GOLD INVESTMENT: HOW FAR ECONOMIC FACTOR AFFECT TOTAL VOLUME OF GOLD INVESTMENT IN KUWAIT FINANCE HOUSE (M) BERHAD

NUR BADRIYAH BINTI MOKHTAR

MASTER OF SCIENCE (BANKING)
UNIVERSITI UTARA MALAYSIA FEBRUARY 2018

GOLD INVESTMENT: HOW FAR ECONOMIC FACTOR AFFECT TOTAL VOLUME OF GOLD INVESTMENT IN KUWAIT FINANCE HOUSE (M) BERHAD

BY

NUR BADRIYAH BINTI MOKHTAR

Thesis Submitted to

School of Economics, Finance and Banking (SEFB)

Universiti Utara Malaysia

in Partial Fulfillment of the Requirement for the Master of Science (Banking)

Pusat Pengajian Ekonomi, Kewangan dan Perbankan
SCHOOL OF ECONOMICS, FINANCE, AND BANKING
Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PENYELIDIKAN
(Certification of Research Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)
NUR BADRIYAH MOKHTAR (818486)

Calon untuk Ijazah Sarjana
(Candidate for the degree of)
MASTER OF SCIENCE (BANKING)

telah mengemukakan kertas penyelidikan yang bertajuk
(has presented his/her research paper of the following title)

GOLD INVESTMENT:HOW FAR ECONOMIC FACTORS AFFECT TOTAL VOLUME OF GOLD-i AT KUWAIT FINANCE HOUSE (M) BERHAD

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan
(as it appears on the title page and front cover of the research paper)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.
(that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the dissertation).

Nama Penyelia (Name of Supervisor) : **Dr. Logasvathi a/p Murugiah**

Tandatangan (Signature) :

DR. LOGASVATHI MURUGIAH
Pensyarah Kanan
Pusat Pengajian Ekonomi, Kewangan dan Perbankan
UUM Kolej Perniagaan
Universiti Utara Malaysia

Tarikh (Date) : **9 April 2018**

PERMISSION TO USE

In presenting this research paper in partial fulfilment of the requirements for a Post Graduate degree from the University Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this research paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of School of Economics, Finance & Banking (SEFB) where I did my research paper. It is understood that any copying or publication or use of this research paper parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my research paper.

Request for permission to copy or to make other use of materials in this research paper in whole or in part should be addressed to:

Dean of School of Economics, Finance and Banking (SEFB)

Universiti Utara Malaysia 06010 UUM

Sintok

Kedah Darul Aman

ABSTRAK

Tujuan kertas penyelidikan ini adalah untuk menentukan kesan pemboleh ubah ekonomi terhadap jumlah pelaburan akaun emas di Kuwait Finance House (M) Berhad sepanjang tempoh 2010 hingga 2016. Kajian ini menguji hubungan di antara harga emas, pekerjaan serta kadar inflasi dan pelaburan emas. Dalam kajian ini digunakan Regression(Ordinary Least Square OLS) untuk memeriksa kesan pemboleh ubah ekonomi terhadap pelaburan akaun emas. Hasil kajian menunjukkan harga emas, pekerjaan serta inflasi mempunyai hubungan yang signifikan terhadap pelaburan akaun emas.

Kata kunci : Analisis Regresi, Kuwait Finance House (M) Berhad, pelaburan akaun emas . pembolehubah ekonomi, harga emas , pekerjaan, inflasi

ABSTRACT

The aim of this research paper is to determine the impact of economic variables towards gold investment account in Kuwait Finance House (M) Berhad over the period of 2010 to 2016. This research tests the relationship between gold price, employment, inflation and gold investment account. In this research applied the Regression (Ordinary Least Square, OLS) to examine the impact of economic variables on gold investment account. The findings show that gold price, employment and inflation have significant impact towards gold investment account.

Keyword: Regression Analysis, Kuwait Finance House (M) Berhad, Gold investment, economic variables, gold price, employment, inflation

ACKNOWEDGEMENT

This research paper finally has been successfully completed with assistance of many authorities. After having a long journey and obstacles, I would like to take this opportunity to express my appreciation to those who assisting me to complete this research paper with advice, guidance and support. Without them, this research paper would not be able to complete.

Special thanks to my professional supervisor, Dr Logasvathi Murugiah, who has patiently guided me with her expertise and skill, sacrifice her time to ensure that I can complete my research paper well. She also supports and believed in me. This paper would not be completed without her time, effort and support.

I would like to express my big thanks to my beloved family especially to my beloved husband, Mohd Shahril bin A.Rahman that always been my side during up and down, continuously giving support me to complete my research paper. Big thanks also to my beloved babies, Saif Irfan and Saqeef Imran that became my strength to complete my research. Million thanks also to my parents and family in law that always support me.

I also would like to extend my special gratitude to Kuwait Finance House (M) Berhad for allowed me to make research on Gold Investment Account yet sponsor my study. Last but not least, appreciation to all my friends and everyone for the biggest supports they give to me throughout this research paper.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In the first chapter provides a brief discussion on the Gold investment and economic variables that giving impact towards total volume of gold investment. This chapter begins with the discussion about the background of the study and followed by the problem statement in section 1.2. Then, explanation about the research question in section 1.3 and in section 1.4 explained and discussed about the objective of the study. While, in section 1.5 discussed on scopes of the study and section 1.6 explained the contribution of the study. The organization of the study is discussed in section 1.7. Lastly, the conclusion of this chapter is explained in section 1.8.

1.1.0 Background of the Research

1.1.1 Overview Gold Investment

Since few decades, gold has been using as an asset for human. From ancient time, gold has been kept as a luxury items or a form of wealth. Gold has been used a long time ago. Hence, gold day by day are now widely recognized as a medium of exchange, or such an instrument for people for dealing in transaction. In different religious and cultural area as well, gold represented the royal and honourable features. It has aesthetic appearance which has proved it as the finest ornament above all other metal. Gold known as ‘denarius’ has been used in Islam in first era or Roman and Persian.

During the era of Islamic Caliph Al-Rashidin until 'Ottoman Empire', gold was widely used and been used by Prophet Muhammad S.A.W yet extensively available to the Arab land. However, the usage of Gold that formerly known as Dinar has been ended in 1924 after the fall of the 'Ottoman Turkish Empire (Salmy Edawati, 2009). Gold has played the important role in all aspect around us including in religious customs, and event as component in industrial products. The intrinsic value is till irreplaceable and maintain high even though it has been existed for long time ago,

Investing in gold now days has been recognized as one of the best alternative or a safe haven investment. As we noticed, investing in gold has been widely spread and booming this recent year. People specifically investors nowadays became more alert with the benefits of gold and its special features can be the realistic reason why this investment alternative becoming popular.

As mentioned by World Gold Council (2009), demand on the gold for investment purpose accounted one-thirds of gold demand all over the world which is significant influential. This investment has shown a huge increment in the last ten years as investor are now days wisely and seeking for more alternative or option to balance and segregate their investment type and portfolio as to be more diversity in order to protect from any uncertainty or economic breakdown.

1.1.2 Historical Development of Gold Investment in the World

As noted by Baur and Mc Dermott (2010), in 1980 is the historic high for gold value when the global economy faced the threat of inflation due to oil crises in 1970's. The moment of Subprime crises occurred, gold has been identified to be one of the investment asset option to be diversified in portfolio.

Globally crises such as Mexico Peso Crisis in 1994, the Asian financial problem 1997 to 1998 and more has led investors and economic researcher start to find out and investigate any alternative way to backup and protect their asset if the crises happen and during economic uncertainty. There's a lot of study, empirical investigation has been conducted, and they found that gold is one of the best option to serves as a safe haven in investment (Baur and Lucey, 2010).

