A Study on a Currency peg in the GCC Region with a Special Focus on UAE and its Impact on Economic Development

By

Student Name: Ala El Alami

Student ID number: 110040

Dissertation submitted in partial fulfilment of the requirements for the degree of MSc Finance and Banking

Faculty of Finance and Banking

Dissertation Supervisor

Doctor Elango Rengasamy

February-2013
Abstract

When there is trading operations which involves exports and imports for a country then currency is required for the purpose of exchange of goods and services. The currency in which two countries exchange goods and services are fixed so they can select the currency in which one of the countries trades in commonly, or choose a currency of even a third country to deal in. Some countries peg their currency to avoid any confusion in future. In this research report, the aspect of currency agreement which is adopted in UAE and other GCC countries for the purpose of trading is studied. The aim of this report is to examine and evaluate the advantages and disadvantages of fixing the currency. The report also provides information on what determines the correlation by pegging the currency with US dollar, euro and independent float and the best way to establish which way should be adopted for the trading of goods and services.

In the literature review the various aspects associated with currency such as common currency, currency board, GCC currency union and pegging to dollar and global currency system has been mentioned in brief details. There are two methods in this report – primary method and secondary method. In the primary method data has been collected related to the values of different currencies from 2004 till 2011 and with the help of statistical tools, correlation of UAE dirham is found out with the different currencies. Also correlation between economic indicators and currency fluctuation has been determined. In the secondary method literature review of articles, scholarly journals, newspapers, magazines, and internet websites related to the topic is referenced.
Acknowledgement

I would like to take this opportunity to first and foremost thank God for being my strength and guide in the writing of this thesis.

I express my gratitude to my faculty guide Dr. Elango Rengasamy who guided me all through the way with his valuable feedback and comments. I would also like to thank those people who helped me in successful completion of the research report by gathering the data with which I was able to conduct an analysis and come to conclusion for the report.

Last but not the least, I would like to thank my family: my parents Rajae El Alami and Omayma El Alami, for supporting me both financially and spiritually throughout my life.
Table of Contents

Abstract .................................................................................................................................................. 2

Acknowledgement ................................................................................................................................. 3

CHAPTER 1: INTRODUCTION .................................................................................................................. 7

Statement of the Problem ....................................................................................................................... 7

Purpose of the Study ................................................................................................................................. 7

Research Questions .................................................................................................................................. 9

Objectives ............................................................................................................................................... 9

Scope & Limitations ................................................................................................................................. 10

Organization of the Study ....................................................................................................................... 10

CHAPTER 2: LITERATURE REVIEW ....................................................................................................... 13

Introduction ............................................................................................................................................ 13

Currency .................................................................................................................................................. 13

Common Currency ................................................................................................................................. 15

Currency Boards .................................................................................................................................... 22

Design of Currency Board .................................................................................................................... 23

GCC Pegging To Dollar .......................................................................................................................... 24

Currency Union .................................................................................................................................... 24

Pros and Cons of Currency Union ......................................................................................................... 31

Global Currency System ....................................................................................................................... 38
Gold Standard ......................................................................................................................... 39
SDR .......................................................................................................................................... 39
US Dollar .................................................................................................................................. 40
Poly-currency System .............................................................................................................. 40
Conclusion ............................................................................................................................... 41
CHAPTER 3: METHODOLOGY .................................................................................................. 41
Introduction .............................................................................................................................. 41
Research Hypothesis ............................................................................................................... 42
Research Design ...................................................................................................................... 43
Research Methodology ........................................................................................................... 43
Data Collection ....................................................................................................................... 44
Chapter 4: Data Analysis, Result and Interpretation ................................................................. 44
Introduction .............................................................................................................................. 44
1. The economic structure of GCC .......................................................................................... 45
2. GCC currencies Fluctuation ............................................................................................... 47
3. GCC Revenue from exports and import ............................................................................. 49
4. 2013 GCC prospects .......................................................................................................... 50
5. USD/AED Correlation ........................................................................................................ 51
Conclusion ............................................................................................................................... 53
Chapter 5: Recommendation and Conclusion ....................................................................... 54
Recommendation ........................................................................................................... 54

Conclusion ..................................................................................................................... 58

Bibliography .................................................................................................................. 63
CHAPTER 1: INTRODUCTION

The evolution of currency started happening in the year of 2000 BC, where earlier money was in the form of grains stored in the temples which was used as exchange of goods. Later on metals were used as currency which had values and symbols which would represent the commodities. This became the basis for trade in the Fertile Crescent which was some 1500 years ago. However in this system there was a flaw and that was the credibility of the currency was limited to the military reach which the country had. During the late Bronze Age there could be seen significant growth in the trading between nations.

Statement of the Problem

Every country has a currency and value of the currency for every country is different which could depend on monetary power of that country. A currency is used for the purpose of exchange of goods and it is considered as a medium for the exchange of goods. Notes and coins could be used as a form of currency which is used for the physical exchange of goods. In US dollar is used as the currency for exchange of goods while in UAE, the dirham is used as the currency for exchange of goods. Since 1997 this UAE dirham was pegged with US dollar. In this research the effort is being made to analyze the impact of which currencies pegging to dollar have on the country’s economic development.

Purpose of the Study

In the recent times there has been an economic crisis in the world and in such situation the currency values also changed. Because of recession when the US dollar became weak it also had an impact on the GCC currencies. Currency pegging is also helpful in having transactions in
one currency and the value can be determined of one currency with respect to another currency. This is helpful especially when there are two different countries which are entering into a trading contract. The currency in which exchange would be made can be decided by the countries beforehand. This is helpful in trading and investment between the two countries because of which it is helpful in the growth of the economy.

The earliest form of currency pegging could be seen as currency being fixed against gold and because of this, the country having more gold had more value in currency. In 1940 there was an agreement made where the US dollar was adopted as the currency against which the pound was fixed. When the dollar value of a currency decreases, the currency is said to be devalued and weak. During the economic crisis the currencies were devalued which was a major concern for the economies of the countries, because the evaluation of the GDP would be done based on the new value of the currency. If the currency value is lower than the GDP of the country would also in turn, be valued at a lower scale. Every country’s currency value is very essential for the economic growth of the country.

The purpose of this study is to examine the advantages which countries have because of peg currency, as there is an economic crisis in one country with which the currency has been fixed there could be impact on other countries also because of this. The research is conducted so there can be a better understanding about the advantages and disadvantages of pegging currency which are made by the countries, and their impact on the overall business of the country. This research would be supportive in finding solutions when there is economic crisis in the future and the currency that has been fixed because an economic crunch in one country, should not impact the economic development of another country. Solutions can be found in the research where the GDP of the country is not affected, during the situation when an economic crisis occurs.
**Research Questions**

Research questions are used to design the flow of research in which way the study would be conducted. With the help of research questions there is clarity regarding the steps which would be followed up for the purpose of the study. It would also help in designing the hypothesis for the research on the basis of which further research would be carried out. The various variables and parameters of the research can be decided before beginning the research. It is important that the research questions are clear and accurate so that it would be visible as to what kind of research has to be adopted. Research questions are helpful in deciding the starting point of the research and objectives of the research can be determined based on this. When properly designed clear and precise questions are there, it is easy to understand and also to explain.

In this research following questions have been decided which would be helpful in better understanding of the problem which is being focused upon:

- What is the importance of common currency the GCC countries to US dollar and their impact on the economic development of the region?
- Will there be any impact on the economy of GCC countries because of peg currency agreement?

**Objectives**

Objectives of a research report has to be stated with clarity and should be outlined well so that the researcher is clear regarding the goals which would be achieved from the research which is being conducted. With the clarity in research the final report can be used for future references.
when there is a similar problem faced. By sticking to the objectives of the research the researcher can further develop on the research.

The research objectives of this research are:

- To critically analyze the contribution of pegging of GCC currencies to the US dollar on the economy development of the GCC.
- To evaluate the impact of the pegging on various sectors such as: import, export, oil and gas.
- To suggest whether alternative argument such as common currencies agreement would boost the economic growth of the region.

**Scope & Limitations**

Currency agreement is a vast topic and there could be various features associated with this and it would be difficult to each and every aspect of the topic. The scope of the topic has been limited to the aspect of impact on economic developments because of pegging currency. There would be ethical means used for collecting the data and confidentiality would be considered while collecting data. There could not be much clarity regarding pegging currency and economic impact. Time and cost is another constraint which is there in this research. The research cannot be stretched for too long because the results of the research might become obsolete and also because of this there would be cost incurred.

**Organization of the Study**

The organization or structure of the study is essential so that there is an idea about the flow in which the research would proceed. This section would be helpful in giving an idea about
the overall flow of the research. This section of report mentions the flow of information which would be included in the research. This section would be helpful for the reader to understand the way in which overall research has been conducted.

This dissertation has been divided into various chapters. There are around five chapters which have been included in this research. In every chapter there are sub sections that have been included. The focus of research is towards understanding the pegging currency and its impact on the economic development of the country. This research includes information related to various aspects of the currency agreement and its impact on the economic development of the country.

Introduction is the first chapter of the research; this chapter is helpful in getting an overall idea about the whole research project. This section of the research has been divided into certain sub sections such as statement of problem, purpose of study, research questions, objectives, scope and limitations, definition of terms and organization of study. The definition of terms defines the important terms such as currency pegging which would helpful in understanding the research in a better way. The objective section includes information about the main objectives of the research which would be undertaken.

