NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

BANKING AND ACCOUNTINGMASTER PROGRAMME

THE IMPACT OF FOREIGN DIRECT INVESTMENT ON BANKING SECTOR PERFORMANCE IN USA

OMRAN ABDULQADIR

MASTER'S THESIS

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MASTER'S THESIS

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ACCEPTANCE

We as the jury members certify the "The impact of foreign direct investment on banking sector performance in USA"
Prepared by Omran Abdulqadir defended on
25 th May 2018

Has been found satisfactory for the award of degree of

Master

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DEDICATION

This study is dedicated to my father and mother who has been a strong pillar of success and positive influence in my life and to my family members. I am thankful to my beloved wife Sara for their huge support and my dear son Mohammed.

ACKNOWLEGMENTS

Foremost, it is with honour that I acknowledge the wonderful assistance rendered and astonishing role played by my supervisor **Assoc. Prof. Dr. Aliya Z.Isiksal** Deepest appreciation also goes to my colleagues in the department of banking and accounting as well as departmental staff for their support. My acknowledgements go also to all my jury members.

I would also like to thank my deepest love and appreciations go to my dear wife to encourage me to study in a foreign country.

Finally, I would like to thank everyone for their help throughout my study.

ABSTRACT

THE IMPACT OF FOREIGN DIRECT INVESTMENT ON BANKING SECTOR PERFORMANCE IN USA.

The study dwells on examining if changes in FDI inflows influence banking sector performance in USA. This study was conducted following observations that were made which showed that there are a lot of contradictions about the idea that bank performance is positively and directly related to changes in FDI inflows. The Autoregressive Distributed Lag (ARDL) Bounds test was used to analyse time series data from the first quarter of March 2000 to the last quarter of December 2017. The results revealed that there is a long run cointegration between bank performance and, FDI, EG. FC, NS, BS and BD. The results also showed that an increase in FDI inflows tends to cause a decline in bank performance.

Keywords: foreign direct investment, economic growth, financial crisis, Bank deposit, banking sector performance.

ŐZ

ABD'de BANKACILIK SEKTÖRÜ PERFORMANSINA YABANCI DİREKT YATIRIMIN ETKİSİ.

Araştırma, DYY girişlerindeki değişikliklerin ABD'de bankacılık sektörü performansını etkileyip etkilemediğini incelemektedir. Bu çalışma, banka performansının DYY girişlerindeki değişimlerle doğrudan ve dolaylı olarak ilgili olduğu düşüncesiyle ilgili birçok çelişki olduğunu gösteren gözlemler sonucunda gerçekleştirilmiştir. Mart 2000'in ilk çeyreğinden Aralık 2017'nin son çeyreğine kadar zaman serisi verilerini analiz etmek için Otoregresif Dağıtılmış Gecikme (ARDL) Sınırları testi kullanıldı. Sonuçlar, banka performansı ile DYY, EG arasında uzun dönemli bir eşbütünleşme olduğunu ortaya koydu. FC, NS, BS ve BD. Sonuçlar aynı zamanda DYY akışlarındaki artışın banka performansında bir düşüşe neden olduğunu göstermektedir.

Anahtar Kelimeler: doğrudan yabancı yatırım, ekonomik büyüme, finansal kriz, Banka mevduatı, bankacılık sektörü performansı.

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LIST OF ABBREVIATIONS

ADF: Augmented Dickey Fuller

PP: Phillips Perron

ARDL: Autoregressive Distributed Lag

BP: Banking sector performance

BD: Bank Deposit

FDI: Foreign direct investment

ROA: Return on assets

EG: Economic growth

FC: Financial crisis

NS: Net savings

BS: Bank size

USA: United States of America

MNCs: Multinational Companies

GDP: Gross Domestic Product

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Efforts is often placed by economies to attract more FDI inflows into an economy. This follows different assertions which have been made and contend that FDI inflows are an engine for economic growth and development (Harding & Javorcik, 2011). Banks are a channel through which such funds are transferred and injected into an economy. Therefore it is important that economies have sound and well developed banking systems (Rajan & Zingles, 2003). The United States of America (USA) has one of the most financial developed banking sector. Meanwhile, foreign direct investment levels have been on the rise and this can be evidenced by a surge in FDI inflows from $172 billion in 2014 to $380 billion 2015 (Commerce Gov., 2016). Such has been in line with improvements in banking sector performance and reports by Federal Bank of St Louis showed that return on assets (ROA) of all banks increased 1.08% in the third quarter of 2017 (n.d). The link that exist between FDI and bank performance is of paramount importance towards attaining growth and financial development goals. Hence, it is the duty of monetary authorities to enact policies that can improve the extent to which an economy lure foreign investments and the development of its financial sector. A study by Deok-Kim and Seo (2003) also showed that the ability of other sectors to grow and develop is also influenced by the level of investments that is made into an economy as well as the extent to which banks and other financial institutions disburse funds to these sectors (Aghion et al, 2005). Either way, FDI and bank profitability are an inseparable phenomenon and hence efforts must be placed to ensure an effective functioning and interaction of FDI inflows and bank performance.

1.1.1 FDI trends

Efforts is often placed by economies to attract more FDI inflows into an economy. This follows different assertions which have been made and contend that FDI inflows are an engine for economic growth and development (Al-Sadig, 2009). Changes in FDI inflows are usually a reflective of the opportunities that are available in an economy as well as the extent to which the ease of doing business with that nation (Klump et al., 2007). FDI inflows tend to result in economic growth as available economic resources and domestic labour are put into effective use. Hence employment and output produced rises as FDI inflows continue to expand (Johnson, 2006). Meanwhile, economies must have well developed financial systems to facilitate the transfer of FDI into their economies (Banga, 2003). This is supported by ideas given by Love and Zicchino (2006), which have shown that financial development increases as economies try to lure more foreign investments to finance domestic production. The impacts of FDI on an economy are considered to be significant when FDI inflows are associated with technology inflows and investments are made into productive sectors of the economy (Al-Sadig, 2009). This can be evidenced by a study conducted by Deok-Kim and Seo (2003), which showed that an increase in FDI inflows does not necessarily result in an improvement in economic growth. This is because most FDI inflows are presumed to be made in sectors that do not contribute to the productive sector of the economy (Harding & Javorcik, 2011). Hence, economic indicators such as employment, output and exports do not usually vary with changes in FDI.

1.1.2 Bank performance

Banks around the world including USA have been experiencing severe competitive pressure coupled by the effects posed by the economic crisis experienced in 2008. Such effects are threatening the ability of banks to fulfil their financial intermediation function (Christopoulos & Tsionas, 2004). Thus it is argued that the more profitable banks are, the more they are capable of disbursing funds to companies and individuals willing to engage in productive purposes (Levine, 1997). Chin and Ito (2006), contends that the extent to

which a financial sector continue to develop hinges on the extent to which banks are able to withstand competition and source funds from the international market (Beck et al., 2000).

1.2 Research problem

It is generally agreed that FDI inflows provides a powerful strategy to boost economic growth (Harding & Javorcik, 2011). The relationship between FDI and banking sector performance is assumed to be caused by changes in economic growth (Klump et al., 2007). This shows that there is an indirect relationship between FDI and bank performance. However, a study by Asante (20156), contradicts with this idea and established that bank performance is in fact positively and directly related to changes in FDI inflows. The nature of the relationship between FDI and bank performance is not clearly established whether it is direct or indirect. This also follows ideas which have shown that FDI inflow have a positive impact on economic indicators such as growth and financial development under a conducive economic environment. Thus showing that the positive association between FDI and bank performance is conditional. But such conditions are not clearly established and hence they need to be established and their effect ascertained in relation to USA. This study therefore seeks to examine the impact of foreign direct investment on the USA's banking sector performance.

1.3 Aims of the study

The main target of this study is to examine if changes in FDI inflows influence banking sector performance in USA. The study also seeks to attain the following goals;

- To determine economic conditions under which a positive relationship between FDI and bank performance be observed.
- To possible economic measures that can be used to influence FDI inflows into positively influencing banking sector performance in USA.

1.4 Research questions

The undertaking of this study is motivated by the need to provide answers to the following questions;

- Do changes in FDI have an influence on banking sector performance?
- Under what conditions can a positive relationship between FDI and bank performance be observed?
- What can be done to influence FDI inflows into positively influencing banking sector performance in USA?

1.5 Justification of the study

The study partially fulfils the requirements of a Masters in Banking and Accounting at Near East University. Observations can be made that FDI inflows are widely sought among nations around the world, this study therefore emphasises the importance of attracting more FDI inflows and enhancing their use to improve banking sector performance. In addition, it also offers strategies that can be used to attract more FDI inflows, enhance the use and effectiveness of FDI inflows as well as improve banking sector performance.

1.6 Organisation of the study

The study is structured in five different parts. The first part gives an introductory insight of the study. The second part covers related theoretical and empirical frameworks while the third part gives a description of the methods that were used to gather and analyse the findings. An analysis and presentation of the findings is addressed in the fourth part while the fifth part concludes the study.

CHAPTER TWO

THEORETICAL AND EMPIRICAL LITERATURE REVIEW

2.1 Introduction

This chapter looks at theoretical and empirical ideas that relate to the study of the effects of FDI on bank performance. Hence, will look at the meaning and rationale of FDI, the eclectic paradigm and how it offers explanations about FDI, benefits and costs of FDI to the host economy, privatisation, bank profitability and determinants of bank profitability and empirical studies that address the impact of FDI on bank profitability.

2.2 Fdi: Meaning and Rationale

In its nature FDI represents capital movements that are made between two economies and can either be inflows or outflows. Grazia (2005) defined FDI inflows as an inflow of capital investments made by foreign enterprises into a host economy while Kehal (2004) defined FDI outflows as capital investments made by a host economy into companies in other countries. Despite the difference that exist in terms of inflows and outflows, they resemble either a purchases of a stake in another countries or an acquisition of the entire foreign business (Lipsey, 2002) however, care must be placed to note that FDI is not related to the purchase of securities in other countries.

Another distinguishing feature about FDI is that it can either be classified as horizontal or vertical FDI and horizontal FDI represents foreign investments made into an industry of firm that is similar to the one operating in the domestic economy whereas vertical FDI can be categorised as backward or forward FDI (Konings & Murphy, 2001). What differentiates backward FDI from forward FDI is that the latter involves investments being made into an foreign industry that offers inputs to domestic firms such as oil refining like Shell Company while forward FDI involves an investment into a foreign company to sell products that are produced by a domestic firm like what Volkswagen is doing (Lipsey, 2003).

Whether an economy opts for FDI inflows or outflows, the decision is often based on either benefit that the host economy will get from the investment. For instance, Al-Sadig (2009).outlined that FDI is motivated by the need to own and control resources in other economies. This is because the geographical distribution of resources in the world is not even with most economies possessing natural resources and raw materials that are not in other countries. For instance, it well known that most of the mineral resources are from Africa and Western economies such as Britain are not endowed naturally with mineral resources. As a result, investors in Britain might invest in mining companies in Africa so as to have access to mineral resources.

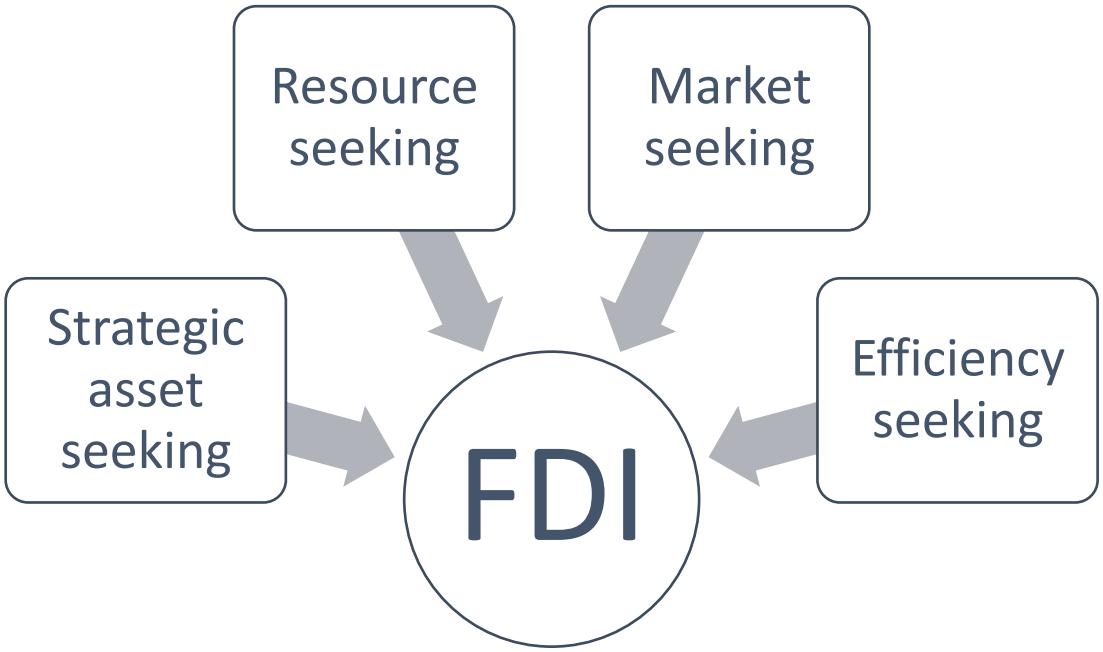

Figure 2.1: The rationale behind FDI

Source: Dunning (2001)

Studies have also showed that there is a rationale behind FDI as depicted by figure 2.1 is to take control of the production process (market seeking), (Vernon, 1974). This is usually possible or important when companies desire to operate close to their customers so as to effectively service their markets. This strategy will in turn result in a number of huge benefits such as a decline in transport costs, decline in prices and improvements in productivity.

Gastanaga et al. (1998) highlighted that this strategy has been used to as a competitive manoeuvre by foreign enterprises and the benefits are reaped by the foreign firms which might be having huge financial resources which domestic firms might not be having. As a result, when domestic firms fail to adequately service local markets, this creates more room for foreign enterprises to venture and exploit a huge market share. The idea of FDI has also be linked to be having first mover benefits and also being used to determine advertising, strategies and locations which are to the best interest of the firm (Deok-Ki Kim & Seo (2003).

With the increase in globalisation over the past two decades, FDI patterns have greatly changed more than changes in trade patterns and ideas given by (Banga, 2003) showed that there has been a growth in FDI patterns and this has been caused by the fact that FDI has an ability to avoid barriers that may in most cases affect international trade. FDI inflows between developing and developed economies have also been established to have changed a lot over the past 10 years with much of the FDI inflows being observed to be flowing towards developed economies as noted from figure 2.2.

