

AFRICA UNIVERSITY
(A United Methodist-Related Institution)

**ANALYSIS OF BARTER TRADE AS A MODE OF TRANSACTING IN
THE MANICALAND TIMBER INDUSTRY A CASE OF ALLIED
TIMBERS.**

BY

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER IN BUSINESS AND
ADMINISTRATION IN THE COLLEGE OF BUSINESS, PEACE, LEADERSHIP
AND GOVERNANCE**

2020

Abstract

Many African countries have faced economic crisis associated with liquidity crisis. A liquidity crisis is the negative financial situation characterized by a sudden and prolonged evaporation of both market and funding liquidity, lack of cash flow, with potentially serious consequences for the stability of the financial system such as shortage of physical cash, lending funds, banks could be running out of cash, defaults, layoffs, bankruptcies and failing financial institutions among others. This research used the case of Allied Timbers to analyse effects of using barter trade as a way to steer around the restrictions imposed by cash and credit guided by Karl Marx's Capitalist Theory. The research determined whether the barter trade activities being conducted at Allied timbers aligned to the set preconditions of Marx's commodification theory of barter trade. The challenges faced when using barter trade were identified by the research. The research also looked at whether barter trade can be used as a liquidity solution. Research data was collected through telephone interview questions where a sample of 50 contractors out of 80 was chosen using convenient sampling. By using Allied timbers as a case study it was evident that timber is a commodity which can be used for barter trade and the preconditions that were set by Marx's commodification for barter trade were being met. The research also uncovered that barter trade enhances the ease of doing business through steering around restrictions caused by liquidity challenges of cash and credit shortages. It was also evident that Allied timbers was able to deal with the problem of liquidity because trade enabled business continuity between allied timbers and its contractors. The research also found out that one of the major problems the contractors faced as a result of practicing barter trade was low profitability after they sold the timber, barter trade made contractors incurred additional costs. The research also found out that the turnaround times between when the contractors got the timber until to when they sold the timber was affecting their business as their money will be held in stock of timber. The research concluded that when adopting barter trade one has to meet the preconditions set by Marx's commodification theory in order to make their product a tradable commodity and fully meets most of the preconditions. The research also concluded that using product or good for barter trade improves the liquidity position and deals with problems associated with liquidity issues such as outstanding payments thereby enabling business continuity. Also the research found out that potential problems associated with practicing barter trade were low profitability, and additional costs incurred in the acquisition and selling the product acquired from bartering. The research concluded that for barter trade to work harmoniously terms must be reviewed on a regular basis so as to rectify any un-favourable terms to either parties involved thereby further strengthening their business relationship. Future research was recommended where research on how other organisations in different sectors can adopt barter trade.

Key words: Barter Trade, Commodification, Liquidity

Declaration

I declare that this dissertation is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it ever be submitted to another university for the award of a degree.

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Acknowledgements

I wish to acknowledge the assistance received from the following people who made it possible for this document to be put together.

My supervisor, Mrs Chirima, who tirelessly guided me in conducting and compiling the entire research project, my fellow colleague Fortune Chimeri who gave me courage to complete the document and my family who patiently put up with the difficulties and pressures encountered in getting work done. I would like to also thank Doctor Murairwa for relentlessly giving pointers and shaping the direction of my research.

I also want to express my gratitude to staff at Allied timbers and the Allied Timbers Contractors for their assistance and patience in providing required information and answering the interview questions. To all I want to say, most sincerely, thank you.

Dedication

This research is dedicated to my grandmother, mother and brother, Ressie Chairuka, Catherine Chairuka and Tinotenda Taruwinga.

Definition of key terms

Commodity	In Marx's theory, a commodity is something that is bought and sold, or exchanged in a market.
Barter Trade	It is a type of trade where goods or services are exchanged for a certain amount of other goods or services and no money is involved in the transaction.
Liquidity	The ability of a company to meet its financial obligations as they come due.

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CHAPTER 1 INTRODUCTION

1.1 Introduction

This chapter presents the background of the study, statement of the problem, aim of the study and objectives, research questions and significance of the study. Moreover, this chapter also focuses on assumptions and sets out the scope, limitations and definitions of the study. This chapter introduces the concept of barter trade and it highlights the general adoption of barter trade as a means of trading internationally. This chapter also introduces the domestic use of barter trade in Zimbabwe and the focus will be based on a local company Allied Timbers Zimbabwe. The barter trade practices which include barter trade policies, the relationship barter trade has created for the company and identifying the challenges the organisation has faced with using barter trade were explored for this study.

1.2 Background of the Study

Most countries have managed to acquire economic alleviation over the years and trade borders have been opened up threats from international competition which in turn has made economies more fragile. Economic crises have been affecting different types of companies and businesses from small to large (Uyan 2017). During an economic crisis or economic recession, the production capacities of most businesses decrease, and their stocks remain idle due to a decrease in demand and cannot be turned into cash hence businesses remain with excess stock. Economic recessions are also associated with liquidity challenges which have a negative impact on the cash flow of most companies. Hence in a bid to find a viable solution to these depressing periods, companies and businesses, economists, countries have turned back to basics and have re-buckled down to the barter exchange economy. Hence in the present-day barter trade has been presented for the use in companies and some economies of some countries that have transformed and have innovated from both the micro economic areas and macroeconomic areas. Mpinganjira (2011) highlights that barter trade is a primitive and crude system and it is an unrefined system of exchange and developed countries are still

practicing barter trade in the present day through barter companies as well as other primitive and underdeveloped countries. The Universal Barter Group highlights that thirty percent of the world's total business was conducted on non-cash basis in 2008. Mpinganjira (2011) states that of the population of the companies that are listed on the New-York stock exchange, sixty-five percent of them have practiced barter trade in the whole of the United States, and one third of all small businesses have been involved in barter. Barter trade is like a puzzle to some economists (Davis, 2009).

Keys and Malnight (2012) in their Global Trends research, state that their discussions with senior executives around the world, shows that in response to tighter credit and budgets companies are exploring new ways to create and capture value. In this context, they see bartering as a way to steer around the restrictions imposed by cash and credit, to extract value from perishable or underperforming assets, and to expand channels to market and find new customers.

Companies create and capture value through the help of Barter Exchanges. Barter Business Exchange (2019) highlighted that a barter exchange a barter trade company that specialises in barter trade and is a liaison for businesses that contract with their organisation in order for them to organize and facilitate barter of their goods and/or services with other business owners. Barter Exchanges also act as a clearing houses and third-party record keeper of trade transactions among its clients. However, the Concept of Barter Exchanges is still expanding and is still yet to be explored hence organisations and individuals indulge in barter trade using their own barter trade agreement and policies.

1.2.1 General Background

Zimbabwe faced a huge economic recession that was associated with non-affordability of basic goods and services, long queues at banks, unavailability of local currency in banks as well as being limited on withdrawals, inability to make any projected financial

planning and inability to make credit purchases (Makochekanwa,2009). Makochekanwa (2009) expressed that these challenges are the reason why most people ended up resorting to barter trade in order to counter some of the difficulties associated with such problems.

Kachere (2018) in her research states that the major reasons for Zimbabweans engaging in barter trade included 97% of respondents citing the scarcity of cash drove them to the option of practising barter trade, three percent cited that they engaged in barter trade so as to secure goods for resale (export) in countries of destination and other reasons included but were not limited to unstable exchange rates and high inflation rates. Kachere (2018) also states that Zimbabweans engaged in barter trade so as to cushion themselves against this whirl winding rate of inflation hence people resorted to barter trade, were traders exchanged goods i.e. groceries for livestock or any other assets at hand.

In a report by Mabasa (2017), domestic barter was introduced in Zimbabwe where the minister of primary and tertiary education Dr Lazarus Dokora allowed schools to accept live stock as a mode of payment and also institutions like Mission hospitals such as Howard adopted the barter trade system where it accepted livestock and grain as a settlement for medical bills. The introduction of barter trade was as a result of the loss in confidence in the country's financial sector associated with cash shortages and limited access to plastic money however a few disputes arose on pricing and lack of proper barter trade policies (Mabasa, 2017).

1.2.2 Timber Industry

Maduna (2018) highlighted that the timber industry in Zimbabwe has been struggling to survive due to high costs of production, a slump in construction and they have been facing loss of their timber inventory as a result of deforestation from illegal miners and contractors making space for their own operations. Chitagu (2019) highlighted that

timber hectareage that had timber supply was eroded thereby resulting in a sharp decline from one hundred and twenty thousand hectares to just seventy thousand hectares which was attributed to the harsh business environment, illegal settlers, miners and veld fires.

Chitagu (2019) states that the Timber Producers Federation chief executive, Darlington Duwao, encouraged the need to recapitalise the timber industry so as to revamp the sector so as to avert domestic timber supply shortages but however, commercial plantation owners were to look for means to meet their finance requirements. Due to the economic challenges Zimbabwe has been facing associated with high interest rates, it has presented Commercial plantation owners with the challenge to access and difficulties to borrow due to the high cost of borrowing thereby resorting to finance their operations through arrangements where payment was done in kind or via barter trade (Chitagu 2019).

In a report by Kadzere (2016), Allied Timbers Zimbabwe risked sinking deep into financial crises due to shortage of timber stock and in a bid to try and raise finances to re-capitalise its forests which are regarded as Zimbabwe's largest forests which sustains the countries timber industry. Bande (2016) highlighted that Allied Timber's financial crisis was attributed to antiquated machinery and shocking asset stripping at Allied timbers and financial crisis had a ripple effect associated with contractors dragging their feet in their operations due to high outstanding payment of services rendered and the company reeled under seven months wages and salaries arrears obligations that it was supposed to meet.

In a bid to breach the gap, between sourcing for finance and revamping its business activities, Allied Timbers engaged about 50 contract saw millers so as to cover production shortfalls since the company was falling short in terms of equipment, under a barter trade agreement that the organisation would share the harvested timber equally between the organisation and its contractors (Kadzere, 2016).

Kadzere (2016) mentioned that, the timber-producing giant Allied Timbers Zimbabwe (ATZ) abandoned contract milling because the ATZ chief executive officer, highlighted that the system had become more of a problem to the embattled firm than a solution because the system had become unsustainable as a result of contractors who were indiscriminately felling trees thereby leaving the state owned company without adequate timber to feed its own mills and factories hence the company was revising its policies in terms of the barter agreement so as to come up with a mutual beneficial agreement.

1.3 Statement of the problem

Due to the economic recession in Zimbabwe, Allied Timbers Zimbabwe faced the ripple effects of the recession namely reduction in production capabilities, idle stock and low cash flows. The recession affected Allied Timber's production capabilities hence the organisation resolved to hiring contractors to assist the organisation in producing. Allied timbers lost seventy percent of its processing capacity and relies on 3rd party contactors to harvest timber (Sibanda, 2018).

On top of limited production capabilities, the organisation also has been facing financial challenges due to the economic recession in Zimbabwe thereby resulting in low cash flows. Hence Allied timbers has been failing to meet its contractor obligations as a result of inadequate cash flows to finance the payment of the huge contractor bill as the company's financial system had crippled which resulted in contractors dragging their feet in their operations due to high outstanding payment of services rendered (Bande, 2016). Allied Timber's financial system had crippled to the extent that the organization got assistance from IDBZ and Agri-bank and the Government of Belarus facility (Bande, 2016).

Hence in a bid to continue getting assistance in their production by contractors as well as meeting the contractor obligations, Allied Timbers Zimbabwe introduced a Barter Trade

System whereby it settled the contractor bill with the equivalent value of timber. Allied timbers engaged 50 contractors under the barter trade agreement that Allied Timbers and the Contractors would equally share the production output by half (Kadzere, 2016).

Allied Timbers chief executive officer elaborated that the system had become more of a problem to the embattled firm than a solution because the system had become unsustainable (Kadzere, 2016). Barter trade proved to be a liability more than a financial relief to the organisation as contractors were indiscriminately felling trees and Allied timbers lost a substantial amount of two hundred million as a result of felling of trees that was done by contractor settlers over the past years thereby leaving the state owned company without adequate timber to feed its own mills and factories (Mambondiyani, 2013). Hence the company was putting a hold to the barter trade agreements so as to revise its policies of the barter agreement so as to come up with a mutual beneficial agreement.

Hence this research using Marx's Capitalist theory seeks to explore the barter trade practices at Allied Timbers and see if they meet the policies that are set out in Marx's commodification theoretical framework. This research also seeks to ascertain if the barter practice improves the problems of liquidity of the company as far as settling contractor outstanding contractor payments is concerned. The research will also look to identify challenges presented by the barter trade practice as well determining the relation between Allied timbers and its contractors.

1.4 Research Objectives

The Objectives of the research were to:

- 1.4.1 Determine the factors to be considered when adopting barter trade or commodity exchange as a mode of transacting.
- 1.4.2 Ascertain whether barter trade can be as a solution of the liquidity problems of the company.

1.4.3 Identify the challenges being faced by contractors in the barter trade system.

1.5 Research Questions

1.5.1 What are the factors to be considered when adopting barter trade or commodity exchange as a mode of transacting?

1.5.2 What extent does barter trade deal with the liquidity problems of the company?

1.5.3 What are the challenges being faced by contractors in the barter trade system?

1.6 Assumptions

The current economic and financial conditions under which Allied Timbers is trading remain constant. The respondents would answer the questionnaires correctly.

1.7 Significance of the study

This study increased the researcher's knowledge with respect to the adoption of barter trade practice as a way to deal with liquidity challenges. The study also improved the researcher's knowledge in understanding barter trade as a counter measure to liquidity challenges, where organisations go through a process called commodification, in which numerous factors or practices that are considered in order for a product to be feasible for barter trade. To the academic world it extends knowledge with respect to barter trade practice in its real-life context with a local organization Allied Timbers Zimbabwe.

