also imported from other countries such as the US, Germany and Britain, China and the UAE were cited as emerging auto parts markets, where prices are comparably cheaper. Germany, United Kingdom and the US remain comparatively expensive source of auto parts supply as indicated in Table 6. The implication is that, more auto parts importers are entering into the auto parts industry with much business focus on the market that offers cheaper vehicles with available auto parts resulting in lower maintenance costs. But it is most probable that versatility and durability may be sacrificed.

Table 6

From which country do you import your goods?

Currency	Freq	% of Total	Cummulative % of Total
Japan	5	20	20
Germany	3	12	32
South Korea	11	44	76
China	2	8	84
United Kingdom	1	4	88
United States	1	4	92
UAE	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

The nature of the auto parts business is that importers normally supply wholesalers and retailers on credit bases and therefore, it takes some time before a consignment is sold. Table 7 indicates that on average, more than half of auto parts importers sampled take up to three months before a new consignment is imported. While other respondents representing about 36 percent indicated that it normally takes three months for a new consignment to be imported, some also intimated that it takes just a month before an order is placed for a consignment. However, a respondent suggested that it takes more than six months before placing an order, because of the nature of their goods. This means that it takes some time for auto parts importers to sell and be able to go for new goods. The implication is that exchange rates volatility will have maximum impact on auto parts dealers' returns as profits fall once the cedi depreciates against major trading currencies within the period. The longer the period before a consignment is sold, the greater the exposure of auto parts importers to exchange rate risks.

Table 7

How long does it take to receive a consignment after placing an order?

Currency	Freq	% of Total	Cummulative % of Total
One month	1	4	4
Three months	14	56	60
Six months	9	36	96
More than six months	1	4	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 8 indicates that more than three quarters of auto parts importers sampled do offer credit to customers, while a little above a quarter of respondents do not sell on credit basis to customers. This means that the auto parts market is characterized by slow business activity such that, customers are only able to pay fully for goods after they are able to sell to the wider market. Therefore, in the area of pricing, importers need to factor in the likely depreciation in the exchange rate between the cedi and the major trading currencies to enable them minimize their exposure to foreign exchange risks. Customers who pose minimal default risk are likely to be given credit facility and may have flexible terms of payment. However, respondents who indicated that they do not offer credit facilities to customers, suggests that customers who pose higher default risk are only able to make cash purchases. The implication is that if wholesalers, retailers, companies and other customers which include mechanics are capable of purchasing auto parts with ready cash, then it takes away completely any default risk. However, selling on cash basis alone could harm the ability of auto parts importers to sell in larger quantities and this will in turn increase the turnover period and therefore affect profitability.

Table 8

Do you offer credit facilities to your customers?

	Freq	% of	Cummulat
	Total	Total	% of
Yes	21	84	84
No	4	16	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 9 shows that auto parts importers give more credit facilities to wholesalers than any other type of client. Wholesalers as indicated in Table 9, form the major category of customers who facilitate the business of auto parts importers as they offer a ready market for their goods. Retailers who buy and sell to other users also receive credit facilities from auto parts importers but form only about 12 percent of the total number of customers who receive credit facility as indicated by respondents in Table 9. However, respondents intimate that, this is done on the basis of long standing business relationships they have established with retailers. Institutions and companies which are supplied with auto parts are occasionally given credit facilities to enable them fix their vehicles and work. These institutions and companies only form about 8 percent of customers who receive credit facilities from auto importers as also indicated by respondents in Table 9. Very few private motorists are offered credit facility because of the high risk of default. The implication of this trend is that wholesalers are able to negotiate for better prices and terms of payments as they buy in larger volumes than other type of customers. Importers are therefore selective in identifying which type of customers can receive credit facility because of fear of repayment default which will increase the risk of foreign exchange rates exposure.

Table 9
What type of clients receive credit facilities?