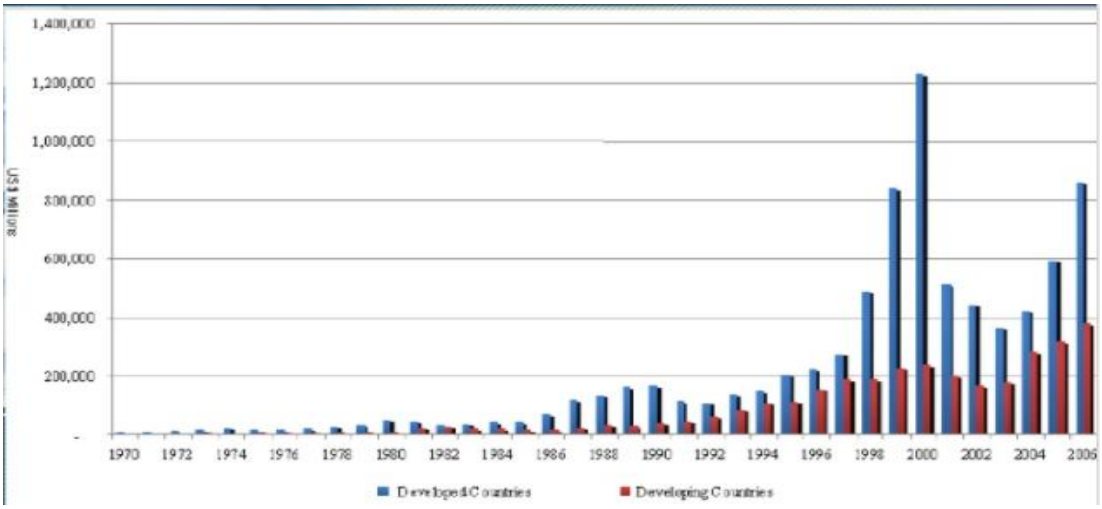

Figure 2.2: FDI inflow patters between developed and developing economies

Source: Dunning (2001)

Changes in FDI have also been witnessed in the area of FDI outflows and there is a growing difference that is emerging between outflows that are being

made from developed economies when compared against developing economies. For instance, figure 2.2 shows that FDI outflows from developed economies have been growing at a relatively high rate as compared to GFDI outflows that are being made from developing economies.

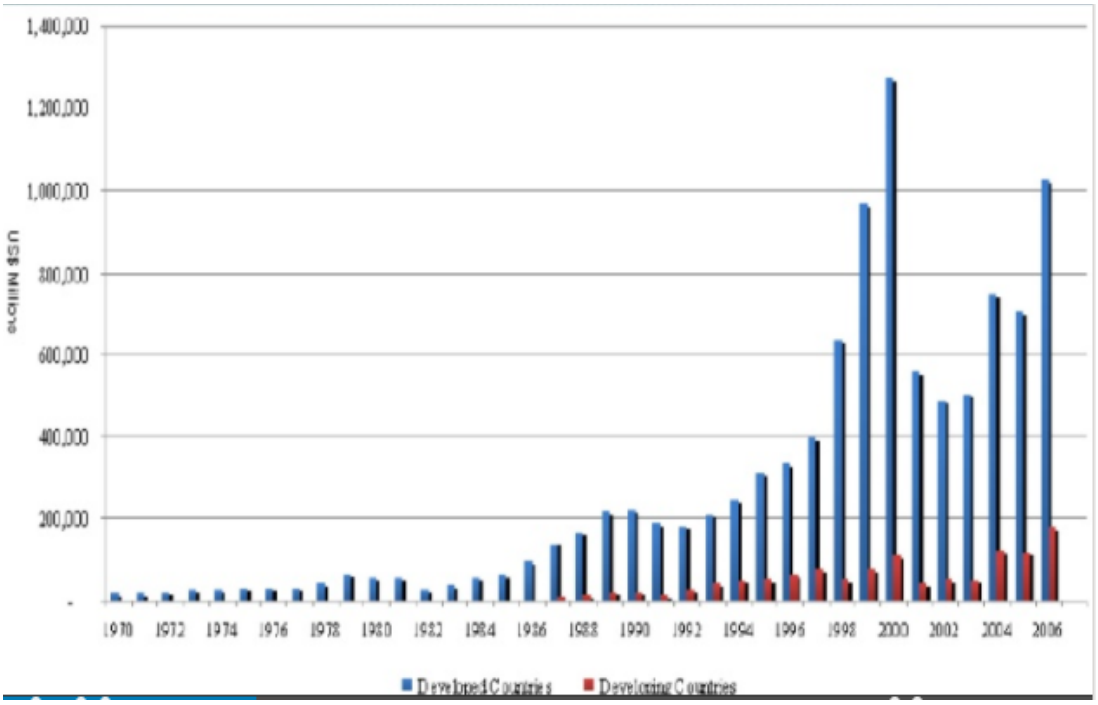

Figure2.3: FDI outflows between developed and developing economies

Source: Dunning (2001)

Moreover, there has been a change in the way foreign companies are now approaching international opportunities and recent studies have shown that foreign enterprises are now regarding international opportunities as part of their markets (Banga, 2003). This can be supported by figures which showed that FDI flows from all the economies increased 260% in 2004 when compared to the 1992 figure and this saw world output growing by 32%, the number of foreign affiliates increasing to 9 000 000 and global sales rising to $17.6 trillion (Al-Sadig, 2009).

In addition, significant economic and political changes have caused a response in FDI patterns as investors are more sensitive to risk and will move

their funds to those economies which they consider to be a safe haven for investment.

With this in mind, it can thus be established that FDI is growing at a faster rate that is higher than the growth in world output and trade. Thus this presents an opportunity for financial markets and economies around the world to tap into such positive developments. Banks are more and well positioned to benefit from the transfer of funds between economies especially when such funds are deposited into their host economy and can levy funds on each transaction made and can even use such funds to generate income provided that they are to be kept in the accounts for quite a long period of time. Moreover, the movement of funds through FDI vehicles provides an incentive for financial institutions to innovate their services and facilitate a swift transfer of funds. This provides a mechanism that will see domestic ban customers benefiting as well as service charges begin to fall and banks cut on operational costs (Gastanaga et el., 1998).

2.3 The Eclectic paradigm of FDI

This theory asserts that FDI is as a result of a combination of factors and Dunning (1996) contends that FDI are causes by market imperfections between nations which gives rise to firm-specific, internalisation and location advantages (Dunning, 2001). Dunning (1996) also highlights that transaction costs will also have an influence on the movement of investment funds between nations. This implied that when search, decision and bargaining, and police and enforcement costs between the two economies are relatively lower and thus giving a foreign firm to invest in that economy where such costs are lower. The decision to enter a foreign market is thus assumed to be as a result of either to use exports, licensing or FDI but focuses on FDI (Vernon,1974).

2.3.1 Basic assumptions

There are basically three assumptions that govern the eclectic paradigm and the first assumption outlines that in order for an international company to engage in FDI activities, it must have a net competitive advantage in servicing a particular market than other economies (Kojima, 1982). The ability to have a better competitive advantage can be as a result of firms having a lot of assets that are generating income into the business (Lipsey, 2002).

Most firms that have been linked with FDI activities have in most cases been noted to have an a strong ability to manage their income generating assets together with foreign assets in a manner that results in the company benefiting more than the firm's competitors (Konings & Murphy, 2001).

This theory also considers that firms are always faced with a decision of whether to add value to existing assets or to generate more assets (Markusen, 2002). This in return results in what is known as market internalisation and the internationalisation theory which highlights that imperfections in flows of raw materials and capital resources and, research and development will cause foreign firms to internalise markets (Bhatnagar, 2013). The internalisation process is however limited and affected by a number of factors such as political and commercial risk which the firm may incur when it invest in a foreign economy. The decision is therefore determined by whether investment benefits will be greater that the FDI costs.

The third assumption is based on the idea that the decision by firms to locate a firm in another country is based on location specific advantages and Bhatnagar (2013) supports this idea and contends that firms are more likely to engage in FDI activities provided that the new location provides the foreign firm with huge or better access to raw materials. Location advantages have also been linked with low taxes and wages which are considered to be major costs that can reduce the profitability of a bank (Konings & Murphy, 2001). Thus banks are more likely to invest in another foreign firm or industry on the condition that tax and wages rates are very low.

2.3.2 Limitations of the eclectic paradigm

2.3.2.1. The Kojima criticism of the eclectic paradigm

Kojima (1982) asserts that both the internalisation and eclectic paradigms are always explaining the same thing. This is based on the idea that when it comes to trade, this theory examines why countries trade with each other. That is, why a country imports certain goods and export other goods (Vernon, 1974). This argument has however been dismissed on the basis that focus should be placed on net trade (Deok-Ki Kim & Seo, 2003). In addition, the when looking at aspects of foreign portfolio, investments controlled and owned by MNEs are considered to be a totally different thing (Kojima, 1982).

2.3.2.2 A static approach: no role for strategy

This theory is a static approach because it does not consider or leave more room for strategy and does not consider the fact that different firms or banks will have different strategies. This can be supported by idea given by Bhatnagar (2013) which showed that even the internalisation process which firms are engaged in, is dynamic and that it changes with time. This is because whichever strategy multinational corporations enterprises (MNEs) undertake will be a reflection of what the firm seeks to achieve and position itself in the long run which is in turn influenced by mergers and acquisition, changes in marketing strategies, improvement in labour productivity, changes in management and technology (Markusen, 2002).

2.3.2.3 Interdependence of OLI variables

Variables of the eclectic paradigm are considered to be related with each other and this implies that location, firm specific and ownership advantages are strongly related with each other (Konings & Murphy, 2001). This tends to affect its effectiveness and the way the firm will respond to ownership advantages is considered to affect its location advantages. For example, changes in a bank's organisational structure will have an influence on the ability of the bank to enter an international market.

2.3.2.4 A shopping list of variables

Major criticism that have be given concerning the eclectic paradigm is that it contains a lot of variables and this tends to reduce its predictive power and a study conducted by (Vernon, 1974) noted that the predictive power of eclectic paradigm is zero all because it has a lot of variables. However, studies have outlined that this idea is not valid because the eclectic theory has a strong base on organisational and economic theory which covers all the variables that it talks about (Konings & Murphy, 2001; Markusen, 2002). For instance, location benefits (the level of competition, trade barriers and labour costs) are explained under the theory of the firm which contends that economic agents will also allocate resources to the production and or use of resources to those activities that will maximise their utility.

2.4 Benefits and Costs of FDI to host country

It is important to note that FDI are done with an emphasis to reap benefits by an economy and such benefits must be greater than the costs of the associated investment so that the investment can be made.

2.4.1 International trade benefits

It is important to note that the ability of FDI to cause positive economic changes in any economy is determined by a number of factors. A study by Cooper et al. (2003) showed that one of the key determinants of whether FDI inflows will cause a huge positive effect on the economy is the motive of attracting FDI inflows. Nations often attract FDI inflows for either as a strategic asset seeking, resources seeking, market seeking or efficiency seeking strategy. But FDI inflows have been noted to have a huge positive effect on economic growth (Bikker & Hu, 2002; Cooper et al., 2003; Duca & McLaughlin, 1990). This is because FDI inflows have been a huge instrument of supporting export growth. Furthermore, most of the output that is produced as a result of efficient seeking strategies is mainly intended for exporting. Thus economies such the USA will stand to benefit a lot in terms of export growth as more efficient production methods are being introduced and supported by funds obtained from FDI inflows.

In the event that raw materials that are being used by affiliates to produce goods for exports, value addition will be so high even when the intermediate goods are imported with sole aim improving efficiency, exports will still rise. However, since all the value addition activities are done within the host economy, the net effect will be a positive change in the economy's trade balance.

Studies also show that efforts to attract FDI inflows are also related with trade liberalisation measures which are targeted at promoting increased export growth (Eichengreen & Gibson, 2001; Goddard, Molyneux & Wilson, 2004). But the relationship between export growth and trade liberalisation is questionable and trade liberalisation does not always lead to increased export levels. As a result, changes in FDI inflows might not have a significant positive effect on trade. There are however several instances in which efforts to promote export growth by opening the economy to trade and luring more FDI inflows, have showed that opening the economy to trade results in increased access to international markets (Cooper et al., 2003; Djankov & Murrell, 2002; Zinnes et al., 2001). Trade openness is in most considered to be an FDI inflow attraction strategy as it allows domestic firms to get access to global financial markets from which they can get money to funds their production activities (Zinnes et al., 2001). But increases in domestic competition and access to capital goods as a result of trade openness, have a high tendency to offer economic scales to firms.

FDI inflows have also been established to cause a positive change in international trade when the production process is characterised by a high level of productive and cost efficiency as a result of combining labour and capital resources with FDI as another factor of production (Balasubramanyam et al., 1996). Ideas by Balasubramanyam et al. (1996) also highlight that economies like the USA will stand to benefit from FDI inflows because FDI inflows have positive external spill over effects on other firms in the host economy. This is because FDI inflows tend to be a representation of both human and capital resources which the host economy will find beneficial.

Hence, Blomstrom and Kokko (1996) believed that FDI inflows are considered to be an important source of export growth in both developing and developed countries. Global institutions are a major player towards export growth as they have the required financial resources that is required to support operations. Economies especially in African countries have been able to boost production below unsustainable resources as a result of FDI inflows, and this has played an important role towards trade promotion (Goddard, Molyneux & Wilson, 2004; Eichengreen & Gibson, 2001).

What may vary about the impact of FDI on international trade position of host economies is the impact. This is because the impacts of FDI on a host economy are assumed to be different between one economy and the other. For instance, a study by Lipsey (2002), established that the impact of FDI on a host economy is determined by the level of economic development of that economy. Implying that the more developed the host economy is, the more and greater FDI inflows will cause positive impacts. One of the key factor has also been established to be the level of industrialisation of that economy.

Moreover, combined gains from FDI inflows and international trade have an effect of causing a technological influx into the host economy. In such cases, expectations are very high that they will cause huge economic benefits especially in developing economies where such things are relatively lacking to a large extent. Evidenced provided by Markusen and Venables (1999), showed that nations like Germany, Italy, Turkey and Slovenia experienced a sharp increase in technological and petroleum exports as a result of a rise in FDI inflows.

2.4.2 Balance of payments benefits

Balance of Payments Effects FDI's effect on a country's balance of payment accounts is an important policy issue for most host governments. There are three potential balance of payments consequences of FDI. First, when an MNE establishes a foreign subsidiary, the capital account of the host country benefits from the initial capital inflow. However, this is a one-time only effect.

Second, if the FDI is a substitute for imports of goods or services, it can improve the current account of the host country's balance of payment. Much of the FDI by Japanese automobile companies in the US and UK, can be seen as substitute for imports from Japan. A third potential benefit to the host country's balance of payment arises when the MNE uses a foreign subsidiary to export goods and services to other countries. The evidence based on empirical research on the balance of payments effect of FDI, indicates that there is a difference between developed and developing countries, especially with respect to investment in the manufacturing industries. Dunning (1961, 1969) while assessing the impact of the US FDI in Britain, he estimated a positive effect of around 15 percent of the total capital invested. Nevertheless, his research only dealt with the direct effect of FDI, which results in noticeable flows in the balance of payments. The indirect effects, on the other hand arising from the changes in the income of residents, or changes in consumption patterns were not considered.