1.1.3 Historical Development of Gold Investment in Malaysia

Impact of the deep Asian Financial Crisis in 1997 and 1998, our former Prime Minister, Tun Mahathir Mohammad had proposed and giving ideas to make use of gold as a good asset to back up during economic recession. Tun Mahathir kept encouraged people to diversified their investment and asset by choosing gold during that time. A lot of events that promoted the gold was held to promote it including in international trade settlement. One by one conference involving international scholars, economic researcher, investors and medias has been organized relating on gold and gold Dinar International Conference on Stable and Just Monetary System continuously followed by International Conference on Gold Dinar in Multilateral Trade 2002, later on International Conference in International Trade in 2003 and International Conference of Gold Dinar Economy in 2007 (MH Ibrahim 2012). Climax to this series of conference and profound interest in gold shown by Malaysian policymaker, Malaysia became 12th country in the world to have its own gold bullion coins in July 2001 launched by our former Prime Minister itself, which known as Kijang Emas by Royal Mint Malaysia. In addition, Royal Mint Gold Dinar and Kelantan Gold Diner has been introducing later in 2003 and 2006 (Salmy Edawati, 2009).

Due to resurgence of usage on gold in Malaysia, few financial institution and gold investment companies started to offer gold investment products as the new option for investor to diversify their investment methods. One of the gold investment products are Gold Investment Account introduced by Kuwait Finance House Malaysia Berhad. It has been launched in Malaysia in 2005 by former Prime Minister Tun Abdullah Ahmad Badawi from RM60 per gram.

1.1.4 Background of Kuwait Finance House (M) Berhad

Kuwait Finance House is an International Islamic Bank that has been established in 1977 at Kuwait. They are the first Islamic bank that developed as fully sharia compliant. Kuwait Finance House is second largest Islamic Bank in the world that has branches in many countries such as Bahrain, Turkey, Australia, and etc. In Malaysia, Kuwait Finance House is the first Islamic Foreign Bank that has been granted license Under IBA 1993. The official opening of Kuwait Finance House (M) Berhad by Tun Abdullah Ahmad Badawi was on August 2005 at Kuala Lumpur, and August 2008 at Penang branch. The first set up they only around 8 main branches from 2008 to 2011, but currently there are more than 15 branches in Malaysia and expected to open another 4 branches. Recently, Kuwait Finance House (M) Berhad been awarded Islamic Consumer Banking Product in International Finance Award 2017.

1.1.5 Gold Investment Account in Kuwait Finance House (M) Berhad

There are many ways for people to buy and invest in gold. They can buy gold physically from the gold shop or bank. Kuwait Finance House Malaysia Berhad has come out with the product of gold to meet their customer demand by introducing the earliest gold investment account which is Gold Investment Account-I. It has been launched in 2005 from RM60 per gram.

Gold Investment Account-I is one of the gold investment product that fully shari'ah compliance offered by Kuwait Finance House (M) Berhad. This Islamic banking product is more secured and convenience. The main advantages for this gold account are cheaper, secured and convenience and has higher opportunity to enjoy the capital gain. In addition, there will be no charge will be imposed to the customer for keeping the gold at bank and they have the opportunity to withdraw the physical gold on the spot or keep it with bank under the Islamic concept of Qardh Hassan (benevolence). In addition, this account recently has been awarded at Kliff Islamic Finance Award 2011 and 2012.

1.2 Problem Statement

Gold investment in Malaysia nowadays is getting popular among investor's as one of superior investment vehicles. Generally, in past tradition, most people especially the people especially elderly tend to keep their money in general saving account yet to fixed deposit. Some of them may invest their money into mutual fund like unit trust and some in bond. The pro and contrast of this products are the low risk but with lower return to the depositors. In addition, the intrinsic value of the saving will be overwhelmed in case of economic meltdown or uncertainty.

Different with gold, it is highly effective vehicle for variegation and risk management because of gold is independence from other asset classes (World Gold Council, 2011). Its continues supported by World Gold Council 2011, that gold's volatility is not only typically lower than commodity and real estate indices but also lower than equity indices regard the formed market equity indices.

Currently, the gold market is easily accessible and deep to be explore. This mean that its allowing investors to add a liquid asset to their portfolio at low cost. Additionally, because gold is not a financial obligation, it is not subject to

company risk or counter party risk (World Gold Council, 2011). In the meantime, World Gold Council in their previously study also stated that inputting gold to portfolio comprising traditional asset classes and commodities tend to increase risk attuned return. It is mean that portfolio which adding the gold are not only 'optimal' in the sense of delivering finer risk adjusted return but they also can help to reduce possible loss in future.

1.2.1 Gold Price and Gold Investment

The strong gold price performance was a positive for investors and producers and was symptomatic of a more profound shift in sentiment: a growing recognition of gold's role as a wealth preservation and risk mitigation tool (World Gold Council,2017). Recent tremendous increase on gold price has been interestingly concerned by existing investors yet potential player in diversifying their investment.

1.2.2 Employment and Gold Investment

Basically, the growth rate of employment is assumed to be an increasing function of the growth rate of investment. Having good employment rate is reflected to the living and income for people, this is because by having stable of financial, can contribute people to invest in investment including gold investment as they have the capability and sufficient fund to invest. Investment has been identified as one of more efficient tools for promoting economic growth as well as employment creation and it is also can be in vice versa. A continuous slump in investment and employment has been in Malaysia, especially since the financial crisis. (IMF,2018) In addition, Malaysia's economy continues to perform strongly, with higher than anticipated growth at 5.8 percent in 2017, and projected growth of 5.3 percent for 2018, according to the IMF. The country is well on its way to achieving high-income status.

But to pass the finish line, the authorities will have to step up reforms to boost productivity and raise living standards for its 32 million citizens Malaysia's economy is showing resilience and is performing strongly. Growth is running above potential, driven by strong global demand for electronics and improved terms of trade for commodities, such as oil and gas. On the domestic front, Malaysia's strong employment is boosting private consumption, and investment is also helping to drive growth.

1.2.3 Inflation and Gold Investment

For the past five to ten years we have been bombarded by commentary that gold is a hedge against inflation, and that wise, prudent, sensible people invest in precious metals to protect themselves against the out-of-control behaviour of government officials. Historically, gold has been used as a hedge against inflation this reputation is well-earned. During the run up in to its peak price in 1980, gold was chasing the inflation rate as investors feared that their purchasing power was going to be destroyed by runaway prices. (World Gold Council, 2017). Since inflation means the decrease in the value of fiat (paper, unbacked by metals) money, people turn to assets that proved to be money throughout history - gold & silver. The intrinsic value of gold has given an advantage to be the safe hedge during inflation. Hence, due to the special feature of safe hedge, people started to invest in gold including in gold investment account.

Gold investment options have booming to Malaysia. The intention of this study is to find out whether the economic factors have affected the total volume of gold investment in Kuwait Finance House (M) Berhad. It is imperative to enhance more public and investor awareness towards gold investment. Thus, the financial

institution can come out with the absolute plan, marketing and product knowledge to provide the investor's in Malaysia regarding on this gold investment.

Despite of having good acceptance of gold investment by investor's in the context of investors in Kuwait Finance House (M) Berhad, however, the economic variables that affect the volume of gold investment account is still under performed. There is unclear evidence of relationship between economic factors such gold price, total employment and inflation towards the total volume of gold investment in Kuwait Finance House (M) Berhad.

1.3 Research Questions

In this research, three research questions have come out in order to accomplish the objective of this study. The research questions are as follows:

1) Can gold price influence the total volume of gold investment in Kuwait Finance House (M) Berhad?
2) What is the relationship between total employment and total volume of gold investment in Kuwait Finance House (M) Berhad?
3) What is the relationship between inflation and total volume of gold investment in Kuwait Finance House (M) Berhad?

1.4 Objective of the Research

1) To investigate the relationship between gold price and total volume of gold investment in Kuwait Finance House (M) Berhad.
2) To determine the relationship between total employment and total volume of gold investment in Kuwait Finance House (M) Berhad.
3) To examine the relationship between inflation and total volume of gold investment in Kuwait Finance House (M) Berhad.