The second chapter of the report is very important section of the report; it is the literature review section. The literature review section of the report will help in doing a critical analysis on the currency agreement and its impact on the economic development of the country. The currency pegging and history regarding this would be understood. The ways in which different countries have adopted currency pegging and the advantages and disadvantages of currency pegging would be mentioned in this section. This section of the report will be helpful in getting an in-depth theoretical knowledge regarding all the associated concepts which would be included.
in the research. It will also help in understanding the position of currency agreement which has been adopted by UAE.

The third chapter in the research includes the project methodology which would be adopted for conducting the research. In this chapter different information regarding the process of undertaking the research will be mentioned. The various sub sections included in this are research objective, the research design and the research methodology and data collection procedure. This chapter will be helpful in understanding the various tools that would be used for collecting, analysing and evaluating the data. Also, the research structure in which would give brief information regarding the overall information in the project. It gives information on how the research has been conducted and from where the information has been collected.

There will be two more chapters that will be included in the research. The forth chapter will be data interpretation; this chapter will include information on the data which has been collected and would give the interpretation of the data which has been collected. This is the most importance chapter of the research as it would be helpful in understanding and inferring the data which has been collected.

The next chapter included in the dissertation is the recommendations and conclusion. The recommendation chapter includes the major findings of the overall research undertaken. This section will help in understanding the major findings of the research which included suggestion given for improvement in the economy because of currency pegging even when there is recession in the country. This is the important section of the report as it will give information on solution to the problem mentioned in the research. The final section of the report will be conclusion that will give a summary of the whole project.
CHAPTER 2: LITERATURE REVIEW

Introduction

For the economic development of a country trading is one way where the products manufactured in the country are sold to other countries. The exchange of goods and services between two different countries involves exchange of currency also (Gevorkyan, 2009). The purchase and selling between two different countries happens based on a particular currency which is fixed by both the countries for the purpose of trading. For the purpose of valuation a country fixes its currency against currency of another country and this is known as currency pegging (Mavlonov, 2005). Exchange of currency for the purpose of trade has been happening for very long time around the world, multinational currencies movement: a single currency has been adopted by twelve Europe countries, however on January 1, 2003; six oil producing countries (Saudi Arabia, United Arab Emirates, Bahrain, Oman, Qatar, and Kuwait) decided the dollarization currency. The balance of the Literature review is organized as follows: overview of the common currency history and the GCC currency pegging to dollar.

Currency

Currency is used for the purpose trading over the exchanges and also in private negotiations. But with currency there is fluctuation which leads to currency risk and thus trade exchange is exposed to this risk (Chu, 2005). There is a trend of globalization which has led to concern over exposure of currency risk for the financial analysts.

For the purpose of trading there is exchange rate and it is the rate at which one currency is exchanged with another currency. The international convention in most countries is to quote exchange rate with US dollar as base currency (Seidel, 2012). To reduce exchange rate risk the
parties can decide on forward exchange rate where a rate is agreed upon at a future date at which one currency would be exchanged for another currency in the future.

Interest rate parity is the interest rate differential between two countries which is equal to the differential between the forward exchange rate and the spot exchange rate. For the investors they are indifferent at this interest rate and there is no arbitrage (Hossain, 2011). Trading of currency happens at huge volumes when there is interbank transaction and there is positive serial correlation from the returns which is generated from currencies (Sidorova, 2011).

Currency and financial transactions are an important element of the international trade system for the purpose of migration of capital, movement of financial assets of the country, participation in the foreign economic activity, and the population. Transactions which happen with foreign currencies are having an important role in the foreign trade operations which are (Yevchenko, 2010):

- migration and accumulation of capital
- payments to citizens
- international investments
- trade
- non-commercial, scientific and technical, charitable and other types of cooperation

There are various indicators which can be used to understand amount of currency transactions and these are (Kondratov, 2011):

- international trade and non-trade operations
- investment processes (in currencies)
- direct currency incomes (loans)
- currency exchange processes
- activity of non-residents (foreign currency activities)
- subject composition of banks (regional and extra regional banks, foreign banks, and banks that have foreign investments)
- financial services (bank guarantees, factoring, and forfeiting);
- support and consultation services

European countries have adopted the common currency called Euro, Ecuador and El Salvador has dollarized their currencies and many countries have adopted currency boards which involves tying their currencies to the American Dollar. But the moot question asked is whether adopting the common currencies or subsequent dollarization has contributed to the economic development of the region. The consequences of giving up the individual national currencies have positive and negative effects on the trade and income of the country.

Common Currency

According to Frankel and Rose, adopting a common currency has an impact on the economy of the company as it is a step towards economic stabilization and openness. The common currency again removes transactional costs. Some economists argue that the exchange rate fluctuations can be handled through hedging on derivatives and research has not found any palpable effect on trade and investments. Frankel and Rose in their research have established statistically that currency union’s triples trade with the partners and there is no diversion of trade from non-members. It has been proved with statistical analysis that analyzed the currencies of 200 countries that a common currency actually boosted the country’s total trade (Rose A.
This increase in trade actually total trade increases the per capita income over a period of time. They make a great case for common currencies and feel that European Union is the step in the right direction. Frankel and Rose suggest that the currency union should be with a trading partner who has a larger size, better proximity and various other historical linkages. It is still unknown how fast these trade boosting effects actually happen and whether other factors along with geographical lines are responsible for such an effect. But it can be safely assumed that the small countries effectively boost their trade by adopting a common currency. The researchers point to the example of Poland which has significantly improved its trade by joining the Euro. They are ground that the currency union has no bearing upon the output (Rose J. F., 2002).

Angie Peng feels that informal currency sharing is already accepted by many nations by accepting trade in American Dollar terms. Dollar serves as a common payment from Cambodia to Zambia. There is no formal announcement of this nature but informal adoption of the foreign currency is already on the cards as in the case of Euro. The adoption of common Euro has enabled the EU to leverage its power as a large economic union and lowers the economic losses over the years. The foreign direct investment is accelerated ad there are no problems with the fluctuating exchange rate. Smaller countries in the same region like do have a greater say in the currency market and tourism inflows to these regions are also very high. The trade across regions in these same currency markets is also a breeze. (Peng, 2012)

But Peng also points out that the pitfalls for the same currency include larger nations picking up the tab for the failure of economies. The countries in the European Union have been forced to take in Greece along with the struggles. The problems of Spain, Greece and Portugal have been a problem for Germany and Britain that Britain is planning to exit from the union albeit with a referendum. A common currency also means that many nations have not control over the
monetary policy of another country may have to stand aside and look when the currency actually is mismanaged (Peng, 2012). The individual countries also do not have any control over its monetary policy as it requires the consent of the currency union to appreciate or depreciates its own money. Economic cooperation and a common market is the first step in creating a common currency market and the countries adopting the common currency need to be ready for a common market and economic conditions.

Angie Peng has been following the developments in the ASEAN countries which plan to adopt a common currency but the struggles in the European Union have been a deterrent for the countries. Moreover, the number of weaker countries in the region are considerably higher and many stronger regions did not want to bail out the smaller economies. Many economists do warn that ASEAN’s jump for the common currency would be perilous and the current state of affairs to adopt the American Dollars informally would be a better strategy. (Peng, 2012)

Andrew Rose adopted a gravity model to establish the effect of the exchange rate fluctuation and the common currency unions on the international trade arena. It has been established that the exchange rate fluctuation has a small negative effect on the international trade but the countries having a common currency trade with have increased trade over three times than the times with individual currency regimes. The common currency eliminates the exchange rate volatility thus increasing economic security and trade over the years. A radical reduction in the exchange rate also does not produce such large volume of trade which is currently witnesses in the European Union. Rose also points out that the increased trade also increases the trade disputes within the union (Rose A., 2000).
Higher levels of trade lead to the synchronization of business cycles and this closer economic integration would lead to more political integration between the countries. The early Scandinavian experience in the 19th century also points out the monetary benefits having a common currency and the current adherent to the rule are the European Union. Rose estimates that 90 countries in the world already accept the common currency regime in principle even though official formal confirmation is to be made. The common currency increases the trade and every one percent increase in the trade increases the income of a person in the country by one and a half points which is a substantial amount. Higher trade has higher synchronization of business cycles which has been determined by the Europe Monetary Union. According to Rose it would be an important milestone for many smaller countries in the European Union to jump into the Euro bandwagon as the returns are considerable higher in terms of trade and income. (Rose A., 2000)

Eicher and Henn carried the research by Rose further to note that the currency unions have a robust trade average of 45%. Currency Unions establish trade relations which are easy to establish and it is important of a country to quantify the trade results so as to understand the increases the currency union has entailed from being an independent monetary union. Raw trade data has shown that the tripling of trade has happened only when the businesses are compatible as in the case of German-Irish trade has increased more than the German British trade (Henn, 2009). Currency union does not take into account the multilateral trade which faces much resistance than bilateral trade. Multilateral trade takes into account tariffs, geographical location, transit connections etc. the determinants affecting multilateral trade vary every year and thus it does not augur well with currency union.
Eicher further argues that many trade agreements like GATT or any multilateral trade agreement do not affect the trade between currency union countries. Nor does the US dollar or any currencies are affected by the trade between the countries adopting a single currency. It has been seen that there is a significant increase in the trade between countries which adopt a common currency and bilateral trade is not affected by the multilateral trade agreements. Preferential trade agreements do have an effect on the trade and this is not offset by the common currency union. The Preferential trade agreement seems to be more useful in increasing the trade between countries than common currency unions as they have a strong and heterogeneous impact on trade relations. Eicher actually accepts Rose’s seminal thesis that Common currencies increase trade relations but provides a rider that it depends on the bilateral fit of the country and the trade Agreements binding on it. Common currency unions along with preferential trade agreements seem to have a potent effect on the trade between countries. (Henn, 2009)

Santana et.al puts Andrew Rose’s theory of common currencies increasing trade by 200% to test by introducing the variables like tourism. It has been well documented that common currencies increase trade by reducing transaction costs and the exchange rate uncertainty. Many economists are skeptical about the magnitude of increase in trade. Many countries do not have any trade between them because the fixed costs in exports are very high and this factor is called the country selection bias. Santana et.al use the HMR method to understand the variables which affect the trade between countries having a common currency (Maria Santana-Gallego, 2012).