2.4.3 Employment benefits

Increases in FDI inflows have positive effects on employment which can either be direct or indirect. Notable effects of FDI on employment have been observed to be high in economies that have high labour resources and few capital (Eichengreen & Gibson, 2001). When a host economy's citizens are employed directly by an MNC, the effect is considered to be a direct effect (Cooper et al., 2003). A study by Hill (2000), outlined that an annual average of 2000 direct jobs has been created by MNCs in France. On the other hand, indirect effects occur as a result of indirect or external benefits and spill over effects of MNC activities such as spending and ancillary activities. More so, other domestic firms can facilitate the processing of investors goods and services (forward linkages), or act potential suppliers that will provide these MNCs will raw materials and other services that are essential to their operations (backward linkages). A study by Feldstein (2000), also highlighted that forward and backward linkages have a high activities have a strong ability

to generate employment as a result of increased subcontracting activities between local and foreign firms.

The World Investment Report (1999) reports that major positive changes in employment brought about by increases in FDI inflows have been in the manufacturing sector. Similar findings were made in Kenya, in which it was known that both direct and indirect employment benefits of FDI inflows were being observed to be highly concentrated in the industrial sector (Nzomo, 1971). This can also be supported by findings which showed that an estimated total of 26 million jobs were created in developing economies as a result of FDI inflows (Aaron, 1999). The suggested reasons showed that there was a strong operational relationship that existed between foreign and local firms.

What is of most importance is that employment benefits posed by MNC activities on a host nation are high when such funds are channelled to productive sectors of the economy. Employment benefits of MNCs can be low when there is no considerable increase in operating activities which allows the use of more labour and the production of more output (Lipsey, 2002). It is therefore important for governments to ensure that FDI inflows are lured and channelled towards strategic sectors of the economy which include among others, industrial, mining, agriculture and service sectors such as the banking and finance sector.

2.4.4 Resource transfer benefits

One of the major reasons why economies like to attract more FDI inflows is that MNCs are in most cases in a position to cause a transfer of resources to the host economy. This can be supported by findings made by Bhatnagar (2013) which showed that there is a high capital and technological supplies that accompanies FDI inflows. A study Lipsey (2002) also contends that the transfer of resources that occur as a result of MNCs is not only restricted to technology and capital but also extends to include human resources in the form of skilled management personnel. Hence, it is important to examine FDI effects on the transfer of resources in relation to capital, technology and management and these are explained in detail as follows;

- **Capital:** Most investments that are made in the form of FDI are in the form of capital funds that are provided by foreign investors and corporations. Konings and Murphy (2001) outlined that foreign companies and other investors are willing to take international risks by investing in foreign enterprises so as to obtain huge profits in the long run. What makes it possible for MNCs to invest in other foreign firms is that they have huge financial resources and most of them are big in size. Even host nations are always looking for funds which are in most cases not locally available and have to be sourced from domestic financial markets (Hill, 2000). MNCs have also been known to be having a huge potential to access funds either by borrowing or issuing shares because of their high reputational status (Bosworth & Collins, 1999). It must however be known that efforts to lure more capital funds from foreign companies and investors can have bad effects on the host economy in the long run. This can be evidenced by a study

  By Jenkins and Thomas (2002) which showed that the attraction of FDI inflow has a high tendency to crowd out local investments.

  There are also studies which showed that FDI inflows are in three distinguishable forms (primarily bank loans, portfolio investment and direct FDI funds), and that the net capital effect depends on the type of FDI inflow (Bosworth & Collins, 1999). The study by Bosworth and Collins (1999) also drew findings from the study of 58 developing countries and the findings show that a single $1 capital investment has a capacity to cause an increase in domestic investment by 50%. There are however studies, which have established that FDI inflows do not necessarily cause a crowding-out effect but also a crowding-in effect. For instance, a study by Borensztein et al (1998) established that a $1 increase in FDI inflow crowds-in domestic investments by $1.

  The extent to which FDI inflows will have a positive effect on capital resources relies also on the extent to which capital movements are restricted. That is, it is difficult to have high or more capital inflows from FDI inflows when capital restrictions are high.

Insights drawn from a study by Feldstein (2000) contends that there are a number of benefits that can be obtained from FDI inflows and these include;

I. FDI inflows are a form of diversification as investors internationally diverse their portfolios to reduce investment risks. Hence, more capital funds are bound to flow to those economies that have less capital restrictions.
II. The global transfer of capital poses a positive challenge on governments and forces them to desist from engaging in bad practices.
III. There is a global integration of capital markets that take place from FDI activities and this can result in the spreading of good ethical conducts and standards.

- **Technology:** Romer (1994) outlined that technology is one of the key elements of economic growth and that the extent to which sound and fast economic progress is made is determined by the level of technological investments made. The need to support efforts to improve technical methods of producing goods and delivering services in an economy is still being favoured by many scholars and economic analysts as they consider it to be leading to industrialization (Brown, Deardorff & Stern, 2004; (Hill, 2000; Krugman, 1995).

  Basically technological changes brought about by FDI can be in two different forms. Foremost, such changes can take place when they are included as part of the product itself and examples include personal computers. Secondly, it can be in the form of technological changes and improvements that are made in the production process and this can include oil refining, product extraction and manufacturing etc. (Hill, 2000). These kinds of technological advancements are considered to be highly true in developed economies such as the USA. Studies have also supported this idea and considered that FDI inflows lead to a significant improvement in productivity and economic growth of host

economies (Brown, Deardorff & Stern, 2004; (Goddard, Molyneux & Wilson, 2004).

- **Management:** there is a huge transfer of skilled resources that take place after FDI agreements have been agreed on (spin-off benefits). This is because MNCs often transfer their qualified and skilled employees to the host economy so that they can supervise and manage economic projects and investments in a profitable way (Athanasoglou, Brissimis & Delis, 2008). This will result in the transfer of knowledge and skills and employees of the host country are sometimes trained on how to use certain new technological equipment and how to perform certain services (Blomstrom & Kokko, 1996). New MNC management may introduce new ways of producing products, delivering services and managing the organisation and benefits will also be reaped when domestic competitors, distributors and suppliers adopt the new and improved methods. But in most cases, employees will be implicitly and explicitly trained which allows then to gain new skills and knowledge. Workers gain new skills through explicit and implicit training. Implicit and explicit skills gained by domestic employees are maintainable and this implies that when workers stop working for these MNCs, they can easily use those skills in other domestic industries of the same type. Management benefits that can be obtained from FDI inflows are in three basic forms and Streeten (1977) considers them to be:

I. In the form of positive externalities that occur when employees have received accounting, executive, technical training etc.
II. Managerial efficiency as a result of improvements in production and work standards, and training of employees;
III. Entrepreneurial capability in looking for investment opportunities;

- **Effect on Competition:** Though competition is not a resource that can be transferred from the MNCs to the host economy, it is an effect that occurs when MNCs introduce better methods and standards of

production (OECD 2002, p.16). There is an increase in competition that occurs whenever MNCs expand their operations into a host economy and this has an effect of pushing down prices and forcing other domestic firms to start producing high quality products (Balasubramanyam et al., 1996). When competition is high, domestic consumers will have more bargaining power and hence they can easily influence both the quality, quantity and price of the goods and services. With the threat of competition imposing pressure on domestic firms, chances are very high that if domestic firms do not respond to the increased competition levels posed by MNCs, they will be driven out of business (OECD, 1998).As a result, domestic firms are forced to introduce better production and service delivering methods so as to survive in the market. This will in turn result in productive and allocative efficiency which has a tendency to drive down costs and boost output levels (Julius, 1990). Hence, it can be said that the increased competition levels brought about by MNCs in necessary for innovativeness and competitiveness reasons.

2.5 Cost of FDI to Host Country's Economy

Though nations especially developing economies favour a lot the idea of attracting FDI, it must however be noted that FDI inflows do not necessarily result in positive benefits on the host economy. This is because there are a lot of challenges that are faced in attracting FDI inflows. For instance, host nations are sometimes forced to compromise on ethical and investment standards so as to just secure investments (Bhatnagar, 2013). In addition, the extent to which FDI inflows will cause positive changes in the economy is also determined by a number of factors (Balasubramanyam et al., 1996). These factors have to be looked into, otherwise it will be incomplete to just say that FDIU results in a lot of favourable benefits. Hence, we need to weigh the benefits of attracting FDI inflows against their costs. This section therefore seeks to examine some of the challenges and costs encountered in securing FDI inflows. These are discussed as follows;

Foremost, it must be noted that the idea to attract FDI requires that domestic economic, social and political conditions be conducive for foreign investors to invest. This is because investors will only invest in economies which they consider to be safe for investment (Graham, 2013).

Secondly, this study will focus on examining the effects of FDI in relation to the effects posed on employment, competition, balance of payment and non-economic effects. The examination of these effects follows a lot of ideas which have shown disfavour against efforts to attract FDI inflows (Brown, Deardorff & Stern, 2004; Hill, 2000; Krugman, 1995; Zinnes et al., 2001). Ideas have still been developed to show that the benefits obtained from attracting FDI inflows do not always lead to positive changes or benefits in the host economy. What studies are considering is that there are a lot of activities that MNCs can engage in which will have a bad effect on the host economy (Bikker & Hu, 2002; Duca & McLaughlin, 1990). Ideas also show that host economies especially in developing economies are always in competition to secure FDI inflo9ws and hence they end up compromising good economic strategies and quality standar5ds which is bad for the performance of the economy. More so, control of FDI activities is also considered to be weak as host nations will be trying to cement their relations with the MNCs (Eichengreen & Gibson, 2001).

Benefits obtained from FDI have also been considered to be difficult to attain or reap when the host economy is considered to be going through a process or phase of economic development and does have the required knowledge and understanding especially in which it is difficult to fully take advantage of technological innovations (Feldstein, 2000). A study conducted by Bhatnagar (2013) also showed that positive changes in infrastructural, educational and technological developments do not warrant that FDI inflows will have a positive effect on the host economy, other things remain equal.

Questions can therefore be placed in this study and this section will attempt to provide answers to these questions. These questions can be listed as follows;

- Does effort to attract FDI inflows always lead to positive changes in the host economy?
- What are the limitations of attracting FDI inflows on the host nation?
- What are the possible benefits host nations will get from attracting FDI inflows?
- What conditions must be met to ensure that host economies will benefit from FDI inflows?
- How can host economies prepare economically to benefit exponentially from FDI inflows?

2.5.1 Adverse Effects on Employment

Generally, the belief is that FDI inflows will cause a huge increase in employment but what has been established is that this does not always the case (Lipsey, 2002). For instance, a study conducted in the USA over FDI made by Japanese firms, showed that the number of jobs lost in the USA over the period in which such investments were being made is actually higher than the number of jobs that were created (Athanasoglou, Brissimis & Delis, 2008).

The extent to which FDI inflows will cause a positive change in employment is also determined by the nature of investment made and the sector to which the investment is being made. This is because FDI made be made to those economic sectors that are not economically productive or possibly capital intensive with a few open positions for manual labour. In such cases, increases in FDI in that sector will not yield much to employment possibly because the investments are targeted at improving process innovation (Brown, Deardorff & Stern, 2004).

2.5.2 Adverse Effects on Competition

Previous ideas given in this study have shown that FDI leads to increased competition levels in the host economy but this is not always the case. What

undermines the ability of MNCs to boost local competition is their access to huge sources of funds and technological innovations (Zinnes et al., 2001). This is because MNCs can use these advantages to drive out local firms out of the industry mainly due to improved methods of production and service delivery. The introduction of better methods of production through innovativeness, lowers production and operational costs and increases output produced and services offered. Hence, this gives MNCs a huge competitive advantage over local firms (Bikker & Hu, 2002).

In the event that local firms have failed to lower their costs of production in relation to those of MNCs, MNCs can take advantage of the situation and sell products at a relatively lower prices. It is the inability of local firms to lower costs that will drive them out of business and MNCs will be selling products at relatively low prices where local firms will find it difficult to operate and survive.

What most studies have failed to acknowledge is that the benefits experienced from attracting FDI inflows are not always instant and sometimes they take time before the actual gains can become so visible. This follows observations made that efforts to attract FDI inflows is at most circumstances characterised by bad consequences and a loss of national sovereignty (Eichengreen & Gibson, 2001). Both economic, social and political conditions of the host economy also play a major role in determining whether FDI inflows will have a huge positive effect on the host economy (Graham, 2013). Krugman (1995) contends that giving MNCs to own or control a huge stake in domestic firms will not be in the best interest of the economic goals of the host economy.

What makes matters worse is concerns are still being placed on the idea that MNCs that are lured through FDI inflow strategies have a tendency to take advantage of their market position (Krugman, 1995). From the established literature, it can therefore be known that FDI inflows strategies do not always lead to the best possible outcomes that favour host economies. Hence, ideas can therefore be developed that there is a greater need to regulate the activities of MNCs. This argument can be supported by events that took place in the USA in the 1980s in which it was established that Japanese firms were

now having too much control and were now considered to be compromising national security (Hill, 2000).

Other scholars which are against the idea of devoted a lot of attention towards attracting FDI inflows have cited that FDI attraction causes a lot of negative effects on host economies and hence the need to regulate them and not spend too much attention luring them (Cooper et al., 2003; Graham, 2013; Goddard, Molyneux & Wilson, 2004). Notable arguments are based on the idea that efforts to attract FDI often lead to environmental degradation, heavy reduction in employment levels, reduction in domestic investments, reduction in competition level, reduction in research and development and a lot of political and economic effects.

A significant number of empirical studies still continue to argue that the net benefits obtained from FDI activities are insignificant (Bikker & Hu, 2002; Graham, 2013; Zinnes et al., 2001). This is because the costs associated with FDI inflows strategies tend to be greater than the actual benefits that are obtained.

More importantly is the idea that there are conditions under which FDI inflows will cause positive changes in an economy (Goddard, Molyneux & Wilson, 2004). This implies that the in availability or ineffectiveness of these conditions can hamper the success and effectiveness of attracting FDI. Some of the conditions that are required in order to ensure that FDI inflows will have a positive effect on the economy are;

- Poor regulatory frameworks,
- Lack of competition,
- Lack of trade openness,
- Lack of technological advancement by the host economy,
- Low levels of education,
- Poorly developed financial systems
- Bad economic policies and,
- Politics and corruption

2.5.3 Adverse Effects on Balance of Payments

Though studies report that FDI inflows have a positive effect on an economy's BOP position, other studies have also established that this is not always the case and that FDI inflows may also fail to positive change the BOP position of an economy (Feldstein, 2000; Lipsey, 2002). The effects of FDI inflows on BOP can be analysed in tow basic ways. Firstly, Krugman (1995) hinted that MNCs also seek to ensure that every single amount of money spent on foreign economies must be matched with revenue inflows. As a result, MNCs will plough back all the profits made to their parent companies. When profits are ploughed back to the parent company, a current account deficit can be observed as current account outflows exceed current account inflows (Bhatnagar, 2013). Thus in order to ensure that governments do not suffer from BOP deficits, efforts must be put in place to put a limit on the amount of profits that can be repatriated back to the MNCs parent company. The second effect can be observed when MNCs import a lot of raw materials from other countries into the host economy (Hill, 2000). A rising level of imported products may cause a trade deficit as export levels fall short of the necessary level required to ensure a trade surplus. Moreover, a rising level of imports can cause an increase in inflation (imported inflation).Which can stir a rise in domestic prices and force a foreign currency shortage situation which undermines the ability of the economy to finance domestic economic activities.