1.5 Scope of the Research

This research been conducted in order to examine the effect of economic factors such gold price, total employment and inflation towards total volume of gold investment in Kuwait Finance House (M) Berhad . The research is based on time series data consisting of Total Volume of Gold Investment Account retrieved by Business Analytics and Development Kuwait Finance House (M) Berhad from the time series of January 2010 to December 2016. Other sources of data were collected from Central Bank of Malaysia, the World Bank, Trading Economic, Treasury of Kuwait Finance House (M) Berhad and the World Gold Council. In this research, one dependent variable is measured which is total volume of gold investment, meanwhile the gold price, total employment and inflation will be act as independent variables to determine the effects toward total volume of gold investment.

Although there are many studies on factors that affect gold investment, very few studies discuss on gold investment and economic factors. This research paper complements existing literatures on gold investment and economic factors since

there is lack of research discussing in that. By selecting Kuwait Finance House (M) as the sample size to determine the effect on economic factor toward their Gold Investment product, this research will be more specific and concise. This aimed to determine the gold investment and economic factors and also to provide empirical evidence from panel data.

1.6 Significance of the Research

This paper provides a comprehensive discussion and finding on the gold investment, how is the history of gold investment throughout along the period, the operations yet mainly focusing on the economic factors that affect the volume of gold investment in Kuwait Finance House (M) Berhad. This paper can be a good guideline for investors to make decision to select gold as a good alternative method to diversify their investment portfolio. In the meantime, this paper also can help and broad the idea for future research of gold investment factors to the researcher to come out with more strong evidence and reason of people to choose gold investment. Thus, it will also serve as a reference material and future guideline for further research.

1.7 Organization of the Research

This paper is organized as follows. In Chapter two is the reviewing previous literature to get better understanding and the gist of the topic based on the trend, result, and findings. Next, on Chapter three discusses the methodology used to answer the research objectives. Later, in Chapter four will report the results and discuss the findings. Lastly, in Chapter five summarize the research paper and give recommendation for future research improvement.

The study is organized into five chapters. Chapter one provides an introduction of gold investment and determinants variable which included content

background of the study, problem statement, research question, objectives of the study, scope of the study, contribution of the study, organization of the study and conclusion of the chapter one.

In Chapter two, it provides literature reviews related to gold investment and economic factors that giving impact towards total volume of gold investment in Kuwait Finance House (M) Berhad. This chapter review of past research and clear objective of the study. Besides that, the literature review and opinion come from previous researcher related to the topic are presented. The literature was collected from different sources liked books, journal, articles, internet and others.

Next, Chapter three explains the methodology which is data and the method used. In this chapter, researcher briefly explains the method used in order to conduct the study and the research design used and discussed the theoretical framework, research framework and develop hypothesis. Then, explains the selection of data collection, empirical method, analysis model and technical analysis. Lastly, in this chapter is the conclusion of chapter three.

Chapter four presents the empirical findings and discussion which are the result of the study. The differences of the result in comparison with the prior experimental evidence are highlighted and the conclusion of this chapter four.

Lastly, chapter five is a conclusion of the study. This chapter highlight the contribution of the study and also explained the limitations while conducting this study. Further, considerations for future research are also included.

1.8 Concluding Remarks

Basically, this chapter discussed the overview of gold investment, problem statement, research questions, research objectives, contribution of the study, and scope of the study and structure of the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, it reviews the previous literature to give a better understanding on gold investment and economic factors.

2.2 Literature Reviews

2.2.1 Gold Price and Gold Investment

Levin and Wright (2006) studied determinants economic factors of gold investment in the world by selecting few countries as their samples such as Asian and Europe countries they found that gold price is one of the factor that give effect towards gold investment option by investors. Cai, et all (2001), in their research on determine what moves the gold market found that gold price is the one of the factors that moves gold market.

When the gold price act as an inflationary hedge in United States, the investors that residence in those country currency is devaluing against US dollar will enjoy the high profitable return has been summarizing by Levin and Wright (2006). In addition, the study by Sjaastad, Larry and Scacciallani (1996) found that the instability of the currency exchange rate will influence the gold price. Besides, the study by them also claimed that European currencies have more determining factor to the price of gold. The price of gold is usually an indicator of global inflation. Accordingly, the World Gold Council (WGC) said in a report of their research findings indicated that the best way to see the effects of monetary policy on inflation is by looking at the price of gold. However, instead, the change

in gold price acts as a key indicator to currency movement that reflects the true inflation rate. Furthermore, according to Sherman E.J (1983), the gold economics and incidentally affect the investment demand when there is price unstable. Hence, the global gold price may consider one of the causal factor of the gold investment demand in Malaysia

2.2.2 Total Employment and Gold Investment

The issue of the relationship between investment and employment is also among the most relevant aspects of economics. Fiscal and monetary policies are often undertaken in order to facilitate the investment process; incentives and subsidies are often granted to new firms and to the development of new economic activities as vehicles for creating new job opportunities in the medium-long run.

Previous studies found that employment have significant impact towards gold investment. The evidence come from the study as Sherman E.J (1982), Pesaran (2001) found that there is long relationship on employment growth towards gold investment. Moreover, the reducing numbers of employment will make the investing activities low. Ranjini L.T (2006) states that, joblessness will reduce the quality of living cost hence will reduce the purchasing power and reduce the investment activities due to lack of surplus fund to invest. Kennedy (2002) and Wang (2011) found that employees in small firms become laid off due to financial crisis in 2008 and 2009. So, the quality of living cost and investment activities become drop because they lost the job and source of income, hence the gold investment volume also fall.

2.2.3 Inflation and Gold Investment

There is a very strong positive connection between gold and inflation according to study of Kennedy (2002). It has been supported by findings result

from Fan, Fang and Lu (2014) that stated that, there is usually a relatively strong economic growth in the initial stage of inflation. The rise of gold price will be less than other commodities because of the industrial applications, other commodities (such as oil, copper, etc.) will have stronger demand than gold. However, in later stage of inflation, gold's hedging property build up when the growth of real economy has declined and demands for oil and copper begins to slow down. Therefore gold price continues to rise while oil and copper start to devalue. This is proved by Blose (2009). Blose points out that any scholars strongly recommended investors to buy gold for hedging in the period of inflation, because they believe that the gold price redirects the inflation level. Some scholars even took gold price as a substitute variable of inflation in their experimental researches.

Adrangi (2003) also reported that there is positive link between gold and inflation and agreed that investing in gold could provide a dependable hedge against inflation both in the short run and long run. It is supported by findings of Capie et all (2005), Wang (2011) that examine the short run and long run for inflation and god investment relation. Findings by Kennedy (2002) found that there is strong relation between gold and inflation and it is supported by Sjaastad (2004), Mohd Fahmi, Hooi Lean, Zakaria (2015).

Furthermore, inflation make financial system yet investment activities not efficient and it give negative impact to the financial development and investment activities. There is evidence from the study by Baur and Lucey (2011), M.H Ibrahim (2012). Thus, the low inflation will help the development in investment activities.

Table 2.1 Summary on Literature Review

Variables	Authors / Years	Findings
Gold Price	Levin and Wright (2006)	gold price is one of the factor that give effect towards gold investment option by investors.
	Cai, et all (2001)	that gold price is the one of the factors that moves gold market.
	Sjaastad, Larry and Scacciallani (1996)	the instability of the currency exchange rate will influence the gold price
	Sherman E.J (1983)	the gold economics and incidentally affect the investment demand when there is price unstable
Employment	Sherman E.J (1982),	long relationship on employment growth towards gold investment
	Ranjini L.T (2006)	joblessness will reduce the quality of living cost hence will reduce the purchasing power and reduce the investment activities due to lack of surplus fund to invest
	Kennedy (2002) and Wang	quality of living cost and investment activities

	(2011)	become drop because they lost the job and source of income
Inflation	Kennedy (2002)	positive connection between gold and inflation
	Fan, Fang and Lu (2014)	relatively strong economic growth in the initial stage of inflation. Recession increased, investment option decreased.
	Blose (2009)	scholars strongly recommended investors to buy gold for hedging in the period of inflation, because they believe that the gold price redirects the inflation level
	Adrangi (2003)	positive link between gold and inflation and agreed that investing in gold could provide a dependable hedge against inflation both in the short run and long run
	Baur and Lucey (2011)	inflation make financial system yet investment activities not efficient and it give negative impact to the financial development and investment activities

2.3 Concluding Remarks

This chapter has clarified the impact of economic variables on gold investment. The discussion highlights previous studies finding on the relationship between gold price, employment, inflation and gold investment.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The main objective of this study is to examine the hypothesis whether economic variables has major effect to influence investors to choose gold investment. Section 3.2 describes data collection and sample selection. In section 3.3 discusses the dimension of variables. While, section 3.4 describes the theoretical framework of dependent and also independent variable used. In section 3.5 explained development of hypothesis. Section 3.6 describes the econometric model to be tested. Later, in section 3.7 clarify the empirical method used and lastly section 3.8 provides conclusion of the chapter.