According to the HMR method it deals with the zero trade between the countries and uses a data omission method to understand the magnitude of the trade. According to the data covered, tourism accounts for most of the increase in trade flows. A common currency increases the footfalls as it implies friendly relations with country. The trade increases through tourist
spending which actually cannot be grouped in to the export category. Once the tourism variable is removed from the measurement it is seen that the trade volume significantly reduces (Maria Santana-Gallego, 2012). This deals a big blow to the research conducted by various researchers espousing the common currency as it showed a marked increase in bilateral trade.

The economy of today is driven by many factors like technology, globalization, political stability, influence of US and China, emergence of new economies and the advent of common currency unions. Many developing countries could experience a growth of 5% by improving the connectivity which provides easy access to knowledge and thus prosperity. Globalization has collectively integrated disparate economies and creating a big wide trade bloc for the companies (Maria Santana-Gallego, 2012). There has been a convergence of Asian, American and European economies which has given the growth further impetus. Slowing down of the US economy has impacted the American dollar and this has affected trade to a large extent.

Robert Mundell in his studies provides the example of China in terms of Exchange rate uncertainty. China was expected to devalue its currency and much of investment happened to increase the pickings on the market on depreciation of the Yuan. In China since land ownership is not permitted much of savings are absorbed by the stock market or the savings accounts of the banks. On depreciation this savings could take major hit as the confidence of the investors would be affected completely. The poorer parts of China especially the countryside which does not enough knowledge about the stock market investing would be completely hit leading to panic and hoarding of cash. China also has a huge trade deficit vis-à-vis USA and devaluation of currencies would lead to cap on exports which would affect the trade with many countries. in the early 90’s the Asian crisis was precipitated by the continuous appreciation of the Yen which actually dried up Japanese investments. Many argue that different currency systems in Asia are
more like hindrance to trade. Hong Kong has currency board system, whereas Singapore, Taiwan and Japan follow a currency Basket system. China has fixed rate with exchange controls where as many countries like Thailand, Indonesia and South Korea did not have the reserves and had high external debts. This varied disparities affected the trade and these smaller countries bore the brunt of the Asian debt crisis (Mundell, 2009).

Mundell argue that the current state of affairs in Asia might spur the ASEAN countries to adopt a common currency like the Euro. In fact the ideal world would have a world currency with each country having the national currencies pegged to it. The supply of the national currency can be keep low so that the global demand for it at a fixed parity is maintained. Each country can be having its own currency with a consortium of states managing the single currency to which each national currency could be converted freely. Asian currency as in the case of Euro would be a mirage as it requires a great deal of international leverage and political integration. The solution for Asian countries would be the parallel currency used for trade within Asia and the rest of the world. This parallel currency according to Mundell could be Yen or the Dollar. China’s RMB fails to be one as it is not convertible and thus cannot be an anchor for any crisis. Yen also face many problems as the banking and fiscal policies of Japan have been eroding its monetary influence in the region. Mundell supports the Dollar as a parallel currency as it is used by majority of the countries (Mundell, 2009).

Mundell argues the formation of the Asian monetary fund which would help Asian economies utilize the power of the dollars. China would especially benefit as RMB has been historically pegged with the US dollars. The dollar based currency area within Asia would act as a single currency which would make foreign direct investment as a easy proposition within the
area. The fluctuation in the exchange rate would not affect the investors within the area as the common currency based on the dollar would defeat any transaction costs.

Silvana Tenyero of Harvard University argues against common currency as the trade increases are quite negligible. The common currency units have been gaining momentum with many states like El Salvador, Ecuador, and Guatemala legalizing the dollarization of its economy. Many Latin American and African countries are planning to follow suit which would enable cancellation of transactional costs and avoidance of exchange rate fluctuations. It also helps to combat inflation as the anchor country is able to commit to the monetary policies (Tenreyro, 2010).

**Currency Boards**

In developing economies currency boards are formed which is used to establish the domestic currency in relation to another currency where the board has to guarantee that the domestic currency is backed by sufficient foreign exchange reserves (Kopcke, 1999). The currency boards provide a foundation which encourages traders and investors for accepting new currencies and also there is no requirement of sophisticated money markets and central banking operations for being effective (Kritzman, 1992). When global financial crisis happened across the world there was more attention given to currency boards and especially for the benefits which are derived by the currency boards they have become attractive in many developing countries in Asia, America or Europe. With the help of currency boards the countries are attempting to introduce a new currency or restore confidence in their existing currencies (Chu, 2005).
But for an economy to be successful and have assurance in the economy cannot be secured by currency boards alone, it also needs to be supported by on government receipts and expenditures (Yevchenko, 2010). Even though because of currency boards a quick start is provided to new currencies but it does not ensure lasting foundation because the economy changes with time. There are prices changes which happen in the economy and the value of assets change because of the trading partners (Kopcke, 1999). Also as the economy grows the ability to protect the currency becomes tough for the board because of the size and resources which are available for the board.

**Design of Currency Board**

In the nineteenth and twentieth centuries most of the colonies were under the British Empire and at that time currency boards were maintained. Under the European powers these boards functioned they were bound to value their currency to those of European governments (Kritzman, 1992). Earlier times the domestic currency was backed by the reserves of precious metals which the country had. Currently in 14 countries there are currency boards which operate under their own governments and in the current situation the currency is backed by reserves of base money of the country (Mavlonov, 2005).

The currency financial and accounting block of a regional economy is a system of relations between the various participants involved in the different foreign economic activity, which includes enterprises and organizations which are subjected to international foreign trade operations located in that region, as well as organizations performing international payments to subjects of regional foreign trade cooperation (Kopcke, 1999).
GCC Pegging To Dollar

A first step in the Gulf Cooperation Council (GCC) January 1, 2003 stated to form a monetary union and to the US dollar would as fixed exchange rate the six countries of the Gulf Cooperation Council (GCC) Saudi Arabia, Bahrain, Kuwait, Qatar, United Arab Emiratis, and Oman pegged their currencies to the dollar. In 1973, Oman pegged US dollar to riyal. However, until 2001 the currencies of U.A.E, K.S.A, Bahrain and Qatar were tied to the SDR. Kuwait pegged the dinar with a basket of currencies. However in 2007 Kuwait withdrew from dollar peg to basket peg.

Despite the proposed currency union some countries were unprepared for the proposed strategy, also GCC countries performance of economic and policy was difference. The main reason of The currency pegging which was adopted by GCC for the purpose of foreign trade particularly oil and gas exports, since the dollar is been quoted in oil prices internationally in which the petroleum sector has the greatest dependence on GCC countries thus the revenue of GCC through exports has been good. Also the export earnings stability and eliminate currency risk and to ensure accurate investment forecasting and long term investment. On the other hand several countries, the pegging or fixing exchange rate shows instability because to protect the peg the country depends on the government pegging reserve.

Currency Union

The commonwealth of independent states (CIS) was established in 1995 with the motive of exchanging information in the field of currency regulation, handling the lack of structural symmetry between legal systems in this field, open markets of financial services, completing the transition to convertibility of national currencies, aligning mutual wholesale price quotations,
and extending settlements in national currencies (Kondratov, 2011). With the help of CIS the aim was to have harmony in the national legislations which includes the use of model laws, freeing up the movement of capital inside CIS countries, and introduction of institutions which would be related to monetary integration. Also with CIS the attempts was installation of optimal currency modes, introducing a mechanism which coordinates currency policies and align the currency rates mutually within the permissible limits, setup coordination with fiscal policy and establish an agreement which would introduce a mutual currency, which will thus become both an international instrument of payments and a reserve currency in future (Hossain, 2011).

When the currency instruments had to be established by the CIS members there was a need to understand the currency instruments which have already been developed and integrated and those which can be used after post-Soviet states. Based on the experience CIS members have given importance to cooperation mechanisms and considered a pattern of monetary integration (Yevchenko, 2010). The commonality with the integration of the monetary sphere is stepwise character which it has and the consistency with which the highest point is approached, which gives rise to currency union. The integration is successful when there is equilibrium between market and state regulation (Seidel, 2012). But in having a currency union the basic problem is the ways in which stability of prices and currency rates is achieved under their real and nominal macroeconomic convergence.