This study improved the researcher's knowledge with respect to practical use of barter trade to tackle liquidity challenges imposed with economic challenges if it is properly utilized or implemented in an organization. Organizations that are facing financial challenges can look into barter trade as an alternative solution of transacting. To the academic world it extended knowledge to an alternative solution of using barter trade as a mode of payment so as to steer around challenges imposed by lack of. To the community it presents room for opportunity to embark in business by utilizing barter

trade to commence business thereby ensuring continuity of business without stalling due cash shortages.

This research helped me discover the challenges that are associated with practicing barter trade. These problems will inform organizations of the problems that they are likely to encounter when they embark in barter trade. To other scholars it presents an opportunity to research on how to eradicate the challenges associated with barter trade.

1.8 Delimitation of the study

Research was conducted at Allied Timbers Mutare. Only the company's contractors from the Estates in Manicaland were considered for this study. These contractors are the practitioners of barter trade hence they assisted in verifying their barter practises with Allied Timbers Zimbabwe so as to determine whether the practise satisfied the preconditions that were set out in Marx's Capitalist theoretical framework. With the assistance of the contractors, the researcher managed to determine whether timber met the definition of a commodity which is a good or service that is made for the purposes of exchange.

Since Contractors faced liquidity challenges due to economic challenges and cash shortages, they helped determine whether the introduction of barter trade improved their liquidity and ease in doing business. The barter trade system has its own challenges that it faces hence contractors also played a crucial role in identifying the challenges that are faced as a result of practising barter trade and they will also highlight how barter trade has affected their relationship with Allied Timbers. Individuals or organisations enter into relationships because they are interested in the commodity that the other has hence the contractors help clarify whether their relationship improved as a result of the introduction of barter trade. The study covered the period from January 2019 to December 2019.

1.9 Limitation of the study

Access to creditors geographically was difficult as they are located in the Estates. This is due to poor infrastructure and road networks. Also, the financial resources to meet up with the creditors as the estates are widely geographically dispersed.

Layout of the research

The preceding chapters in this research highlighted various literatures that underpins this research project by giving background information of barter trade, from the common types of barter trade, their advantages and disadvantages. Literature on the modern practises of barter trade by barter exchanges was availed briefly followed by the theoretical framework Marx's Capitalist theory the main focus being on Commodities, how they are recognised and the effects of exchanging commodities and the relevance of the theoretical framework to the study. The research went on to highlight how the research methodology of how the study would be conducted. The section highlighted how the single case study was going to be carried out using a qualitative research design and how self-administered questionnaires were used for collecting data how the results were analysed.

The research went on to present the analysed data that was collected from the respondents which showing the results from the aforementioned research objectives. Responses of whether timber was an exchangeable commodity, the effects of barter trade on liquidity, potential problems and the relationship between Allied Timbers were shown in tables followed by comments. Lastly the research went on to summarise the research and gave conclusions of whether timber was a commodity and whether exchanging timber improved the liquidity as well as the potential problems that were discovered and lastly whether the relationship between Allied timbers and its Contractors was improved as a result of introducing barter trade. The research went on to give recommendations and other areas of further research concerning barter trade.

CHAPTER 2 REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter presents available literature available relevant to this study to be carried out. This chapter begins by looking at the overview of barter trade giving informative information about barter trade followed by a brief explanation of the types of barter trade systems and their pros and cons. Moreover, this chapter also focuses on the theoretical frame work which is Marx's Capitalist theory which introduces the concept of commodification which entails the introduction of barter trade and the preconditions that are to be satisfied when carrying out commodity exchange/ barter trade (Leys, 2012). This chapter also presents information on whether barter trade improves liquidity as well the associated problems that are anticipated as a result of adopting barter trade. The chapter is an informative part of the research as it highlights on relevant chosen literature on barter trade.

Overview of Barter Trade

Sandu (2014) highlighted that due to circumvent prevailing liquidity challenges, companies have resorted to barter trade as a medium of exchange after struggling to pay for goods or services rendered. He also mentioned that workers at Meikles Limited told the parliamentary thematic committee on Indigenisation and Economic Empowerment that the group was giving retired workers plates or hotel accommodation for them and their spouses. Resorting to barter trade was a stop gap measure to alleviate the tight liquidity situation and barter trade would bring difficulties at the end of the day as companies need to convert the goods into cash to pay workers' salaries (Sandu, 2014). Money plays four key functions unit of value, medium of exchange, standard of deferred payments and store of value. Money measures the value of goods and services produced in an economy and as such it becomes the unit of value.

The International Reciprocal Trade Association reports that in 2011 over 400,000 companies worldwide used bartering to earn an estimated \$12 billion on unwanted or

underused assets (Keys & Malnight, 2012). Global Trends research, along with discussions with senior executives around the world, show that in response to tighter credit and budgets companies are exploring new ways to create and capture value. Hence in this context, bartering is seen as a measure used to steer around the restrictions imposed by cash and credit, to extract value from perishable or underperforming assets, and to expand channels to market and find new customers. Barter trade is described by Keys and Malnight (2012) as a mutual benefit, which is supposed to provide an alternative mode of transacting without using cash. It enables those companies or countries who are short supply of foreign currency to obtain goods and services between countries. Business bartering has been around for a while for example in 1990 Pepsi conquered the USSR by exchanging the soft drink for vodka. According to Keys and Malnight (2012), companies considering bartering should consider 3 main factors namely: Are there services for which you could barter to improve your cost base or capacity utilization? What underperforming or non-strategic assets do you have that could generate value through creative bartering? What other assets could you benefit from bartering?

Jean (2019) highlighted that before money was introduced, goods were exchanged without a monetary value attached but however even after the introduction of money businesses and people still barter. Modern barter trade is conducted through virtual interfaces and these interfaces have organizations that control and manage the barter trade between individuals and businesses. These barter systems are called barter exchanges. Barter exchanges enable one to trade with more businesses but however barter exchanges require subscription fees that include an initial membership fee, transactional percentages, monthly maintenance fees and some barter exchanges charge monthly fees to stock the account and to encourage buying and selling.

According to Acca (2007), a barter transaction is the exchange of goods or services, in exchange for other goods or services. Barter trade benefits companies and countries that

see a reciprocal gain in the exchange of goods and services rather than transacting in cash. Barter trade also permits those in deficit of hard currency to obtain goods and services from others. Barter trade is operated parallel to monetary systems even in established economies although to a more limited extent. Most barter transactions that are performed are usually bilateral but however some can be multilateral. The advent of online bartering sites has made multilateral bartering more common. Barter trade has evolved into a tool that businesses sometimes use in order to increase their efficiencies by monetizing their idle capacities and utilise excess inventory. In recent times, barter trade also has become an effective tool that is used to increase sales, conserve cash, move excess inventory and capitalise on excess production capacity for businesses (ACCA, 2007).

ACCA (2007) highlights that the introduction of online bartering sites has rendered multilateral barter trade to be a more common practise. A trade or barter exchange is a commercial organisation that offer trading platforms and bookkeeping systems for its members or clients. Simple barter trade involves no cost as this involves exchanging goods and/or services of the same value and monetary value is used as a unit of measurement. The exchange's role is to provide services such as record keeping, brokering expertise and provision of monthly statements to members of its network. Commercial exchanges profiteer from charging commission on every transaction performed on their network, either on the buy or sell side nor a combination of both. Comparing commercial exchanges to one on one barter trade there have been some concerns raised of unequal exchanges that are associated with individual barter which can be reduced by joining a barter exchange.

Naughton (2013) says barter trade still has its place alongside the mainstream economics, particularly during an economic crisis. Governments such as Ireland, France and China have been contemplating on launching state sponsored barter schemes. Also thirty percent of the worldwide business according to IRTA was transacted on a barter

basis and examples of barter trade was when Mercedes Benz bartered buses for bananas in a deal worth 65m and PepsiCo embarked on a barter deal with Russia to swap cola for Stolichnaya vodka (Naughton, 2013) .

Types of Barter Transactions

There are different types of barter transactions and the following are the main 5 barter transactions. Direct trade is one of the barter transactions and is defined by Tran (2015) as the direct exchange of goods or services without using a medium of exchange. Another Form of a barter transaction is Partial trade. According to Tran (2015), it is a situation where one barter away goods for partial trade and partial cash. Partial trade is a great way to conduct barter trade as it cushions you with cash to settle barter costs. Another way to conduct barter trade is called associated trade. According to Tran (2015), this is a situation where one trades in an association or a third-party group that brings together many different businesses and you trade into a bank. Conjoined trade is a situation whereby one mixes their products and services with other products and services to trade together either by using partial trade or full trade. Lastly according to Tran (2015), investment trade is where one invests their services with no expectation of getting an immediate payoff, but instead getting referrals and building relationships which will pay off for years to come.

Commodity and Exchange

Wang (2019) highlights that, a commodity is something that is bought and sold, or exchanged in a market as shown in Marx capitalist theory. A commodity has an exchange value, which means that a commodity can be traded for other commodities, and thus giving its owner the benefit of others' products of labour. Price is then the monetary expression of exchange-value, but exchange value could also be expressed as a direct trading ratio between two commodities without using money, and goods could be priced using different valuations or criteria.

There different forms of commodity trade whereby variables such as money and the commodity are used differently. There are about 7 commodity trade forms according to Chen (2020). The first form of commodity trade is whereby money purchases a commodity, or money is changed into a commodity. The second form of commodity trade is when a commodity is sold for money. The third form of commodity trade is when a sum of money is lent out at interest to obtain more money, or one currency or financial claim is traded for another were money begets more money. The form of commodity trade is countertrading whereby a commodity trades directly for a different commodity, with money possibly being used as an accounting unit of measurement. The fifth form of commodity trade is when a commodity is sold for money and the money acquired is used to acquire different commodities with an equal or higher value. The sixth form of commodity trade is when money is used to buy a commodity which is resold to obtain a larger sum of money. The last form of commodity trade is a complex one where money is used to pay for means of production and labour power used in production to create a new commodity which is sold for more money than the original outlay. The focus of this research is C-C countertrade where a commodity trades directly for a different commodity with money being the accounting referent.

2.2 Theoretical Framework

An explanation of Marx's capitalist theory will be covered which includes commodification and valuing of commodities. An in-depth explanation of the factors to be considered for a successful exchange of commodities will be covered (Leys, 2012). According to Uyan (2017), in the Journal of Economics, Finance and Accounting, barter trade is a tool that can be used as an alternative trading and financing tool in times of economic crisis as well as the strong relationships that can be derived from practising barter trade. In this section the different types of trade according to Uyan (2017) will be covered as well as their pros and cons which are associated in using the different types of barter trade. Hence these theories will be used in the context of Allied timbers to determine whether its practices meet those highlighted in the commodification theory of

trade and whether barter trade improve liquidity and well as the challenges associated with using barter trade in order to satisfy the research objectives.

2.3 Marx's Commodity theory

According to Nicholas (2011), capitalism is a commodity production system characterised by the existence of a surplus product which assumes an exchange value or money form and is appropriated by producers in relation to the exchangeable worth of inputs advanced to undertake production. Nicholas (2011) states that in commodity production as well as in capitalism, producers act in isolation from one another.

According to Hamid and Kazeroony (2014), Marx's capitalism theory has two main components which are commoditization and labour value are involved. The concept of commodification introduces the concept of barter trade which is production for exchange in the market. According to Hamid Kazeroony (2014), at the beginning of commodity exchange, people bartered one product for another. The theory of commodification is used to ascertain whether barter trade enhances the ease of doing business imposed by cash and credit since commodity exchange barter one product for another and also Marx's commodification lists practices that are to be satisfied in order to determine whether the barter trade can be practised at ease.

Rigi (2012) states that the major question one must ask themselves is whether to trade or not to trade, before trading a commodity because the commodification of a product or service involves a considerable pragmatic achievement in trade because the process of commodification is influenced by economic, technical factors, political and cultural factors. The process of transforming a product into a commodity involves aspects such as the rights of ownership of a commodity, the right to use resources and quality assurance as well as safety of use of the product.

According to BIS (2016), barter system can be used to restructure a company's accumulated debt as well as have any payables. The clearing of the problem of

accumulated debt is dependent on the fact that commodities are exchanged for other commodities using labour value as the common factor between the exchange values of the commodities. Market debts are paid by utilizing overstock shown by commodification and idle capacity of an organisation thereby avoiding any accumulated debt or creating further payables. Hence organisations do not have to sell their commodities to acquire money so as to be able to acquire commodities (M-C-M). Capitalist theory of exchange value/ barter trade allows for a commodity to be exchanged for another commodity (C-C). Hence organisations are not supposed to delay paying other organisations as the Capitalist theory of exchange value facilitates for immediate exchange of commodities through markets.

Ollman (2017), states that in capitalism producers seek to maximise profits through the prices of their products, i.e. to appropriate as large a part of the exchangeable worth of the total surplus produced as possible. In Marx's theory of Labour Marx's sets out different ways how the exchange value of a product is determined thereby presenting a potential problem of pricing as well as profiteering from barter trade. Marx's highlights that the exchange value of a product is its market value hence when conducting barter trade if producers seek to maximise profit this will pose as a hazard where it will not leave room for profit for the provider of labour. In Marx's Capitalist theory, labour is considered a commodity thereby enabling its exchangeability with other products on the market.

Felluga (2015), states that in commodification goods are exchanged in a way that directly relates one item to another by consideration of the specific useful and concrete labour used to produce the object. The objects exchanged are tied closely both to the use-value of the objects (their immediate usefulness) and to the real, material labour expended to produce the object. In capitalism, that concrete labour tends to get translated into an abstract quantity that can then stand as an equivalent form that one can use to determine the exchangeability of all sorts of products (Felluga, 2015).