2.5.4 Non-Economic challenges

The most challenge that is associated with FDI is the fact that it imposes degrading costs on the environment. This is because environmental and other legal restrictions may be loosened so as to just lure more FDI and safeguard good relationships with MNCs (Hill, 2000). A study by Graham (2013) outlined that environmental protection agencies are usually 'soft' on foreign firms. What cause governments to relax their legal measures against operational activities that threaten the environment is the increased demand and competition for FDI inflows (Blomstrom & Kokko, 1996).

Another concern that can pointed out when looking at the effects of FDI is the working conditions under which domestic workers may be subjected to. Brown, Deardorff and Stern, (2004) highlighted that MNCs sometimes force workers to work for longer hours for a lower wage. The problems of low wages is also linked with poor working conditions as noted from sweatshops which have been considered to be having inhumane working conditions and in most cases children are hired as employees (Hill, 2000). This is true and has been considered to be a huge problem in the USA, after complains of abuse were levelled against sweat shops in the USA and measures were being put to ban the selling of their products in USA markets (Workers' Rights Consortium, 1999).

When it comes to the investment in efforts to protect the environment and invest in the social lives of the community, MNCs are sometimes at the back as they consider that social and environmental responsibilities are costly to implements (Hill, 2000). The rate at which MNCs engage in corporate social responsibilities is sometimes low and not all MNCs are capable of engaging and upholding corporate social responsibilities. Sometimes MNCs operate with targets and such targets can have bad effects on the environment and people's social lives when production activities involve the extraction and production of commodities such as oil, cement and other harmful products. Production activities of this nature often cause air pollution which can destroy not only conducive climate conditions but also affect people's health standards (Krugman, 1995).

2.6 Privatization as a Major Channel for Attracting FDI

Private enterprises have a tendency to offer high returns on invested funds as compared to public corporations. This is because private firms are profit oriented unlike public companies which are motivated by the need to satisfy members of the public (Graham, 2013). Investors are more interested in investing their money in corporations that will offer them huge returns in the future (Djankov & Murrell, 2002). Private companies are thus a channel through which investors can use to make high returns from investments. In the

case that there are a lot of public companies that are not performing well, governments are sometimes forced to sell public institutions that are not operating well (Zinnes et al., 2001). One way of selling or privatising public institution is by selling them to international corporations and investors. In this way, governments can attract FDI inflows and it is established that privatisation results in huge FDI revenue earnings (Hill, 2000). By privatising public institutions, not only does revenue flows into the domestic economy but technology and skills will also be introduced. The benefits of privatisation will thus extend to cover other areas as operations, output and employments increase. The major challenge that limits efforts to privatise public institutions is that the government is sometimes interested in the welfare of its people rather than just making profits (Djankov & Murrell, 2002). Privatisation results in increased efforts to maximise profits and privatised firms are forced to sell at high prices and possibly reduce quantity sold so as to make more profits. This tends to affect consumers especially low income earners and this is the major reason why governments are sometimes not willing to privatise public institution. There are however several methods that can be used to privatise public institutions and these include employee/management buyouts, vouchers, and indirect sales. Nevertheless, privatisation offers a lot of benefits to the economy and by using FDI inflow as a privatisation strategy, more revenue will be earned, better technology will be brought in and skilled resources will also be transferred. Hence, it is important to weigh in the costs of keeping public institutions against using FDI attraction strategies as a form of privatisation.

2.7 Bank profitability

Bank performance has been noted to be related to the changes in financial performance of the bank over the course of an operating period of usually a year (Molyneux & Thornton, 1992). Hence, in this study bank performance will be taken to mean financial performance. Despite emphasis being placed on financial indicators as measures of bank performance, they are notably three indicators that can be used to measure bank performance (Bikker & Hu, 2002). These measures are net interest margin, return on equity and return on

assets. Bank performance is an important element or subject in banking and finance and especially when formulating economic policies. This is because banks are mediators who act as gap between economic agents who need funds to undertake economic projects or production activities (Goddard, Molyneux & Wilson, 2004).

Funds that cannot be easily accessed by consumers and other economic players are in most cases provided by banks (Sufian et al., 2008). Hence the extent to which economic activities will increase is determined by the availability of funds provided by the financial sector (Cooper et al., 2003). Thus, the more funds banks can offer, the more production activities will increase and the more banks will make profits from fees charged on assets and services, and returns on issued assets. Hence, banks that are able to make more profits are more capable of issuing more loans and investing in more profitable assets. It is therefore important to ensure that banks continue to survive and make more profits so that their impact on economic activities and growth remains uncompromised (Eichengreen & Gibson, 2001). The importance of bank performance is tied to economic growth, inflation, unemployment and this is why monetary authorities are so much concerned about banking activities and performance.

2.8 Determinants of bank profitability

Factors that determine bank performance can be categorised into two broad categories, that is, internal determinants and external determinants. Internal determinants are firm specific factors while external determinants are economic specific (Molyneux & Thornton, 1992). These are discussed as follows;

One of the key factors that affect bank performance is capital adequacy which represents a measure of the lowest amount of capital banks are required to have by the Central Bank (Duca & McLaughlin, 1990). Capital adequacy is used by Central Banks to maintain bank stability in the event that banks are experiencing bank panics which might lead to bank runs (Cooper et al., 2003). Bank runs occur when consumers are risk averse and are attempting to

withdraw their funds from banks as a result of problems that are being experienced in the banking sector (Eichengreen & Gibson, 2001). When banks are unable to meet a rising demand for bank deposits, it forces other bank customers to begin to panic and withdraw their funds from banks and if this is not contained, a situation called a bank run will occur. Hence, capital adequacy serves as a provision against such things including losses which banks may suffer in the process. It therefore acts as a measure that guards against risk and meant to boost bank efficiency.

One of the challenging risk that threatens banks is liquidity risk which occurs when banks are facing a shortage of liabilities (swift cash or funds) to meet their short term operational needs (Sufian & Chong, 2008). This is because too much capital will be tied up in fixed assets which cannot be easily converted into means of payment. It is therefore important for banks to have access to cash which they can use to fund activities or meet their obligations. Loans given to households have a high chance of being defaulted and this may result in credit risk. In order to avoid that, banks will charge high interest rates on high risky credit. Hence, the relationship between profitability and liquidity can be said to be positive (Eichengreen & Gibson, 2001). But the lesser the amount of funds that are tied up in fixed (illiquid) assets, the more banks will have a better capacity to invest in other assets which might give banks better returns in the future (Cooper et al., 2003). The more a bank is exposed to credit risk, the greater the chances that its profitability is being threatened and this brings about the idea that it is not the volume of loans that matters but the quality of loans issued (Sufian & Chong, 2008). A high volume of issued loans increases the chances of having unpaid loans which causes a decline in profitability.

Sufian et al. (2008) conducted a study to examine how credit risk influences the profitability of banks in the Philippines. The ratio of loan loss provisions to total loans was used as a measure of credit and the results should that credit risk has a significant negative effect on bank profitability. The results therefore show that credit risk has a potential to lower bank profitability and that it is

most important for banks to establish measure that will help deal with credit risk. What causes credit risk to be a problem for banks is that there is a mismatch in credit risk management and any anomalies that exist must be addressed so as to avoid hazardous exposure.

Though leverage plays an essential role to explain changes in profitability, there are differences in ideas that can be noted to exist. This is because obtained results about the relationship that exist between capitalisation and profitability are sometimes different. For instance, Sufian and Chong (2008) outlined that banks can sometimes have low capital ratios which might indicate that that the potential risk levels are so high and hence the relationship between leverage and profitability in this case can be expected to be negative. Low leverage ratios often require that banks raise additional sources of funds to boost their capital levels (Molyneux & Thornton, 1992). But this can prove to be costly as interest and other costs may be required to be paid. On the other hand, ideas obtained by Berger (1995) showed that having a high capital ratio implies that banks have a better leverage position. This reduces the need by banks to borrow or issue shares to get more funds and hence contributing to profitability. It can thus be noted that well capitalised or highly leveraged banks are more efficient. Hence, it can be concluded that there is a positive association between bank leverage and profitability.

One of the key ways that can be used to determine whether banks will enjoy from economies of scale or diseconomies of scale is by looking at their sizes. This is because the size of a financial institution determines how banks will diversify their products, or even diversifies to guard against risks (Bikker & Hu, 2002). Goddard, Molyneux and Wilson (2004) outlined that differences in costs experienced by banks are as a result of size differences. Implying that big banks incur high costs as opposed to small banks but what matters most is how they approach the problem of costs. This is where the idea of economies of scale come in. big banks can be said to be in a strong position to enjoy and benefit from economies of scale which can result in falling costs and rising output (Akhavein & Humphrey, 1997). Challenges that can be noted when

banks increase in size by diversifying operations and products is that the diversification process may end up reducing credit and operational risks. Yet on the other hand, the relationship between risk and returns is positive and implying that banks will charge and demand high returns so as to cover for the high (Molyneux & Thornton, 1992). Hence, a reduction in credit risk will have a tendency to lower returns that banks will get. In this case, it can thus be noted that bank size has an adverse effect on returns and ultimately profitability.

From this idea, it can thus be said that the relationship between bank size and profitability is not always positive. This can be evidenced by the idea that big banks have more total assets (Bikker & Hu, 2002). When a large portion of total assets is made up of fixed assets, banks in this case will be having a limited amount of liquid assets and hence can potentially face liquidity challenges. A high portion of fixed assets hence implies that banks are having a lot of money which is tied up in assets and this can reduce their ability to invest in future projects which can offer them high returns (Goddard, Molyneux & Wilson, 2004). This tends to compromise future profit levels and thus in this situation arguments can be made that bank size does not also necessarily lead to improvements in performance. What is requires is that big banks have proper asset management strategies that are able to balance liquidity needs and required fixed assets to support their operations. Bank size can however be considered to be positively related to performance when income generated from total assets is greater than operational and asset acquisition costs (Goddard, Molyneux & Wilson, 2004). A high return from total assets (ROA) is thus an important determinant which influences the relationship between bank size and performance. Some big banks have lower ROA than others and this further supports the idea big banks do not necessarily have better performance. Total assets are used to provide an indication of how big the banks are, (big banks have more total assets).

Smaller banks are on the other hand have a few total assets than big banks and this is what set the difference between small and big banks in terms of total assets (Eichengreen & Gibson, 2001).

Sufian et al. (2008) used regression analysis to examine how capitalisation influences the profitability of banks in the USA. The findings showed that bank capitalisation causes an improvement in bank performance and that the relationship is significant at 5% significance level. The results supported observations made by Demirguc-Kunt and Huizinga (1999), and this leads to the conclusion that banks that are well capitalised have lower chances of going bankrupt and this reduces to the need to raise additional funding either by borrowing or by issuing shares. Borrowing and issuing shares are financing strategies that are used to raise funds by firms in the event that firms do not have enough funds. Thus when banks are undercapitalized, borrowing or issuing shares are some of the key strategies banks can use to raise funds (Sufian et al., 2008). The decision top borrowing or issue shares is determined by the cost of capitalisation. Hence, the cheaper the method, the more favourable it will be to use that method to raise funds (capitalise).

Bank performance has remained vulnerable to bad macroeconomic changes even though efforts might be done to diversify and employ financial engineering methods to guard against risk (Balasubramanyam et al., 1996). But period of high economic performance allow banks to issues more loans which offers them a chance to obtain high interest rates which improves the quality of assets (Bhatnagar, 2013). A study by Demirguc-Kunt and Huizinga (2001) outlined that periods of high economic performance are accompanied by a rise in disposable incomes which can trigger high savings and high borrowing activities. High borrowing and saving activities by consumers can trigger a rise in bank earnings

There are studies which examine the influence of macroeconomic variables on bank performance. For instance, Kosmidou (2008) conducted a study to examine how economic and financial stability affect bank profitability. The findings showed that bank profitability tends to increase in times of high

economic and financial stability. However, in times of financial stability such as with cases of inflation, bank profitability will be low or possibly negative.

This implies that economic events such as a financial crisis will have a negative effect on profitability. This can be supported by a study conducted by Staikouras et al. (2008) which showed that economic indicators such as GDP, employment and FDI will have a positive effect on profitability. However, the effect of money supply on bank profitability has in different cases been established to either cause a negative change in profitability or a positive change in profitability. This can be attributed to arguments an increase in money supply means that consumers will be left with excess money which they can afford to save with banks (Bikker & Hu, 2002). Banks will in return uses those savings to issue further loans and possibly invest in other assets. Thus, an increase in saving and investments which occur as a result of increases in money supply have a positive effect on bank profitability. But when increases in money supply results in inflation, the value of assets (loans and other fixed interest bearing assets) owned by the banks will decline causing a decline in profitability (Demirguc-Kunt & Huizinga, 2001).

2.9 Empirical literature review

Asante (2016) did a study that looks at the influences of FDI on bank performance using data from the year 2000-2012. The study bases its findings on the panel data estimation models of 16 financial institutions in Ghana. The findings showed that FDI and bank are positively related with each other but the relationship between FDI and bank profitability was established to be negative. This implies that a negative relationship

Kirikkaleli (2013) undertook an analysis of the effects of FDI on the bank performance in Turkey using VAR approach. The study includes the analysis of the effects of the financial crisis on bank performance. The results from the study showed that FDI granger causes bank performance. The effects of FDI on bank performance were established to be insignificant.

Bhatnagar (2013) explored the OLS approach to examine how GFI influences profitability of telecommunication companies in India. The findings showed that FDI positively influences the extent to which FDI can be considered to be effective. This follows ideas which showed that FDI funds are usually injected into business using sound strategic plans and measures are always high to ensure that such funds will be capable of generating huge profits in the long run.

Iddrisu et al (2015) also used the OLS to examine the effects of FDI on the performance of the agriculture sector in Ghana from the period 1980-2013. This study outlines that efforts to attract FDI are mainly motivated by the need to access huge financial resources which might be difficult to obtain from domestic financial institutions. The study also places emphasis on acknowledging the fact foreign firms will invest in companies abroad so as to attain better access to resources in other countries. In Other ways, it shows that FDI initiatives are a representation of strategic resources efforts. Cointegration test results showed that there is a long run relationship between agriculture performance and FDI inflows. The study results also showed that trade and agriculture performance are positively related with each other.