It has been shown by J. Frankel who is from Harvard University and A. Rose who is from California University that countries which develop close trade ties and enter into a currency union have undergone changes in their economic cycle so that synchronization can be achieved (Mavlonov, 2005). Currency union can utilize financially integrated capital markets for cross-country risk sharing more effectively, which would lead to lower fluctuations in the volumes of
output and income. There is substantial effect on the level of production and trade because of integration (Kopcke, 1999). Currency unions help in favourable influence with the development of bilateral trade and coordinated price behaviour. There is positive influence of financial integration is that there is growth of trade and thus manufacture can receive higher orders than the effects received from the stabilization of economic cycle (Kondratov, 2011). By adopting the common currency it stimulates and strengthens further trade integration.

When the integration of currency is adopted then during the transition phase the currency policy model which is adopted should be based on the concrete needs and conditions of each country. There are number of shared elements which are used for determining the choice of monetary and currency policy which should be adopted by the CIS countries (Seidel, 2012).

Currency integration is not just about adopting a common currency but in this there is also an integration of financial markets. This leads to liberalization of capital movements, equalizing the conditions related to their functioning with the common standards, structures, institutes, and regulation norms, and also there is creation of a strong banking system when currency integration is adopted (Hossain, 2011). The currency integration is needed because of following reasons (Kondratov, 2011):

- Administration of monetary policy is successful by the central bank, there is need for proper functioning of internal financial sector is needed so that countries can rely on these.
- An adequate institutional structure which might lead to stability in the economy and security of the overall system.
• Effective regulation and control of financial institutions and markets which is the most important aspect for the countries.

Trust and reliability is an important element in policy administration (Gevorkyan, 2009). There should be a trustful monetary policy which aims at lowering the inflation which reduces the chances of potential recession in the production system and thus help in bringing the desired results in lesser time, even though there are obstructions because of the nominal convergence of currencies (Sidorova, 2011). If trust is not there then it would lead to inflation inertia and output reduction. By lowering inflation CIS countries have achieved success and also maintained a price stability which means the dynamics of prices and wages are in accordance with low inflation expectations (Yevchenko, 2010).

Necessity is another element of monetary policy where it is essential to take into account the uncertainty factor in the process which keeps occurring continuously in the changing structures of CIS countries’ economies. There could be uncertainty because of the following reasons (Gevorkyan, 2009):

• lack of sufficient experience related to this policy of the countries with former centrally planned economies
• lack of statistics or their authenticity is unreliable for the long term periods
• structural changes in the economy and difficulties in understanding and modelling economic processes

Price stability is the key concern for the currency integration of the countries because it would affect the economic and monetary conditions of the countries (Gevorkyan, 2009). In the economic analysis things which are included are evaluating the current state of the real and
financial sectors of an economy, the nature of exposure towards the present economic shocks, and evaluating inflation risks in the short to medium term (Chu, 2005). The price dynamics is projected on the basis of changes in the demand and supply ratio in labour, commodity and service markets. Most central banks typically have economic analysis for monetary and credit policy (Hossain, 2011).

Also, R. Mundell developed theory of optimum currency which attempts to describe the characteristics of an economy, diminishing the probability of asymmetric shocks and introducing a common currency (Kritzman, 1992). This theory tries to understand the economic benefits which two or more countries derive by having common monetary, credit and currency policies, which would include the irreversible fixation of currency exchange rates by a one-to-one ratio based on the assumption that the economic cycles of these countries are highly correlated with each other (Chu, 2005). The economies of countries which are members of a particular currency zone they should be characterized by a considerable degree of mutual openness which would be defined as the ratio of mutual foreign trade to the GDP size. Thinking of R. McKinnon who is from Stanford University is that structural reforms should be directed towards the stimulation of flexible markets, which would be helpful in lowering the need for inflexible fiscal, monetary and credit policy measures (Kritzman, 1992).

In the monetary analysis the central banks recognize that in long-term there would be mutual trade-off between the money mass dynamics and inflation (Yevchenko, 2010). Therefore the analysis of monetary statements considers the dynamics of monetary aggregates and their influence on the level of prices in the middle and long term.
Currency unions are criticized for the loss of independence to tailor the economic policies according to the local needs. It is more favourable for countries in the European Union which have high labour mobility and low economic shocks. There is also the loss of seignorage revenues to content with an also the abdication of a national symbol (Tenyero, 2010). It is important to note that the members of the currency unions have geographically close ties and share linguistic and close colonial links as evident from the CFA Franc zone in Africa, eastern Caribbean Currency area and the unilaterally dollarized Panama, Puerto Rico and Bermuda. These exhibit high movement of shocks to prices and are very small countries which are unviable to have an independent currency. According to Tenyero it would be impractical for big countries to go for a currency union as it would entail the loss of a unifying national symbol and cannot have any significant increase in the trade revenues. This is because the multilateral trade agreements and other preferential agreements play a vital role in controlling the trade of a country.

Agarwal et.al studies the viability of financial integration of the ASEAN countries and studied the various convergence criteria that the ASEAN countries should meet to undertake a currency union. The North America Free Trade Zone and the European Union have led to the integration of the economies of the member countries. But the level of economic integration in the AEAN region is very low which actually does not augur well for a currency union. The wealth gap between the rich and poor countries are very high in these regions and the 1997 Asian crisis aftermaths are still persistent in the economies. ASEAN countries have experienced low growth and have has collaboration agreements with non ASEAN members. Different countries have inked preferential trade agreements which have excluded members completely (Agarwal, 2004).
It has been noted that Japan has signed a 2million deal with the ASEAN members to provide a trade free zone for the members. It would provide training in technical skills and reduce the wealth gap between the members. The growth of India and China in its neighbourhood has also increased the trade relations immensely. There has been a proposal for an ASEAN dollar to increase trade and monetary relations within the members and to contain inflation and tax evasions. But it requires the members relinquish the power of issuing the currencies and transfer it to a central banking authority which would manage the currency (Agarwal, 2004). The roadmap towards adoption of a common currency would be development of an ASEAN currency community which would accept and adopt the ASEAN dollar.

To be part of the ASEAN currency community the required qualifications should be prescribed like developing appropriate banking and monetary systems which would reduce the impact of the common currency on the systems of the country. It should also be noted that the independent monetary policy of the countries come to a standstill and they should elucidate policies which would bring domestic fluctuations to the minimum. The various criteria of the Maastricht treaty would be an able framework for the ASEAN community (Agarwal, 2004). The economic growth of the ASEAN region has been impressive as the countries have been less reliant on the demand from outside the region. The growth of China has increased inter-regional trade thus protecting the region form external shocks of recession.

Agarwal and others find the establishment of a central ASEAN bank would encourage fiscal discipline between the member countries which would influence the growth. The question of ASEAN dollar being beneficial to the members is highly debatable as many scholars feel the economic disparity too high to be managed. Many countries too are politically distrustful of each
other and feel that the Dollar would bring up the survival instincts of the weakest countries (Agarwal, 2004).

Also, Jamil, Streissler and Kunst explored the exchange rate volatility impact on industrial productivity on the various European Union countries which adopted the common currency with respect to 4 other countries which did not accept the currency union. It has been noted that each country reacted differently to exchange rate volatility and the common currency did mitigate some of the ill effects of volatility on the economy.

**Pros and Cons of Currency Union**

The major benefit of having a currency union is to have reduced transaction costs in the currency exchange. In the union more countries are included, there would be higher benefit derived from it (Seidel, 2012). As there is lower transaction cost for the countries in the union it leads to a higher exchange volume for the commodities between member countries, there is more effective distribution of resources, and thus higher rate of economic growth happens in the countries (Kondratov, 2011). By having fixed exchange rates there would be higher inflow of direct foreign investments which would encourage development in entrepreneurship and decrease unemployment, create a tight fiscal policy which would stabilize long-term interest rates at a low level for the member countries (Sidorova, 2011).

A common currency is an essential parameter for stability and economic growth which increases closeness among the members in the union and thus leads to closer coordination of monetary and currency policies (Kopcke, 1999). With increased globalization it has become essential that there is adoption of fixed currency rates so that it would be helpful for the world economy as a whole. Within a currency union, there is reduction in the transaction costs for the
currency operations and the sharp fluctuations in currency rates will be reduced (Seidel, 2012). The transition to a common currency will also allow a considerable decrease in the costs which are associated with international trade and there would be reduction in interest rate risks which would generate a positive effect for the economy of the country.

However by having common currency there will be increased risk of speculation on the national money unit. In 1998 Russia had faced currency crisis because of transition towards fixed currency rates system (Kondratov, 2011).

There is a need to have autonomous monetary policy which would speed up the economic growth of the developing countries and would be helpful in reaching out to advanced countries (Hossain, 2011). In such a situation it is uncomfortable that the benefits of independent monetary and currency policies are sacrificed because there is a threat of lower rates for further economic growth. A serious problem could arise because of this which is premature loss of flexibility in a currency policy; it is hard to find a real effective equilibrium currency rate, and by having the market currency rate could turn out to be beneficial for the interests and long-term objectives of an economy (Hossain, 2011).

According to the western analysts there is a belief that common currency zone would lead to lower rates of economic growth for the countries than that which they could achieve by keeping their national currencies for the purpose of transaction (Mavlonov, 2005). The exchange rates of national currencies and purchasing power parity could become closer to each other in the countries which are members of the union.