Felluga (2015), states that the differences between different kinds of labour and different sorts of use-value no longer matter, one begins to think of labour as an abstract, undifferentiated quantity that one can exchange for analogous abstract quantities of labour congealed in other products. The labour that creates value is now explicitly presented as labour which counts as the equal of every other sort of human labour, whatever natural form it may possess, hence whether it is objectified in a coat, in corn, in iron, or in gold”.

Felluga (2015), then highlights that movement thus begin to move towards a universal equivalent, a single abstract measure by which one can facilitate the exchange of categorically different items on the market. A similar transformation occurs in the value of the given product. In the exchange of goods on the capitalist market, exchange-value rather than use-value dominates. Felluga (2015), explains, exchange-value must always be distinguished from use-value, because the exchange relation of commodities is characterized precisely by its abstraction from their use-values. By abstracting value into exchange-value, the stage is set for the eventual dominance of first gold and then paper money as the universal equivalent of capitalist society.

According to Felluga (2015), by accepting money as the universal equivalent, capitalism eventually manages to exploit the labourer upon whom all value ultimately inheres, according to Marx. That is, money tends to hide the real equivalent behind any monetary exchange which is labour. The more labour it takes to produce a product, the greater its value.

Felluga (2015), states that in commodity exchange, one can exchange a commodity for money or a commodity for the equivalent value of another commodity. One sells in order to buy something else of use to the consumer and Marx writes this formula as C-M-C (Commodity-Money-Commodity). The aim of the capitalist theory is the

unceasing movement of profit-making. Once again, what is forgotten in this process is the labour-power upon which the whole system of profit relies which is the purchasing of a person's labour-power in exchange for full ownership of the product thus produced.

Factors to consider during commodity exchanges

According to Bendien (2007), in the first chapters of *Das Kapital*, Marx traces out a brief logical summary of the development of the forms of trade, beginning with barter and simple exchange, and ending with a capitalistically produced commodity. This sketch of the process of marketization shows that the commodity form is not fixed once and for all, but in fact undergoes a development as trade becomes more sophisticated. There must be excess stock or product or idle stock of which the supply constantly available and must be reliable. In simple commodity production, not all inputs and outputs of the production process are necessarily commodities or priced goods, and it is compatible with a variety of different relations of production but however, it is the producer himself who trades his surpluses.

Bendien (2007), states that there must be relative demand of the product in the markets or a social need for it which can be met through trade. That is, one should have the desire and capacity to buy a commodity and should be willing to pay its price to constitute effective demand for that commodity. Once one has acquired the commodity there must be a legal approved declaration of private rights of ownership of the commodity and the rights to trade the commodity as well. According to Bendien (2017), a commodity is an alienable object that it is subject to transferable private property rights which are legally or practically defined. Hence when carryout barter trade there should be clear definition of the transferrable rights.

These afore mentioned rights must be enforceable in order to secure ownership especially in the instance of Pseudo commodities. According Bendien (2007), Marx acknowledged explicitly that not all commodities are products of human labour all kinds

of things can be traded as if they are commodities, so long as property rights can be attached to them. Pseudo commodities are fictitious commodities or fiduciary commodities. A property right or financial claim, for instance, may be traded as a commodity their existence as commodities is only nominal or conventional. They may not even be tangible objects but exist only ideally. Another factor is the transferability of these private rights from one owner to another. The members and management of commodities exchanges are responsible for establishing and enforcing rules and regulations that govern the trading of these barter trade contracts.

The commodity must be physically transferable and there must be the possibility to store, package, preserve and transport the commodity from one owner to another. The amount that must be transferred is the amount of the commodity represented in the contract. This can be expressed in a metric unit, an Imperial unit or a traditional measurement unit such as a barrel or bag.

Bendien (2007), states that exclusion to access the commodity must be enforceable. Exclusion can be enforceable by including an exclusion clause in a contract. An exclusion clause is a term in a contract which intends to exclude one of the parties from liability or limit the persons liability to specific listed conditions, circumstances, or situations. The owner must be able to use or consume the commodity privately at any given time. Exchanges stipulate the delivery date for each contract and the method and place of delivery to the owner for personal or private consumption. Some commodity contracts are settled through financial payments rather than physical delivery.

Guarantee of the commodities quality and safety must be outlined and the possibility of replacements if any faults occur (Bendien, 2007). These are the features that describe the commodity being traded in the contract. For example, the commodity may have to come from a particular region or have certain physical characteristics.

The commodity must be produced at a production cost that will be adequate to attain a sale price that gives ample profit and predictable income or profit. According to Bendien (2007), a commodity has different value which include a social use-value, a material use-value and a utility for the buyer, an exchange-value, a market value, a production price and the actual market price. In the case of some pseudo-commodities, notional commodities or fictive commodities, they may have a utility for the buyer and an exchange-value, but no value. Hence for the successful implementation of barter trade, the production price must be known in order for the other party to determine a price that give profit.

According to Bendien (2007), the production and trading of the commodity should not risk or pause a threat of undermining the business of the company. Organisations that engage in barter trade need to be cautious of the amount of barter business they engage in as compared to cash business. This is because if not well managed barter trade can be a threat to the cash flow of an organization as well as to money paying customers and the value of a company's products.

2.4 Barter trade as a liquidity measure

According to Uyan (2017), the growing of commercial and financial integrations between countries with globalization has been leading to intense competition and global economic crises. Hence companies have been facing some difficulties in carrying on their business thereby managing the crises with traditional marketing and financing techniques. Uyan (2017), states that these companies have been turning to alternative methods, one of them is barter system meaning buying and selling goods and services without using money. Barter is an innovated form of exchange system used as a trading method since the early ages. Barter offers companies various benefits such as moving inventory, utilizing idle capacity, increasing sales, supplying interest-free credit, debt configuration, foreign trade facilitation. Hence in looking at barter trade as a liquidity measure Uyan (2017), in the Journal of Economics Finance and Accounting by named

barter as an alternative trading and financing tool and its importance for businesses in times of economic crisis, was used. The following are the types of barter trade by Uyan that are used to deal with liquidity challenges in times of Economic crisis.

According to Uyan (2017), in order to survive in today's economic conditions where financing is expensive, demand is decreased, market has become stagnant, competition has increased, global crises are experienced companies are turning to alternative economic methods. One of these methods is barter model which can convert the resources economically and is not based on money. Barter, which has been used in different forms from the past to the present, has succeeded to be trade and finance method of every age. Today, innovative elements have been added to barter method which is the oldest method of trade and the method is being reused in this way.

Today's barter industry is applied in three different types which are retail (organized) barter, corporate barter and international barter. Barter is now a system that serves hundreds of sectors and hundreds of thousands of companies. Moreover, not only commercial enterprises, but also public institutions, municipalities, local governments and even governments are involved in the barter market to finance their needs with idle capacities. According to Uyan (2017), companies in Turkey use barter system mostly for idle capacity, stock excess, liquidity problems, accumulated debts, risky receivables, financing and marketing problems. The following are the types of barter trade by Uyan that are used to deal with liquidity challenges in times of Economic crisis.

2.4.1 Types of Barter transactions used to deal with liquidity

According to Uyan (2017), retail barter is also known as organised barter trade and it is an arrangement were by firms or organisations or individuals who are affiliates of barter organisation transact and make payments for goods and services that they acquire in their network by disposing of goods and services which they produce or trade on this market. Uyan (2017), states in the journal of economics that a vast variety of companies

from the numerous sectors for example retailers, service providers, sole traders even self-employed individuals can use retail barter to perform business transactions and gives an example of the barter trade market in Turkey where a vast majority of products and services are exchanged such as real estate, written advertising as well as visual advertising, tickets for airline, motor vehicle rentals, guest house/ accommodation, clinic or hospital services, ready-to-wear clothing, building materials, furniture and fittings as well as educational services.

According to Uyan (2017), exchanges between member companies are materialized and handled by barter companies such as brokerage houses which organise the barter transactions which in turn will allow member businesses to find funding for future transactions by selling their own goods or services. Barter trade transactions can be performed on a one hundred percent barter basis or they can be done on a fractional barter basis. Transactions that are made by affiliate firms of barter organisations are recorded and these transactions are multilateral which enables the barter organisations to perform checks of debt or receivables to the current accounts of their member companies. Member companies of a barter organisation can perform barter transactions by getting the products and services that they need without paying money to the other affiliate companies in the system, but however a predetermined time will be set in which the members have to perform transactions with other members (Kenton ,2019).

Barter companies are also the custodians of the brokerage firms and they are accountable laying out of transactional terms and conditions of barter trade that will be used in conducting barter transactions. Examples of such terms include the pricing, quality of products and services, delivery time and place, after sales services that are required by the buyer from the seller. Termination of membership of the affiliates can be as a result of the expiry of a members contract, as a result of a deliberate request to terminate the contract and either when an affiliate is deemed unfit to be a member after careful deliberation by the barter company (Kenton, 2019).

Uyan (2017) explains that, retail barter processes can be performed multilaterally, and multilateral barter eradicates circumstances where bilateral barter transactions are impossible to perform or unsatisfied. This offers a vast opening of substitutions to supply and demand. When multilateral barter transactions are performed several associate businesses are collectively introduced to each other through the arrangements made by a barter company which will make shopping, transacting and trading with each other easier. The introduction of various organisations will enhance multi-sided and multi-commodity trading network which will be accomplished through cross exchanges in the barter market continuously.

Pros of organized barter

Clegg (2012), states that barter trade improves liquidity this is because, companies can put excess capacity to use thereby by-passing currency restrictions. Companies can capitalise on the systems that enable cashless exchanges that are put in place by barter companies and the affiliates of these barter companies can transact without using cash but by merely exchanging goods and services thereby improving the company's cash flows as they would have performed moneyless transactions (Delaney, 2019). This thereby lives them with excess cash which can be channelled for other investments and enhances company growth.

Bayar (2009), states that another advantage of organized barter trade is that it provides credit on all goods and services based on a zero-interest rate for a period not exceeding twelve months. The members of the barter company are only required to settle the cost of the goods they would have bought from its fellow members who are in the system.

Kenton (2019), highlights that the advantage of barter trade is that it moves idle or excess stock which would have accumulated as a result of poor business decisions or environment as well as poor marketing skills. If members of a barter company have

perishable stock, they can take the opportunity of moving their stock within the network of the barter company without affecting their sales outside the barter network

Z-Yen (2011) says that barter trade presents the opportunity to utilise an organisations idle capacity which in turn will lead to companies capitalising on economies of scale which reduces the cost of production per unit. Uyan (2017) highlights that barter trade provides competitive advantage this is because a barter system does not allow saturation of companies producing a homogeneous product as it will narrow the variety of products in the network of a barter company. Meacham (2010) says that barter trade offers free and effective advertising and promotion of products that are being sold

. According to Beau (2014), barter trade increases the sales of the organisation through utilising idle capacity thereby providing profit increase and barter trade enables effective marketing of an organisation's products. Uyan (2017) states that barter trade allows financial structuring through restructuring a companies' accumulated debt and risky receivables. Financial structuring is achieved by using barter as companies that did not have the financial power to pay off debts can utilise idle capacity or excess stock to settle market debts.

Barter trade leaves room for international trade opportunities this is because some barter companies have international firms in their network hence local firms can deal with international firms thereby giving them more exposure to international business (Emerson, 2019).

Corporate Barter

Corporate barter is practised by most organisations in order to move or capitalise on excess stock or inventory (Gage, 2014). Producing companies, leading distributing companies and retailers exchange products, goods and services with companies that are in their trading network. The barter transactions can either be fully the exchange of

goods and services or the transaction can be performed partially in cash for and remaining the remaining will be settled through barter trade.

Uyan (2017), highlights that when carrying out corporate barter, the managers of the respective corporates who are interested in exchanging or trading products have to reach a consensus and setup a special type of contract or arrangement that is beneficial to both parties and this type of barter trade is called bilateral barter. One of the simplest forms of barter trade is bilateral barter. Bilateral barter trade involves an exchange of either goods or services and the exchange must be mutually beneficial to both firms involved were both parties involved are both seller and buyer in all instances.

Benefits of corporate barter

Gage (2014), highlights that the benefits of corporate barter to be that products lines or specific products with a low turnover rate resulting in excess stock are converted into a current asset under receivables. Corporate barter trade helps organisations to utilise and find ways that can capitalise on idle capacity. The networking provided by barter trade improve or increases market share without any capital outlay for advertising and promotions. Barter trades widens an organization's enables the establishment of new marketing networks.

International Barter

According to Kenton (2019), counter trade agreements are another form of international barter trade. Kenton (2019), describes counter trade is a form of international trade whereby an agreement that involves two governments of different countries is not all transacted in cash. Counter trade can be named differently depending on the basis on which transactions are performed such as the types of goods sold, the mode of payment that will be used whether cash was used to perform the transactions, duration it will take for payment to be made and the number of entities involved in the transaction (Uyan, 2017).

When performing countertrade, the goods the countries technology and services to be exchanged will be quoted or expressed in a certain currency at a fixed price in exchange for the transfer of other goods, services, technology or receivables and not for cash. Counter trade is a remedy that can be used by countries experiencing economic hardships such as shortages of hard currency and low currency hence these countries effectuate the transfer of goods and services as well as technology between each other (Uyan, 2017). Howse (2010), highlights that countertrade is estimated to account for twenty to thirty percent of the world trade

Developed countries identify counter trade as an instrument or alternative way that can be used to move its products across borders rather than having little or no sales at all Laurel (2019). Uyan (2017) explains that counter trade was first introduced when the 1st world economic crisis happened in 1929. The main good or products that were exchanged when performing counter trade agreements were minerals, agricultural products and some processed industrial goods. Counter trade when performing international trade can also be called classical barter, clearing agreements, switch trading, offset deals, counter-purchase, compensation, buy-sell, buyback etc (Laurel, 2019).