Client	Freq	% of Total	Cummulative % of Total
wholesalers	19	76	76
Retailers	3	12	88
Institutions/Companies	2	8	96
Others	1	4	100
Total	25	100%	

Source: Field survey, Koomson (2016)

In Table 10, 16 respondents representing 64 percent indicated that even though they offer credit facilities to customers, they do not give a credit period exceeding 3 months and therefore, full payments are expected to be made by the end of the third month after sales. 5 respondents who indicated that they give a credit period not exceeding 2 months represent 20 percent of total respondents while 3 respondents representing 12 percent give credit to customers for more than 3 months. A respondent representing 4 percent indicated that on average, customers are given a credit period not exceeding one month. The result suggests that auto parts importers give credit periods based on the type of goods imported, the type of customers and also the perceived effect of foreign exchange rates volatility likely to impact on their returns and therefore profitability.

The implication is that auto parts importers become very susceptible to the negative effects of foreign exchange rates volatility on their trading activities and therefore in a period of high exchange rates volatility, importers` business declines as prices of goods sold do not reflect current exchange rates resulting in losses or fall in profits. The volatile nature of exchange rates between the cedi and the major trading currencies particularly the US dollar, suggests that

a longer credit period exposes auto parts importers to foreign exchange risks which will impact negatively on their profitability.

Table 10
What is the average period of repayment?

Credit Period	Freq	% of Total	Cummulative % of Total
One month	1	4	4
Two months	5	20	24
Three months	16	64	88
More than three months	3	12	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 11 indicates that more than three quarters of respondents give credit facilities to eligible customers based on their expectation of how the local currency will perform against the US dollar between when the sale is effected and when they expect to receive payments. The Euro, the British pound sterling and the cedi are also shown in Table 11 as having some influence on credit sales of auto parts importers in a descending order of impact. The implication is that once the exchange rates between the cedi and the currency dominating trading activities of auto parts importers fluctuates widely, it exposes auto parts importers to high foreign exchange risks and this restricts trade and also reduces the incentive to allocate resources efficiently. Therefore, as the local currency fluctuates against the US dollar, the import bill of the majority of auto parts importers continues to rise while profits fall.

Table 11

Which trading currency most influences your credit sales?

Currency	Freq	% of Total	Cummulative % of Total
US dollar	18	72	72
British pound sterling	2	8	80
South Korea	0	0	80
Ghanaian cedi	1	4	84
Euro	4	16	100
Others	0	0	
Total	25	100%	

Source: Field survey, Koomson (2016)

A number of economic factors affect both international trade and domestic trade but have differing impact depending on the sector (such as manufacturing, mining, service and others) and the currency. Table 12 shows that exchange rates remain a major economic factor that affects the business activities of firms, enterprises and organizations especially importers within the auto parts industry. Respondents also indicated that import duties and port charges come next after exchange rates which have negative impact on trading activities of auto parts importers and therefore operate to reduce their margins, while taxes and other domestic charges respondents claim, impact negatively on their trading activities. These factors thus limit their ability to offer good credit facilities to customers which could increase the volume of sales and expand their trading activities. The implication is that majority of auto parts importers are hemmed in by volatile foreign exchange rates and therefore have their trading activities restricted with very little prospects for growth and expansion to help the transport sector which employs millions of Ghanaians especially the youth.

Table 12

What economic indicator do you consider significant when giving credit facilities?

Economic Indicator	Freq	% of Total	Cummulative % of Total
Exchange rates	13	52	52
Import duties/Port charges	7	28	80
Taxes	3	12	92
Others	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 13 indicates that default risk is high within the auto parts import business as characterized by higher credit sales to customers. With more than 70 percent of respondents indicating that customers default in repayments, suggests that the auto parts business is one area that has a very high foreign exchange risks exposure and therefore very risky. Although close to a quarter of respondents indicated that customers do not default in repaying debts, it is most probable that these customers buy in smaller quantities and also may buy auto parts which are used more frequently by motorists than other goods. The implication is that a high default rate puts auto parts importers in a risky position in the auto parts business and are more prone to the effect of foreign exchange rates volatility. It is also the case that a high default rate has the potential to reduce working capital of businesses and therefore will result in a fall in profitability.

