GCC monetary union

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1.1 Introduction

The last three decades have witnessed a growing interest in monetary integration and currency unification. The notion of currency areas can be dated back to Mundell's Optimum Currency Areas (OCA) of 1961. Mundell states that "*If the world can be divided into regions within each of which there is factor mobility and between which there is factor immobility, then each of these regions should have a separate currency that fluctuates relative to all other currencies (Mundell, 1961)*". Hence, should any asymmetric shock hit the region, the mobility of factors of production should be the adjusting mechanism, but not the exchange rate flexibility. In the absence of factors of production mobility, foreign exchange rate flexibility *cannot be expected to perform the stabilization function attributed to it* and varying rates of unemployment or inflation in different regions would prevail[2] (Mundell, 1961).

The upshot of the above premise is the search for means that facilitate the adjustment process during market imbalance situations (Leefthink, 1995). In view of this line of thought, some economists argue that currency unions would be sensible if there is a high degree of openness among union members and a low degree of openness between the members as a group and the rest of the world. For the use of exchange rate as a means of adjustment to external shocks is less efficient in a relatively open economy than in a relatively closed economy.

On January 1999 the exchange rates of eleven European currencies were locked to each other at fixed exchange rates. The successful move by the Europeans has revitalized the efforts of the Gulf Cooperation Council (GCC) countries to push forward the long awaited Gulf Monetary Union (GMU). Since the endorsement of the GCC Unified Economic Agreement (UEA) in 1981, which calls for a joint currency, the efforts toward a single currency in the Gulf have been slow. However, in the Bahrain Summit, December 2000, leaders of the GCC ratified the agreement among GCC countries to multilaterally adopt the US dollar as their common peg. This initiative was taken to minimize exchange rates risk and stabilize exchange rates among GCC countries.

The objective of this paper is to examine the feasibility of the Gulf monetary union and uncover some of the operational issues that are likely to arise in such type of arrangements. Before that however it sheds some lights on the meaning of a monetary union, costs and benefits as well as some empirical studies about GCC monetary union.

1.2 Definition of a monetary union

Before defining the term "monetary union", it might be informative to consult the experience of the European Monetary Union (EMU) for guidance to elements that should characterize a

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[1] The views expressed in this paper are those of the authors and do not necessarily represent those of Saudi Arabian Monetary Agency (SAMA).

[2] Melitz (1991) asserts that Mundell's criterion of labour mobility loses its appeal once the belief in the long-run trade off between unemployment and inflation under the Phillips curve framework is abandoned.

monetary union. The 1970 Werner Report on economic and monetary union in the European community states "*A monetary union implies inside its boundaries the total and irreversible convertibility of currencies, the elimination of margins of fluctuation in exchange rates, the irrevocable fixing of parity rates and the complete liberation of movements of capital*" (The Werner Report of 1970).

Based on this line of thought, monetary unions could be defined as geographic areas whose exchange rates are irrevocably fixed to each other. Masson and Taylor (1992) emphasize that: "*The very nature of a monetary union precludes separate monetary policies, and so, essentially a monetary union has the characteristics of a common currency area, but no single circulating currency*". They define a currency union as *an area throughout which a single currency is accepted as a primary medium of exchange*. Hagen (1993) uses the terms monetary union and currency union alternately. He defines monetary union as a *group of countries using the same currency or linked by irrevocably fixed exchange rates*. It has been contended that the adoption of a common currency represents the narrow version of a currency area arrangement, while the situation in which exchange rates of two or more countries follow predetermined pattern represents the broad version (Mancera, 1991).

Three aspects should characterize a monetary union or a currency union. These are: (1) a single currency or several currencies that are fully convertible at an irrevocably fixed exchange rate; (2) union-wide monetary policy that is determined by a single central bank or a system of central banks; (3) a sole external exchange rate policy (Masson and Pattillo, 2001). This paper follows the line of thought that uses the single currency and a monetary union interchangeably, given that exchange rates are irrevocably fixed.

1.3 Costs and benefits of a monetary union

Adoption of a single currency brings in benefits and inflicts costs on member countries. In general benefits emanate from the following:

1. The elimination of transactions costs and accounting costs. Most of these costs are associated with bid-ask spreads and commissions on foreign exchange transactions. For small and open economies with unsophisticated financial markets, direct savings in transactions after adopting a single currency are probably larger. Lowering transactions costs might lead to higher output and consumption gains.
2. A removal of foreign exchange risk, which is considered a major obstacle to trade and cross border lending. It is argued that trade in goods and services especially among small firms will be enhanced, which would tend to intensify competition and increase allocative efficiency (Kenen, 1996). Rose (2000) contends that there is a large positive effect of a common currency on trade and that effect is much larger than the effect of reducing exchange rate volatility to zero, through an irrevocably fixed exchange rate arrangement (P.18).
3. Creation of more transparent pricing system, which makes international price comparison easier.
4. Gaining more credible monetary policy by adopting the strongest exchange rate commitment (Frankel, 1999).
5. Monetary union arrangements are less susceptible to speculative attacks (Frankel, 1999).