Ersun (2010) states that, counter trade can be classified into two main criteria which are the duration of the relationship between parties and the density and scope of the relationship. Counter trade relationships that have been mutual between trading allies for a long period create a robust and ample long-lasting relationship that exposes the parties to new collaboration opportunities which complements the working activities between the parties. Otherwise, short-term techniques like barter take over (Ersun, 2010).

Counter-Trade Types

According to Ersun (2010), one type of counter trade is when barter transactions are conducted amongst two exporters and importers in two different countries by bartering goods. This type of counter trade states that the exporter has to import goods that are equivalent to the same cost of goods exported and the importer has to export the equivalent cost of goods imported. Under this arrangement of counter trade, foreign trade deficits are not experienced this is because the transactions performed are realised without the use of convertible foreign currency. The type of goods that are exchanged when performing counter trade are usually unrelated with each other. International barter agreements are usually generally for a short period usually up to a maximum of 2 years. Most countries engage in international barter to secure strategic goods such as mineral ores, cereals and pulses (Ersun, 2010). Examples of international trade are when Iran exchanged petroleum for weapons, and in the 80's PepsiCo an American company exchanged vodka with a Russian company Stolichnaya and the vodka was marketed in America (Ersun, 2010).

Benefits of International barter trade

Uyan (2017) highlights that, money (foreign currency) in a country will be protected as transactions are moneyless. Barter trade improves the product range in an economy. Barter trade enables products to penetrate new markets. Practising barter trade improves the production capacities of exporting firms. International barter promotes close foreign trade deficit (Ersun, 2010). International barter promotes the preservation of a country's Central Bank foreign reserves as imports are realized without paying cash (Toroslu, 2010).

2.5 Barter trade Challenges

Cons associated with organized barter

The cash flow balance may be impaired because its receivables remains as an idle fund in barter system (Oduncuoğlu, 2007). Commission and membership fee are incurred if barter trade is conducted through trading houses (Tekşen, 2006). There is a need to

provide strong guarantees (Oduncuoğlu, 2007). Standards for the financial bookkeeping and reporting for barter activities have not yet been formulated hence recording the data from the barter transaction poses challenges.

Challenges of corporate barter trade

Bayrav (2009), states that bilateral barter processes make it difficult to strike a balance between demand and supply this is because matching the values of the goods in exchange between buyer and seller may be difficult as one may not be interested in the goods that are available in the network of the barter company. Barter trade operations are challenging to implement in an organization where by a special barter department must be setup.

Challenges of international barter trade

According to Uyan (2017), the laying out of a contract terms and conditions that will ensure an orderly and safe transaction is beneficial between the buyer and seller may prove to be difficult as the parties involved must provide guarantee of payment. Premium products are usually unavailable for international barter as the barter market will be competing with the cash market hence supplier prefer selling in the cash market.

Products that are offered by international barter may deviate from the company's mission statement and core business. Barter trade transactions are difficult to value in order to enable the accurate calculation of duty and taxes. There is information asymmetry in terms of how barter is practiced between companies. Practicing international barter means companies will incur additional costs such as transport costs and customs and clearing costs (Uyan, 2017).

Other Barter trade challenges

Mpinganjira and Oliver (2010) state that there are common difficulties or impediments that are associated with barter trade which range from negotiations and administrative

requirements, product quality and disposal, use of intermediaries as well as with the impact of barter trade on the financial side of the business.

Ference (2009), states that barter trade, unlike monetary transactions, is characterized by protracted negotiations before an agreement can be reached. While this gives an opportunity for the parties involved of knowing each other better, the negotiations can be too time-consuming depriving the staff involved of time for other business activities. Additional administrative staff may thus be required to not only negotiate but also to monitor, enforce and control the terms of barter deals. Mpinganjira and Oliver (2010), also noted that barter trade often results from excess stock that is difficult to sell through normal cash channels. Barter trade can thus be used by companies to offload low-quality products.

Mpinganjira and Oliver (2010) also highlight that the process of verifying the quality of products offered is sometimes difficult due to lack of knowledge or expertise in a particular product category amongst other factors. Another challenge that they highlighted was that firms that accept products with the intention of reselling become competitors since they will be offering similar goods to the market. Mpinganjira and Oliver (2010) say that, organisations that engage barter brokers when conducting barter trade face an extra charge for their services. Knes (2007), states that the charges can often be exorbitant, thus diminishing the potential profits from barter trading.

Mpinganjira and Oliver (2010) highlighted that organisations must be wary of accepting disproportionate amount of barter business compared to cash business as they still will have expenses that need to be paid for in cash such as salaries. Hence it is clear that despite the many associated benefits associated with barter trade there are many potential challenges associated with barter trade which may prevent firms from engaging in it or optimally reaping its benefits.

2.6 Relevance of theoretical framework to the study

According to Bendien (2007), Marx's Capitalism theory introduces two main components which are commodification and Labour Value. The concept of commodification introduces the concept of barter trade which is production for exchange in the market or commodity production. Marx's commodification theory list factors that must be present for a successful exchange to occur. The labour value theory introduces the issue of valuing a commodity and the value can be expressed in monetary terms.

The theory of commodification is used to ascertain the factors or preconditions that must be evident in order to carry out successful exchanges or barter trade. Marx's theory of commodity exchanges highlights that organisations do not have to sell their commodities to acquire money so as to be able to acquire commodities (M-C-M). but rather it allows for a commodity to be exchanged for another commodity (C-C). Hence the focus of the research was to look at the factors that must be present for there to be successful exchange of commodities or barter trade.

The use of barter trade or commodity exchange is however not highlighted by Marx commodification theory as a tool that is used to tackle liquidity, but it introduces how the concept came to pass and the factors involved. According to Uyan (2017), in the Journal of Economic, Finance and Accounting, barter trade or commodity exchanges or moneyless exchange is a tool to that can be used to tackle liquidity challenges during an Economic crisis. Barter trade according Uyan (2017), barter offers companies various benefits such as moving inventory, utilizing idle capacity, increasing sales, supplying interest-free credit, debt configuration, foreign trade facilitation. Uyan (2017) gives the types of barter trade and how they help deal with liquidity challenges during times of economic crises as well as the advantages associated with using such types of barter trade. The research aims to see whether barter trade can be used as a solution of liquidity challenges.

Uyan (2017) gives a list of cons or challenges that are expected by using the different types of barter trade in order to tackle liquidity challenges. The main challenge being the impairment of cash flow as a result of holding value in stock received from barter transactions. Another common problem that arises as a result of barter trade as found both in Marx's commodification or theory of exchange as well as with Uyan is the valuation of the exchange of the goods in question were by both parties involved in barter trade will equally benefit from the transaction. Hence one of the objectives of this research was to identify the challenges the practitioners of barter trade were facing.

2.7 Summary

An explanation of Marx's capitalist theory was covered that included commodification and valuing of commodities. The theory of commodification gave the characteristics of an exchangeable commodity as well as the effects of trading a commodity that included improving liquidity to name the few. The exchange values and prices were also explained that help determine a goods exchange value when being exchanged and the potential problems of determining the value of the product. These theories will be used in the context of Allied timbers to determine whether its practices meet those highlighted in the capitalist theory of trade in order to satisfy the research objectives.

A vast of scholars and authors have looked deep into the theory of commodification. Tomas and Rodrigo (2018) analysed the commodification of information and technology and they looked into the challenges that maybe associated with the commodification of information and technology guided by Marx's Capitalism. Westra (2017) captures the prism of conceptualisation of the commodification of labour power in Marxist theory. Hence Marx's capitalist theory has been used to determine whether different types of goods and products from various sectors are a commodity. Mpinganjira and Oliver (2010) highlighted the different challenges practitioners of barter trade faced on their research of Impediments of barter trade. Uyan (2017), highlights how barter trade can

be used as an alternative trading and financing tool in times of economic crisis as well as the strong relationships that can be derived from practising barter trade. Uyan also highlights the different types of trade as well as their pros and cons.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter outlines research methods that were used to conduct the study. It provides information on the participants, that is, who the participants and how they were sampled. The researcher described the research design that was used for the purpose of this study and the reasons for this choice. The instrument that was used for data collection was also described and the procedures that were followed to carry out this study are included. Lastly the researcher also discussed the methods that were used to analyse the data collected.

3.2 The Research design

The researcher used Allied timbers as its case study in-order to investigate the effects of using barter trade as a mode of transacting. The case study was used to research barter trade within its real-life context as being practiced at Allied timbers. A single case design of Allied timbers was used to conduct the research. An exploratory case study was used to uncover the practices and the use of barter trade by Allied timbers. An exploratory case study on barter trade was used to explore the phenomenon in the data presented in chapter 2 which serves as a point of interest to the researcher usage of barter trade by Allied timbers and its contracts.

A qualitative research design was used to uncover trends in thought and opinions, and dive deeper into the use of barter trade. Semi-structured techniques for collecting the qualitative data guided by the literature review was used to collect data. Individual telephone interviews were used to collect data. The sample size was typically small, and respondents were selected to fulfil the given quota as guided by Morse (1994), who suggested 30 to 50 respondents if saturation occurs and adding more participants to the study does not result in additional perspectives or information.

According to Yin (1984), the case study research method is an investigation into a modern day practice in order to verify a research problem within a real-life context of use, when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used. Researchers can adopt either a single-case or multiple-case design depending on the issue in question. In cases where there are no other cases available for replication, the researcher can adopt the single-case design. In this research, a single case of Allied Timbers was adopted.

A descriptive case study was used because it provides an accurate portrayal or account of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group. This design was chosen to meet the objectives of the study, namely to determine the factors to be considered when adopting barter trade or commodity exchange as a mode of transacting, to ascertain whether barter trade can be used to improve the liquidity problems of the company and to identify the challenges being faced by contractors in the barter trade system by using barter trade using Karl Marx commodification and exchange value theory as the guideline of conducting barter trade.

Yin (1984) notes three categories, namely exploratory, descriptive and explanatory case studies. First, exploratory case studies set to explore any phenomenon in the data which serves as a point of interest to the researcher. Descriptive case studies set to describe the natural phenomena which occur within the data in question, for instance, what different strategies are used by a reader and how the reader use them. The goal set by the researcher was to explore the data.

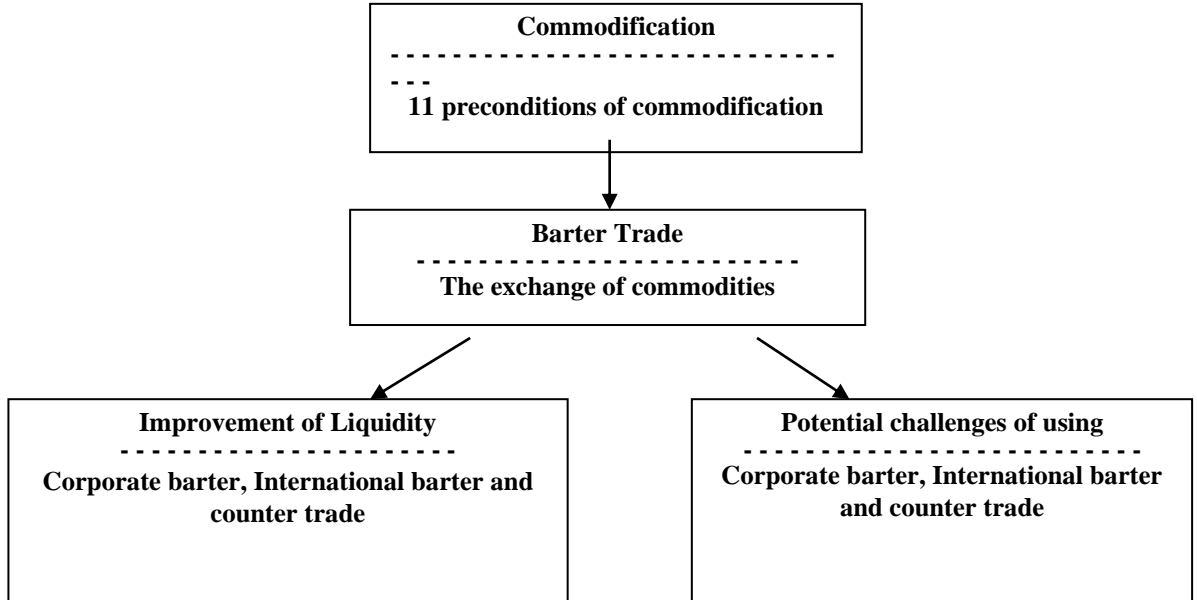
De Franzo (2011) mentions that qualitative data collection methods vary using unstructured or semi-structured techniques. Some common methods include focus groups (group discussions), individual interviews, and participation/observations and the sample sizes are typically small, and respondents are selected to fulfil a given quota.

Hence for the purposes of this research individual interviews were used and a sample of 50 respondents will be selected to fulfil the minimum requirements of the study.

3.2.1 Conceptual Framework

The aim of this research was to look at the factors involved in commodity exchanges / barter trade practice in its real-life context and see whether Allied timbers met these required factors According to Marx's commodification theory (Bendien, 2007). The research also wanted to note whether barter trade can be used as a solution to improve the liquidity during times of economic crisis being faced (Uyan, 2017). The research aimed at unveiling the potential problems and challenges that are faced as a result of using barter trade as compared to the challenges that were highlighted by (Uyan, 2017). In the following section the researcher introduced the basis on which he designed the research framework and the definition of the framework variables defined.

Fig 3.1 Conceptual framework



From the variables in fig 3.1 the research focused on acquiring information of those variable from contractors. Looking at commodification the research aimed at determining the factors to be considered when adopting barter trade or commodity exchange as a mode of transacting as well assessing whether timber was an exchangeable commodity by looking at how many contractors would agree that they

adhered to the preconditions set by Marx for commodification so as to enable the smooth implementation of barter trade.