Table 13
Do customers default in their repayments?

Client	Freq	% of Total	Cummulative % of Total
yes	19	76	76
No	6	24	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 14 depicts that in situations where customers default in repayment of debts, it takes almost the same credit period offered to be able to recover debts outstanding. This means that if a customer is given three months to pay for any credit purchases made and subsequently he or she defaults, it takes about three months to recover the debts making the whole period six months. As indicated in the Table 14, more than half of respondents intimated that they are able to recover debts owed by customers within three months, meaning that it takes additional three months to be able to recover debts owed. Also a little over a quarter of respondents indicated that it takes almost a month to be able to recover outstanding debts.

Respondents representing 8 percent specified that, it takes more than six months to recover outstanding debts, while 4 percent of respondents suggested that it takes more than six months to recover debts. The difficulty associated with the rate of recovery can be traced to the very nature of the items sold (such as heavy duty engines, axles and others) and also, how fast the brand or category of auto parts move on the market. Those who fall within one month period portrays primarily customers who buy for their retail businesses and therefore do not buy heavy or bulky auto parts which move very slow on the market. These findings suggest that auto parts importers are very cautious when selling goods on credit basis. The implication

is that the longer the recovery period, the more auto parts importers become prone to losing their working capital and increasing their operating costs.

Table 14

How long does it take to recover unpaid debts?

Debt Recovery Period	Freq	% of Total	Cummulative % of Total
One month	7	28	15
Three months	15	60	88
Six months	2	8	96
More than six months	1	4	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 15 indicates that delays in repayments of debts have impact on the profit margins of auto parts importers more than any other aspects of their businesses. Respondents in total pointed out that any delay in repayment of debts have profound negative impact on their revenues and this translates into reduced profit margins as costs of operating increase with depreciation in the value of the cedi in relation to major trading currencies, especially the US dollar. While other respondents intimated that delayed repayment of debts affect their working capital, other respondents also indicated that undue delay in repayment affect their capital as they are forced to make payments to creditors even when they have not received revenues from customers who purchased on credit basis.

The implication is that as transactions are denominated in cedis in Ghana, exchange rates movements will have maximum impact on auto parts importers` profits once prices do not reflect forward exchange rates but rather spot rates. It is true that auto parts are bought in US dollars, the Euro, the British pound and other trading currencies, but once goods are

invoiced in cedis, importers are exposed to exchange rates risks as payments are made in cedis and therefore, dealers need to convert back to these foreign currencies to be able to import again. Consequently, most auto parts importers are not able to import in volumes as they normally will have done. The trading activities of auto parts dealers have been on a continuous downward trajectory prompting several agitations in recent times for the central government to put in place policies and programmes to help sustain and grow the industry.

Table 15

How does delayed repayment affect your auto parts business?

Observation	Freq	% of Total	Cumulative % of Total
Capital falls	4	16	16
Working Capital declines	6	24	40
Profits decrease	13	52	92
Others	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

In finding out what happens to auto parts importers` profits when exchange rates are stable, Table 16 indicates that 84 percent of respondents are able to increase their profitability while 16 percent of respondents are just able to maintain their profit margins with no appreciable growth. However, no respondent denied the fact that profits are positively affected in a period when exchange rates are stable. This means that when exchange rates are stable, importers of auto parts are able to import or buy more and sell at prices that ensure that their margins increase and this increases their ability to expand and increase the volume of trade. The implication is that business activities are positively affected when exchange rates are stable for a longer period and this allows businesses to plan into the future.

Table 16

What happens to your profits when exchange rates are stable?