With the premature integration of currency it could lead to the overestimation of national currency exchange rates which would reduce the inflow of foreign investments. Also there could
be negative impact on the stability of rates (Seidel, 2012). Competitiveness would be lowered in terms of exports which would also reduce the inflow of direct foreign investments and thus integration of national economies into a single market would slow down. There is possibility that to reduce the negative impact of currency integration the countries would devalue their national currencies or change the internal monetary and credit policies (Kondratov, 2011). From the past experience it has been seen that countries with different levels of economic growth and significantly different economic structures are much more effective in handling the negative consequences of external influence if they are independent and not a member of any currency union (Yevchenko, 2010). Also by being member of currency union the countries have to accept additional costs which are present in the unfavourable dynamics of prices and level of wages and employment.

At present currency union is possible for countries which are having high volumes of mutual trade, integrated financial systems, and similar economic structures such as Kazakhstan, Belarus, Ukraine, and Russia (Sidorova, 2011). There would be equal concern for all the members of union regarding the external factors and thus it would lead to a mutual currency policy which would be most effective for them. When countries face asymmetric external shocks but have high degree of integration then the loss of independence with regards to monetary, credit and currency policies can be compensated by other economic leverages (Kondratov, 2011). These economic leverages which the countries can derive would be mobility especially of labour, a high degree of trade relations within the union, a broad structure of production and trade, flexibility of prices and wages, lack of fiscal domination, low or equal levels of public debt, comparable or synchronized economic cycles, and political coordination (Seidel, 2012).
The benefits of currency integration can be seen for euro zone where the European currency has been integrated by the union.

Volatility in the exchange price represents the uncertainty on the international transactions of goods and financial assets and it is determined by exchange rates, money availability, interest rates and income of the country. The adoption of the Euro is said to have removed the exchange rate volatility. It is important to check how the economic variables have reacted to the obliterating of this volatility compared to countries which are still grappling with the issues.

The establishment of Euro acts as a precursor to the political, social, legal and cultural integration of the European countries. The first and foremost step is to remove all the hurdles in the intra-regional investment and trade. The exchange rate was pegged initially at a band which varied for different companies. While the band was narrow for countries like Germany, Belgium and others the countries like Spain, Greece and Italy were allowed larger bands of fluctuations. The European currency unit was the basket of currencies of member countries which transformed in to Euro at the rate of 1ECU is equal to 1Euro. The Maastricht treaty specified the various convergence criteria for countries which were joining which included the following,

- The average inflation should not be 1.5 percent above the average of the countries having the lowest inflation within the union.
- The country’s interest rate on long run government bonds should not be higher than 2% of the average of the three countries having the lowest inflation.
- The government deficits should not be higher than 3% of the GDP.
- The government debt should not be more than 60% of the GDP.
The country has to join the EU exchange rate for two years.

Its exchange rate should not fluctuate between plus or minus 15 percent and short term changes of exchange rates should not be very high.

The country’s national government cannot influence the central bank’s decision (Muhammad Jamil, 2012).

Many countries like Greece did not satisfy this convergence criteria and it took some time to converge with the above points. Euro was launched by 1999 but came in to real existence by 2001. At present with more than 15 members Euro is one of the largest reserve currencies and Euro zone is one of the largest economies of the world.

Many countries including the Association of Southeast Asian Nations (ASEAN) and GCC are influenced by the success of Euro to start their own currency unions and central banks to develop trading blocs which would have greater negotiation power. But it has been criticized that the central bank cannot find any solution for individual countries economic problems but can suggest solutions at the union level. The businesses investing in Euro zone do not have to pay the hedging costs as they are protected from exchange rate fluctuations and also the transaction and accounting costs are very low (Muhammad Jamil, 2012). This increases more investment in the region for financial and political reasons.

Exchange rate volatility affect each trade as in higher the volatility, the higher price do the economic agents demand to cover the risk. This leads to decrease on the trade volume. The foreign investment is also considerably lower with higher volatility as the uncertainty reduces the return on investment. The debt servicing costs for many countries also increase with large appreciation of the dollar. This affects the allocation of money for developmental purpose.
Another big threat to Euro would be the appreciation of Dollar which would lead to appreciation of currencies pegged to the dollar creating a weakening of the European currencies. But it has been proven that higher volatility there is a decrease in the trade and investment within the country (Muhammad Jamil, 2012).

The exchange rate volatility of many countries even though initially was higher but it stabilized over the years after joining the Euro. This is true especially in the case of Norway which did not show much volatility before the adoption of Euro but the volatility showed marked increases after Euro was introduced. The industrial production surprisingly did not show any marked growth for countries which have joined the European Union. It has remained similar to that of the countries which were not part of the EU even though Trade did show some significant increases. The research reflects on the fact that common currency does not give a guarantee against exchange rate fluctuations but helps to stabilize it in a more efficient manner. (Muhammad Jamil, 2012)

Buoyed by the Euro the GCC countries in 2010 planned to introduce a common currency and increase the prospect of economic integration. The countries planned to harmonize all the fiscal and monetary policies and standardize all banking regulations to balance out all the convergence criteria just as in the Euro Zone. The GCC plans also to create a single central bank, a monetary policy and a common exchange rate regime. (Eisa Aleisa, 2012). It has been a question of the exchange anchor or the option of a floating currency that has been on the minds of many experts.

Some researchers argue that anchoring the currency to an international currency like Dollar or Euro is the safest way to gain credibility and check volatility. Many endorse the use of a basket of currencies to peg one’s own as it offers more flexibility in the exchange rate. Many
do in-fact peg their currencies to mineral or agricultural commodity but this is more risky as the mineral wealth like gold or oil can undergo depreciation thus eroding the currency (Eisa Aleisa, 2012).

GCC countries are more integrated with each other politically and economically and are characterized as low inflation and low unemployment economies. They have high degree of labour mobility and open economies which are supported by strong economic institutions. This increases the likelihood of being subjected to symmetric shocks rather than asymmetric shocks. The GCC monetary union would

- Eliminate the transactions costs associated with using different currencies
- Reduce the price discrimination within the markets.
- Enhanced trade and capital flows happen with single currencies.
- Better policy formulation and coordination of national economic policies.
- Increase the length and breadth of the financial markets giving firms more access to capital and diversity of investments (Eisa Aleisa, 2012)

But one has to bear in mind a four common currency discourages any country specific fixes to country specific problems. The GCC countries have shown high correlation with the US dollar as the business is conducted with the petro dollar terms. It would be prudent to create a basket of currencies in which the dollar and Euro would have larger shares to peg the currencies of the GCC in case of the monetary union (Eisa Aleisa, 2012). But with the economic down turn these plans seems to be unlikely but it is something which the future would have to consider.
Global Currency System

With the financial crisis there was a serious concern raised to restructure the global currency system (GCS) (Sidorova, 2011). There are unmatched imbalances of payments and spontaneous capital flows across the countries which come along with the accumulation of huge international reserves and also concentration of these assets in a few reserve currencies are major reasons for the restructuring of GCS (Sidorova, 2011). During the restructuring of GCS system there is need to identify ways to strengthen currency and improve its elasticity.

There is a dominant role of dollar which plays in the GCS but then it also is the reason for growing global imbalances which led to global financial crisis and thus there is feeling that dollar should be retired as the global reserve currency and new global reserve currency should be established (Yevchenko, 2010). However recently the world has been coming out of financial crisis and in such a situation any changes would be undesirable. The retirement of dollar would require mutual efforts from national governments and supranational bodies such as IMF (Mavlonov, 2005).

The most rational solution for the problems which have accumulated there is need for emergence of several regional currencies on the international platform (Mavlonov, 2005). Some of the ideas do not look feasible in the near future but still there should be ideas which should be taken into account regarding restructuring of GCS on a long-term basis. For the restructuring of GCS the following long-term prospects should be considered (Sidorova, 2011):

- return to the gold standard
- creating supranational artificial currency which would be similar to the SDR with wider functions
• preserving dollar in the mono-currency system as a leading reserve currency
• using a poly-currency system which would be based upon the formation and use of regional currencies

**Gold Standard**

The gold standards have been existing in the world economy since 19th century but with the current system it has become outdated because it does not either the strengthen economic relations nor the conditions necessary for further economic development (Kopcke, 1999). In 1971 the US dollar was pegged against gold for the last time. There was the Jamaica Agreement for demonetization of gold where the IMF charter was amended for discontinuing the official price of gold and its use for determining the parity of currencies (Yevchenko, 2010). However gold is still a major element which is used as global monetary reserves.

**SDR**

In 1969 special drawing rights (SDR) was created by IMF as supranational currency for supporting the fixed rates of the Bretton Wood system (Sidorova, 2011). In 1969 when SDR was created there were 16 leading currencies but by 1981 this was reduced to 5 currencies which were the US dollar, the Japanese yen, the pound sterling, the deutsche mark, and the French franc and when euro replaced the deutsche mark and the French franc there has been 4 leading currencies in SDR (Sidorova, 2011). The share of each currency is found by the economic potential of that country and in every five years this is reviewed. In the current scenario SDR has a significant role to play in the GCS.
US Dollar

Currently US dollar is the most powerful reserve currency where two-thirds of the world’s currency reserves are kept and this fact is based on the data provided by the IMF official foreign exchange reserves (COFER) regarding the currency composition (Kondratov, 2011). International prices for oil, gold, and other raw materials have also been set in terms of dollars. Assets which are represented in terms of US dollar comprise 64 percent of the official global currency reserves. 88 percent of daily international trade operations are performed in dollars and these largely exceed the number of transactions which happen with the United States (Sidorova, 2011). In US only 20 percent of total international trade operations are done whereas Asia and Europe have significant number of trade operations which is done in dollars. There is dollar domination which is based on the following reasons (Yevchenko, 2010):

- the US economy has long enough period of macroeconomic stability which boosts the confidence in the dollar’s long-term purchasing power;
- the US credit and fiscal bodies have shown readiness towards granting the dollar for the purpose of international operations and also high-quality debt obligations issued meet the demand for dollar-denominated assets
- The network effect which means that the more currency is issued and used it becomes more needed and thus it raises the demand even higher.