According to Booth and Sewell (2017), in analyzing the Capitalist system Marx started by analyzing the concept of the commodity. The commodity was defined as a product of labour, a good or service that is produced or solely made or conducted for the purpose of exchange, that is for use by someone else. That commodity had values which are the use value and exchange value. Booth and Sewell (2017), highlight that the Capitalist theory elaborated that for a commodity to have an exchange-value, it must first have a use-value that is there must be social need for the commodity. Through their price products they take on a commodity form. According to Marx, money is the universal yard stick against which the value of all other commodities can be expressed. In a simple barter economy, there may be a degree of flexibility over the amount of one commodity exchanged for another in any individual, isolated act of exchange.

According to Bendien (2017), the process of changing a product of labour into a commodity is called commodification and many technical and social preconditions have to be taken into account when a labour product is being transformed into a commodity that is exchangeable for the successful implementation or exchanging of products or barter trade.

According to Uyan (2017), barter trade creates a more liquid market because it makes it easier to buy and sell whatever the commodity is a commodity is a fundamental good used in commerce that is interchangeable with other commodities of the same type. According to Chen (2018), commodification creates a more liquid market because it makes it easier to buy and sell whatever the commodity is. Chen (2018) highlights that by exchanging commodities or goods and services organisations improve their liquidity as the direct exchange leaves organisations with excess funds and also the organisations will remain with a few creditors thereby improving their liquidity ratios.

As a result of commodification practices there are numerous challenges that one faces. According to Michie (2013), when conducting barter trade or exchanging products a problem of bourgeois occurs which is double inequality of exchange. Gale (2008) highlights that valuing a commodity has been one of the challenges as it has an exchange value and use value. Hence barter trade has numerous problems that arise as a result of exchanges.

Rubin (2017), identifies that another problem associated with the capitalist theory, exchange value and commodity fetishism are relations between people. Commodities seem to have value and power but however the actual strength lies in the relationships between the parties whose work is integrated through exchanging commodities. According to Robinson (2018), highlights that whenever there is a pattern of repeated and successful commodity exchanges, eventually relational goods connected to human feelings and relationships will be exchanged as well.

Hence the research illustrated the relationship between a commodity and commodity exchanges, improvement of liquidity as a result of exchanging commodities and potential problems associated with these exchanges. Figure 3.1 shows the relationship between the variables that were in the research.

Also, in this research, it also looked at how barter trade improved liquidity by looking at the time period it took contractors to be paid when using barter trade as well as at whether any contractors have received payments late when using barter trade. Whilst looking at liquidity, the research also looked at determining how many contractors agreed to the notion that barter trade facilitated quicker settlement of debt than cash. Lastly the research looked at discovering the potential problems that were faced by contractors as a result of practising barter trade as well as looking at the frequency the

problem arose amongst the contractors so as to assess the magnitude of importance of the problems.

3.3 Population and Sampling

3.3.1 Study Population

The study population in this research consisted of a population of 80 Allied Timbers Contractors which were extracted from Allied Timbers data base. The total population of 80 respondents were all active and non-active Allied timbers contractors who practiced barter trade. The population of 80 constituted contractors who engaged in Sawmilling 19, Haulage 19, Silviculture 38 and Loading 4. Ben and Khen (1993) noted that the target population is a group of individuals that have one or more interests and characteristics to the research. Gray, (2011) said target population refer to the entirety of people, organizations, objectives or incidences from which a sample is drawn. The population sample is referred to by Chakwesha (2015) as a representation of the entire group of study elements selected for study, observation and analysis hence it is a small portion drawn out to represent the large population.

3.3.2 Sample size

From the population of 80 respondents a sample of 50 respondents was chosen. The goal of this qualitative research was to attain saturation. Saturation occurs when adding more participants to the study does not result in additional perspectives or information. Hence for the purposes of this study a sample of 50 participants was chosen from the population of 80. According to Morse (1994) he suggested 30 to 50 interviews if saturation is attained. Tabachnik and Fidell (2001) defines a sample as that part of a large population that gives a representation of the entire population. Sampling has been defined by Gay (1985) as the method of selecting a set of subjects for a research skilfully in such a manner that the individuals are representative of the larger group from which they were handpicked. Qualitative analyses typically require a smaller sample size than quantitative analyses. Qualitative sample sizes should be large enough to

obtain enough data to sufficiently describe the phenomenon of interest and address the research questions.

3.3.3 Convenience sampling

Due to the dispersion of the contractors in different locations and the unavailability of network, a convenient sample was taken on the nearby from plantations. This sampling technique was based on the notion of availability of network and accessibility of Allied Timbers contractors, since most of them are located in estates in the Chimanimani area. Convenience sampling was used in conducting out this research and the response rate of the total population of activities constituted above 50% of the respondents. There was a 78.95 percent response rate from saw millers, 47.37 percent from haulage, 63.16 percent from Silviculture and 50 percent from loading. The involved respondents were a clear-cut sample drawn from the population under study that was readily available and convenient to the researcher. The researcher used this sampling technique for the reason that it is relatively the easiest, cheapest and, above all less time consuming as compared to other sampling techniques.

3.4 Data Collection Instruments

The research data was collected through using interviewer administered questionnaires. This was because respondent literacy not necessary and questions and responses would be clarified, and it allowed probing for additional information. The interview questions were complex and open-ended questions were possible and it ensured the answering of the questionnaire by intended research participants

3.5 Data Collection Procedure

Case study method was conducted through interviews. Interviews and focus groups are the most common methods of data collection. A list of verbally administered questionnaires with predetermined questions were uniformly asked with no variation to the way they were asked. Structured interview questions were used to explore Karl

Marx's Commodification and Exchange Value theory and to device interview questions. Close Ended questions and open-ended questions were used to carry out the interview. The interviews were conducted in a way that acknowledged the four important facts of human social interactions that influence what people are likely to say to you. These four facts are that research questions are not the same as interview questions, people's espoused theories differ from their theories-in-use and interviews are social occasions.

There are three fundamental types of research interviews which are, structured, semi-structured and unstructured. Structured interviews are, essentially, verbally administered questionnaires, in which a list of predetermined questions are asked, with little or no variation and with no scope for follow-up questions to responses that warrant further elaboration. Consequently, they are relatively quick and easy to administer and may be of particular use if clarification of certain questions is required or if there are likely to be literacy or numeracy problems with the respondents. Hence the interview questions were guided with Karl Marx's exchange Value theory in order to get responses that were used to see if the way barter trade is conducted at Allied timbers satisfies or meets Karl Marx's exchange value theory.

3.6 Analysis and Organisation of Data

After the data was collected it was organised and analysed. For analysis of closed-ended questions, a computer programme called Statistical Package for Social Sciences (SPSS) was used. Data was analysed using descriptive statistics. Frequency tables were drawn and from these the data was presented in tables. The close-ended questions were analysed through quantitative content analysis by the researcher with the aim of quantifying emerging characteristics and concepts. Open ended questions were listed, and frequencies drawn on how many times the response came from the respondents.

The identity of research participants was always protected through anonymity or confidentiality. Anonymity means that there is no way to identify a person from the

information provided which is ensured, for example, by keeping personal details separate from survey responses, or by participants not sharing their names with researchers. For research purposes only the company names were revealed and not the name of the respondents.

3.7 Ethical Considerations

In conducting the research, ethical considerations were taken note of and well exercised as explained. The research respondent's participation in the research was voluntary and respondents were given the right to withdraw from the study at any stage if they were uncomfortable with the questions. The researcher provided sufficient information and assurances to the respondents about taking part in the study as well as implications of the study and the respondents chose to freely participate without the exercise of any pressure or coercion. The use of discriminatory, offensive, or other unacceptable language was avoided in the formulation of the research interview questions. Anonymity and privacy of respondents was kept in the research. Acknowledgement of the works of other authors used in this research through referencing using the APA referencing system.

3.7.1 Validity

In this research, a reasonable level of validity was established. The researcher chose a sample of respondents who have been using barter trade and left out those who have not used barter trade. The researcher also carried out a pilot study for the interview guide to find assess the acceptability of the interview questions and to assess whether the questions covered the theoretical framework being used. Deep saturation into the study was used for validation and it was discovered that the responses became more consistent across the sample. When the researcher was carrying out his interviews, he asked questions to ensure the validity of the data.

3.8 Summary

This chapter focused on the methodology that was used in this study. An explanation of qualitative research as a method for data collection and analysis was given. Measures followed during the data collection were discussed in this chapter and the information about the sample was provided. The chapter also looked at how the collected data will be validated. Based on the research aim, the research objectives were justified by coming up with a framework. Moreover, the research framework which aims to explain and understand the use of barter trade in its real-life context was explained.

The suggested framework includes 4 variables. The first being commodification which is the transformation of a product of labour to a commodity which can be exchanged with other goods. The second variable is liquidity which is included the settlement period as well as the facilitation of quick payment by barter trade. The third variable is the potential problems that are faced as a result of using barter trade. The fourth variable is the strength of the business relationship between Allied timbers and its contractors

CHAPTER 4 DATA PRESENTATION ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter discusses the data analysis and findings from 50 interview questions by Allied timbers contractors who have been conducting barter trade with the organization. The purpose of this study was to analyse the effects of using barter trade as a mode of transacting in the Timber industry using the exchange value and commodification by Karl Max.

Telephone interviews were held with the Allied timbers contractors who were reachable after being assured of the anonymity of their personal and company details to their interview. During the interviews, the interviewer noted down answers to the questions asked as well as further comments from the respondents. Out of population of 80 respondents, a total of 50 contractors were interviewed who have been practicing barter trade with Allied timbers from a period of less than a year and over.

The data from the questionnaires was statistically analysed by the researcher. The SPSS version 20 program was used for the data analysis. The findings are discussed according to the sections of the questionnaire and then with reference to Marx's Exchange Value Theory. The chapter starts by giving information on the response rate of the respondents looking at the population and actual responses. The chapter then highlights the respondent's demographic data. It then gives the responses according to each objective from the interview questions that were conducted.

It starts by giving responses from contractors on whether their barter activities were aligned with the factors that are considered during barter trade according to Marx and the analysis of the results as well as the discussion and interpretation of the results of whether timber is a commodity. It then goes on to show the results of whether barter trade can be used as a solution to liquidity challenges as well with the analysis of the

results as well as the discussion and interpretation. The next section goes on to highlight the respondent's challenges that they face as a result of using barter trade followed by discussions.

4.1.2 Response rate

The response rate to my requests for interviews with various selected participants was fairly encouraging. The required responses from the selected areas were not totally achieved as some of the respondents were not reachable on their mobile phones. Hence the researcher went on to contact and interview those respondents who were reachable in other areas. Table 4.1 shows the summary of the research participants against the proposed sample against the population and their specialty. In total 50 interviews were held with contractors from different business activities.

Table 4.1 Proposed and Actual Interview Respondents

Activity	Estimated population	Actual Responses	Percentage Response
Sawmilling	19	15	78.95
Haulage	19	9	47.37
Silviculture	38	24	63.16
Loading	4	2	50
Total	80	50	62.50

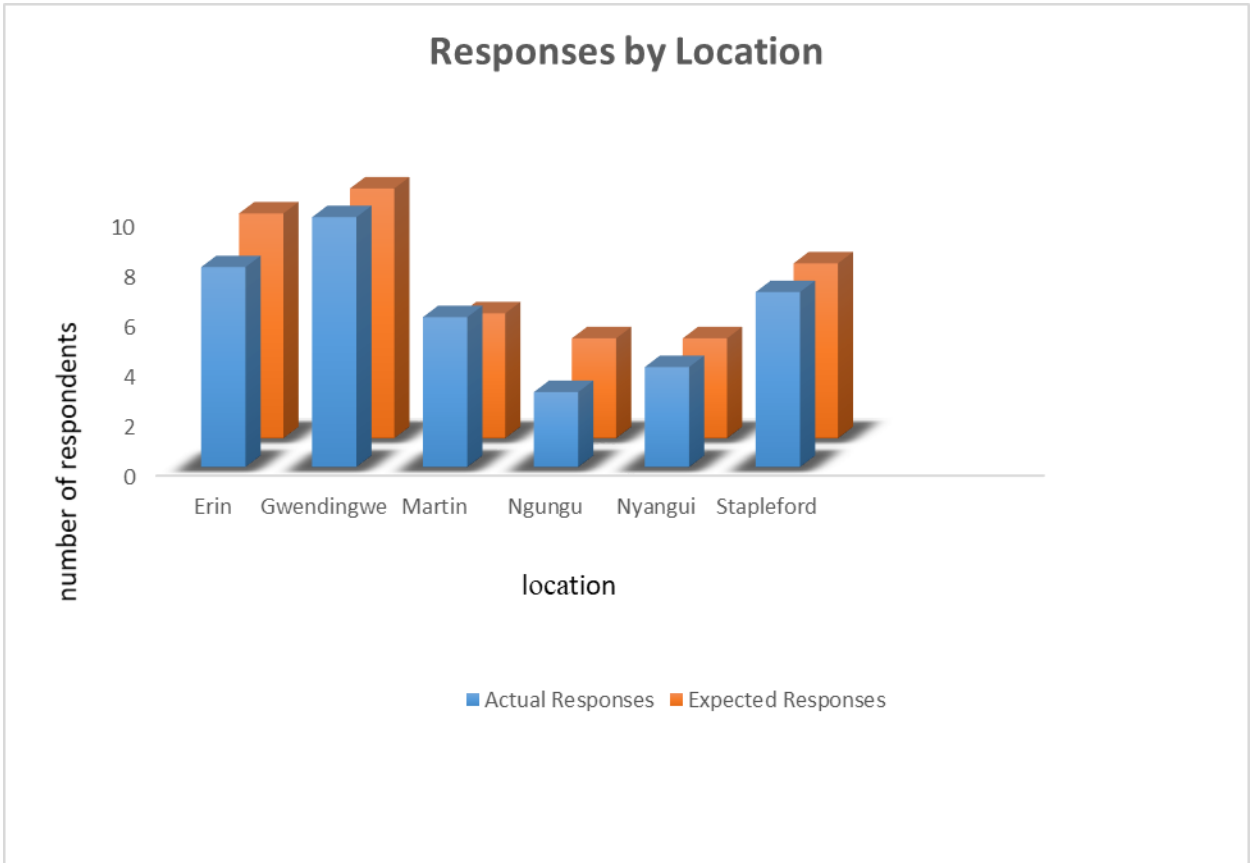
According to the presented data from table 4.1 respondents who were involved in barter trade mainly provided services such as sawmilling, haulage, silviculture and loading.