3.2 Data Collection and Sample Selection

This study castoff the quantitative research. Quantitative research is research that use of mass numbers, obtained from data collection, descriptions of the data, as well as the occurrence of the result. There are several types of data always used in research liked cross sectional, time series and pooled data (Cameron and Trivedi, 2013). The secondary data are collected for some meant otherwise the problem in hand (Malhotra, 1999). Secondary data are very practical for the researcher to solve the problem statement and may explain the data more expressive (Sekaran, 2003). This study is based on secondary data that collected from Kuwait Finance House (M) Berhad (KFHMB, 2017), World Gold Council (WGC, 2017), and Bank Negara Malaysia (BNM, 2017). The following table shows the data collection of this study in Table 3.1.

Table 3.1 Data Description

NO	Variables	Definition of Variables	Sources of Data
1	TV	Total Volume of Gold Account (in gram denomination)	Business Analytics and Development Data of Kuwait Finance House (M) Bhd,2017
2	GP	Gold Price (using gold price of Kuwait Finance House Treasury	World Gold Council, 2017 World Bank, 2017 Treasury of Kuwait Finance House (M) Bhd, 2017
3	EMP	Total Employment (Unemployment rate Indicator from MDI)	Bank Negara Malaysia, 2017 Malaysian Development Indicator (2017)
4	INF	Inflation	Bank Negara Malaysia, 2017

The data used for this study comprise of Total Volume of Gold Investment Account in quantity of Grams for Kuwait Finance House (M) Berhad. The data been acquired in lump sum by Division of Business Analytic KFHB The data collected starting from January 2010 to December 2016 as presents in table 3.2:

Table 3.2 Sampling of the Study

NO	BRANCHES	RANGE OF THE YEAR	TOTAL
1	KL Main	January 2010 - December 2016	7
2	Penang	January 2010 - December 2016	7
3	Kota Bharu	January 2010 - December 2016	7
4	Kota Kinabalu	January 2010 - December 2016	7
5	Johor Bharu	January 2010 - December 2016	7
6	Kuching	January 2010 - December 2016	7
7	Shah Alam	January 2010 - December 2016	7
TOTAL			**49**

3.2.1 Panel Data

The data used in this research involved 49 panel data from 7 main branches of KFHMB that opened from 2008 which are KL main, Penang, Kota Bharu, Kota Kinabalu, Johor Bharu, Kuching, and Shah Alam. Panel data is denoted as cross sectional and time series. Moreover, there are mixture between time series data and cross section in panel data. In addition, with varies type of practical variation by panel data the researcher can learned different from other studies (Hsiao, 2014). In this study used balance panel data which has the same numbers time series in the unit of cross sectional. The benefits of using panel data can raise the sample of size; it appropriate for the dynamic changes and it can be allows studying the complex behaviour (Gujarati, 2008).

3.3 Measurement of Variables

3.3.1 Dependent Variable

In this research, the dependent variable is measured by Total Volume of Gold Investment in Kuwait Finance House (M) Berhad. Thus, the use of total volume gold investment is to measure the impact of economic variables on gold investment. Gold investment nowadays has become favourite by most of the financial institution in Malaysia including Kuwait Finance House (M) Berhad.

3.3.2 Independent Variables

The enlightenments about independent variables used for this research which are economics variables as follow:

a) Gold Price

This research used Gold Price retrieved by Treasury Department of Kuwait Finance House (M) Berhad. Reference on gold price is also taken from World Gold Council for additional reference. The gold prices taken are by monthly

average from January 2010 to December 2016.The reason to select gold price as variable as few studies showed strong relationship of gold price towards gold investment such as Levin and Wright (2006).

b) Employment

The employment is measured from the age above than 18 years old. This variable was obtained from Malaysia Development Indicator (2017). The variable included because decreasing in the number of the total employment will decline the demand to invest in gold (Ranjini L.T 2006)

c) Inflation

This research used Consumer Price Index (CPI) as alternative for inflation. In previous research, the inflation had been examined to determine the gold investment such as. The financial development acted as dynamic channel through the inflation can be badly give impact the growth (Fan, Fang and Lu, 2014). The inflation will reduce the numbers of investors in gold investment due to the time value of money. Thus, inflation will give the impact whole economic activity including investor and also the banks.

Table 3.3 Summary of variables and measurements

Variables	**Measurement**	**Definitions**	**Previous studies**
Total Volume of Gold Investment	Total Volume of Gold Investment holder in KFHMB taken from yearly statistical on Business Analytics and Development in KFHMB	TV	Mansor H. Ibrahim (2012) Levin and Wright, 2006 Sjaastad, Larry and

			Scacciallani (1996)
Gold Price	Gold Price rate Retrieved by Treasury Department of Kuwait Finance House (M) Berhad	GP	Levin, Wright (2006) A.H Baharom, Mansor H. Ibrahim (2011) Sherman E.J (1982) Sherman E. (1983) Sjaastad, Larry and Scacciallani (1996) Cai, Cheung and Wong (2001)
Total Employment	This study used the total employment above 18 ages to examine the relationship	EMP	Sherman E.J (1982) Ranjini L.T

	between employment and gold investment		(2016) Kennedy (2002) Wang (2011)
Inflation	This study used Consumer Price Index (CPI) as proxy for inflation	INF	Mohd Fahmi, Hooi Lean, and Zakaria (2015) Fan, Fang and Lu (2014) Blose (2009) Adrangi (2003) Kennedy (2002)

3.4 Theoretical framework

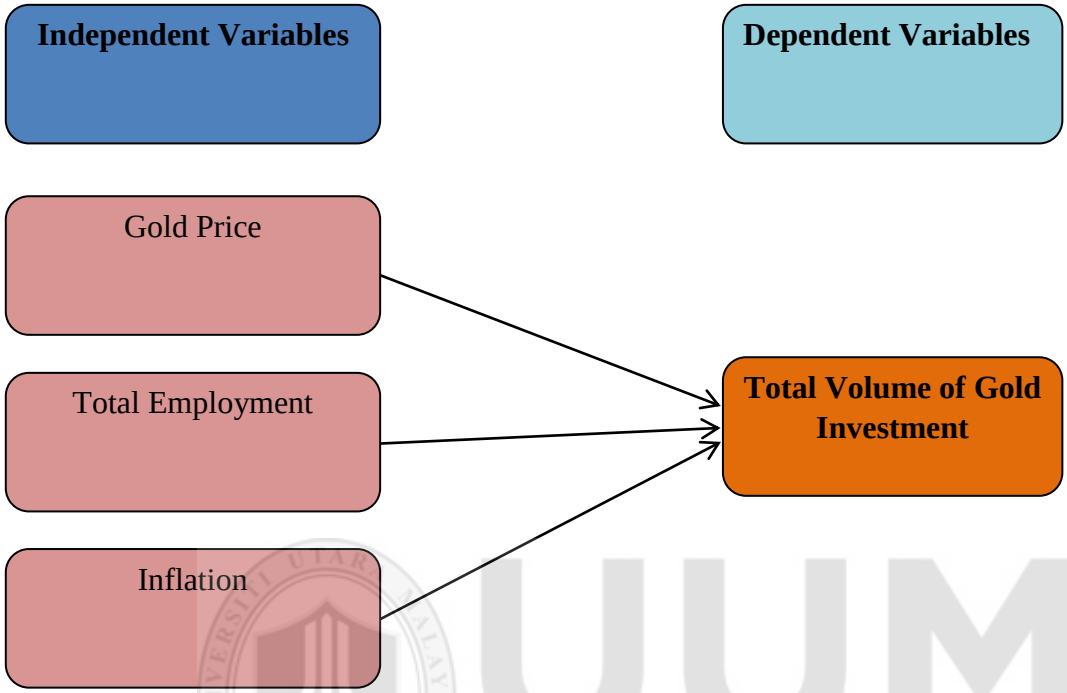
This study is use secondary data that taken from the experiential study. The variable into two categories namely:

a. Independent variable consists of 3 kinds of variable:

1. Gold Price (GP)
2. Total employment (EMP)
3. Inflation rate (INF)

b. Dependent variable consist of total volume gold investment

Figure 3.1 Theoretical Framework



3.5 Hypothesis Development

The researcher is going to observe the relationship between gold price, total employment, inflation and gold investment in Kuwait Finance House (M) Berhad. For the gold price variable, measurement used is Ringgit Malaysia from data of treasury Kuwait Finance House (M) itself. By measure this variable, we can see the effect of changes in gold price towards total volume of gold investment. In the past studies, Levin and Wright (2006), A.M Hafizi, Syed Musa, Hawati etc (2012), A.H Baharom, Mansor H. Ibrahim (2011), also used gold price as variable in their research. Therefore, the hypothesis of gold price is:

H1: There is a significant relationship between gold price and gold investment.

Second variable used are total employment. The measurement of total employment was obtained from Malaysia Development Indicator 2017 by using rate of employment growth in Malaysia from range 2010-2016 in the percentage rate of measure. In the previous study, Sherman E.J (2002), Ranjini (2016) and Kennedy (2002) included the employment rate as a factor that affects the investment in gold. Therefore, the hypothesis of total employment is:

H2: There is a significant relationship between total employment and gold investment.

Last but not least, the third variables that been used are inflation. Measurement on inflation is obtained from Bank Negara summary report from 2010 to 2016. In this study, measurement on inflation is in the percentage rate of inflation as the inflation rate percentage has significant effect on the previous studies by Blose (2009), Adrangi (2003), Fan, Fang and Lu (2014) and Fahmi, Hooi Lean, and Zakaria (2015). Therefore, the hypothesis for inflation is:

H3: There is a significant relationship between inflation and gold investment.

3.6 Econometric Model

The regression model aims to examine and predict how the connection link between independent variables and dependent variable. The econometric model is show below:

$TV_{it} = \beta_o + \beta_1 GP_{it} + \beta_2 EMP_{it} + \beta_3 INF_{it} + \varepsilon_{it}$

Where :

TV : Total Volume of Gold Investment

βo : Constant

$\beta_1, \beta_2, \beta_3$:Coefficient of the Parameters

GP : Gold Price

EMP : Total employment

INF : Inflation

ε : Error term

3.7 Research Design

This research employed the several method SPSS IBM versions 24 to test the relationships between economic variables and gold investment liked gold price, total employment and inflation. The analysis will be divided into 4 parts, namely:

i. Diagnostic Test

ii. Descriptive Analysis

iii. Correlation

iv. Regression (OLS)

3.7.1 Diagnostic Test

Diagnostic test was employed on the data that explained in the current section. This study conducted several tests before the regression analysis liked multicollinearity , normality, linearity and homoscedascity tests was applied.

a) Multicollinearity Test

Mullticollinearity are frequently confront statistical phenomenon are highly correlated with two or more independent variables in the multiple regression (Sekaran, 2013). If an independent variable has a tolerance value more than 0.1 and variance inflation factor (VIF) are less than 10, the multicollinearity problem does not exist (Hair, 2010).

b) Normality Test (Skewness and Kurtosis)

In statistics, normality tests are used to determine if a data set is well-displayed by a distribution. Not only to see the normal distribution, this test also is

to compute how probable it is for a random variable underlying the data set to be normally distributed. For this test, Skewness and Kurtosis result will be analyse to see the pattern of normality on the data.

c) Linearity (Durbin Watson test)

Linear relationships among all pairs of dependent variables must be assumed. At this test, Durbin Watson will be use to analyse the results.

d) Homoscedasticity (PP plot test)

The assumption of homoscedasticity or in other word same variance is central to linear regression models. PP plot is used to analyse the result. Homoscedascity is being used to describes a situation in which the error term (that is, the "noise" or random activity in the relationship between the independent variables and the dependent variable) is the same across all values of the independent variables.

3.7.2 Descriptive Statistic

The descriptive statistic consists of a process converting a large of raw data into a table with the frequency distribution and also percentages which are essential part of the data (Denscombe, 1998). The descriptive statistics are used to describe and summarize data in study (Trochim, 2000). Moreover, descriptive statistics also discover and measure the cause and impact the relationships among variables (Cooper and Shindler, 2000). In this test of descriptive comprising information about mean, standard deviation, median, minimum and maximum.

3.7.3 Correlation

A correlation can be briefly explained as a single number that describes the degree of relationship between two variables (Throchim, 2000). Besides, the correlation is obtained from appreciating the variations in one variable as other

variable also different variations (Sekaran, 2013). Therefore, in this study, Pearson correlation is being used to test the result. The correlation function is to measure the strength of relationship between the variables for this study. Furthermore, if the correlation coefficient is more than 0.8, it might lead to multicollinearity problem between variables (Gujarati, 2003). However, the interpretation of a correlation coefficient is depending on the purpose of the study. This study used Pearson Correlation to analysis on correlation.

3.7.4 Regression (OLS)

Regression (OLS) is a method of standard linear regression with the focuses of reduces the distinction between the ascertained responses in some absolute data set and the responses predicted by the linear estimation of the data. The OLS is most common statistical method use for the presentation of vary discipline for the regression analysis (Hair, 2010). The stepwise method of regression involves automatic selection of independent variables. Stepwise regression can be achieved either by trying out one independent variable at a time or by including all potential independent variables in the model in one time shot and removing those that are not statistically significant, or by a combination of both methods. The regression provide the result predictable of dependent variable and independent variables (De Coster, 2004). The equation for OLS showed below:

$$Y_{i,t} = \alpha + \beta x_{i,t} + \varepsilon_{i,t}; \; i = 1,2,...,N; \; t + 1,2,...,$$

3.8 Concluding Remarks

This chapter has defined the data employed in this research and explained the sample selection to examine the hypothesis whether economics variables has significant influence to the gold investment. These samples consist of 7 branches of Kuwait Finance House (M) Berhad. Balanced panel data is utilized in this research. In this sense, panel data provides several advantages can be controlled in the regression analysis. The next chapter were presents the result of the analysis and the findings.