Effect	Freq	% of Total	Cummulative % of Total
No change	4	16	16
Profits decrease	0	0	16
Profits increase	21	84	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 17 sought to find out what happened to profits of auto parts importers in 2014 when according to the Bank of Ghana, exchange rates were volatile. The result obtained shows that majority of dealers experienced a decline in profits as prices of imported auto parts rose in real terms because of the persistent fluctuations in exchange rates between the cedi and the major trading currencies. Respondents representing 16 percent alluded to the fact that, during 2014, there was no visible changes in their profits as they took advantage of the situation and managed to sell in volumes and at prices that contained the effect of the exchange rate volatility. However, some respondents representing 8 percent indicated that their profits actually increased in 2014 when there was high exchange rates volatility. These importers intimated that they were able to sell their goods at prices that had forward exchange rates factored into them and while the market saw a general contraction, they managed to import and sell in larger volumes to consumers thereby spreading costs. This is contrary to the theoretical position, that foreign exchange rate volatility reduces the incentive to trade and allocate resources to productive sectors.

Table 17

In January 2014 the exchange rate between the cedi and US dollar was GH¢2.39/US\$1 increasing to GH¢3.19/US\$1. How did it affect your profits?

Effect	Freq	% of Total	Cummulative % of Total
No change	4	16	16
Profits decreased	19	76	92
Profits increased	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Generally, respondents indicated that businesses were adversely affected by exchange rates volatility which reached all-time high during 2014 as reported by the bank of Ghana. Table 18 shows that respondents representing 48 percent of the sample used for the study indicated that the general level of risks of doing business increased in 2014 as costs of all factors of production through to sales increased dramatically. Other respondents representing a little above a quarter of the sample used also indicated that profits declined as sales went down because prices of goods generally shot up as exchange rates depreciated widely in 2014 putting a number of people out of reach in patronizing their goods. A few respondents pointed out that the general business environment was very hostile in 2014 and therefore, business activities slowed down as business owners exercised a lot of caution in investing into their businesses for fear of losing their working capital. Other respondents cited a number of factors including rent, utilities and taxes that affected business activities. The implication is that businesses could not increase their volume of trade in 2014 and therefore could not make sufficient profits to allow them expand and grow.

Table 18

How was the general business environment affected when exchange rates were highly volatile in 2014?

Effect	Freq	% of Total	Cummulative % of Total
Profits declined	7	28	28
Business slowed down	2	8	36
Business risks increased	12	48	84
Others	4	16	100
Total	25	100%	

Source: Field survey, Koomson (2016)

In Table 19 more than half of the respondents admitted that the persistent depreciation of the cedi is one major factor responsible for exchange rates volatility. Other respondents represent 32 percent of the sample used for the study indicated that excessive demand for foreign exchange is the main factor causing exchange rates volatility, while 12 percent of the respondents showed that the ever rising interest rates constitute a major cause of exchange rates volatility. However, A respondent intimated that there is not one factor responsible for exchange rates volatility but that it is a combination of all factors mentioned in table 19 including over-dependence on foreign goods. The inference is that several factors account for exchange rates volatility, but the depreciation of the cedi and excessive demand for foreign exchange have profound impact on exchange rates volatility accounting for more than 70 percent.

Table 19

What do you think is one major factor that causes exchange rates volatility?

Market rate	Freq	% of Total	Cummulative % of Total
Depreciation of the cedi	13	52	52
Interest rates	3	12	64
Excess foreign exchange demand	8	32	96
Others	1	4	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 20 indicates that auto parts dealers have different market rates that influence the pricing of their goods when selling on both credit and cash basis to customers. Respondents representing 56 percent indicated that their source of foreign exchange is the forex market and therefore, their prices are influenced by prevailing forex rates. A little more than a quarter of the respondents also indicated that the black market has been their main source of foreign exchange over the years and therefore have their prices influenced by rates obtainable from the black market at the time of sale. A few respondents representing 16 percent pointed out that, they obtain foreign exchange from banks and other financial institutions and therefore have had to use prevailing inter-bank rates to fix prices. This trend suggests that the auto parts industry has participants whose business operations are impacted by varying interest rates which include the extreme exposure to foreign exchange risks as there exists no one reliable source of foreign exchange. As a result, auto parts importers are forced to set prices for their goods at levels to enable them cover costs and make some profits to stay in business.

Table 20
Which market rate influences your trading activities?