4.1.3 Demographic Data

This section shows the various demographic characteristics of the respondents by their location. It compares the expected and actual responses of the research. Supporting

tables and figures are following below. The geographical response rate showed a minimal change in trend between the expected responses and actual responses. There was a 100% match between expected response rate versus the actual response rate from Cashel, Gwendingwe, Nyangui and Stapleford and the other responses did not match entirely in areas such as Chimanimani, Erin Martin and Ngungu. The potential respondents were targeted based on the information provided from Allied Timbers data base of all contractors who were paid using barter trade/ setoffs. However, the differences in the expected and actual response rates was as a result of unavailability of network access of the respondents as they are located in remote areas.

Fig 4.1 Demographic data by Geographic Location



4.2 Discussion and Interpretation

4.2.1 To determine the factors to be considered when adopting barter trade or commodity exchange as a mode of transacting.

Table 4.2 — Results for the 14 factors of commodification

Questions	Frequency	Percent	Valid percent	Cumulative percent
1. Does Allied timbers have a reliable supply of timber or a surplus of timber?	50	100	100	100
2. Is there a market demand for timber?	50	100	100	100
3. Is there a market where timber is tradable?	50	100	100	100
4. Is there a legal sanctioned assertion of private ownership rights to the timber and the right to trade it?	50	100	100	100
5. Are the rights enforceable thereby securing ownership?	50	100	100	100
6. Are these private rights transferable from one owner to another?	50	100	100	100
7. Can the timber be physically transferred from allied to you?	50	100	100	100
8. Can the timber be stored, packaged, preserved and transported from one owner to another?	50	100	100	100
9. Can you exclude others to have access to the timber?	50	100	100	100
10. Can the timber be used or consumed privately?	50	100	100	100
11. Can allied timbers Guarantee the quality and safety of the timber?	50	100	100	100
12. Can allied timbers guarantee of replacement if quality is compromised?	13	26	26	26
	37	74	74	100
13. Does allied timbers produce the timber at a traceable cost?	6	12	12	12
	44	88	88	100
14. Does your sale-price suffice to yield an adequate and predictable income or profit?	3	6	6	6
	47	94	94	100

This section consisted of 14 close ended interview questions that the respondents were asked about their barter trade activities with Allied timbers guided by Marx's factors that all must be satisfied for the successful implementation of commodity exchange and be used for barter trade.

From the results in table 4.2 the respondents agreed 100% that from their barter trade activities with allied timbers these factors were 100% evident:

Of the 14 commodification questions 3 questions did not have a 100% agreement from the respondents. The 3 questions have been highlighted on the list of responses in table 4.2. All respondents agreed that Allied Timbers has a reliable supply of timber and that there is a high demand for timber. All respondents agreed that there are evident markets where timber is tradable and that there is legal assertion of private ownership rights to timber and to trade it. All respondents agreed that the rights are enforceable thereby securing ownership and these private rights can be transferred from one owner to another. All respondents agreed that timber can be physically transferred, and that timber can be stored, packaged, preserved and transported from one owner to another.

All respondents agreed that they can exclude others to have access to the timber and that timber can be consumed privately. All respondents agreed that allied Timbers guarantees the quality and safety of the timber. From all the respondents 74% agreed that Allied Timbers would replace timber if quality is compromised and 26% of the respondents were not sure if it would replace. Eighty eight percent of the respondents agreed that allied timbers produces timber at a traceable cost and 12% of the respondents were not sure because they said they have never investigated the cost of production. From the respondents 94% confirmed that their sale price was sufficient to yield them an adequate and predictable income or profit and 6% of the respondents said they would not disclose the profiteering information of their organizations as it was confidential.

From the 14 factors that are supposed to be satisfied in order for barter to be possible and consider timber to be a tradable commodity, 11 of the factors attained a 100% yes response rate thereby conforming to Karl Marx's Exchange values commodification of a good for barter trade purposes. The following are some of the comments and responses of the practises that the respondents in terms of their barter practice. In terms of the reliable supply of timber, all contractors agreed that Allied Timbers still has a very reliable source of timber.

The respondents also all agreed 100% that the market demand of timber is available locally and internationally and that they are failing to satisfy the required demand of the market. All respondents also highlighted that there are markets where timber is traded in Zimbabwe in most high density suburbs such as Chitungwiza where there are houses that are still being built and other public markets such as Mbare musika and other Private organizations and construction companies that order timber.

In terms of the legal sanctioned ownership rights, the respondents highlighted that the GRV for the setoff that is signed between Allied Timbers and the respondents companies serves as the legal contract and agreement of setoff contract between Allied timbers and the contractors of which the contractors keep a copy of the GRVs. Thereby making the contract enforceable by law to receive the setoff as promised.

Respondents agreed that timber can be transferred from Allied timbers estates to them and the timber can be safely stored packaged and preserved. In regards of transferability, the respondents highlighted that timber can be transferred from one owner to another.

In terms of excluding others to have access to the timber and allowing for private consumption of timber, the respondents agreed that it was possible as the timber is bought for private consumption by individuals and companies.

The respondents highlighted that Allied timbers guaranteed the quality and safety of timber because the respondents were set off with the timber, they would have harvested themselves so they know the quality of the timber that they will be paid off with. If quality was compromised the respondents mentioned that Allied timbers would replace if the timbers quality was compromised in allied timbers hands not as a result of negligence by the contractors in terms of storage and failure to treat the timber properly.

4.2.2 Improvement of Liquidity when using Barter trade.

Liquidity challenges are associated with outstanding debts and payments. Hence in this section the researcher asked the respondents about questions that were trying to prove that barter trade can steer around restrictions cause by shortages of cash and credit in times of economic challenges. Hence 3 questions were asked. The first questions asked whether barter trade facilitated quick payment or settlement of contractor's outstanding balances as compared to when they were paid in cash. Secondly the researcher asked the respondents whether they have been paid late when using barter trade and the last question that was asked by the researcher was the longest time period the contractor's had to wait for their payment when using barter trade.

The following responses were derived from the interview questions which were investigating to see if Barter Trade deals with the problem of liquidity.

The time period that Allied timbers took to pay set-off was at a maximum around 12 months and the shortest period being a month as highlighted by respondents. Most respondents highlighted that Allied timbers takes 4 months to pay when using barter trade and, on an average, it takes 6 months.

Table 4.3 - Results to show if barter trade facilitated quick payment than cash

The respondents were asked whether barter trade facilitated quick payment than being paid by cash.

Does Barter Trade facilitate quicker settlement than cash?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	y	48	96.0	96.0	96.0
	n	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

Of the interviewed respondents 96% highlighted that Barter trade facilitates quick payment better than cash and 4% viewed barter trade delayed payment than cash.

Table 4.4 — Results to show if respondents have received payments late when using barter trade

The respondents were asked if they have ever received their payments late when they were using barter trade.

Has Allied timbers delayed settling its debt when using barter trade?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	n	46	92.0	92.0	92.0
	y	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Of all respondents 90% said Allied timbers has delayed paying them using barter trade and 10 % said that the organization has not delayed paying them before.

The respondents were asked the longest time Allied Timbers had delayed in paying them whilst using barter trade in order to determine the average time the contractors had to wait to receive their timber as payments and their responses are enlisted in table 4.5.

Table 4.5 Results showing the time period Allied Timbers has delayed in paying set offs

What is the longest time have you waited for your payment when using barter trade?		
N	Valid	50
	Missing	0
Mean		6.0000
Median		5.00000
Mode		4.000
Range		11.000
Minimum		1.000
Maximum		12.000

The majority of the respondents highlighted that barter trade facilitated for quick payment of by Allied Timbers better than when they were using cash payments. The majority of the contractors (96%) highlighted that barter trade facilitated a quicker payment better than cash and also that (92%) of the contractors highlighted that they have never been paid late when using barter trade. The latest time period according to the respondents that it took for one to be paid was 12 months but however most payments averaged 6 months.

4.2.3 To identify the challenges being faced by contractors by using barter trade system.

Under this section the researcher asked the respondents about the potential problems they faced. The following table will show the potential problems the contractors faced and the frequency that problem was raised by the contractors and the problems will be ranked from the one that was raised the most to the one that was least raised.

Table 4.6 Response of the potential problems the respondents faced as a result of using barter trade.

What are the problems you are facing as a result of using barter trade		
Responses	Frequency	Percent
Low profit margins when selling timber	38	76
Extra costs incurred for storage, carriage and selling expenses as compared to receiving cash.	13	26
Low mark-up margins given by Allied timbers hence low profits.	43	86
Settlement/Exchange values are in RTGS hence buying power is being eroded	10	20
Delays in getting timber from Allied timbers as 1 st preference of distributing timber is given to Allied Timbers contractors hence revenue will be tied in un-received goods	25	50
No problems at all	5	10

From the potential problems, 86% of the contractors complained about low mark-ups given by Allied timbers and they hoped to get a review of the mark-up rates. From the potential problems the second problem that had a high respondent appearance of 76% was that the majority of the respondents highlighted that they were getting low profit margins after selling the timber. Fifty percent of the respondents also complained about the delays in receiving timber which had negative impact on the contractors businesses of tied up working capital in timber and this prolonged their turnaround time as the contractors needed to sell the timber after receiving it.

Twenty six percent of the respondents highlighted that they were facing the problem of extra costs incurred as a result of barter trade such as carriage, selling costs and storage costs. From all the respondents, 10% of them highlighted that another problem was the settlement or exchange value which was expressed in RTGS dollars instead of foreign currency. Five percent of the contractors highlighted that they had no problems with barter trade and were facing no challenges or problems as a result of practicing barter trade.

4.3 Summary

This chapter discussed the data analysis and interpretation with reference to the literature review. The aim of this study was to examine the factors to be considered when using barter trade as a mode of transacting in the Timber industry using the exchange value and commodification by Karl Max's Capitalist theory. The main findings of the investigation were summarised in each section.

From the results that were obtained from the contractors it showed that Allied Timbers' and its contractors were conforming to Marx's commodification theory practices of exchange and a few factors were not totally being practiced when exchanging the commodity between the two parties. The exchanging of the commodity (timber) according to the contractors improved the liquidity position and managed to make steer around the cash and credit restrictions paused by cash shortages. The results also showed that barter trade can be used as a solution to liquidity challenges as the contractors were receiving their payments earlier than when receiving cash and the majority of the contractors agreed that they have never received their payments late when using barter trade. The contractors aired their challenges they are facing as a result of adopting barter trade and the main challenges where the ones which affect the profitability of their organisations which include low profit margins, high costs and low mark-ups.

CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The closing comments on the study are presented in this chapter, providing an overview and conclusion of the research endeavour. The study is examined in terms of both its contribution to the field and its limitations. Recommendations were made with regard to aspects that could be explored in future research, especially within the context of considering the use of barter trade in modern business.

5.2 Discussion

The research analysed barter trade as a mode of transacting in the timber industry and a case study was conducted at Allied timbers Zimbabwe. Barter Trade according to Mpinganjira (2011), is a primitive and crude system and it is an unrefined system of exchange and developed countries are still practicing barter trade in the present day through barter companies as well as other primitive and underdeveloped countries. This research then goes to show how Allied Timbers went on to adopt and introduce barter trade as a mode of transacting. According to Makoche Kanwa (2009), Zimbabwe faced a huge economic recession that was associated with non-affordability of basic goods and services, long queues at banks, unavailability of local currency in banks as well as being limited on withdrawals, inability to make any projected financial planning and inability to make credit purchases hence to confront these challenges people adopted barter trade as a mode of transacting.

According to Kachere (2018), the major reasons for Zimbabweans engaging in barter trade included the scarcity of cash, to secure goods for resale (export) in countries of destination and other reasons included but were not limited to unstable exchange rates and high inflation rates. According to Sibanda (2018), Allied timbers adopted barter trade as a lack of processing capacity hence it had relied on 3rd parties paid via barter trade. Bande (2016), also highlighted that Allied timbers had no financial capacity to

meet its financial obligations hence it looked at barter trade as a solution. Bande (2016) Also highlighted that barter trade was being practised under an arrangement where half of the timber harvested was shared between the contractors and the company which saw the contractors engaging in illegal activities that diminished the company's timber supply in forests at a rapid rate. These activities brought up the intent of the research to discover if there are policies that can be followed if a product is to be used for barter trade and to see whether barter trade deals with financial problems on an organisation. Also, the research tried to discover the potential problems that were being faced as a result of using barter trade as well and see the relationship between Allied timbers and its Contractors.

In a bid to answer those questions, the research used Marx's Capitalist theory as its theoretical framework. According to Kazeroony and Stanusch (2014), Marx's capitalism theory, involves two main components which are commodification and labour value. The concept of commoditization introduces the concept of barter trade which is production for exchange in the market. Marx's commodification theory then gives some preconditions that must be satisfied in order for a product of Labour to be considered a commodity and be eligible for exchange or barter trade hence this research analysed whether Allied timber's barter trade practice matched these preconditions.