Korna et al. (2013) did a study which looked at the impact of FDI on the Nigerian banking sector using an OLS approach which covered data from the period 2006 to 2010. The results revealed that FDI does not influence the liquidity of banks in Nigeria but outlines that it results in an improvement in the capital position of banks. The study recommends that there is a greater need to create conducive economic environments which foster improvements in FDI inflows.

Onyekwena (2012) focused on the effects of FDI on banks and manufacturing firms in Nigeria using Back Scope data and OLS panel regression estimation. The study bases its approach on the Cobb –Douglas models and provided a strong evidence of the existence of a positive association between FDI and the growth of manufacturing firms. The effects of FDI inflows on banks was considered to be in the form of liquidity and the results showed that bank liquidity tends to move upwards with each positive change in FDI inflows.

Markus et al. (2006) focused on Eastern and Central Europe to examine the effects of FDI on financial sector and economic growth. The study uses panel data from 1996 to 2003 collected from 11 countries. Observations made from the study showed that FDI inflows and outflows are associated with movements in FDI. The study placed an argument on the idea that improvements in financial sector growth can trigger huge and swift movements in FDI flows. As a result, the results showed support of the idea that FDI and financial sector performance are positively related. The study also showed that a unilateral relationship exists between economic growth and FDI. Changes in financial sector and economic growth were noted to be as a result of an increase in money supply among businesses which resulted in an increase in output and employment of factor of resources.

There are a lot of studies that have looked at factors that determine bank performance and these studies have either shown a positive relationship or a negative relationship between bank performance and one of these factors. But studies must continue to be undertaken so as to establish a robust foundation

upon which current and prevailing issues can be explained. For example, a study conducted in Kenya by

Ongore and Kusa (2003) showed that both internal and external conditions that influence the bank performance are always changing.

The findings however showed that most of the factors that influence bank performance have a positive impact on bank performance except inflation which was established to be having negative effects on bank performance.

Bikker and Hu (2013) conducted a study that resulted in findings that supported ideas established by Batten and Vinh (1995) which contends that an increase in bank size has a positive effect on bank performance. But Terraza (1998) found different results and concluded that an increase in bank size does not always lead to an improvement in bank performance. A study of 400 banks by Kasman (2003) revealed that bank size is inversely related to net interest margin. This supports ideas of the inverted U-curve which posit that the relationship between bank profitability and size follows a convex shape. However, ideas given by Pasiouras et al. (2001) contend that bank size is not of significant importance when looking at bank performance. This can be supported by findings made by Kagecha (1996) which showed that there are other important factors which influence bank performance and these include management decisions and skills. In addition, a study by

Yermack (2006) explored how the numbers of directors in a bank influence bank performance. The findings revealed that the number of directors in bank in negatively related to performance. Possible reasons suggest that a high number of directors can result in communication breakdowns and this negatively affects the effectiveness of decisions made by company executives.

It can be noted that decisions requiring urgent attention may delayed as a result of too much formalities and time taken before they are approved. This can be costly as the company ends up delaying in making informed decisions in response to strategic changes, needs, opportunities and threats in the banking environment. This will in turn result in a decline in bank performance.

Other studies have emphasised on different factors and considered factors such as earnings management to be playing a huge role towards effecting positive changes in bank performance (Ben Amar & Abaoub, 2009) while others focused on the importance of disclosing information Khalfaoui & Ben Saada, 1999).

What can be drawn from these cases is that there are conditions which influence the extent to which a positive between bank size and performance association can be obtained and these conditions can include liquidity and opportunity costs. Hence expectations of this study are that an increase in the size of banks in the USA will either lead to an improvement or a decline in their performance.

Msuya (2007) did a study that looked at how FDI inflows affect agricultural performance of firms in Tanzania and how such helps to reduce poverty. . The study established an argument that FDI inflows have a high tendency to cause an increase in productivity which results in an increase in agricultural output. An increase in agricultural output is asserted to be the main factor that causes a reduction in poverty as per capita output rises. This shows that the effects of FDI are mainly transmitted through changes in economic growth (output). But a study by Karikari (1992) showed that FDI does not granger cause growth but rather the relationship runs from growth to FDI.

A study by Korna et al. (2013) looked at how bank performance changes in response to changes in liquidity. The findings were based on the argument that banks with a high level of liquidity tend to perform much better than those with low levels of liquidity. This is because banks with a high level of liquidity are more capable of investing in profitable projects and assets unlike those whose funds are tied up in assets.

The major challenge that can be observed with these studies is that they do not consider the effects of a financial crisis (FC) and how it impacts bank performance. This is because the relationship between bank performance and FDI inflows is strongly determined by how the banking sector responds to the effects of a financial crisis. This is because investors are not willing to invest in

economies which have a financial crisis and the risk of investing in such a nation will be high. This is supported by the principle that there is a negative relationship between risk and total investment (Bollerslev et al., 2011). If investors are risk averse, they will not invest their money and this implies that there level of FDI inflows will fall (Mackey et al., 2007). Hence, it is possible to say that there is negative relationship between FDI inflows and a financial crisis.

The effects of a financial crisis can be transmitted to bank performance as bank can stop making loans to firms or taking securities issued to raise funds. Banks will be preferring those assets whose returns are not fixed in the event that the financial crisis is characterised by high levels of inflations (Addison & Heshmati, 2003). But stock prices tend to fall in the event of a financial crisis (Post & Levy, 2005). The most notable effect is that investors will shift their preferences to those nations which are financially stable (Cox, Brammer & Millington, 2004).

2.10 Concluding remarks on FDI

In order to obtain huge positive effects from FDI inflows, it is important to ensure that there is a healthy economic environment that can promote a growth in operational activities especially for banks. Efforts to lure FDI inflows can be noted to be a major cause of human capital and technological improvements especially in the banking sector. This is because banks provide a channel which is used to offer the obtained FDI inflow funds to domestic companies. It can also be noted that benefits obtained from FDI inflows are sometimes not instant and they often take time to be visible. The benefits obtained from FDI inflows also tend to differ from one economy to the other depending on the level of economic development and hence expectations are high that the effects of FDI inflows on the performance of banks in USA will be different from other countries. Banks provide an avenue that can be used channel to chain FDI inflow funds into the domestic economy; hence improvements in the banking sector are needed to boost effectiveness and efficiency in securing and distributing FDI inflow funds. Hence, it is also

important to deal with problems that affect banks so as to remove any restrictions or challenges that may hinder the flow of funds into the host economy.

2.11 Summary of empirical studies

Table 2.1: Summary of empirical studies

Author	Variables	Country	Method	Results
Sagari (1993)	FDI, ROA, market size, protectionism (dummy),	USA (1970 -1990)	Cross - section least squares regression analysis	There is a positive relationship between FDI and bank performance. Market size is positively related with bank performance. Protectionism has a negative effect on bank performance.
Kirikkaleli (2013)	foreign bank penetration, country risk, and foreign portfolio investment	Turkey (1994 - 2009)	VAR approach	Foreign bank penetration, FDI and foreign portfolio investment and bank performance are positively related. A negative relationship between foreign bank and country risk,
Bhatnagar (2013)	FDI, earnings per share, profit after tax	India (2000 - 2012)	OLS approach	earnings per share and profit after tax positively cause an increase in FDI
Klein& Rosengren (1994)	Real Exchange Rate, inflation, GDP, FDI	USA (1979 -1991)	Cross-section least squares regression analysis	FDI is positively related with currency appreciation and GDP but negatively related with inflation.
Iddrisu et al (2015)	FDI, agriculture output, trade, employment, loans	Ghana (1980 - 2013)	OLS approach	A long run relationship between agriculture performances. FDI, employment, loans and trade are (+) with agriculture performance.
Markus et al. (2005)	FDI inflows, GDP, money supply, ROA, savings, employment	Russia (1990 - 2003)	Panel regression	A positive relationship between FDI inflows, GDP, money supply, employment and bank performance.

Onyekwena (2012)	FDI, ROA, output, inflation, GDP, employment, loans, bank liquidity	Nigerian (2000 - 2011)	Back Scope data and OLS panel regression	Positive relationship between FDI and ROA, bank liquidity, employment, GDP, firm output
Sakyi (2011)	ROA,GDP, Risk, trade openness, FDI and capital adequacy.	Ghana (1990 - 2010)	ARDL	Risk, trade openness, FDI and capital adequacy are positively linked to profitability.
Kagecha, p. k. (2014).	Bank size, Money supply, bank deposits, economic growth and profitability	Kenya (2007- 2014)	OLS approach	bank size is negatively related with bank performance. Money supply, bank deposits, economic growth are positively related with bank performance.
Kasman (2003)	Bank performance bank size, bank deposits, bank liquidity, GDP	Turkey. (1990 - 2002)	OLS approach	Negative relationship between net interest margin and bank size. Positive relationship between bank performance and bank deposits bank liquidity and GDP
Bikker and Hu (2013)	The relationship between bank size and profitability	Tunisia (2001 - 2006)	OLS approach	Positive relationship between bank size and bank profitability, especially in the case of a large size.
Ongore and Kusa (2013)	ROA, ROE, bank size, bank deposits, savings, bank liquidity, inflation	Kenya (2001 - 2011)	OLS approach	bank size, bank deposits, and bank liquidity have a positive effect on bank profitability where's inflation has negative effects on bank performance.
Korna et al. (2013)	FDI, bank performance, savings, bank size, bank liquidity, customer deposits	Nigerian (2006 - 2010)	OLS approach	FDI, savings, bank size, bank liquidity, customer deposits are positively related with bank performance

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research design

The study adopts a quantitative approach to estimate the impact of FDI on banking sector performance. Thus the study uses secondary data for all banks that are based in the USA. 67 observations of quarterly data from the period 2000-2017 obtained from Federal Reserve Bank of St Louis. The study thus uses econometric techniques to determine if there is causality between bank performance and FDI.

3.2 Unit root tests

This model requires that all variables must not have unit roots at second difference but however their can either be stationary at level or first difference or contain mixed stationarities (Engel & Granger, 1987). Augmented Dickey Fuller and Phillips Perron tests will thus be used to check if the model variables have a unit root or not. This model was because the variable were established too be having mixed stationarities. Moreover, this model is suitable for a study with a low number of observations. Said and Dickey (1984) posit that data will contains a unit root is considered to be non-stationary. Given a standard regression function;

$$\nabla y_t = (p\text{-}1)\, y_{t-1} + \mu_t = \delta_{yt-1} + \mu_t \qquad (1)$$

Where Yt is where is the variable of (ROA), *t* is the time index, rho is a coefficient, and μ_t is the error term. Stationarity tests are in 3 forms;

- Test a unit root with a drift

$$\nabla y_t = a_0 + \delta_{yt-1} + \mu_t \qquad (2)$$

- Test for a unit root

$$\nabla y_t = \delta_{yt-1} + \mu_t \qquad (3)$$

- Test a unit root with drift and deterministic time trend

$$\nabla y_t = a_0 + a_1 t + \delta_{yt-1} + \mu_t \qquad (4)$$

A unit root is present if rho =1 and under normal or standard ordinary least squares (OLS) estimation, unit roots will have a spurious effect on the

obtained results (Dickey & Fuller, 1981). However, a cointegration test such as the Johansen cointegration test requires that all the variables be non-stationary at level and stationary at first difference.

3.3 Model specification

Based on the study by Asante (2016), it established that the impact of FDI on banking sector performance can be determined by observing changes in the banking sector's return on assets (ROA), liquidity ratio and capital base. However, Bonin (2005), proposes that standard bank profitability measures such as return on equity (ROE) and net interest margin (NIM) be used to ascertain variations in bank performance (BP). Thus a standard profitability model by Asante (2016), depicts that changes in bank performance caused by variations in FDI inflows can be depicted as follows;

$$BP = F(FDI) \quad (1).$$

Eqn. (1) is thus expressed in a regression form resulting in the following expression

$$BP = \alpha i + \beta iFDI + \mu i \quad (2).$$

Where α_i and β_i are coefficients and μ represents an error term. In this study, ROA will be used as bank performance measures and this follows observations which have shown that such indicators in USA have significantly changed over the past 10 years. This also follows that banks in USA have increased in size (BS) denoted by the level of total assets in the possession coupled by improvements in bank deposits (BD) and net savings (NS) as well as improvements in economic performance denoted by EG. However, there has been incidences of a financial crisis (FC) that were observed in the USA between the period 2007 to 2009 (US Bureau of Economic Analysis, n.d).

When these are incorporated into eqn (2) the following functional form is obtained;

$$BP = F(FDI, EG, FC, NS, BS, BD) \quad (3)$$

Thus, eqn. (3) becomes the base upon which the ARDL model will be estimated. The data will also be converted to logarithms so as to deal with the problem of heteroscedasticity.

LROA = αi + βiLFDI + β2LEG+ β3LFC + β4LNS+ β5LBS + β6LBD+ μi (4).

3.3.1 ARDL model estimation

With an ARDL model, the effects on independent variables are considered to occur not once but over time (Perron& Passaran, 2003). The relationship is also considered to be linear as following a linear model the following nature;

$$y_t = \alpha + \beta(L)x_t + u_t = \alpha + \sum_{s=0}^{\infty}\beta_s x_{t-s} + u_t, \quad (5).$$

The error correction will be captured by the function,

$$\alpha + \sum_{s=0}^{\infty}\beta_s x_{t-s}$$

When we introduce the concept of error correction term to equation 5, we can obtain an ARDL function which can be expressed as follows;

$$\Delta LROAt = \lambda_0 + \lambda_1 \sum_{i=0}^{n}\Delta ROAt + \lambda_2 \sum_{i=0}^{n}\Delta FDIt + \lambda_3 \sum_{i=0}^{n}\Delta LEGt\,\lambda_4 + \sum_{i=0}^{n}\Delta LFCAt + \lambda_5 \sum_{i=0}^{n}\Delta LNSt + \lambda_6 \sum_{i=0}^{n}\Delta LBSt + \lambda_7 \sum_{i=0}^{n}\Delta LBDt + \beta_1\mu_{t-1} \quad (6)$$

Equation 6, thus becomes ARDL models that will be estimated in this study and the ability to the model to revert to equilibrium will be ascertained using an error correction term which has to be negative and significant in the long run.

The ARDL was adopted in this study because it is conducive for small sample sizes with average number of observations such as 40 and also it can be applied to variables whose stationarities levels are different at levels. Perron and Passaran (2003) hinted that this model also offers results that are characterised by a lot of consistencies.

While other models consider the issue of unit roots to impair the quality of results that are obtained citing the fact that the results are spurious, an ARDL

model does require that the variables not to be stationary at second difference but at first difference I(I). The Phillips Perron and Augmented Dickey Fuller (ADF) tests can be used to determine the presence of unit roots but in this study the ADF test was used to determine the presence of unit roots.