Market rate	Freq	% of Total	Cummulative % of Total
Inter-bank rate	4	16	16
Forex market rate	14	56	72
Black market rate	7	28	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 21 indicates that more than half of respondents cited exchange rates volatility as a major bottleneck to the success of the auto parts import business as it is able to erode completely their profits and partly their working capital in periods of high volatility as witnessed in 2014. Other respondents representing almost a quarter of the sample for the study also suggested that the numerous import duties and port charges pose the biggest challenge to importers of auto parts in Ghana as they have no means of hedging against these costs increases to reduce their direct incidence on profits. Three respondents representing 12 percent of the sample however cited taxes by the central government as well as the district and municipal assemblies as a major hindrance to their business activities. The ever increasing interest rates have also been cited by a respondent as a major challenge while the rest of the respondents indicated that some other major hindrances which include a combination of several other economic factors pose huge challenge to the auto parts business as a whole.

This means that more than half of auto parts importers within the auto parts industry are exposed to exchange rate risks which emanates from the fact that they make purchases in foreign currencies but have to price their goods in the local currency, making it extremely difficult to stay in business and make good profits. With the introduction of various import

duties, penalties and port charges at Ghana`s ports of entry, it has become extremely difficult for auto parts importers to do business in the country as indicated by a quarter of the respondents. The implication is that the success or otherwise of the auto parts industry in contributing positively to Ghana`s transport sector to ensure economic growth, hinges on how foreign exchange rates are stable in allowing the auto parts industry participants trade with minimal exposure to foreign exchange risks.

Second, it is also evident that the introduction of the numerous import duties and taxes by the central government and other state agencies have a negative impact on profits and this can induce auto parts dealers to either under invoice customers or under declare the value of goods imported. Therefore the theoretical principle of purchasing power parity cannot be achieved as there exist several economic factors that impact trade differently in different trade destinations.

Table 21

Which economic factor poses the biggest challenge to your business operations?

Economic Indicator	Freq	% of Total	Cummulative % of Total
Exchange rates volatility	13	52	52
Import duties/Port charges	6	24	76
Taxes	3	12	88
Interest rates	1	4	92
Others	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

The turnover of a business measures both viability and profitability of the operations of the business. Table 22 shows that respondents selected for the study have annual turnover from Gh¢200,000 and above. Majority of the respondents indicated a turnover of between Gh¢410,000 and Gh¢600,000. Almost a quarter of respondents have an annual turnover of up to Gh¢800,000. However, respondents representing 16 percent intimated that they make a turnover of over Gh¢810,000. This means that on average, auto parts importers are doing good business with prospects for growth and development. The implication is that the larger the volume of turnover, the more likely the ability of auto parts importers to contain the effect of factors especially foreign exchange rates risks that impact trade.

Table 22
What is your average annual turnover?

Turnover range Gh¢	Freq	% of Total	Cummulative % of Total
200,000 - 400,000	3	12	12
410,000 – 600,000	12	48	60
610,000 – 800,000	6	24	84
810,000 and above	4	16	100
Total	25	100%	

Source: Field survey, Koomson (2016)

Table 23 indicates how respondents rated the contribution of the auto parts industry to Ghana` GDP. Majority of the respondents indicated that the auto parts industry is of critical importance to Ghana`s economic growth and therefore, can be rated as very good in terms of the industry`s contribution to Ghana` GDP growth. A fifth of the respondents also rated the auto parts industry`s contribution to Ghana`s GDP as good, while other respondents representing 12 percent indicated the industry`s contribution as average. However, a few

respondents representing 8 percent disagreed and suggested that the auto parts industry's contribution to Ghana's GDP is poor. This suggests that, on average the auto parts industry is a very important industry which needs proper policy framework to guide and control the activities of participants to help realize the full benefits of the industry. The implication is that the introduction of any policies particularly targeted at the activities of auto parts importers should help sustain and grow the industry rather than stifle its` growth and development as the road transport system is the only major means of transport for goods and services in Ghana now.

Table 23

How would you rate the contribution of the auto parts industry to Ghana's GDP?