The other research objectives were dependent on the successful implementation of barter trade. Marx's Capitalist theory also highlighted that problems associated with exchanging goods were valuing the product since a product has a use value and an exchange value Vincent (2016). Hence this research focused on unveiling the potential problems contractors at Allied faced as a result of using barter trade. Two of the objectives were dependent on the successful implementation of barter trade. Improvement of liquidity and determining the relationship between Allied Timbers and its contractors was based on the usage of barter trade by the organisation.

The research was a case study of Allied timbers and a qualitative research design as used to conduct the research. A descriptive case study was used because it provides an accurate portrayal or account of the characteristics of barter trade. Marx's Capitalist theory was used to extract the conceptual framework that was used to design research conceptual framework. The study population had 80 contractors and a sample of 50 respondents was chosen through convenience sampling. Data was collected through interview questions and a list of predetermined structured and semi structured interview questions based on the theoretical framework were asked. Data was analysed by using Microsoft excel and SPSS to draw frequency tables from the data that was collected. Identity of participants was protected, and confidentiality was kept.

5.3 Conclusions

Most of the respondents highlighted that they preferred the idea of being paid using set-offs or barter trade because it yielded a better profit and they could sell it in foreign currency than being paid in RTGS or bond notes and if any market changes that would affect the value of their money with Allied they would recover from selling timber. Only small scale contractors said they preferred being paid in cash only if it was on time because their capacity and setoff balances were small and it would cost those more to carry the timber and sell rather than getting paid from the source of work.

In terms of the reliable supply of timber, all contractors agreed that Allied Timbers still has a very reliable source of timber. The respondents also all agreed that the market demand of timber is available locally and internationally and that they are actually failing to meet the required demand of the market. All respondents also highlighted that there are markets where timber is traded in Zimbabwe in most high density suburbs such as Chitungwiza where there are houses that are still being built and other public markets such as Mbare musika and other Private organizations and construction companies that order timber.

In terms of the legal sanctioned ownership rights, the respondents highlighted that the GRV were raised as proof for the setoff that is signed between Allied Timbers and the contractors which serves as the legal contract and agreement of setoff contract between Allied timbers and the contractors of which the contractors keep a copy of the GRVs. Thereby making the contract enforceable by law to receive the setoff as promised.

Respondents highlighted that timber can be transferred from Allied timbers estates to them and the timber can be safely stored packaged and preserved. In regards of transferability, the respondents highlighted that timber can be transferred from one owner to another.

In terms of excluding others to have access to the timber and allowing for private consumption of timber, the respondents agreed that it was possible as the timber is bought for private consumption by individuals and companies.

The respondents highlighted that Allied timbers guaranteed the quality and safety of timber because the respondents were set off with the timber, they would have harvested themselves so they know the quality of the timber that they will be paid off with. If quality was compromised the respondents mentioned that Allied timbers would replace if the timbers quality was compromised in allied timbers hands not as a result of negligence by the contractors in terms of storage and failure to treat the timber properly.

Hence by satisfying these 14 factors of commodification or factors that should be considered during barter trade, timber can be considered a commodity that can be exchanged with other commodities. The 11 factors are of significant importance because before exercising in barter trade organisation should evaluate their practises and see if they meet all 11 factors to be a commodity and make them exchangeable with other goods and organisations must include policies that cater for those preconditions.

The following in-depth detailed discussions were held with the respondents when data was collected by the researcher when assessing whether barter trade improved the liquidity of the organization. The majority of the respondents highlighted that barter trade facilitated for quick payment of by Allied Timbers better than when they were using cash payments.

From the potential problems, contractors complained about low mark-ups given by Allied timbers and they hoped to get a review of the mark-up rates. Contractors highlighted that Allied timbers was still using old mark up rates that were used when the USD and RTGS was still at par hence they would like the mark up rates to be reviewed since there is a significant difference between the two. Another problem that was highlighted by the majority of the respondents was that they were getting low profit margins after selling the timber this was because the quantity of timber they were getting versus the expenses they are facing in this dynamic business environment were very high.

Respondents also raised complaints about delays in receiving timber which had negative impact on the contractor's businesses of tied up working capital in timber and this prolonged their turnaround time as the contractors needed to sell the timber after receiving it. Hence the contractors were hoping the organisations would be more efficient in dispatching allocated settlement timber to give the contractors time to sell the timber for more cash.

This was followed by the problem of extra costs incurred as a result of barter trade such as carriage, selling costs and storage costs. Smaller contractors raised issues for high extra costs as a result of small quantities of timber they received, the costs they were facing were very high and larger contractors did not feel the costs due to economies of scale. Another problem highlighted was the settlement or exchange value which was expressed in RTGS dollars. A few small contractors lodged complaints about the

valuation of their exchange values that they are supposed to be quoted in foreign currency as they were facing cost of production in USD. Only a few contractors highlighted that they had no problem with barter trade.

The respondents also aired their concern that the percentage they got for their services was low to leave room to attain profit when they sold the timber which is a problem since the economy is changing and the money is being rendered valueless by the dynamic environment.

By using Allied timbers as a case study, it was evident that timber is a commodity which can be used for barter trade and it enhances the ease of doing business. It was also evident that Allied timbers was able to deal with the liquidity challenges as Allied Timbers was able to pay contractors on time thereby steering around restrictions caused by cash and credit facilities as well as steering around financial challenges.

The research concluded that barter trade enhances the ease of doing business if the product being traded is a commodity according Karl Marx's Exchange Value and commodification and that modern companies practicing barter trade must incorporate the preconditions that were set by Marx's in their barter trade policies to ensure the smooth implementation of the barter trade practice. Also, the research found out that potential problems of exchange value according to Marx are minimized because of the monetary value attached to goods exchanged.

Organisations must also setup processes that pay setoffs as early as possible so as to deal with problem of accumulated debt. As shown in the research Allied Timbers delayed paying setting off its contractors thereby causing contractors to face challenges as they would need to sell the timber to acquire cash. Hence companies should settle as early as possible since their creditors will also need to sell those products so as to get money.

Organisations should also discuss barter trade terms that are flexible and leave room for profit for their counterparts. As shown in the research most of Allied Timbers service providers showed that the barter trade discussed left room for low profits.

5.4 Implications

The research shows that when using barter trade or planning to use barter trade, there are factors that must be taken into account for it to work smoothly and these factors to be considered are highlighted in Karl Marx's Exchange Value and commodification and that modern companies practicing barter trade must incorporate the preconditions clearly in order for their barter trade policies to ensure the smooth implementation of the barter trade practice.

The research looked at whether barter trade deals with liquidity challenges during times of economic crisis associated with liquidity challenges and the research implied that if effectively implemented barter trade facilitates for quick payment of better than when using cash payments.

Also, the research looked at the potential problems associated with practising barter trade and it implied the following problems can be faced. The main potential problems that are associated with barter trade are, low mark-ups on settlements, low profit margins after selling the received goods, delays in receiving timber which has a negative impact of tied up working capital in stock hence a prolonged turnaround needed to sell the stock after receiving it. Practising barter trade also implies incurrence of extra costs as a result carriage, selling costs and storage costs. Another implication raised was that when practising barter trade lower profit percentage for services rendered can be given thereby leaving no room to attain profit.

5.5 Recommendations

5.5.1 Timber as a commodity

Organisations that are considering barter trade must ensure that their product is an exchangeable commodity according to Karl Marx's Exchange Value and commodification and that they incorporate the preconditions set by Marx into their policies to ensure the smooth running and implementation of barter trade. Also, the organisations must educate their engaged practitioners of these policies as to avoid information asymmetry about the practice between the two parties involved might affect their business relationship negatively.

5.5.2 Liquidity

Barter trade if practised efficiently can be used to steer around the challenges posed by liquidity challenges which are the shortage of cash and credit facilities. Hence for Allied timbers it must look into perfecting its policies as well as engaging its contractors more so that they air out their grievances such as getting their timber settlement late which was negatively affecting their companies in terms of their turnaround times as they also needed to sell the timber after acquiring it from Allied timbers. Hence a shorter period must be arranged between those parties who are willing to engage in barter trade.

5.5.3 Potential Problems

Allied Timbers has to take into consideration the difficulties their contractors are facing such as delay in the time which contractors are set off. Allied timber must also review the percentages so that the suppliers can have room to make profit and sustain their businesses. Allied timbers must also incorporate the issue of contractors facing extra business costs such as carriage and selling expenses thereby reviewing the mark-up or settlement rate so that contractors can be able to cover that gap as well.

Allied Timbers must also setup processes that ensure setoffs are paid as early as possible so as to deal with liquidity challenges as well as to avoid inconveniencing the

contractors who have to sell the timber to acquire cash. Hence companies should settle as early as possible since their creditors will also need to sell the product so as to get money.

5.6 Suggestions for Further Research

Future studies can also investigate barter trade in other industries outside the timber industry to see whether their products are commodities and can be used for barter trade. Looking deeper into the subject will allow for comparability to be made of how barter trade is being implemented in different industries whilst getting familiar with industry specific factors relevant to understanding barter trade which further enhances our understanding of the practice. Also, researchers can study and see whether Allied timbers has the capacity to commence barter trade for how long into the future for them not to exhaust their resources.

REFERENCES

- Association of Chartered Certified Accountants. (2007, September), *ACCA- BARTER*. Retrieved June 15, 2019, from : <https://www.accaglobal.com/africa/en/business-finance/types-finance/bartering.html>
- Ahmad, Y. (2017). *Fund Specific Determinants of performance*. Economics Journal, 7, (5).
- Arthur, D. (2017). *The Labor Theory of Value and Simple Commodity Production*. Science & Society Vol. 71, No. 4: p 455-483.
- Bande, R. (2016, March 19). *Allied Timbers on its knees*. Retrieved from <https://nehandaradio.com/2016/03/19/allied-timbers-knees/>
- Bayrav, M. H. (2009). *Barter System as an Alternative Trade and Finance Technique*. İstanbul: Marmara University.
- Barter Business Exchange. (2019, November). *Barter Basics*. Retrieved from: <https://www.ncbarter.com/How-BBE-Works/Barter-Basics>
- Beau, C. L. (2014, February 21). *7 Tips for Becoming an Expert Barterer*. Retrieved from: <https://www.entrepreneur.com/article/230884>
- Beers, B. (2019, December 10). *What are some examples of barter transactions?* Retrieved from: <https://www.investopedia.com/ask/answers/101314/what-are-some-examples-barter-transactions.asp>
- Bellofiore, R. (2018, April 01). *The Multiple Meanings of Marx's Value Theory*. Retrieved from: <https://monthlyreview.org/2018/04/01/the-multiple-meanings-of-marxs-value-theory/>
- Bendien, J. (2007, July 11). *Marx's imperial work*. Retrieved June 2019, from Ricardo.en.wfu.edu: <http://www.ympu.com/en/ricardo.ecn.wfu.edu>
- BIS. (2016). *The global economy: realignment under way*. BIS Annual Economic Report. Retrieved from <https://www.bis.org/publ/arpdf/ar2016e3.htm>
- Booth, A., & Sewell, R. (2017, July 03). *Understanding Marx's Capital: A reader's guide* . Retrieved from: <https://www.marxist.com/marx-capital-guide.htm>

- Bratton, J., & Denham, D. (2014). *Capitalism and Classical Social Theory*, Second Edition. Toronto: University of Toronto.
- Chappelow, J. (2018, July 18). *Labour Theory of Value*. Retrieved from Investopedia: <https://www.investopedia.com/terms/l/labor-theory-of-value.asp>
- Chen, J. (2018, May 22). *Commoditization*. Retrieved from Investopedia: <https://www.investopedia.com/terms/c/commoditization.asp>
- Chitagu, T. (2019, June 7). *Zim timber hectarage declines*. Retrieved from News Day: <https://www.newsday.co.zw/2019/06/zim-timber-hectarage-declines/>
- Clegg, A. (2012, October 10). *The art of good bartering*. Retrieved from Financial Times: <https://www.ft.com/content/6da4934a-121a-11e2-b9fd-00144feabdc0>
- Davis, R. (2009, January 15). *Relevance and Relation to Money*. Retrieved from University of Exter: <http://projects.exeter.ac.uk/RDavies/arian/barter.html>.
- Delaney, L. (2019, June 01). *The Prons and Cons of a Cashless Trade*. Retrieved from The Balance Small Business: <https://www.thebalancesmb.com/countertrade-the-pros-and-cons-1953402>
- Emerson, M. (2019, August 8). *What Business Owners Should Know About Barter and Trade*. Retrieved from: <https://succeedasyourownboss.com/what-business-owners-should-know-about-barter-and-trade>
- Ersun, N. A. (2010). *The Role and Importance of Multilateral Clearing Union Project in the Development of Trade Between Islamic Countries*. Journal of Accounting and Finance, V.4, Iss.3, p172-190.
- Felluga, D. F. (2015). *Critical Theory The Key Concepts*. London: Routledge Key Guides.
- Gage, D. (2014, 12 04). *The Importance of Corporate Barter*. Retrieved from The Journal of the Global Accounting Alliance: <http://www.gaaaccounting.com/the-importance-of-corporate-barter/>
- Gronow, J. (2016). *On the Formation of Marxism*: Encostor, Historical Materialism Book Series, No. 113, London: Palgrave Macmillan.