On the other hand the costs of adopting a single currency, besides the costs of forming the union, are mainly relinquishing monetary autonomy. These costs are more likely to increase the more dissimilar shocks to member economies are. By the same token, costs tend to increase the lower the flexibility of factor markets, as this implies a difficulty of adjustment to shocks.

2. Previous Empirical Studies on GCC Monetary Union

A number of studies have tried to determine whether the GCC countries are ready to establish a monetary union based on economic similarities, common social and cultural backgrounds. Some studies reached the conclusion that the GCC members are not ready to establish a monetary union and that the progress towards a monetary union is very slow compared to what it should be. While others found some support to the GCC monetary union.

Laabas and Limam (2002) provided an evaluation of the readiness of GCC countries to establish a monetary union. They used a formal test based on the generalized purchasing power parity. What they found is that the GCC countries have not yet met the pre-requirements to establish a monetary union due to the fact that the GCC economies are oil-dependent, have little intra-trade, lack convergence in macroeconomic fundamentals, and lack synchronization in business cycles[3]. In contrast, the authors mentioned that the GCC countries are more likely to satisfy the monetary union criteria ex-post rather than ex-ante. Establishing a monetary union may align the business cycles to increase intra-trade among the GCC countries. The authors claimed that in order to accelerate the progress towards the monetary union, restrictions on factors mobility have to be eliminated in addition to more political unification.

Jadresic (2002) concluded that launching a common currency for the GCC countries will carry out many benefits, yet it is not enough to have a successful economic integration. Removal of domestic and cross-border distortions that hinder trade and investments, coordinating policies, and increasing the political unification are steps that should be taken in order to achieve a successful integration.

Shotar and Shams (2005) examined the economic structure of the GCC countries to find whether or not the GCC members can adopt similar policies when launching the common currency in 2010. They found that the GCC countries follow different economic policies, and significant differences exist that may limit the expected benefits of the monetary union.

By testing for co-integration among the GCC countries' GDPs, inflation rates, exchange rates, and monetary bases, Darrat and Al-Shamsi (2005) reached the conclusion that the GCC countries are compatible to establish a monetary union. Nonetheless, the failure in doing so is due to socio-political factors that have hampered the process towards the monetary union.

Hebous (2006) concluded that the reduction of the costs of forming a monetary union in the GCC case is due to the similarities among the GCC economies. He also called attention to the notable degree of convergence that the GCC countries have achieved in terms of the convergence criteria.

A study by Abu-Bader and Abu-Qarn (2006) concluded that the GCC countries are not yet ready to establish a monetary union. The authors used three different methods to test the GCC economies. The first method was the Structural VAR to identify both demand and supply shocks and to find whether these shocks are symmetric or not. The second method was the co-integration tests to find whether long-term relationships of real GDP among all the possible paired countries exist. The last method was to find whether there are common business cycles among the GCC countries. All three methods provide no support for establishing a monetary union.

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[3] The authors do not agree that there is lack of convergence in macroeconomic fundamentals and lack of synchronization in business cycles. The data show the opposite.

A recent study by Louis, Rosmy, and Mohammad (2008) tested whether the GCC countries are subject to symmetric aggregate demand (AD) and non-oil aggregate supply (AS) shocks. The authors also tested the suitability of the Euro as a common anchor on the basis of shocks asymmetry between three major European countries (France, Germany, and Italy) and the GCC countries. They concluded that AD shocks are clearly symmetrical but non-oil AS shocks are weakly symmetrical across the GCC countries, which supports the monetary union. Authors found that neither AD nor AS shocks are symmetrical between the GCC countries and the selected European countries. One more result was found is that GCC's AD shocks are symmetrical with the US but non-oil AS shocks are not. This finding supports using the US dollar as a common anchor for the GCC countries since US monetary policy can help smooth demand shocks in the GCC countries.