Poly-currency System

The best solution for which could be adopted by GCS is to establish a poly-currency system where other strong currencies are given status of reserve currencies in addition to the dollar at the global arena (Kopcke, 1999). The economic crisis in US has led a change in attitude
towards dollar across the world. Creation of other currencies for reserve currencies would lead to stronger and better economies across the world. This would decrease the pressure on the single currency and this can be done by having currency of the strongest country in a region as the international money for that region (Sidorova, 2011).

Conclusion

Every country has its own currency for the purpose of transaction. In the exchange of goods and services currency is exchanged. When the exchange of goods and services happen between different countries then there is a particular currency which is fixed between the countries. There are various risks associated with exchange of currency. Many countries have currency boards which encourages foreign investors to make investment in the country. Currency union has been established in Europe where one currency is followed for the purpose of transaction. Most of countries have adopted dollar as the common currency for the purpose of transaction however, GCC countries postponed the GMU also its unclear if they will establish it soon. But with the recent economic crisis there has been consideration to have a global currency system. There are thoughts going over having a poly currency system which would be helpful during the situation of financial crisis.

CHAPTER 3: METHODOLOGY

Introduction

The topic selected for this research is the currency pegging agreement and its impact on the economic development of GCC countries specifically UAE. The focus of methodology section of the will be on the ways and methods which have been adopted during the research.
The success with the level of information which is derived from the research and genuineness of report depends on the quality of data which is received.

In this section the impact of pegging dollar to GCC currencies on the economy of the countries has been analyzed. This chapter contains these two sections – findings and analysis, and conclusion. In the findings and analysis section the information which has been given during the interview has been analyzed. In the conclusion section the findings of the research have been concluded.

**Research Hypothesis**

Based on the research objectives research hypotheses are developed. Hypotheses are the assumptions which the researcher takes for the purpose of research so that the conclusion can be reached for the research. For having a strong hypothesis it is essential that the research questions and objectives are clear and accurate so that proper hypothesis for the research can be developed. There are two types of research hypothesis – null hypothesis and alternate hypothesis. The hypotheses for this research are as mentioned below:

Null hypothesis, $H_0$: Currency pegging with dollar do not have an impact on the economic development of GCC countries.

Alternate hypothesis, $H_1$: Currency pegging with dollar have an impact on the economic development of GCC countries.
Research Design

The way in which data is collected for the research is mentioned in the research design. The framework which is adopted for the research methodology to assurance of completion of project is known as research design. In this section of the report the plan which would be adopted for collecting the data, relevance of the data, the whom will the questions be addressed, and the methods adopted for analysing and interpreting the responses of the data which is collected. Flexible research design framework has been selected for the purpose of this research. Flexibility will be provided in the framework for the method adopted for data collection which would be helpful in understanding the overall impact of currency agreement on the economic development of the country.

Research Methodology

There are two types of research methodology – primary method and secondary method, which can be used for collecting data. In the primary method interviews would be conducted to understand the views of respondents regarding the topic which has been selected for research. In the secondary method the information would be collected from websites, journals, books, periodicals and other sources which is related to the topic of research.

There are two tools for analysing the data – qualitative tool and quantitative tool. Mostly in this research qualitative tools will be used for analysing the data which is collected as it would be helpful in gathering true and detailed information related to the topic. however if needed quantitative tools could also be used for the purpose of understanding, summarizing and generalizing the overall findings from the data which is collected from the respondents during the primary method of data collection.
Data Collection

Data would be collected from policy makers who are involved in the pegging dollar so that there is better understanding regarding the impact of currency agreement on the economic developments. Various data tools would be used when the research is conducted, data from government sites have been collected and the information which has been collected has been analysed. Also data from government sites have been collected and the information which has been collected has been analysed for the purpose of analysis interview has been conducted.

For the purpose of data collection interview method would be adopted where questionnaire would be used for the purpose of interview. Questionnaires are helpful in getting detailed data in short time and with time constraint being there in the research this method of data collection would be good. For the purpose of interview the policy makers, economists and business persons would be contacted who have better idea regarding currency agreements and how it impacts the economic development. One to one interview would be arranged with these people so that there is in-depth information regarding the research questions. For the purpose of interview and data collection prior consent would be taken from the respondent through letters, emails and telephone.

Chapter 4: Data Analysis, Result and Interpretation

Introduction

There are debates and discussion happening whether GCC should adopt another currency for the purpose of trading or independently float the currency. At present the value of dollar is still strong and thus pegging with US dollar is still beneficial for the country. However it would
be tough to predict the future and with future consequences of currency pegging there is a need of a deeper analysis of currency pegging with revenue.

There are various benefits of pegging currency with another currency and most countries have adopted the system of currency pegging. There is a need to peg the currency so the rates of the currency can be fixed and transactions can happen against the currency with which it has been pegged. Fixing the currency with another currency is helpful in determining a fixed rate at which the trading will happen.

Currency pegging is also helpful in controlling the inflation of the country. When the currency is pegged it encourages the confidence of consumers and consumers are willing to purchase the products and services of another country. When the products and services of a country are sold to consumers outside the country there is a change in the currency which is used for the purpose of transaction.

There are exchange rate risks which are involved with a currency and it becomes essential that this risk is kept low. By fixing the exchange rate with a certain currency the exchange rate risks are lowered. As the currency between the two countries is exchanged there are issues related to fluctuation in the exchange rate. To avoid any confusion or issues related to exchange rate the exchange rates are fixed.

1. The economic structure of GCC

Several characteristics in The Gulf countries are similar they face almost economic challenges. In 2010 the GCC population, were more than 26 million in KSA, however UAE, Qatar, Oman, Kuwait and Bahrain were less than 5 million (table 1).
Table 1: GCC Economic Characteristics

<table>
<thead>
<tr>
<th>Country</th>
<th>Bahrain</th>
<th>Kuwait</th>
<th>Oman</th>
<th>Qatar</th>
<th>Saudi Arabia</th>
<th>UAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>0.8</td>
<td>3.1</td>
<td>2.9</td>
<td>1.5</td>
<td>26.3</td>
<td>4.7</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>22.7</td>
<td>132.6</td>
<td>57.9</td>
<td>127.3</td>
<td>448.4</td>
<td>302</td>
</tr>
<tr>
<td>Per capita GDP</td>
<td>28,025</td>
<td>43,475</td>
<td>19,897</td>
<td>84,305</td>
<td>17,082</td>
<td>64,119</td>
</tr>
</tbody>
</table>

Sources: International Monetary Fund, International Financial Statistics database

Also, in 2010 The GDP in KSA is much higher than other GCC countries in which helped to develop GCC Regional Corporation. However, GDP per capital Qatar are the wealthiest country over US $84,000 and the poorest are KSA only US$17,100.

The main activity of GCC countries is the resource of oil and gas, by pegged to dollar in which any fluctuation on the price will affect the price and demand of the oil market. Thus, the real exchange rate appreciation can be caused of the price rapid rise, while the recessionary can be cause of the price rapid falls. Statistics shows, during the period in 2011 the GCC crude oil reserve and natural gas reserves reached respectively reached 33 percent and 21 percent as presented below in graph 1 & 2.
Moreover Graph 3, 4 shows in 2011, GCC production of natural gas reached to 303.5 (Trillion standard cu m) and 16.23 (Million b/d) of the crude oil production.

**Graph 3: world production of natural gas**

![Graph 3: world production of natural gas](image)

**Graph 4: world proven crude oil production by country**

![Graph 4: world proven crude oil production by country](image)

2. GCC currencies Fluctuation

It is important to check the currency fluctuation of US dollar also and see if there is impact in value of each GCC country. The Graph 5 shows fluctuation in US dollar and GCC currencies from 2004 till 2012. It can be seen that in 2007, 2010 and even in 2011 there has been decrease in the value of US dollar and there is also effect on the value of GCC currencies.
The Kuwait dinar appreciates against the dollar more than 8 percent from May 2007 to July 2008, but from July 2008 to March 2009 it depreciate by 10 percent against dollar due to inflation. The Oman riyal depreciates by 5 percent in 2007. Both of Saudi riyal and Bahrain dinar depreciates respectively by the end of 2009 due to the US dollar exchange rate instability, 2011 due to unsolved political impasse. The Qatar riyal, in December 2008 it reached to the high of 3.6700, and then depreciates in April 2010 to 0.6400.

**Graph 5:** GCC currencies and US dollar fluctuation

![Graph of GCC currencies and US dollar fluctuation](Image)

**Source: Yahoo Finance**

However, UAE dirham in 2007 there is a drop in value of UAE dirham but still in the revenue generated through exports is high for the year. Again in 2010 there is decrease in the value of UAE dirham and during this year it can be clearly seen that there is also decrease in the revenue of UAE. Thus during the first recession even though there was no impact of decrease in the value of currency in 2008 but in 2010 there has been impact in the revenue generated in UAE through exports.
3. GCC Revenue from exports and import

As shown in Table 2.3 has been given for revenue which is generated through exports and Import in GCC from 2008 till 2011. The revenue data also covers revenue which is generated during time when there was global recession.