3.4 Definition and justification of variables

3.4.1 Bank performance

Bank performance refers to the change in the financial position of the bank measured by changes in ROE, ROA and NIM (Samad & Hassan, 1999). In the study, a variation in bank performance represents an endogenous variable. It is worthy to note that determinants of bank performance are either firm specific or macroeconomic in nature (Kao & Liu, 2004) and indicators such as firm size, asset quality, liquidity, economic growth, and inflation often influence the extent to which a bank performs in an economy (Grigorian & Manole, 2002). Bank performance in this study will be taken to mean bank profitability which is a reflection of how many profits banks have been making in relation to ROA, ROE and NIM but this study will however concentrate on the effects of FDI on banks' ROA.

3.4.2 Foreign direct investment inflow (FDI)

FDI refers to changes in foreign investments that are made into (inflows) or from a country out flows (Gastanaga et al., 1998). The association between FDI and bank performance is deemed to be positive and Asante (2015), asserts that an increase in FDI inflows stimulates financial sector innovation and development leading to an improvement on bank performance. On the other hand, Noorbakhsh et al. (2001), contends that FDI inflows are a source of funds that can be used by banks to provide loans to customers as well as invest in profitable projects and assets. Thus improvements in bank performance are witnessed when such projects and assets begin to generate revenue inflows.

But changes in FDI can have negative effects on both the economy and banks when the governments come up with bad policies and agreements so as to

just lure more FDI inflows. In such a case increase in FDI inflows will negatively affect bank performance as noted by Asiedu (2002). Hence, in this study, a negative relationship between FDI inflows in thus expected.

3.4.3Bank deposit (BD)

Bank that are capable of utilising their resources are established to earn more profits and an increase in bank deposits provide banks with more funds which they can use to invest into profitable projects and assets. This implies more returns in the future and thus bank deposits can be said to be positively related with bank performance. Expectations will be made in line with the study findings made by Ongore and Kusa (2003) that shows that bank deposits and bank performance are positively related.

3.4.4 Financial crisis (FS)

One of the notable event that has had an impact on bank performance in USA is the financial crisis and reports established by Peni and Vahamaa (2012) showed that most banks suffered significant losses while some went bankrupt during the 2008 financial crisis. A financial crisis can be defined as a situation in which financial assets suffer a decline in nominal value. A study conducted by Bikker and Hu (2002) showed that a financial crisis has a negative effect on bank performance. Hence, expectations are that bank performance will respond negatively to the effects of the financial crisis in USA. A dummy variable FC will be assigned to capture periods which were characterised by a financial crisis using a value of 1 and a value of 0 to indicate periods which were free from incidences of a financial crisis.

3.4.5 Net savings (NS)

The OECD defines net savings as a fraction of disposable income that remains after consuming. It is important to note that increases in net savings are tied to the performance of the economy (Allen et al., 2005). Implying that an increase in economic performance results in an increase in disposable income and it also increases the level of income that remains after consumption. As a result, bank customers will remain with more income which

they will use to save with banks. Ongore and Kusa (2003) also assert that increases in NS will give banks a huge capacity of additional revenue to undertake projects and invest in other assets. This will have a positive effect on profitability in the long run. Thus a positive relationship between bank performance and NS is anticipated.

3.4.6 Economic growth (EG)

Economic growth provides a measure of how well the economy has been performing and the notable measure of economic growth is GDP which denotes the amount of amount produced by an economy (Canning &Pedroni, 2008). The relationship between economic and bank performance is sometimes a two way. This is because banks provide funds that are needed in order to undertake economic production and in this case improvements in bank performance will cause an increase in economic growth (Allen et al.,2005). On the other hand, an increase in economic performance means that there is a corresponding increase in disposable incomes and the ability of consumers to save their additional incomes with banks. Banks will get more savings following an increase in income because the belief is that people will save excess income with banks (Chong & Calderon,2000). In this case, improvements in economic growth will have a positive effect bank performance as also established by Demirgüç-Kunt and Levine (2004).

3.4.7 Bank size (BS)

Bank size is one of the most important indicator in the banking sector and provides an indication of how the bank has grown over the past years of its operations (Kasman, 2003). An increase in bank size is usually determined by the level of assets the bank has accumulated. More assets provide banks with an ability to use those assets to generate more returns in the future and this implies that the more assets the bank has the more profits it will make in the long run (Goddard, Molyneux & Wilson, 2004). Hence, expectations can be made that there is a negative relationship that exists between bank size and bank performance.

3.4.8 Definition of variables

Table 3.1 provides a description of the model variables that were used in the study.

Table 3.1: Definition of variables

	Variable	Definition	Expected relationship
Dependent variables	BP (ROA)	Bank performance in this study will be taken to mean bank profitability which is a reflection of how much profit banks have been making in relation to ROA. ROA will be used as a representative of BP.	
Independent variables	Foreign direct investment (FDI)	That FDI inflow is a source of funds that can be used by banks to provide loans to customers as well as invest in profitable projects and assets.	(-)
	Bank size (BS)	An increase in bank size is usually determined by the level of assets the bank has accumulated. More assets provide banks with an ability to use those assets to generate more returns in the future.	(-)
	bank deposits (BD)	Bank that are capable of utilising their resources are established to earn more profits and an increase in bank deposits provide banks with more funds which they can use to invest into profitable projects and assets.	(+)
	net savings (NS)	that increases in NS will give banks a huge capacity of additional revenue to undertake projects and invest in other assets	(+)
	Economic Growth (EG)	Economic growth provides a measure of how well the economy has been performing and the notable measure of economic growth is GDP	(+)
	Dummy Variable (FC)	One of the notable event that has had an impact on bank performance in USA is the financial crisis during the 2008. A dummy variable FC will be assigned to capture periods which were characterised by a financial crisis using a value of 1 and a value of 0 to indicate periods which were free from incidences of a financial crisis.	(-)

3.5 Descriptive statistics

Descriptive statistics were conducted for the variables at their natural levels. The results showed that a highest mean rate was recorded to was related to FDI in which US$2 614 299 was racked into the USA by foreign corporations. On the other hand, the ROA that was recorded from March 2000 to December 2017 stood at 0.01% while the highest rate stood at 1.52%. Maximum values of 9.5%, 11.32%, 32.3% and 15.4% were recorded for the variables economic growth, net savings, bank size and bank deposit respectively. High variations were observed to be in relation to FDI inflows which had a standard deviation of US$921 470.90 which shows that FDI inflows have a high responsive effect. This means that efforts to influence FDI inflows will have profound benefits when changes in FDI are positive and huge negative effects when FDI inflows decrease.

Table 3.2: Descriptive statistics at level

Variable	Mean	Min.	Max.	Std. dev
ROA	1.1394	0.0100	1.5200	0.3565
FDI	2 614 299	1 172 550	4 723 687	921 470.9
EG	6.159	0.1000	9.500	1.7189
NS	4.7028	0.1000	9.100	1.9797
BS	17.5817	0.3000	32.3000	5.4888
BD	7.1465	0.1000	15.4000	2.7588

3.6 Data sources

The data was obtained from the US Bureau of Economic Analysis and the data is for all banks that are in the USA. The main advantage of using this data is that it includes all banks large and small, private and public and hence conclusions that can be made are a close reflection of the actual banking situation in USA and how it is affected by FDI policies. The data id from the first quarter of March 2000 to the last quarter of December 2017.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter highlight a procedure that were followed in analysing the collected data and hence covers stationarity tests, bounds test, ARDL estimation and diagnostic tests that were carried out to determine if the model does not suffer from misspecifications. These procedures are herein discussed in details as follows;

4.2 Stationarity test

The ADF and PP tests were conducted at intercept, and trend and intercept at both level and first difference. The ADF findings reveal that the variables EG, BS and BD are stationary at levels with p-values of 0.0229, 0.0001 and 0.0000 respectively. The variables are however stationery at first difference.

On the other hand, it can be seen that FDI and NS are non-stationary at levels with probability values of 0.2287 and 0.5525 respectively. They however, become stationary at first difference. This therefore satisfies the requirements of the ARDL technique which requires that the variables be either stationary or non-stationary at level but be stationary when subjected to first difference (Dickey & Fuller, 1981).

4.1: ADF unit root test results for Stationarity

Variable	*ADF At level 5%*			
	Intercept		***Intercept and trend***	
	T-stat	***Prob.***	***T-stat***	***Prob.***
LROA	-2.9042	0.1134	-3.4762	0.3219
LFDI	-2.9042	0.9431	-3.4762	0.2287
LEG	-2.9042	0.0041*	-3.4762	0.0229**
LNS	-2.9035	0.2053	-3.4753	0.5225
LBS	-2.9035	0.0000*	-3.4753	0.0001*
LBD	-2.9035	0.0000*	-3.4753	0.0000*
	ADF At first difference 5%			
Variable				
	Intercept		***Intercept and trend***	
	T-stat	***Prob.***	***T-stat***	***Prob.***
LROA	-2.9042	0.0001*	-3.4762	0.0001*
LFDI	-2.9042	0.0000*	-3.4762	0.0002*
LEG	-2.9042	0.0000*	-3.4762	0.0000*
LNS	-2.9042	0.0000*	-3.4762	0.0000*
LBS	-2.9042	0.0001*	-3.4762	0.0001*
LBD	-2.9048	0.0001*	-3.4773	0.0000*

* and ** significant at 0.01 and 0.05

4.2:PP unit root test results for Stationarity

Variable	*PP At level 5%*			
	Intercept		***Intercept and trend***	
	T-stat	***Prob.***	***T-stat***	***Prob.***
LROA	-2.9035	0.0033*	-3.4753	0.0154*
LFDI	-2.9035	0.7248	-3.4753	0.0393**
LEG	-2.9035	0.0196*	-3.4753	0.0837
LNS	-2.9035	0.1953	-3.4753	0.5079
LBS	-2.9035	0.0000*	-3.4753	0.0001*
LBD	-2.9035	0.0000*	-3.4753	0.0000*
	PP At first difference 5%			
Variable	***Intercept***		***Intercept and trend***	
	T-stat	***Prob.***	***T-stat***	***Prob.***
LROA	-2.9042	0.0001*	-3.4762	0.0001*
LFDI	-2.9042	0.0000*	-3.4762	0.0002*
LEG	-2.9042	0.0000*	-3.4762	0.0000*
LNS	-2.9042	0.0000*	-3.4762	0.0000*
LBS	-2.9042	0.0001*	-3.4762	0.0001*
LBD	-2.9042	0.0001*	-3.4762	0.0001*

* and ** significant at 0.01 and 0.05

According to the given PP test results, it can be noted that the variable ROA is stationary at both level and first difference at 5% with p-values of 0.0154 and 0.0001. Conclusion can be made that the variable FDI is not stationary at 5% with p-values of 0.7248 when tested at intercept but becomes stationary when tested at trend and intercept with a p-value of 0.0393 respectively. The variables EG and NS are non-stationary at levels (p-values = 0.0837 and 0.5079 respectively at trend and intercept but EG is stationary at trend). The variables are however stationary when tested at first difference. This also satisfies the requirements of the ARDL technique which requires that the variables be either stationary or non-stationary at level but be stationary when subjected to first difference.

4.3 Short run ARDL estimation

Table 4.3 provides an insight of the short run ARDL estimation results that were obtained. The results are showing that in the short run, it can be noted that previous changes in ROA in the first lag have a positive effect on ROA in the second and third lagged periods. This can be supported by an improvement in ROA from - 0.5349 to -0.3047 in period 2. ROA continues to improve in the 3rd lag as the rate at which it causes a fall in bank profitability declines to -0.0810 in the 3rd lag. Though ROA has been negative, it can however be noted that the rate which the banks' ROA has been falling has slowly declined. This can possibly be explained by the idea that bank managers are making an effort to improve the use of the bank's assets in an effective and efficient though significant positive gains are yet to be recorded.

Table 4.3: Short ARDL estimation, Model selection method: Akaike info criterion (AIC), Dynamic regressors (4 lags, automatic): LNS LFDI LEG LBD, LBS, DM (FC), Selected Model: ARDL (4, 0, 1, 3, 4, 4, 4)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
D(LROA(-1))	-0.534919	0.075258	-7.107825	0.0000*
D(LROA(-2))	-0.304686	0.086273	-3.531639	0.0011*
D(LROA(-3))	-0.080995	0.029594	-2.736874	0.0092*
D(LNS)	-0.326478	0.107633	-3.033244	0.0042*
D(LFDI)	-0.179874	0.497848	-0.361304	0.7198
D(LEG)	0.100848	0.063025	1.600122	0.1174
D(LEG(-1))	-0.141086	0.089152	-1.582529	0.1214
D(LEG(-2))	0.315890	0.086738	3.641902	0.0008*
D(LBD)	0.009960	0.028573	0.348594	0.7292
D(LBD(-1))	-0.169201	0.034891	-4.849426	0.0000*
D(LBD(-2))	-0.131109	0.036637	-3.578543	0.0009*
D(LBD(-3))	-0.052975	0.029302	-1.807905	0.0781**
D(LBS)	-0.247037	0.060569	-4.078603	0.0002*
D(LBS(-1))	0.415852	0.068609	6.061175	0.0000*
D(LBS(-2))	0.358429	0.082006	4.370758	0.0001*
D(LBS(-3))	0.247472	0.077185	3.206234	0.0026*
D(DM2008)	-0.017653	0.078866	-0.223840	0.8240
D(DM2008(-1))	0.713532	0.112978	6.315698	0.0000*
D(DM2008 (-2))	0.742708	0.113811	6.525814	0.0000*
D(DM2008 (-3))	0.359272	0.124030	2.896658	0.0061*
C	2.173412	0.773573	2.809575	0.0076*
CointEq(-1)	-0.400623	0.040347	-9.929304	0.0000*
** and ** Significant at 1% and 10% respectively* R^2 = 0.9858; Adjust. R^2 = 0.9766; F-Stat.=106.7674, Prob(F-stat.)=0.000, Durbin Watson=1.9835				

Improvements in FDI inflows are causing banks to suffer from a decline in performance by -0.1799 which is insignificant at 5%. The notable explanation suggests that the government's effort to attract and promote a growth in FDI investments is negatively affecting banking operations and hence there is a need to reevaluate FDI inflow policies (Asiedu, 2012).

It can be noted that there is an improvement in net savings (NS) has a negative effect on bank profitability of -0.3264. This signifies that an increase in consumer savings is possibly being held up as reserve requirements ratio which possibly reduces the bank's ability to issue more loans and hence reducing the profit earning capability of the bank. Such as noted byBonin et al.(2005) which contends that an increase is savings will not cause a significant positive impact on bank profitability when such deposits are held as reserves.