CHAPTER FOUR

EMPIRICAL FINDING AND DISCUSSION

4.1 Introduction

This chapter provided the main finding of the empirical tests. Firstly, this chapter begins with diagnostic tests of this study of the variables in section 4.2. Next, section 4.3 described the descriptive test of the variables. Later, section 4.4 explained the correlation test for this study. Furthermore, regression analysis was described in section 4.5. While in section 4.6 were discussed about the finding in this study. Lastly, the conclusion of this chapter was explain in chapter 4.7

4.2 Diagnostic Analysis

a) Multicollinearity test

In multicollinearity test, if the independent variable value shows a variance inflation factors (VIF) has less than 10, the multicollinearity problem non-existance (Montgomery, 2007), The outcome in table 4.1 shows that all of the VIF values are below than 10. Therefore, the problem multicollinearity does not exist and not disturb the regression analysis as table 4.1 below:

Table 4.1 Multicollinearity test

Variable	VIF
Gold Price	1.037113
Employment	1.008515
Inflation	1.045601

b) Normality (Skewness and Kurtosis)

Table 4.2 Normality test

	N	Skewness		Kurtosis	
TV	49	.910	.340	-.354	.668
GP	49	-.122	.340	-1.564	.668
EMP	49	.220	.340	-.680	.668
INF	49	1.210	.340	.555	.668

The result shown that Total Volume of Gold are positively skewed to right with result of 0.910, same goes with Employment and Inflation that showed more positive skewed to right. Meanwhile, Gold price showed that it is more to skew to left with negative result which mean that the left tail is longer compared to right tail. On the Kurtosis result, it shows that only Gold Price is more than 3.

c) Linearity test (Durbin Watson)

Table 4.3 Linearity Test

Durbin-Watson
1.548

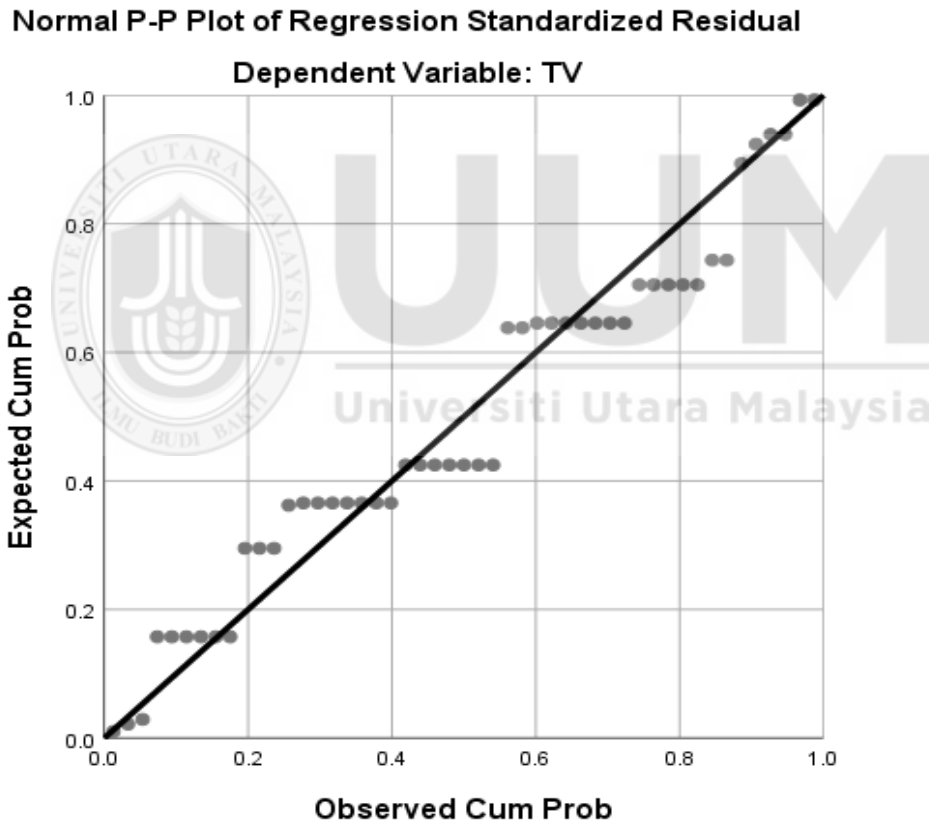
Table 4.3 indicates of Linearity test. Linearity test aimed to determine the relationship between dependent variable and independent variable whether it is linear or not. The test that been use are Durbin Watson. Based on the result, it shows 1.548 of Durbin Watson that indicates that there is positive autocorrelation between

the dependent variables and independent variables. Hence, we can say that it is optimistic relation of dependent and independent variables.

d) Homoscedasticity Test (PP Plot)

The figure below shows the result of probability-probability plot or PP plot that been used to test the homoscedascity. It is accessing in order to see how closely two data sets agree. Based on the result, we can have assumed that there is equal distribution since the plots falls on this line.

Figure 4.1 PP Plot



4.3 Descriptive Analysis

Table 4.4 presents summary of descriptive analysis for the dependent variable and independent variables that was used in this study. It is also including information about mean, standard deviation, median, minimum and maximum.

Table 4.4 Descriptive statistic

Details	TV	GP	EMP	INF
Mean	22.6131	1.0473	17.4522	0.1726
Median	21.8924	1.1939	17.2049	0.4700
Maximum	27.6959	2.0919	18.8176	1.5041
Minimum	20.5848	-0.6932	16.6217	-2.3026
Std. Dev.	2.0486	0.7100	0.67312	1.0236
Observations	49	49	49	49

In table 4.4 above, all the series for the variables were converted into log form. The importance of log transformation is that can be lessening the variability of data and make data conform more closely to the normal distribution. The dependent variable for this study is total volume of gold account and the independent variables are gold price, employment, and inflation. In addition, the transformation into log made the projected elasticities. Furthermore, the results show all variables comprise 49 observations. The table above shows that the mean for gold account is 22.6131 and median 21.8924. The maximum value of total volume of gold account data is 27.6959 and the minimum value is 20.5848.

4.3.1 Correlation

In table 4.2 below shows the correlation between the variables are used in this study:

Table 4.5 Correlation

Correlation Probability	Total Volume	Gold Price	Employment	Inflation
Total Volume	1			

Gold Price	-0.4630***	1		
	0.0000	-----		
Employment	0.2506**	-0.0181	1	
	0.0279	0.8759	-----	
Inflation	-0.3698***	0.1892*	-0.0919	1
	0.0009	0.0994	0.4267	-----

*Notes: * indicates significant at 0.10 level, ** indicates significant at 0.05 level and *** indicates significant at 0.01 level.*

In table 4.5 shows the Pearson correlation coefficients. The correlation function is to measure the strength of relationships between the variables for this study. Furthermore, if the correlation coefficients are more than 0.80, it might lead to multicollinearity problem between the variables (Gujarati, 2003). However, the interpretation of a correlation coefficient is depending on the purposes of the study.

Thus, in table 4.5 shows that all correlation coefficients in this study are less than 0.80. Moreover, the table indicates that the correlation coefficient between total volume of gold and total employment is positive (r=0.2506) and significant (pvalue=0.0279) at 0.05 level. Similarly, the correlation coefficient amongst the inflation and gold price is positive (r=0.1892) and significant (p-value=0.0994) at 0.10 level. This shows that an increase or decrease in gold price would be followed by an increase or decrease in total employment respectively. It is also shows same with the variables between inflation and gold price. While, the correlation coefficient amongst total volume of gold investment and inflation is negative (r= -0.3698) and significant (p-value=0.0009) at 0.01 level. Lastly, the table above presents that the correlation coefficient total volume of gold investment and gold price is negative (r= -0.4630) and it significant (p-value=0.0000) at 0.01 level.

4.5 Regression Analysis (OLS)

This study shows the results on panel data regression of the gold price, total employment and also inflation on the total volume of gold investment are shows in table 4.6 as below:

Table 4.6 Regression Analysis

Variable	Coefficient	t-Statistic	Prob.
Gold Price	-1.1757	-4.2217***	0.0001
Employment	0.6639	2.2920**	0.0248
Inflation	-0.5458	-2.8138***	0.0063
R-squared	0.3442		
Adjusted R-squared	0.3173		
F-statistic	12.7719		
Prob(F-statistic)	0.0000		

*Notes: * indicates significant at 0.10 level, ** indicates significant at 0.05 level and *** indicates significant at 0.01 level.*

In table 4.6 above shows the results of ordinary least square (OLS). All the independent variables are significant to total volume of gold investment as shows in the table. T-statistic in table shows that all results for independent variables are higher than ±1.96 means that the results are significant. The all t-statistic results present that this study can reject the null hypothesis. The r-square was about 34.42%, it means that the 34.42% variation in total volume of gold explained by factors (independent variables) included in the model to test the period. Moreover, the p-value of fstatistic is significant at 1% level of significance. The regression coefficient shows 1% increase in gold price will decrease the total volume of gold investment by 1.17%.