Assessment of contribution to Ghana` GDP.	Freq	% of Total	Cummulative % of Total
Very good	15	60	60
Good	5	20	80
Average	3	12	92
Poor	2	8	100
Total	25	100%	

Source: Field survey, Koomson (2016)

As indicated in Table 24, majority of respondents in their estimation intimated that reduction in import duties and port charges can go a long way to harness the full potential of the auto parts industry. With the introduction of restrictive regulations on foreign exchange transactions by the bank of Ghana, respondents representing over 25 percent indicated that easing restrictions on foreign exchange transactions will help the auto parts industry to grow and expand to help Ghana's economy. Other respondents suggested that the level of taxes is inimical to the auto parts industry and therefore, reduced taxes will help the industry to grow,

while a few other respondents indicated that it should take a multi-purpose approach to help the auto parts industry to grow. The implication is that import duties and port charges will continue to hamper the growth of the auto parts business in Ghana greatly unless these duties and charges become productive to the auto parts industry.

Table 24

What in your estimation can be done to harness the full potential of the auto parts industry in Ghana?

Policy options	Freq	% of Total	Cummulative % of Total
Reduction in import duties & port charges	11	44	44
Tax exemptions	3	12	56
Ease on foreign exchange transactions	7	28	84
Others	4	16	100
Total	25	100%	

Source: Field survey, Koomson (2016)

In summary, the study found that auto parts importers in Ghana are extremely exposed to exchange rate risks as a result of several factors. Exchange rate volatility, domestic currency depreciation, credit sales, debtors` period, high default payment rate, sources of imported auto parts, excessive demand for foreign exchange and type of foreign exchange market constitute the determinants of exchange rate risks which affect the profitability of auto parts importers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study was motivated by the many challenges that continuously confront the auto parts industry in Ghana as a result of the nature of the business activities of participants and the lack of interest and support from government and financial intermediaries in spite of its critical importance to the transport sector and the employment the industry generates for the youth in Ghana. The purpose of this study is measure how exchange rates volatility impact on the trading activities of auto parts dealers, specifically importers, and how this affects their profits in the end. The study adopted the following questions to guide the researcher to identify, search and obtain the right data to analyse and achieve the objectives of the study:

- What are the determinants of exchange rate risks among auto parts dealers in Ghana?
- Does exchange rate volatility affect the profitability of dealers in spare parts in Ghana?

The study also adopted an anti-positivist paradigm which believes that, reality is multi-faceted and complex and therefore a single phenomenon has multiple interpretations. This informed the selection of a qualitative methodology for the study which sets the researcher close to reality, uses open methods of data collection, employs naturalistic methods and captures the world in action. The choice of a descriptive research design was selected to help obtain the primary qualitative data needed to answer the research questions and to achieve the research objectives. With a target population of 60 well established auto parts importers, the sample size was calculated using the online sample size calculator from www.checkmarket.com.

The sample size calculated was 53 respondents. The study further adopted both probability and non-probability sampling methods in selecting respondents. The stratified sampling method was first used to select the various groups of importers dealing in Japanese auto parts, German auto parts and Korean auto parts. The purposive sampling technique was then used in selecting respondents from each group. The study used questionnaire and interview guide to obtain primary data.

Summary

The study reveals that, auto parts importers exposure to exchange rates risks are determined by; the depreciation in exchange rates, excessive demand for foreign exchange, type of foreign exchange market, sources of supply of goods, credit sales, credit period, nature of goods imported and high default rate. Profitability of auto parts importers are thus affected by the continuous depreciation in exchange rates between the cedi and the major trading currencies as goods which are imported with foreign currencies are priced in the domestic currency.

Conclusions

The study found out that the auto parts industry is faced with the enormous challenge of undue exposure to exchange rates volatility as every item is imported into the country using foreign currencies. The US dollar was found to be one single foreign currency that dominates the trading activities of auto parts importers. Profitability of auto parts importers is directly affected by exchanges rates movements as importers are largely able to sell their goods to various types of customers basically on credit basis. The length of credit period given to customers by importers was found to determine how profitable or otherwise trading would be. However, import duties and port charges as well as domestic taxes were also found to impact negatively on auto parts importers` profitability.