The results also show that improvements in economic growth will cause bank profitability to fall in the first period to -0.1411. This signifies that improvements in economic performance are resulting in negative responses by consumers towards banks who are either opting not to save with banks or borrow from banks. Bank profitability however, increased to 0.3159 in the second operational period following an increase in economic performance. This is because there is an increase in economic performance is causing positive changes in bank performance and this suggests that the improvement in economic performance is favoring banks either as a result of good economic policies, increases in disposable incomes and savings or an increases in the demand for banking services (Demirgüç-Kunt & Levine, 2004). However, there is a drop in bank performance in the third period.

An increase in bank size can be seen to be causing successive declining effects on bank performance in both the second and third operational periods by 0.3584 and -0.2475 respectively. Such can be attributed to rising bank costs such as wages and salaries (Molyneux & Wilson (2004). But there is a significant improvement in bank performance in the first period from a negative of 0.2470 to 0.4159 following increases in bank size. Thus combined effects of

an increase in banks size can be noted to be causing an increase in bank performance.

Meanwhile, the net effects of increases in bank deposits on bank performance can be said to be causing negative effects on bank profitability in both the three operational periods. But the rate at which bank deposit are causing a decline in bank performance begins to decline from the first period to the third period. it can thus be concluded that the combined effects of an improvements in bank deposits has a net negative effect on bank profitability.

It can be seen that a financial crisis has significant positive effects on bank performance in all the three operational periods by 0.7135, 0.7427and 0.3592 respectively. The net effects of a financial crisis on bank performance can thus be said to be positive. This shows that a financial crisis is resulting in good opportunities for banks. However, the initial impact of a financial crisis on bank performance can be said to be negative and hence measures should be taken to guard against the effects of a financial crisis (Bikker & Hu, 2013).

The error correction term is -0.400623which means that the speed of adjustment is 40.06%. This alternatively means that the speed at which the variables will move bank to a point of equilibrium is 40.06%.

4.4Bounds test

This study was also aimed at determining if changes in FDI and bank performance are cointegrated in the long run. This objective was made possible through the use of the Bounds technique. The Bounds testes tablishes that there is long run cointegration when they obtained F-statistic value if greater than both lower and upper bounds critical values.

It can be shown that an F-statistic of 10.78474was obtained and this higher that all the lower and upper bounds critical values. Hence, conclusions can be made that there is a long run cointegration between bank performance (ROA), FDI, EG, NS, BS and BD.

Table 4.4: Bounds test

Test statistic	**Value**	**Significance**	**Lower boundI(0)**	**Upper bound I(1)**
F-statistic	10.78474	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99

4.5 Long run ARDL estimation

Since the bounds test confirmed that there is a long run cointegration, long run estimations were conducted to determine the relationships that exist between bank performance, and FDI, EG, NS, BS and BD.

Table 4.5: Long run ARDL estimation, Model selection method: Akaike info criterion (AIC), Dynamic regressors (4 lags, automatic): LNS LFDI LEG LBD, LBS, DM (FC), Selected Model: ARDL (4, 0, 1, 3, 4, 4, 4)

Variable	Coeff.	Std. err.	t-stat.	Prob.
LFDI	-0.2931	0.1186	-2.4721	0.0178**
LEG	0.9705	0.3444	2.8175	0.0075*
LNS	0.0628	0.1924	0.3264	0.7458
LBS	-1.2052	0.7808	-1.5434	0.1306
LBD	0.3735	0.2712	1.3772	0.1761
(DM2008)	-1.5951	0.4811	-3.3157	0.0020*
C	5.4466	2.7845	1.9560	0.0575***
****, ** and * Significant at 10%, 5% and 1% respectively*				
EC = LROA – (5.4466 - 0.2931LFDI + 0.9705LEG + 0.0628LNS – 1.2052LBS+ 0.3735LBD – 1.5951DM				

The results show that positive changes in FDI will have a negative effect on bank performance and this means that an increase in FDI by 1 unit will result in a decline in bank performance by 0.293 units and the relationship is significant at 5%. The results are in confirmation with findings made by Asiedu (2012) which showed that increase in FDI inflows tend to affect bank performance. Possible reasons suggest that governments are forced to come

up with measures that are not conducive to economic and bank performance so as to just lure more FDI inflows.

The results also show that improvements in economic growth have an effect of causing positive improvements in bank performance. This is because a 1 unit increase in economic growth will have a positive effect on bank performance of 0.9705 units. The results are in support of findings made by Demirgüç-Kunt and Levine (2004) which suggest that banks tend to grow and improve their performance following increases in economic growth.

It can be noted that a financial crisis has negative effects on bank performance of 1.5951. Possible suggestions imply that increases in the effects of a financial crisis reduce banking activities and hence bank performance falls as banking risk increases. Such confirms findings made by Bikker and Hu (2013) which highlight that a financial crisis results in high banking risks and lowers the extent to which bank customers will engage their needs with banks. As a result, bank performance will fall.

Upwards changes in net savings can be established to be having a positive effect on bank performance. The results show that an increase in net savings by 1 unit will cause bank performance to increase by 0.0628. This is evidenced by findings made by Bonin et al. (2005) which established that bank savings and bank performance are positively related. Possible suggestions point to the idea that increases in savings provides banks with funds which they can use to invest in profitable projects and assets which will generate high revenue inflows in the future.

An increase in bank size can be noted to be negatively affecting bank performance and this is because an increase in bank size by 1 unit is resulting in a decline in bank performance by 1.2052 units. This is similar to deductions made by Goddard, Molyneux and Wilson (2004) which contends that increases in total assets can in most cases lead to a fall in bank performance.

The relationship between bank performance and bank deposits can be note to be positive and an increase in bank deposits by 1 unit will result in an increase

in bank performance by 0.3735 units. Such results are similar to the findings made by Ongore and Kusa (2003) and this suggests similar conclusions which are made about the ability of bank savings, and deposits often give banks power and ability to invest in more projects, assets and improvements in operations which will improve the performance of the bank.

4.6 Diagnostic tests

All the residual diagnostics tests that were carried do confirm that the estimated ARDL model does not suffer from heteroscedasticity, serial correlation and normality problems. All the obtained results indicate that the model does not suffer from heteroscedasticity, serial correlation and normality problems.

Table 4.6: Residual diagnostics

	Heteroscedasticity test		**Serial Correlation test**	**Normality test**
	Breusch-Pagan	**Arch test**	**LM test**	**Jarque-bera**
F-stat	0.6549	0.7077	0.3087	4.8024
(Prob.)	(0.9969)	(0.3955)	(0.5853)	(0.0906)

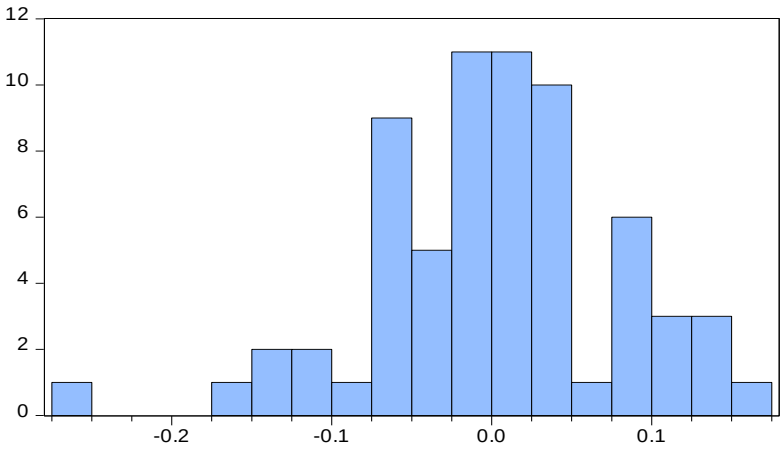

Figure 4.2: Normality test

4.7 Stability tests

Cusum test and Cusum of squares tests were used to check if the model is stable. The results are shown in figure 4.1. It can be seen that the estimated model stays within the required boundaries and hence we can say the model is stable and it can reliable explanations.

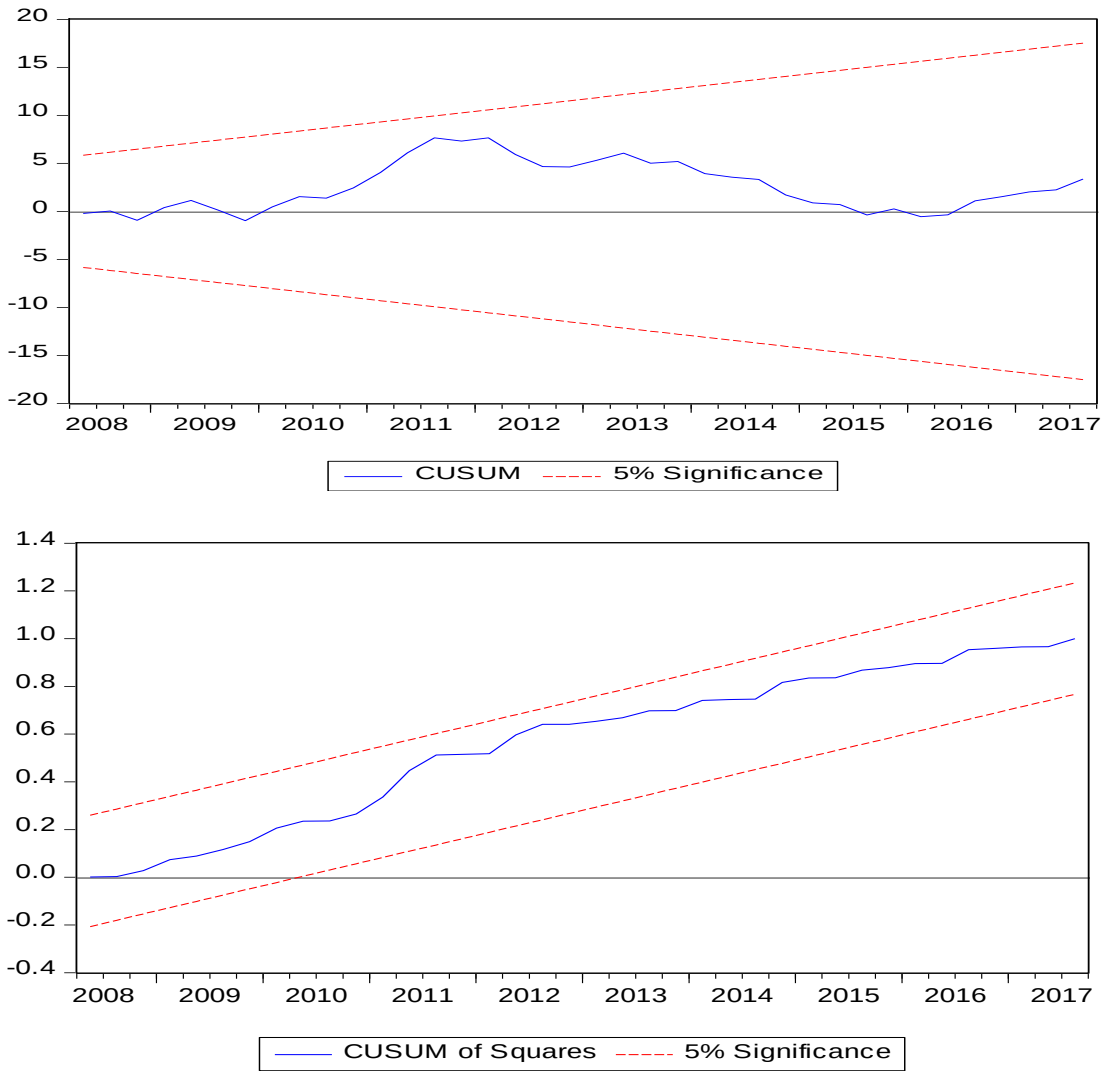

Figure 4.2: Cusum stability tests

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSIONS, POLICY IMPLICATIONS AND SUGGESTIONS FOR FUTURE STUDIES

5.1 Discussion of findings

The results have indicated that FDI inflows are negatively related with bank performance. This can be attributed to the idea that governments are compromising both bank and economic performance so as to obtain high FDI inflows. Such moves will be at the expense of bank performance especially when such funds are not channelled towards the banking sector but are rather drawn out of circulation. Based on the established findings, it can be noted that a lot of studies are confirming that the relationship that between FDI and bank performance can either be re is a positive or negative depending on circumstances. Meaning that increases in FDI can either cause an improvement in bank performance or a decline in bank performance. This implies that the relationship between FDI and bank performance is governed or influence by how banks and government deal and respond to FDI inflows issues and strategies.

An increase in net savings in this case can be noted to be favouring banks and this concurs with findings established by Ongore and Kusa (2013). This is because it means more customers have excess to funds to save and hence will manage to save their deposits with banks which give banks a more capacity to invest in other profitable assets which can generate more interest. Thus, net savings can be said to be enhancing the investment capacity of the banks to invest into profitable assets and hence expectations are that banks will earn huge interests from those activities and assets. The same deductions can be made concerning bank deposits and the idea is that an increase in bank deposits increases the amount of funds banks have to make loans and invest in other companies and assets. Increases in performance will be observed when the made loans and investments begin to generate returns.

Meanwhile, increases in bank size as measured by total assets were observed to be negatively related with bank performance. The results are the same as those established by Kasman(2003) and this entails that efforts by banks to improve or grow in size possibly ties the banks' capital into non-income generating assets which do not bring any returns in the long run. Such tends to reduce the amount of revenue inflow and this can be weighed down by rising costs which will cause bank performance to fall. Thus, an increase in bank size can also be said to be reducing bank liquidity in terms of the amount of cash the bank readily has for investment. More so, it can be deduced that bank managers are not effectively utilising banks assets and hence low return on assets are being obtained.

The effects of a financial crisis have in most cases been established to negatively affect bank performance and this concurs with the established findings by Bikker and Hu (2002).This is because a financial crisis is associated with a lot of risks such as interest risks and default risks. When interest risks rise, banks might fail to get their money which they have either given to customers as loss or customers will not be capable of paying back interest as result of difficult economic conditions. This reduces interest income while interest expenses may remain high and hence NIM will fall. With regards to that, assuming that loans are also part of the current assets of the bank, then a financial crisis will have an effect of reducing the value of issued loans while interest payments paid by the bank on borrowed funds will rise in value. Such will have an effect of causing a decline in profitability.

Positive improvements in bank performance which are caused by an increase in economic performance can be explained by the fact that an increase in economic growth results in an increase in disposable incomes. This is similar to what Chong and Calderon (2000) established. This is possibly because an improvement in economic performance causes a rise in the level of disposable income and much of the excess income will be saved and this allows banks to have more funds which they can use to issue out loans and possibly make more investments in other corporations and assets.

This ultimately results in an increase in bank performance. Increases in bank performance as result of an increase in economic growth can also be explained by the fact that there will be a rise in economic activities and the demand for funds to finance such activities. With more funds being required, demand for funds will rise more than the supply of funds causing interest rates to rise. A rise in interest rates will have a positive effect on bank performance.