- Howse, R. (2010). *Beyond the countertrade taboo: why the world should take another look at barter and countertrade*. The University of Toronto Law Journal, Vol. 60, Issue 2, 289-314.
- Jean, M. (2019, August 02). *Barter Exchanges and How They Work*. Retrieved, from The Balancesmb: <https://www.thebalancesmb.com/what-is-barter-exchange-398141>
- Kachere, W. (2018). *The Prevalence and Persistence of Barter*. Trading in the. Krepublishers, Soc Sci, JSS-55, p1-5.
- Kadzere, M. (2016, February 03). *Allied Timbers abandons contract milling*. Retrieved from The Herald: <https://www.herald.co.zw/allied-timbers-abandons-contract-milling/>
- Kadzere, M. (2016, March 24). *Allied Timbers continues to sink deeper into financial abyss*. Retrieved from Chronicle: <https://www.chronicle.co.zw/allied-timbers-continues-to-sink-deeper-into-financial-abyss/>
- Kennedy, P. (2017). *Marxism, Capital and Capitalism: From Hegel Back to Marx*. Journal of Socialist Theory, Volume 45-Issue 4 443-466, www.tandfonline.com › abs › 03017605.2017.1377924
- Kenton, W. (2019, September 13). *Barter (or Bartering)*. Retrieved from, Investopedia: <https://www.investopedia.com/terms/b/barter.asp>
- Kenton, W. (2019, April 26). *Counter trade*. Retrieved from Investopedia: <https://www.investopedia.com/terms/c/countertrade.asp>
- Keys, T., & Malnight, T. (2012, September 12). *The Exploding Business of Bartering*. Retrieved from Havard Business Review: <https://hbr.org/2012/09/the-exploding-business-of-bart>
- Kriesler, P. (2016). *Exchange Value*. SpringerLink. Retrieved from Springer Link. https://link.springer.com/chapter/10.1057/978-1-137-47529-9_5
- Kurz, H. D. (2018). *Marx and the "Law of value"*. Retrieved from <https://www.jstor.org/stable/26483184>.

- Laurel, D. (2019, June 01). *What Is Countertrade and How Is It Used*. Retrieved from The Balance Small Business: <https://www.thebalancesmb.com/countertrade-the-pros-and-cons-1953402>
- Leys, C. (2012, April 2). *Commodification: the essence of our time*. Retrieved From Open Democracy: <https://www.opendemocracy.net/en/opendemocracyuk/commodification-essence-of-our-time/>
- Mpinganjira, P. O. (2011). *Impediments to barter trading: Analysis of practitioners and non-practitioners perceptions*. African Journal of Marketing Management Vol. 3. P. 2- 8
- Mabasa, I. (2017, April 24). *Of barter trade, goats for school fees*. Retrieved From The Herald: <https://www.herald.co.zw/of-barter-trade-goats-for-school-fees-and-the-jokes/>
- Maduna, T. (2018, April 03). *Zimbabwe's struggling timber industry*. Retrieved, from BBC News: <https://www.bbc.com/news/av/business-43629365/zimbabwe-s-struggling-timber-industry>
- Makochehanwa, A. (2009). *Clothed in rags by hyperinflation: the case of Zimbabwe*. Retrieved From MPRA: <https://mpa.ub.uni-muenchen.de/28863/>
- Makowski, L., & Ostroy, J. M. (2012). *Appropriation in a competitive theory of value*. Retrieved from CAIRN.INFO: <https://www.cairn.info/revue-cahiers-d-economie-politique-2012-2-page-25.htm>
- Mambondiyani, A. (2013, November 08). *Timber Industry in Limbo*. Retrieved, from Bulawayo 24 News: <http://bulawayo24.com/index-id-news-sc-national-byo-38535-article-Timber+industry+in+limbo.html>
- Meacham, W. P. (2010). *Smarter Companies Barter*. Retrieved from : Smarter-Companies-Barter-William-Meacham/dp/1458362868#reader_1458362868
- Michie, J. (2013). *Reader's Guide to the Social Sciences*. 1st Edition: Routledge: New York

- Naughton, C. (2013, January 04). *A barter way of doing business*. Retrieved June 13, 2019, from The Guardian:
<https://www.theguardian.com/commentisfree/2013/jan/04/barter-exchange-goods-recession>
- Nicholas, H. (2011). *Marx's Theory of Price, Capitalist Commodity Production*. In: Marx's Theory of Price and its Modern Rivals. London: Palgrave Macmillan.
- Oduncuoğlu, F. (2007). *Analysis of the Effect of Barter System Application on Marketing Function in Preventing Enterprises*: Retrieved from
<https://www.researchgate.net/publication/336810687>
- Ollman, B. (2017). *Marx's Conception of Man in Capitalist Society*. Retrieved from New York University (NYU):
http://www.nyu.edu/projects/ollman/docs/alienation_and_law_of_value.php
- Phil. (2012). *Use-value, Exchange-value, and Commodities*. Berkeley Edu. Retrieved from
[https://www.ocf.berkeley.edu/~ngkolodny//12SPhil114L19\(Marx2\).pdf](https://www.ocf.berkeley.edu/~ngkolodny//12SPhil114L19(Marx2).pdf)
- Pitts, F. (2014, June 17). *Value Theory and Michael Heinrichs New Reading of Marx*. Retrieved from Creative Industries: <https://www.triple-c.at/index.php/tripleC/article/view/639/720>
- Rigi, J. (2012). *Peer to Peer Production as the Alternative to Capitalism: A New Communist Horizon*. Journal of Peer Production. Retrieved From:
<http://www.indymedia.org.uk/en/2012/08/498544.html>
- Robison, L. J., Oliver, J. R., & Frank, K. A. (2015). *Commodity and Relational Good*. Journal of Agricultural Education A Publication of the American Association for Agricultural Education Volume 59, Issue 1, p269
- Rubin, I. (2017, March 28). *Marx's Theory of Commodity Fetishism*. Retrieved from Libcom: <https://libcom.org/library/i-marxs-theory-commodity-fetishism>
- Sandu, N. (2014, July 27). *Barter trade resurfaces as liquidity crunch worsens*. Retrieved from The Standard: <https://www.thestandard.co.zw/2014/07/27/barter-trade-resurfaces-liquidity-crunch-worsens/>

- Screpanti, E. (2018, February 27). *Karl Marx on Wage Labor: From Natural Abstraction to Formal Subsumption*. *Rethinking Marxism*. 29. 511-537. Doi: 10.1080/089935696.2017.1417086
- Screpanti, E. (2019). *Labour and Value: Rethinking Marx's Theory of Exploitation*. Cambridge: Open Book Publishers.
- Sewell, R. (2014, January 13). *In Defence of Marx's Labour Theory of Value*. Retrieved From Marxist: <https://www.marxist.com/in-defence-of-ltv.htm>
- Sibanda, G. (2018, February 23). JV partners eye Allied Timbers. Retrieved November 1, 2019, from Business weekly: <https://www.ebusinessweekly.co.zw/jv-partners-eye-allied-timbers>
- Tekşen, Ö. 2. (2006). *Accounting and Taxation of Barter Transactions with New Financial Techniques*: Retrieved from <http://tez.sdu.edu.tr/Tezler/TS00461>
- Toroslu, M. V. (2010). *Barter Operations and Accounting*: Ankara, Turkey: Adalet Publications Turkey.
- Uyan, O. (2017). *Barter as an alternative trading and financing tool and its importance for business in times of economic crisis*. *Journal of Economics, Finance and Accounting* V.4, Iss.3, p.282-295.
- Varul, M. Z. (2010). *Reciprocity, Recognition and Labour Value*. *Journal of Social Philosophy*, 50-78. Retrieved from Exeter. <https://ore.exeter.ac.uk/repository/handle>
- World Press. (2010, June 13). *Kapitalism101, Use-Value, Exchange Value*, Retrieved from: <https://kapitalism101.wordpress.com/2010/06/13/law-of-value-4-value>
- Yusin, J. (2017, October). *Marx and the Idea of Commodity*. Retrieved from Scholarblogs.emory.edu: <https://scholarblogs.emory.edu/postcolonialstudies/2014/06/21/marx-and-the-idea-of-commodity>
- Z-Yen. (2011). *Capacity Trade and Credit: Emerging Architectures for Commerce and Money*. London: City of London Corporation, ESRC and Recipco.

APPENDICES

Appendix 1: Interviewer Administered Questionnaire

Barter Trade Self Administered Questionnaire

General Questions:					
What is the name of your Organisation?					
How Long have you been Trading Using Timbers?					
Have you been contracted being paid in cash before?					
How do you like the idea of using Timber as a means of settlement?					
Section A: Commodification of timber Questions	Yes	No	Not Sure	I dont know	Comments
1. Does Allied timbers have a reliable supply of timber or a surplus of timber?	Y	N	NS	IDK	
2. Is there a market demand for timber?	Y	N	NS	IDK	
3. Is there a market were timber is tradable?	Y	N	NS	IDK	
4. Is there a legal sanctioned assertion of private ownership rights to the timber and the right to trade it?	Y	N	NS	IDK	
5. Are the rights enforceable thereby securing ownership?	Y	N	NS	IDK	
6. The transferability of these private rights from one owner to another?	Y	N	NS	IDK	
7. Can the timber be physically transferred from allied to you?	Y	N	NS	IDK	
8. Can the timber be stored, packaged, preserved and transported from one owner to another?	Y	N	NS	IDK	
9. Can you exclude others to have access to the timber?	Y	N	NS	IDK	
10. Can the timber be used or consumed privately?	Y	N	NS	IDK	

11. Can allied timbers Guarantee the quality and safety of the timber?	Y	N	NS	IDK	
12. Can allied timbers guarantee of replacement if quality is compromised?	Y	N	NS	IDK	
13. Does allied timbers produce the timber at a traceable cost?	Y	N	NS	IDK	
14. Does your sale-price suffice to yield an adequate and predictable income or profit?	Y	N	NS	IDK	
Section B : Improvement of Liquidity Questions					
1. Does barter trade facilitate quick payment from Allied timbers?	Y	N	NS	IDK	
2. Since being paid by timber, has allied timbers delayed settling its debt?	Y	N	NS	IDK	
3. What is the longest time you have waited to be settled when using barter trade?	0-3 m	3-6m	6-9m	9-12m	
Section C: Potential Problems (exchange value) Questions					
1. What are the problems you are facing as a result of using barter trade or setoffs?	Comments				
2. Section B : Relationship					
3. Do you view Barter trade as Mutually beneficial between you and Allied Timbers?	Y	N	NS	IDK	
4. Has the introduction of Barter Trade Improved your business relationship with Allied Timbers?	Y	N	NS	IDK	

Appendix 2 : Anti Plagiarism Report




Urkund Analysis Result

Analysed Document:	Takunda Pfukwa.docx (D63691513)
Submitted:	2/10/2020 12:21:00 PM
Submitted By:	djeranyama@africau.edu
Significance:	1 %

Sources included in the report:

Curthbert K Chirahwi.docx (D50732513)
https://www.researchgate.net/publication/268364706_Barter_trading_An_empirical_investigation_of_management_practices
<https://en.wikipedia.org/wiki/Value-form>
<https://dergipark.org.tr/en/download/article-file/370257>
https://en.wikipedia.org/wiki/Law_of_value

Appendix 2: Aurec Approval Letter

**AFRICA UNIVERSITY**
(A United Methodist-Related Institution)
INVESTING IN AFRICA'S FUTURE

**AFRICA UNIVERSITY
RESEARCH ETHICS COMMITTEE (AUREC)**

P.O. BOX 1320, MUTARE, ZIMBABWE • OFF NYANGA ROAD, OLD MUTARE • TEL: (+263-20) 60075/60026/61611 • E-MAIL: aurec@fricau.edu • WEBSITE: www.africau.edu

Ref: AU893/19 3 April, 2019

Takunda Pfukwa
C/O CBPLG
Africa University
Box 1320
Mutare

**RE: TO EXAMINE THE EFFECTS OF USING BARTER TRADE AS A MODE OF
TRANSACTING IN THE TIMBER INDUSTRY**

Thank you for the above titled proposal that you submitted to the Africa University Research Ethics Committee for review. Please be advised that AUREC has reviewed and approved your application to conduct the above research.

The approval is based on the following.

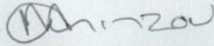
- a) Research proposal
- b) Questionnaires
- c) Informed consent form

- **APPROVAL NUMBER** AUREC893/19
This number should be used on all correspondences, consent forms, and appropriate documents.
- **AUREC MEETING DATE** NA
- **APPROVAL DATE** April 3, 2019
- **EXPIRATION DATE** April 3, 2020
- **TYPE OF MEETING** Expedited

After the expiration date this research may only continue upon renewal. For purposes of renewal, a progress report on a standard AUREC form should be submitted a month before expiration date.

- **SERIOUS ADVERSE EVENTS** All serious problems having to do with subject safety must be reported to AUREC within 3 working days on standard AUREC form.
- **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the proposal (including changes in the consent documents)
- **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to AUREC.

Yours Faithfully


**MARY CHINZOU – A/AUREC RESEARCH ETHICS OFFICER
FOR CHAIRPERSON, AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE**

**AFRICA UNIVERSITY
RESEARCH ETHICS COMMITTEE (AUREC)**
03 APR 2019
APPROVED
P.O. BOX 1320, MUTARE, ZIMBABWE

Appendix 3: Allied Timbers Approval Letter



No. 125 Borgward Road, Msasa, Harare, Zimbabwe
Telefax: +263 4 446140-42, Email: info@alliedtimbers.co.zw, Website: www.alliedtimbers.co.zw

12 March 2019

Africa University
P O Box 1320
MUTARE

Dear Sir

RE: CONFIRMATION OF RESEARCH - TAKUNDA PFUKWA

This letter serves to confirm that **TAKUNDA PFUKWA** has been given permission to do his research at Allied Timbers and has full access to any required documents and information.

Thank you

Yours faithfully


Tinashe Mutasa-Assistant Accountant North

Directors: Dr. P Gumbo (Interim Board Chairperson), A Mandizha, S Kanzou, P Phillips, T Mahachi, W. Dzuda (Acting Chief Executive Officer)


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