**Table 2: GCC Export**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.A.E</td>
<td>200,070</td>
<td>148,282</td>
<td>125,857</td>
<td>162,864</td>
</tr>
<tr>
<td>Bahrain</td>
<td>22,417</td>
<td>15,323</td>
<td>11,882</td>
<td>18,229</td>
</tr>
<tr>
<td>K.S.A</td>
<td>364,699</td>
<td>251,143</td>
<td>192,298</td>
<td>313,462</td>
</tr>
<tr>
<td>Oman</td>
<td>47,092</td>
<td>36,601</td>
<td>27,652</td>
<td>37,719</td>
</tr>
<tr>
<td>Qatar</td>
<td>114,299</td>
<td>74,810</td>
<td>48,007</td>
<td>67,307</td>
</tr>
<tr>
<td>Kuwait</td>
<td>62,654</td>
<td>62,654</td>
<td>51,907</td>
<td>87,362</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>811,231</strong></td>
<td><strong>588,813</strong></td>
<td><strong>457,603</strong></td>
<td><strong>686,943</strong></td>
</tr>
</tbody>
</table>

Source: Secretariat General of GCC

**Table 3: GCC Import**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.A.E</td>
<td>164,127</td>
<td>132,157</td>
<td>121,823</td>
<td>154,042</td>
</tr>
<tr>
<td>Bahrain</td>
<td>14,751</td>
<td>15,877</td>
<td>12,148</td>
<td>17,552</td>
</tr>
<tr>
<td>K.S.A</td>
<td>131,586</td>
<td>106,863</td>
<td>95,544</td>
<td>115,134</td>
</tr>
<tr>
<td>Oman</td>
<td>13,620</td>
<td>19,775</td>
<td>17,853</td>
<td>22,925</td>
</tr>
<tr>
<td>Qatar</td>
<td>22,332</td>
<td>23,240</td>
<td>24,922</td>
<td>27,900</td>
</tr>
<tr>
<td>Kuwait</td>
<td>22,672</td>
<td>22,672</td>
<td>20,340</td>
<td>24,871</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>369,088</strong></td>
<td><strong>320,584</strong></td>
<td><strong>292,630</strong></td>
<td><strong>362,424</strong></td>
</tr>
</tbody>
</table>

Source: Secretariat General of GCC

Till 2008 there is growth in the revenue but the revenue decreases in 2009 during the time at which there is recession. In 2010 there is increase in revenue but still the effect of global recession can still be seen in the revenue generation through exports. However, in 2011 GCC export dropped sharply unlike import it increased more than the past three years. (See figure 1)
4. **2013 GCC prospects**

The success of currency pegging can be seen in the recent years where China pegged its currency with US dollar and it has been having drastic revenue growth in the recent years. The GDP of revenue has increased and this is because currency pegging has led to more global transactions which are beneficial for the country. With the dependence on oil for the revenue generation through exports pegging the currency would be beneficial for GCC countries in the long run. It would be helpful in increasing the GDP of the country and thus overall revenue of the country would be increased.

In the past decade, the GDP of GCC economic were growing impressively. In 2012 GCC countries saw an increase of $1.5 trillion, compared to the previous year of 2006 where it was $713 billion. Or triple the level in 2004, where it was set at $485 billion. The International Monetary Fund expects during 2013 GCC economy to grow only to 3.7 percent which inconsistent with past economic growth, during 2012 5.5 percent and during 2011 7.5 percent.
Also, there is a close correlation between GDP and currency pegging. When the oil price is expressed in terms of dirham the standard deviation is .64 but when the oil price is expressed in terms of dollars then standard deviation is .75. This is because OPEC sets the oil prices in terms of dollars and thus the volatility in the oil prices expressed in terms of dollar is high. Now if currencies are not pegged against US dollar then the value of country currency would be low as compared to when it is pegged against US dollars and this could lead to weak revenue generation by the country. Also when there is increase in the oil prices then it affects the currency only nominally as compared to when the currency is not pegged. This means that when the currency is not pegged and there is increase in oil prices then the increase in inflation will also be high as compared to the situation when currency is pegged against dollar.

5. USD/AED Correlation

There is a strong correlation between currency pegging and economic factors. A correlation has been found between various economic parameters in two situations – when currency is pegged and when currency is not pegged. Also a correlation between revenue and pegging of currency has been found. For the purpose of correlation US dollar and euro has been used and when currency is not pegged. This would be helpful in knowing whether the decision of pegging UAE dirham with US dollar is good or not. (See table 3)

Peg currency agreement has close correlation with all the economic indicators. Any fluctuation in the value of currency has an impact on the economic indicators. A Slight fluctuation in the currency puts a huge impact on the economy of the country. This is the reason because of which revenue has been impacted during the time of recession. During the recession as the value of currency decreased there was as well a decrease in the revenue. As the currency
has been pegged with US dollar so when there is decrease in the value of the US dollar there is significant decrease also in the value of UAE dirham and thus there is decrease in the revenue of UAE.

Table 3: Correlation between revenue and pegging of currency

<table>
<thead>
<tr>
<th></th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>0.97</td>
</tr>
<tr>
<td>Money Supply</td>
<td>0.88</td>
</tr>
<tr>
<td>Product Price Index (PPI)</td>
<td>0.59</td>
</tr>
<tr>
<td>Productivity Report</td>
<td>0.73</td>
</tr>
<tr>
<td>Trade Balance Report</td>
<td>0.96</td>
</tr>
<tr>
<td>Wholesale Trade Report</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Table 4 below shows the correlation of revenue with US dollar, euro and when it floats independently with the purpose of trading. With the decrease in the value of US dollar there have been speculations that whether UAE should peg the currency with US dollar for the purpose of transaction or adopt some other float currency for the purpose of pegging or should it float independently. From the correlation it can be seen that US dollar still has strong correlation with the revenue of the country and pegging of US dollar with UAE dirham would still be beneficial in future. Although the currency can also float independently for the purpose of trading but for doing so there should be a strong power of the UAE dirham. As according to the table, the euro has low correlation rates so pegging it with the UAE Dirham is not practical.
Table 4: correlation of revenue

<table>
<thead>
<tr>
<th></th>
<th>UAE Dirham</th>
<th>US Dollar</th>
<th>Euro</th>
<th>Independent Float</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>2.351</td>
<td>10.431</td>
<td>4</td>
<td>4.8</td>
</tr>
<tr>
<td>2005</td>
<td>2.478</td>
<td>11.882</td>
<td>4.7</td>
<td>5.5</td>
</tr>
<tr>
<td>2006</td>
<td>2.777</td>
<td>11.934</td>
<td>4.2</td>
<td>5.8</td>
</tr>
<tr>
<td>2007</td>
<td>3.287</td>
<td>11.483</td>
<td>4.4</td>
<td>6.4</td>
</tr>
<tr>
<td>2008</td>
<td>4.22</td>
<td>14.875</td>
<td>6.3</td>
<td>6.7</td>
</tr>
<tr>
<td>2009</td>
<td>3.665</td>
<td>12.44</td>
<td>6.7</td>
<td>5.7</td>
</tr>
<tr>
<td>2010</td>
<td>3.685</td>
<td>13.465</td>
<td>7.5</td>
<td>6.5</td>
</tr>
<tr>
<td>2011</td>
<td>3.494</td>
<td>12.842</td>
<td>7.3</td>
<td>6.3</td>
</tr>
<tr>
<td>2012</td>
<td>4.041</td>
<td>13.877</td>
<td>8.5</td>
<td>6.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Dollar</td>
</tr>
<tr>
<td>Euro</td>
</tr>
<tr>
<td>Independent Float</td>
</tr>
</tbody>
</table>

Conclusion

In the result sections, because it is pegged it has been found that with fluctuation in US dollar there is fluctuation in UAE dirham. Also revenue from exports and import are affected because of the fluctuation in the value of currency. There is a strong correlation between currency pegging and economic indicators. There is a strong correlation between US dollar and UAE dirham and thus at the moment pegging of UAE dirham with US dollar would be better than pegging it with euro or making it an independent float.
Chapter 5: Recommendation and Conclusion

Recommendation

The major reason for pegging the domestic currency with foreign currency is to establish a fixed exchange rate. Even though during the recession there was lower revenue generated because the value of US dollar had decreased but in the current scenario adopting currency pegging against US dollar is the only best option. There are various reasons which support pegging of US dirham against US dollar. Kuwait, Qatar, K.S.A and UAE have their oil exports and oil prices by OPEC, fixed in terms of the US dollar. Therefore by pegging their currencies with the US dollar, the prices and the value of their currencies can be determined quite easily. It also helps in increasing the trading volume of the country and confidence for investors, amplified.

Across the world benefits of currency pegging can be seen. Although there are concerns of burdening single currency by pegging against dollar but in the current scenario there are not many options. Unless other stronger currencies are not established replacing US dollar for the purpose of pegging would be difficult.