While, the regression coefficient shows 1% increase in total employment will increase the total volume of gold investment by 0.66%. Furthermore, the regression coefficient shows 1% increase in inflations will decrease the total volume of gold investment by 0.54%. Thus, there is significant impact between independent variables and dependent variable for panel regression.

4.6 Discussion and Finding

4.6.1 Gold price and Total Volume of Gold Investment

The regression analysis shows that the impact gold price towards total volume of gold investment is significance. The relationship is negative between gold price and total volume of gold. The t-statistic result for gold price is -4.2217 with 1% of level significance. The regression coefficient shows 1% increase in gold price will decrease the total volume of gold investment by 1.17%. There are proof that gold price has positive relationship with total volume of gold account and significant found in the early studies by Levin and Wright (2006), Sherman E.J (1982), Sjaastad, Larry and Scacciallani (1996).Investors might interested to buy more gold if the gold price is getting high. Hence, this scenario will directly impact the total volume of gold account in Kuwait Finance House (M) Berhad.

4.6.2 Employment and Total Volume of Gold Investment

The regression analysis shows that the relationship between employment and total volume of gold investment is positive and significant. The t-statistic result for employment is 2.2920 with 5% of level significance. This result shows the regression coefficient shows 1% increase in total employment will increase the total volume of gold investment by 0.66%. This is because the unemployment rate is the major factor in investing (Kennedy,2002). Hence, this result supported the previous studies like Sherman E.J (1982), Ranjini (2006) and Kennedy (2002). By having increment on

growth rate of employment in the country, it will affect to improve the quality of lifestyle yet toward source of income. Thus, creating job opportunity in the country should be consider by government yet every organization in helping to improve the living income hence it will give more opportunity for people to invest in gold investment.

4.6.3 Inflation and Total Volume of Gold Investment

As regression analysis reveals that the impact inflation towards total volume of gold investment is significant. The t-statistic result for employment is -2.8138 with 1% of level significance. The regression coefficient shows 1% increase in inflations will decrease the total volume of gold investment by 0.54%. The result shows negative relationships between inflation and total volume of gold investment. Besides, there is an evidence that inflation have negative relationship with gold investment like Kennedy (2002), Adrangi,et all (2003),Sjaastad (2004) and supported with Capie, et al (2005). The increasing rate in inflation will contribute high purchasing power and lack of surplus to invest and it will reduce the volume of gold investment. Thus, the higher inflation will give bad impact and reduce the total volume of gold investment.

Table 4.7 Summary of Hypothesis Testing

No	Objective	Hypothesis	Findings
1	To examine the relationship between gold price and the total volume of gold	There is a significant relationship between gold price and total volume of gold investment	Supported
2	To determine the relationship between total employment and total volume of gold investment	There is a significant relationship between employment and total volume of gold investment	Supported
3	To investigate the relationship between inflation rates and total volume of gold investment	There is a significant relationship between inflation and total volume of gold investment	Supported

4.7 Concluding Remark

This chapter has reported the findings and discussion of the study. Furthermore, early of this chapter discusses the summary descriptive analysis of all variables and follow by explain in correlation. This chapter also reported the diagnostic test and regression analysis. Moreover, this chapter shows the summary results of hypothesis in this study. Lastly, the discussion result for this study from regression analysis.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter consist of the whole presentation of this research from previous chapter. Section 5.2 presents the summary of findings in this research. While, in section 5.3 discusses on implications of the research. Section 5.4 identifies the limitation in this research. Lastly, in section 5.5 consist of conclusion with recommendation for the future research.

5.2 Summary of findings

In this research investigate the effect of economic variables toward total volume of gold investment in Kuwait Finance House (M) Berhad. The data was collected from 7 Main branches of Kuwait Finance House (M) Berhad which are established since 2008 to 2016. The samples 7 branches are KL main, Penang, Kota Bharu, Kota Kinabalu, Johor Bharu, Kuching, and Shah Alam. The main concentration was to determine whether economics factor affect the gold investment. The research found that gold price, total employment and inflation have relationship with the total volume of gold investment in Kuwait Finance House (M) Berhad.

The result for gold price is consistent with the previous studies by Levin and Wright (2006),Cai,et all (2001), Sjaastad and Larry (1996), Sherman E.J (1983) and Mansor Ibrahim(2012) which they conclude that gold price has significant effect with positive relation with gold investment. Furthermore, the regression coefficient shows that 1% increase in gold price will decrease the total volume of gold investment by

1.17%. So, if the banks increase their gold price then the volume of gold investment will decrease.

The result for total employment is consistent with studies of Sherman E.J (1982), Ranjini (2006) and Kennedy (2002) which they conclude that gold investment has strong connection with employment and it is significant. Moreover, regression coefficient shows 1% increase in total employment will increase the total volume of gold investment by 0.66%. So, when the numbers of total employment increase then the volume of gold investment will increase. Hence, employment rate giving high impact towards total gold investment in Kuwait Finance House (M) Berhad as high employment rate will increase better living and source of income for investors.

The result for inflation is consistent with previous studies of Kennedy (2002), Adrangi (2003), Sjaastad (2004) and Capie (2005) which they concluded that inflation has negative relationship with gold investment. Moreover, the regression coefficient shows 1% increase in inflations will decrease the total volume of gold investment by 0.54%. Thus, the higher inflation rate will give bad impact towards total volume of gold investment as well.

5.3 Implications of research

There is valuable information and implication provides for policymakers to look insight in this research. Firstly, the gold price must be monitor to encourage the investors to buy the gold with low price and sell it at high price or keep preserving their gold for future saving. Secondly, this study can be a good guideline to the industry player to offer better investment product and be more competitive from others. Third, this research could be other ideas to the policy makers in developing or structuring the policy that will give better guideline for industry player yet to the prospect investors. From the view of academic field, this

study can be a stepping stone to broad the research for more in depth on other additional factors could be added yet can be in form of quantitative method in future for better understanding.

5.4 Limitations

There are several restrictions in this research. The limitation of this research is on the previous study. Since the gold investment account are quite new in industry, the previous study that give high impact on the gold investment account still less and the lack of information. Second limitation is length of time to obtained full data on volume of gold investment account from Kuwait Finance House (M) Berhad due to restriction on the data plus it is covered only from 2010 to 2016. Generally, get a more comprehensive conducted then the better results can be obtaining.

5.5 Recommendation and Future Research

There are several recommendations for future research. Firstly, it would be exciting to study the relationship between economics variables and gold investment account by compiling all the 15 branches of Kuwait Finance House (M) Berhad for better result, or included another banks in Malaysia that also offering similar product like gold account-i, for example Bank Muamalat gold account, al Rajhi gold account and Public gold. It might be different or same impact between these banks as different bank has different price on gold and margin.

Secondly, researcher can prolong length of period to get better result. Besides, the researcher can expand their research not only focuses in financial institutions. They will cover the non-financial institution that offering gold bar for investment like Poh Kong Jewellery, Habib Jewel and etc.

Thirdly, to consider more additional independent variables such as income, interest rates and oil price in the study to obtained more interesting research as nowadays, oil price, income and interest rates also has become major economic factor that can influence people to invest in any forms of investment including gold investment. Hence, by including more factors as variables to be tested, the study findings will be much more interesting and in depth.

5.6 Concluding Remarks

This chapter consist of the whole presentation of this research from previous chapter. This chapter also explain summary of findings in this research. While, discusses on consequences of the study. Moreover, this chapter identifies the constraint of this study. Lastly, this chapter consist of conclusion with recommendation for the future research.