Default in repayments is a factor that also contributes to the exposure of auto parts importers to exchange rates risks as delayed repayments affect the real value of sales. Depreciation of the cedi is a major determinant of exchange rates volatility and as trading currencies appreciate against the value of sales denominated in cedis, importers incur losses as payments are made in cedis, but not in foreign currency. An unexpected finding is how some auto parts importers were able to increase their profit margins through increased volumes of trade when exchange rates were volatile. The theoretical view is that exchange rates volatility impact negatively on trade and reduces the incentive to allocate resources efficiently to productive sectors. This is a deviation from theory, and the possible explanation is that, auto parts importers took high risk to invest into their business activities and therefore increased sales when risk averse importers reduced trading.

Recommendations

The study makes the following recommendations to enable policy makers, financial institutions and auto parts industry players to make informed policies, develop products and programmes to enable the auto parts industry make maximum contribution to Ghana's economic growth and development:

1. Financial institutions should take a second look at how they offer credit facilities in foreign currencies to customers by expanding their products to cover those in critical sectors of Ghana's economy especially the auto parts industry which serves the main transportation system in Ghana.
2. The government of Ghana should put in place policies and programmes that will facilitate the auto parts business through reduction in import duties and taxes to enable importers sell at prices that meet the pocket of ordinary motorists to help reduce the carnage on our roads.

3. The financial market in Ghana should be developed to the level that will enable importers to hedge against exchange rates risks to help auto parts importers sustain and develop the auto parts industry to create employment for the teeming unemployed graduates in Ghana.
4. There should be a conscious effort on the part of government at stabilizing the value of the domestic currency (the cedi) against the major trading currencies to enable importers plan their business activities effectively to minimize their exposure to exchange rates risks which militate against their profitability.
5. The over-aged policy on used cars imported into Ghana should also be given a second look. As levels of incomes of majority of Ghanaians are low thus preventing the purchase of brand new vehicles, the old vehicles in the system which are affordable to most people should also have affordable auto spare parts to keep them running and therefore requires the lifting of the penalty on used auto parts.
6. Government should work to reduce restrictions on foreign exchange transactions especially in the banking sector, as these regulations only serve as inducement for speculators to cash in and buy foreign currencies in large quantities and sell them on the black market later. This will go a long way to reduce the demand for foreign exchange
7. The transport ministry should engage key players in the auto parts industry and fashion out a comprehensive programme that will ensure that quality but affordable auto parts are imported into the country to support the transport sector in providing the needed service to facilitate the safe movements of goods and people.
8. Participants in the auto parts industry should work together to increase the number of partnerships and evolve into companies to enable members have the financial muscle

to take on huge credit facilities from financial institutions to expand their businesses and create employment for Ghanaians.

9. The issue of quality standards should be taken serious and given the attention it requires. Importers of auto parts into Ghana should continuously be given technical training by the ministry of transport to help them assess the quality of auto parts before bringing them into the country to ensure safety on our roads.
10. Government should have an effective tax system that will help track and monitor all trading activities of auto parts importers as they make hundreds of thousands of cedis in sales, but under declare their taxable profits which results in reduction in tax revenues to the state.

Suggestions for Further Research

The study makes the following suggestions in the light of revelations that emerged which require further research efforts to help address the numerous bottlenecks facing the auto parts industry in Ghana:

1. A research effort should be made at determining and measuring the actual value and contribution of the auto parts industry to Ghana`s economy to inform policy direction.
2. A quantitative research approach could be used to further study and measure the impact of exchange rate risks on auto parts importers profitability to contribute to existing literature.
3. A research effort could be direct at studying the impact of the auto parts business on employment creation in Ghana to ascertain how the auto parts business help in solving the unemployment situation in Ghana.
4. Further research effort is required to assess the impact of bank of Ghana`s restrictions on foreign exchange transactions on the growth of the auto parts business.

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