UAE dirham can trade independently also but again in having independent float there are various risks which can be seen. In having independent float the confidence of investors for the currency needs to be created. There are risks of overvaluation of currency which might lower the investor confidence. There are exchange rate risks associated with currency which would increase if the currency is traded independently over the exchange. UAE dirham is not that strong that the investors would be confident in trading in UAE dirham.
Adopting any other currency for the purpose of pegging in the current situation will not be much beneficial for GCC countries. US dollar ensures economic stability and credibility of this currency is better as compared to other currencies. The risks of currency fluctuation are also lowered by adopting the currency pegging. Comparative advantage can be attained by keeping the value of their currencies lower than US dollar. As the value of dirham would be lower than US dollar the exports to America would be cheaper and more export demand would be created. Many countries have adopted this competitive pricing strategy by pegging its currency against US dollar. Also when the value of dollar decreases still there would be higher reserves for UAE in terms of dollars because the trade activities happen in terms of dollar and this dollar reserves can be invested during the time of recession.

In this era of global competition every country is trying to attain better economic position and currency pegging helps in ensuring that economic position for the country. It helps in countries becoming competitive with their customers. It helps in easing the flow of funds in the country and thus capital flow for the country is also increased.

The only exception is during the time of recession there has not been a decrease in the revenue of UAE. It has helped in fixing the exchange rates and various benefits have been determined by fixing currency against a particular currency. By having an independent float it would not ensure that there would not be times when the revenue of the country would decrease because of decrease in the overall value of currency. There could be various reasons which could lead in decrease in the value of currency and there is always uncertainty in future.

There are emerging markets and the global competition is increasing to be competitive in the global environment it is essential that currency is pegged. It also affects the investment
sentiments of the traders for the purpose of trading. There are better growth opportunities when the currency is pegged in comparison to the scenario when the currency is not pegged. It also helps in bringing price stability as inflation is controlled and there is no sudden increase in inflation.

Also it is essential to determine the major countries with which each country is into trade activities as it would be helpful in determining which currency is mostly used by these countries for the purpose of trading. For example, The UAE economy sees good trade opportunities with developing economies such as India and China and these countries prefer US dollar as the currency for trading. So if UAE adopts any other currency it would still have to link its trade activities with the US dollar. Although there are no fixed rules based on which decision can be made regarding the currency against which UAE dirham should be pegged but based on the export activities it would be advisable that it should be pegged against US dollar. Also oil prices are given in dollar and oil is the major commodity which is traded by UAE so this again suggests that UAE dirham should be fixed with the US dollar.

By securing the currency it would be helpful for the central bank to establish monetary policy which is non-inflationary. Inflation does not need to be taken into account when monetary policy is developed because the impact of inflation on the domestic currency would be already taken care of by the foreign currency. It helps in bringing in price stability and it helps in prevention of excessive money growth and inflation for the country. Although during the time of recession the freedom of central banks is lost in stabilizing the effect of recession and they need to wait until the time period till which recession runs but during such situation government can intervene and establish anchors, which would be helpful in reducing the impact of recession on the currency pegging. When there is independent float and the international markets deteriorate
then it would automatically reduce the value of currency. This means that when there is deterioration in the international markets then there would be reduction in the value of currency thus it would lead to reduction in the volumes of trade. Independent float does not ensure that there would not be any decrease in the volume of trade and even in independent float the overall revenue and economy of the country can be reduced. Even in such situation it is essential to have strong nominal anchors.

There are not just export activities which are conducted by a country for currency exchange and trade but country also imports goods and services from other country. Even when the country has import activities currency pegging is helpful because the currency in which trade activities will be conducted is pre-determined. Currency pegging helps in fixing the rate of both capital inflow and outflow. It is helpful in boosting the confidence of traders and investors. In the current scenario US dollar is the most powerful currency of the world and unless new currencies are not established pegging UAE dirham with US dollar would be beneficial for future. Also recession and depreciation in the value of US dollar is temporary and once the currency again appreciates benefits from this appreciation can be derived in future for the UAE economy.

If in future there is a decision made for making UAE dirham as free float and pegging with US dollar is removed then it would be essential to also establish a system of currency boards. When the UAE dirham is floated freely for the trade exchange then currency boards would be required for building confidence of the traders and investors. Also by having a system of independent float there would be changes in the economic structure. The currency boards will ensure that the transition in the economic structure of the country happens smoothly.
One needs to understand that the ultimate aim of currency pegging is to have lower variability and higher level of economic growth. It is essential that the overall impact of pegging with different currencies should be determined to know with which currency this objective of currency pegging is being achieved. There will always be boom and bust financial cycle in the economy and it is not easy to perfectly determine the currency against which the domestic currency would be pegged.

Conclusion

In 1973 dirham was adopted as the currency of UAE. Currently this currency is fixed with the US dollar and any fluctuation in the US dollar affects the value of UAE dirham. Earlier this currency was fixed with special drawing rights but in 1997 it was secured with the US dollar. During the recent global recession which affected the world there have been debates and discussion if the dirham should be fixed against the US dollar or float independently.

In the literature review it was found that currency pegging is concern across the world. In developing economies currency boards have been adopted which try to ensure that the domestic currency is backed by sufficient foreign reserves. Their purpose is to attract traders and investors so that the new currencies are adopted accepted and there is economic growth in the country. The concept of currency board is being adopted in many countries in Asia, Europe and America because of the benefits which are derived from them. Also with the financial crisis countries are trying to introduce new currency system and restore confidence in existing currency. Along with support from government receipts and expenditures success in the economic growth can be derived.
Many countries have formed currency union where these countries adopt a mutual currency for the purpose of trade and it would become the instrument for payments and also act as reserve currency in future. Only when there is equilibrium between market and state regulation there is success in the integration of domestic currency with new currency. Still in currency union the basic problem is establishing price stability and currency rates which would be determined under real and nominal macroeconomic convergence. When two or more countries establish currency union then there is a close trade relation which is established between the countries. These countries undergo changes in their economic cycle in order to achieve synchronization between them. The cross-country risk associated with currency is shared across effectively and this leads to lower fluctuations in the volumes of output and trade. Currency integration leads to integration of financial markets from which the countries derive various benefits. The administration of monetary policy by central banks is successful and internal financial sectors function properly. It leads to stability in economy and security of the overall system because of adequate institutional structure. The financial markets and institutions are regulated and controlled effectively.

By adopting currency union it would become difficult to determine the currencies which are strong and which are weak and in the long run the fluctuation in the value of currency would happen in both the direction. The developing economies which have adopted currency union for those fluctuations in the world commodity market condition would have minimum impact on the economy. They would be able to accommodate the exogenous changes in terms of trade and thus minimize the overall impact on the economy.

The monetary policy of the country is trustworthy so that it helps in lowering the inflation which would be helpful in reducing the chances of potential recession. The currency union helps
in maintaining price stability and keeps the expected inflation lower. There is uncertainty in economy because of which there is continuous change in the economic structure of the company.

The transaction costs are reduced because a common currency is adopted for the purpose of exchange. When more countries are included in union and thus higher benefits can be derived from currency union. Because of lower transaction costs the output volumes are higher and thus there is effective distribution of resources and higher economic growth rate of the countries which are part of the currency union. Inflow of foreign direct investment is increased and it encourages development in entrepreneurship and reduces unemployment of the country. A tight fiscal policy is created which helps in stabilizing long-term interest rates for the countries which are members of currency union.

There has been increase in globalization and it has lead consideration for adoption of common currency for the purpose of transaction. But by adoption of common currency there would be risk towards the domestic currency and it would be difficult to find equilibrium in the currency rate. It is believed that in the initial stage there would be growth in the economy but once stability is reached within the members of currency union there would be reduction in the inflow of foreign direct investment. It is believed that in long run there would not be many benefits from the currency union. Also benefits from currency union can be derived only from countries which have similar economic structures.

With the global financial recession concerns have been raised regarding restructuring of global currency system. In the 19th century gold standards was adopted where the currency value was determined against the gold reserve values of the country but this system has become outdated. After the gold standards special drawing rights was created by IMF and in this 4
leading currencies have been adopted for fixing the currency rates. Most of the countries have adopted US dollar as the currency for the purpose of trade. US dollar is currently the most powerful currency and this has lead for adopting US dollar for the purpose of trade. Although there are thoughts being given over creating more currency reserves so that pressure on one single currency can be reduced. This would also help in better and stronger world economy.

In the analysis conducted for the UAE dirham it was found that there is direct impact of currency on the economic condition of the country. UAE had adopted currency agreement where dirham has been pegged with US dollar because of high trade activities. The UAE economy has major revenue contribution from the trade of oil and oil is exported to other countries. Since major revenue of UAE is contributed from exports when there was decrease in the value of US dollar it affected the revenue of UAE also. There was decrease in the revenue and this has concern over pegging of UAE dirham with US dollar.

When correlation between the US dollar, euro and independent float was found it was seen that even though there has been decrease in the revenue of UAE but still there is better correlation between UAE dirham and US dollar. In the current scenario benefits would be derived by pegging UAE dirham with US dollar. Although independent float can be also adopted for the purpose of currency exchange but creating investors’ confidence over UAE dirham would be important. Also determining the value of UAE dirham as independent float would be difficult and there could be situation where the currency value is overvalued.

It can be seen that most countries have pegged their currencies with US dollar and around 88 per cent of the world’s trade happen in US dollar. There are various reasons for pegging the domestic currency. Fixing the rates is helpful in determining the value of domestic currency and
also brings stability in the domestic currency. It is helpful in increasing the value of global transaction for the country as the confidence of investors’ increases. Exchange rate risks are also lowered as the exchange rate is fixed.
Bibliography