REFERENCES

Aggarwal, R., & Soenen, L. A. (1988). The nature and efficiency of the gold market. *The Journal of Portfolio Management, 14*(3), 18-21. doi:10.3905/jpm.1988.409152

Aggarwal, R., & Lucey, B. M. (2005). Psychological Barriers in Gold Prices? *SSRN Electronic Journal*. doi:10.2139/ssrn.669761

Batten, J. A., & Lucey, B. M. (2007). Volatility in the Gold Futures Market. *SSRN Electronic Journal*. doi:10.2139/ssrn.996235

Batten, J. A., Ciner, C., & Lucey, B. M. (2013). On the Economic Determinants of the Gold-Inflation Relation. *SSRN Electronic Journal*. doi:10.2139/ssrn.2320754

Baur, D. G., & Lucey, B. M. (2009). Is Gold a Hedge or a Safe Haven? an Analysis of Stocks, Bonds and Gold. *SSRN Electronic Journal*. doi:10.2139/ssrn.952289

Białkowski, J., Bohl, M. T., Stephan, P. M., & Wisniewski, T. P. (2015). The gold price in times of crisis. *International Review of Financial Analysis, 41*, 329-339. doi:10.1016/j.irfa.2014.07.001

Blose, L. E. (2010). Gold prices, cost of carry, and expected inflation. *Journal of Economics and Business, 62*(1), 35-47. doi:10.1016/j.jeconbus.2009.07.001

Cai, J., Cheung, Y., & Wong, M. C. (2001). What moves the gold market? *Journal of Futures Markets, 21*(3), 257-278. doi:10.1002/1096-9934(200103)21:3<257::aid-fut4>3.0.co;2-w

Capie, F., Mills, T. C., & Wood, G. (2005). Gold as a hedge against the dollar. *Journal of International Financial Markets, Institutions and Money, 15*(4), 343-352. doi:10.1016/j.intfin.2004.07.002

Chapra, M. U. (n.d.). Alternative visions of international monetary reform. *Islamic Banking and Finance*. doi:10.4337/9781843765318.00018

Davidson, P. (2015). Full Employment, Open Economy Macroeconomics, and Keyness General Theory: Does the Swan Diagram Suffice? *SSRN Electronic Journal*. doi:10.2139/ssrn.2735590

H. Z. (2017, September 30). *Efficiency of Gold Dinar*. Speech presented at Senior Expert Workshop on Gold Dinar in IDB Headquarters, Jeddah.

Ghazali, M. F., Lean, H. H., & Bahari, Z. (2015). Sharia compliant gold investment in Malaysia: Hedge or safe haven? *Pacific-Basin Finance Journal, 34*, 192-204. doi:10.1016/j.pacfin.2014.12.005

Ghosh, A. (2016). What drives gold demand in central banks foreign exchange reserve portfolio? *Finance Research Letters, 17*, 146-150. doi:10.1016/j.frl.2016.03.007

Granger, C. W. (n.d.). Investigating Causal Relations by Econometric Models and Cross-Spectral Methods. *Essays in Econometrics vol II: Collected Papers of Clive W. J. Granger,* 31-47. doi:10.1017/ccol052179207x.002

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics*. Singapore: McGraw-Hill/Irwin.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis*. Harlow: Pearson Education Limited.

Huybens, E., & Smith, B. D. (1999). Inflation, financial markets and long-run real activity. *Journal of Monetary Economics, 43*(2), 283-315. doi:10.1016/s0304-3932(98)00060-9

Ibrahim, M. H. (2012). Financial market risk and gold investment in an emerging market: the case of Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management, 5*(1), 25-34. doi:10.1108/17538391211216802

Kauffman, G. B. (1985). The role of gold in alchemy. Part II. *Gold Bulletin, 18*(2), 69-78. doi:10.1007/bf03214689

KEYNES, J. M. (2016). *GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY*. S.l.: DESERT.

Levin, E., Montagnoli, A., & Wright, R. (2006, June 02). Short-run and long-run determinants of the price of gold. Retrieved September 11, 2017, from http://strathprints.strath.ac.uk/7215/

Mahathir, B. M. (2002). *The Malaysian currency crisis: how and why it happened*. Subang Jaya: Pelanduk.

Malaysia's Economy: Getting Closer to High-Income Status. (n.d.). Retrieved January 20, 2018, from https://www.imf.org/en/News/Articles/2018/03/07/NA030718-Malaysias-Economy-Getting-Closer-to-High-Income-Status

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics, 16*(3), 289-326. doi:10.1002/jae.616

Ranjini L. Thaver (2006). Unemployment as A Determinant Of Gold Prices: Empirical Evidence. *The International Journal of Business and Finance Research* Vol. 10, No. 4, 2006, pp. 43-52.

Sherman, E. J. (1982). Gold. *The Journal of Portfolio Management, 8*(3), 21-27. doi:10.3905/jpm.1982.408850

Why Gold, Not Oil, Is The Superior Predictor of Inflation | World Gold Council. (n.d.).

Retrieved September 30, 2017, from https://www.gold.org/research/why-gold-not-oil-superior-predictor-inflation

Yaacob, S. E. (2015, June 18). Study of implementation gold dinar as currency. Retrieved September 30, 2017, from https://ukm.pure.elsevier.com/en/publications/study-of-implementation-gold-dinar-as-currency

Zainal-Abidin, H. A., & Tan, P. L. (2016). Gold Investment Account in Malaysia: Comparative Review of Gold Investment Scheme Between Maybank Bhd. and Genneva Malaysia Sdn. Bhd. *Proceedings of the 1st AAGBS International Conference on Business Management 2014 (AiCoBM 2014),* 611-619. doi:10.1007/978-981-287-426-9_54

APPENDIX

APPENDIX A

RELATIONSHIP BETWEEN GOLD PRICE, EMPLOYMENT AND INFLATION TOWARDS TOTAL VOLUME OF GOLD INVESTMENT

Covariance Analysis: Ordinary

Date: 04/01/2018 Time: 21:49

Sample: 2010 2016

Included observations: 49

Correlation Probability	LNTV	LNGP	LNEMP	LNINF
LNTV	1			

LNGP	-0.4630	1		
	0.0000	-----		
LNEMP	0.2506	-0.0181	1	
	0.0279	0.8759	-----	
LNINF	-0.3698	0.1892	-0.0919	1
	0.0009	0.0994	0.4267	-----

APPENDIX B

MULTICOLLINEARITY TEST

Variance Inflation Factors

Date: 04/01/2018 Time: 21:55

Sample: 1 49

Included observations: 49

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
LNGP	0.077552	3.322896	1.037113
LNINF	0.037626	1.075729	1.045601
LNEMP	0.083915	687.8816	1.008515
C	25.71102	690.9671	NA

APPENDIX C

COMMON EFFECT MODEL

Dependent Variable: LNTV

Method: Panel Least Squares

Date: 04/01/2018 Time: 21:52

Sample: 2010 2016

Periods included: 6

Cross-sections included: 6

Total panel (balanced) observations: 49

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGP	-1.1757	0.2785	-4.2217	0.0001
LNEMP	0.6639	0.2897	2.2920	0.0248
LNINF	-0.5458	0.1940	-2.8138	0.0063
C	12.3513	5.0706	2.4359	0.0173
R-squared	0.3442	Mean dependent var		22.6131
Adjusted Rsquared	0.3173	S.D. dependent var		2.0486
S.E. of regression	1.6927	Akaike info criterion		3.9411
Sum squared resid	209.1585	Schwarz criterion		4.0628
Log likelihood	-147.7308	Hannan-Quinn criter.		3.9898
F-statistic	12.7719	Durbin-Watson stat		1.548
Prob(F-statistic)	0.0000			

APPENDIX D

RELATIONSHIP BETWEEN GOLD PRICE, TOTAL EMPLOYMENT, INFLATION, EMPLOYMENT GROWTH RATE AND TOTAL VOLUME GOLD INVESTMENT

Covariance Analysis: Ordinary
Date: 04/01/2018 Time: 05:15
Sample: 2010 2016
Included observations: 49

Correlation Probability	LNTV	LNGP	LNEMP	LNINF	LNGI
LNTV	1				

LNGP	-0.4630	1			
	0.0000	-----			
LNEMP	0.2506	-0.0181	1		
	0.0279	0.8759	-----		
LNINF	-0.3698	0.1892	-0.0919	1	
	0.0009	0.0994	0.4267	-----	
LNGI	-0.1641	0.3603	0.0356	0.2564	1
	0.1538	0.0013	0.7583	0.0244	-----