5.2 Conclusions

Foremost, conclusions can be made that there is a long run cointegration between bank performance, FDI, EG, FC, NS, BS and BD. Conclusions can also be made that FDI inflows are not favouring bank performance and that an increase in FDI inflows is possibly not causing banks to innovate their operations and much of the obtained funds are possibly being channelled out of the banking sector. Conclusions can also be made that increase in net savings, bank size and bank deposits favours improvements in bank performance and hence banks' capacity to invest, increase in size and grow in the future. However, the effects of a financial crisis can be said to be having adverse effects on bank performance.

5.3 Policy implications

Based on the findings, the following policy implications can be recommended;

To the government

- Governments are therefore advocated to put in place policies that promote FDI inflows and this can include a reduction in taxes or giving foreign investors more incentives to invest in the economy.
- Governments need to put measure that will guard against the effects of a financial crisis and such can be increase in capital adequacy ratios.
- Governments must come up with sound and proper FDI policies that do not negatively affect both economic growth and banking sector performance and ensure that the obtained FDI inflow funds are channelled to economic agents through the banking system.

To bank managers

- Banks can also innovate their operations through investing in technology that improves the movement of funds at a lower cost.
- Introduce liquidity management policies that will reduce the amount of funds that are tied up in fixed assets or non-income generating assets. Liquidity management will thus help to channel funds towards high income generating assets.
- Introduce new banking products and incentives that will lure more customers' deposits.

5.4 Suggestions for future studies

This study examines the combined effects of FDI inflows on bank performance using combined data. Suggestions can be made that future studies use panel data or narrow the study to either commercial or public banks.

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LIST OF APPENDICES

Appendix I: Short run ARDL estimation

Dependent Variable: LROA
Method: ARDL
Date: 03/19/18 Time: 15:41
Sample (adjusted): 2001Q1 2017Q3
Included observations: 67 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): LFDI LNS LEG LBS LBD DM
Fixed regressors: C
Number of models evalulated: 62500
Selected Model: ARDL(4, 0, 1, 3, 4, 4, 4)

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LROA(-1))	-0.534919	0.075258	-7.107825	0.0000
D(LROA(-2))	-0.304686	0.086273	-3.531639	0.0011
D(LROA(-3))	-0.080995	0.029594	-2.736874	0.0092
D(LFDI)	-0.179874	0.497848	-0.361304	0.7198
D(LNS)	-0.326478	0.107633	-3.033244	0.0042
D(LEG)	0.100848	0.063025	1.600122	0.1174
D(LEG(-1))	-0.141086	0.089152	-1.582529	0.1214
D(LEG(-2))	0.315890	0.086738	3.641902	0.0008
D(LBS)	-0.247037	0.060569	-4.078603	0.0002
D(LBS(-1))	0.415852	0.068609	6.061175	0.0000
D(LBS(-2))	0.358429	0.082006	4.370758	0.0001
D(LBS(-3))	0.247472	0.077185	3.206234	0.0026
D(LBD)	0.009960	0.028573	0.348594	0.7292
D(LBD(-1))	-0.169201	0.034891	-4.849426	0.0000
D(LBD(-2))	-0.131109	0.036637	-3.578543	0.0009
D(LBD(-3))	-0.052975	0.029302	-1.807905	0.0781
D(DM2008)	-0.017653	0.078866	-0.223840	0.8240
D(DM2008(-1))	0.713532	0.112978	6.315698	0.0000
D(DM2008(-2))	0.742708	0.113811	6.525814	0.0000
D(DM2008(-3))	0.359272	0.124030	2.896658	0.0061
CointEq(-1)	-0.400623	0.040347	-9.929304	0.0000

Cointeq = LROA - (-0.2931*LFDI + 0.0628*LNS + 0.9705*LEG -1.2052*LBS
+ 0.3735*LBD -1.5951*DM2008 + 5.4466)

Appendix II: Long run ARDL estimation

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LFDI	-0.293081	0.118557	-2.472067	0.0178
LNS	0.062787	0.192380	0.326368	0.7458
LEG	0.970463	0.344437	2.817534	0.0075
LBS	-1.205162	0.780840	-1.543418	0.1306
LBD	0.373531	0.271227	1.377188	0.1761
DM2008	-1.595128	0.481077	-3.315742	0.0020
C	5.446583	2.784486	1.956046	0.0575

ARDL Bounds Test

Test Statistic	Value	k
F-statistic	10.78474	6

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	1.99	2.94
5%	2.27	3.28
2.5%	2.55	3.61
1%	2.88	3.99

Appendix III: Serial Correlation LM test

F-statistic	0.308730	Prob. F(2,38)	0.7362
Obs*R-squared	1.071274	Prob. Chi-Square(2)	0.5853

Test Equation:
Dependent Variable: RESID
Method: ARDL
Date: 03/24/18 Time: 23:05
Sample: 2001Q1 2017Q3
Included observations: 67
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LROA(-1)	0.057893	0.174055	0.332614	0.7413
LROA(-2)	-0.049299	0.119894	-0.411189	0.6832
LROA(-3)	-0.021674	0.123471	-0.175540	0.8616
LROA(-4)	0.000479	0.041246	0.011605	0.9908
LFDI	0.007310	0.049640	0.147255	0.8837
LEG	0.009159	0.098155	0.093308	0.9261
LEG(-1)	0.027390	0.122620	0.223375	0.8244
LEG(-2)	-0.048369	0.162235	-0.298142	0.7672
LEG(-3)	0.021678	0.134665	0.160975	0.8730
LNS	-0.056957	0.179490	-0.317329	0.7527
LNS(-1)	0.049720	0.156295	0.318117	0.7521
LBD	0.002189	0.038146	0.057378	0.9545
LBD (-1)	0.011226	0.040002	0.280639	0.7805
LBD(-2)	0.011279	0.046691	0.241565	0.8104
LBD(-3)	-0.011622	0.043491	-0.267237	0.7907
LBD(-4)	0.002605	0.039160	0.066517	0.9473
LBS	0.005937	0.085623	0.069340	0.9451
LBS(-1)	0.010831	0.089389	0.121173	0.9042
LBS(-2)	-0.043392	0.121460	-0.357256	0.7229
LBS(-3)	0.045877	0.118697	0.386508	0.7013
LBS(-4)	0.002513	0.114125	0.022020	0.9825
DM2008	-0.011568	0.094406	-0.122530	0.9031
DM2008(-1)	0.011872	0.133120	0.089182	0.9294
DM2008(-2)	-0.034235	0.160712	-0.213023	0.8324
DM2008(-3)	0.016817	0.151266	0.111173	0.9121
DM2008(-4)	0.016598	0.156634	0.105968	0.9162
C	-0.203952	0.849687	-0.240032	0.8116
RESID(-1)	-0.076660	0.242280	-0.316412	0.7534
RESID(-2)	0.174880	0.225855	0.774303	0.4435

R-squared	0.015989	Mean dependent var	2.79E-16
Adjusted R-squared	-0.709071	S.D. dependent var	0.076064
S.E. of regression	0.099440	Akaike info criterion	-1.479964
Sum squared resid	0.375754	Schwarz criterion	-0.525694
Log likelihood	78.57878	Hannan-Quinn criter.	-1.102357
F-statistic	0.022052	Durbin-Watson stat	1.896124
Prob(F-statistic)	1.000000		

Appendix IV: Heteroscedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.654864	Prob. F(26,40)	0.8713
Obs*R-squared	20.00428	Prob. Chi-Square(26)	0.7914
Scaled explained SS	10.53978	Prob. Chi-Square(26)	0.9969

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 03/24/18 Time: 23:11
Sample: 2001Q1 2017Q3
Included observations: 67

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.078706	0.083944	0.937599	0.3541
LROA(-1)	-0.000674	0.013115	-0.051385	0.9593
LROA(-2)	0.005049	0.010909	0.462860	0.6460
LROA(-3)	0.009077	0.011742	0.773042	0.4440
LROA(-4)	-1.16E-05	0.004261	-0.002730	0.9978
LFDI	-0.001173	0.005066	-0.231607	0.8180
LEG	-0.009229	0.010406	-0.886912	0.3804
LEG(-1)	0.008942	0.012519	0.714268	0.4792
LEG(-2)	0.010779	0.015710	0.686128	0.4966
LEG(-3)	-0.006372	0.013884	-0.458943	0.6488
LNS	0.013676	0.017154	0.797232	0.4300
LNS(-1)	-0.010447	0.015097	-0.691985	0.4929
LBD	0.001078	0.004026	0.267894	0.7902
LBD(-1)	0.003809	0.003983	0.956456	0.3446
LBD(-2)	0.001680	0.004415	0.380468	0.7056
LBD(-3)	0.002249	0.004244	0.529889	0.5991
LBD(-4)	-0.003523	0.003980	-0.885086	0.3814
LBS	-0.009650	0.009046	-1.066722	0.2925
LBS(-1)	-0.006404	0.008986	-0.712643	0.4802
LBS(-2)	0.002129	0.010395	0.204796	0.8388
LBS(-3)	-0.003793	0.010885	-0.348460	0.7293
LBS(-4)	-0.010685	0.011405	-0.936862	0.3545
DM2008	0.002342	0.009941	0.235636	0.8149
DM2008(-1)	-0.005782	0.014111	-0.409735	0.6842
DM2008(-2)	0.007475	0.016400	0.455813	0.6510
DM2008(-3)	-0.002002	0.015904	-0.125860	0.9005
DM2008(-4)	0.014623	0.015150	0.965156	0.3403

R-squared	0.298571	Mean dependent var	0.005699
Adjusted R-squared	-0.157357	S.D. dependent var	0.009874
S.E. of regression	0.010622	Akaike info criterion	-5.961593
Sum squared resid	0.004513	Schwarz criterion	-5.073135
Log likelihood	226.7134	Hannan-Quinn criter.	-5.610028
F-statistic	0.654864	Durbin-Watson stat	2.590190
Prob(F-statistic)	0.871300		

Appendix V: Heteroscedasticity test: ARCH

F-statistic	0.707748	Prob. F(1,64)	0.4033
Obs*R-squared	0.721882	Prob. Chi-Square(1)	0.3955

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 03/24/18 Time: 23:16

Sample (adjusted): 2001Q2 2017Q3

Included observations: 66 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006206	0.001410	4.401898	0.0000
RESID^2(-1)	-0.104585	0.124317	-0.841277	0.4033

R-squared	0.010938	Mean dependent var	0.005618
Adjusted R-squared	-0.004516	S.D. dependent var	0.009927
S.E. of regression	0.009949	Akaike info criterion	-6.352813
Sum squared resid	0.006335	Schwarz criterion	-6.286460
Log likelihood	211.6428	Hannan-Quinn criter.	-6.326594
F-statistic	0.707748	Durbin-Watson stat	1.997164
Prob(F-statistic)	0.403325		

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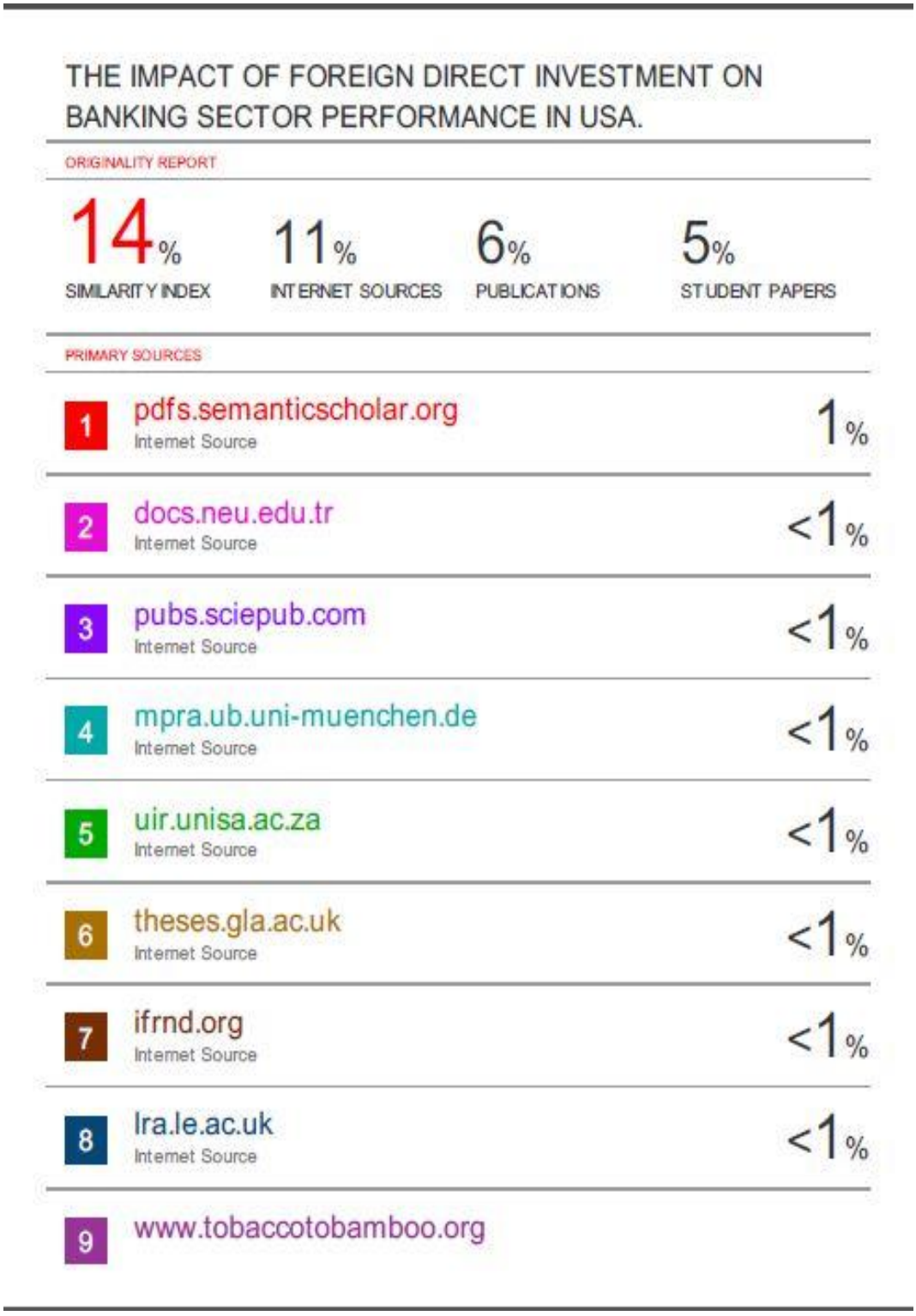

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ETHICS COMMITEE APPROVAL

YAKIN DOĞU ÜNİVERSİTESİ

BİLİMSEL ARAŞTIRMALAR ETİK KURULU

01.06.2018

Dear Omran M.Rashid Abdulqadir

Your project "**The Impact Of Foreign Direct Investment On Banking Sector Performance In USA** " has been evaluated. Since only secondary data will be used the project it does not need to go through the ethics committee. You can start your research on the condition that you will use only secondary data.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee

Direnc Kanol

Note: If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.