3. The Gulf Cooperation Council

3.1 Introduction

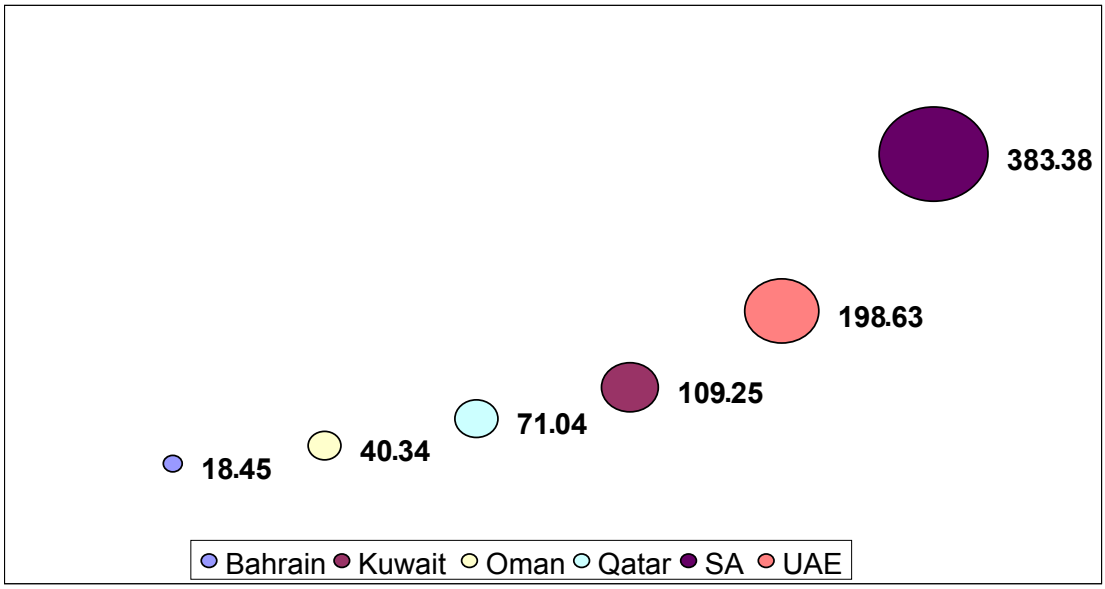
In the period 1975–78 four of the current GCC members (i.e. Bahrain, Kuwait, Qatar and the United Arab Emirate) attempted to reach a monetary coordination, as a step toward issuing a common Gulf currency, a Gulf dinar. The attempt however was futile and the issuance of the common currency was put off (El Kuwaiz, 1988).

Not until May 1981 when the four Gulf countries, along with Saudi Arabia and Oman, signed the Charter of the GCC. The six members have a combined population of about 37 million, in 2007, and had a combined GDP of US dollar 821 billion. The GCC objectives include coordination, integration and inter-connection between member states in all fields, formulation of similar regulations in the fields of economic and financial affairs, commerce, customs and communications. To achieve these objectives the GCC countries erected three main entities. These are: 1) The Supreme Council; 2) The Ministerial Council; 3) The Secretariat General. Each of these organizations may establish sub-agencies as may be necessary (GCC Charter).

Graph 1

GCC countries GDP in 2007

Billion US$



Source: National Central Banks.

In accordance with the Charter and as a step toward strengthening their economic ties, the GCC members signed the Unified Economic Agreement in 25 May 1981 in Abu Dhabi. The UEA articulated the principles of coordination and integration of economic activities. The agreement calls for the following:

1. Dismantling tariffs on regional products and implementing a common tariff on non-GCC products;
2. Coordinating member states commercial policies and relations with other states and regional economic blocks with a view to creating balanced trade relations;
3. Granting all GCC citizens the same treatment with regard to freedom of movement, work and residence; freedom of exercising economic activities and movement of capital;
4. Coordinating and harmonizing members development plans;
5. Formulating united oil policies;
6. Adopting a common legal framework for trade and investment;
7. Cooperation in the financial and monetary sphere. Article 22 of the agreement reads "Member states shall seek to coordinate their financial, monetary and banking policies and enhance cooperation between monetary agencies and central banks, *including the endeavour to establish a joint currency in order to further their desired economic integration* (GCC web-site).

3.2 Economies of the GCC

The Gulf countries share several homogeneous aspects. They have same language, culture and history. The GCC countries face similar set of economic challenges, a fact that necessitates development of stronger economic integration.

Statistics show that the GCC countries collectively account for 40.2 percent of world proven oil reserves, and this potential oil wealth makes them leading oil producers by supplying 21.9 percent of world crude oil production. Similarly, the GCC countries have at their disposal up to 23.4 percent of the world natural gas reserve and account for 7.9 percent of the world natural gas production[4]. The GCC countries enjoy relatively cheaper extraction of oil and gas resources, which puts them in an advantageous position relative to other oil and gas producers. The ample wealth generated by the Gulf States from oil and gas exports allows their economies to surpass unprecedented development, with higher standards of living and modern physical infrastructure.

The total GCC countries GDP has leapt from a mere US dollar 11 billion in 1971 to US dollar 821 billion in 2007. Nonetheless, the total number of GCC population has increased from 8.5 million in 1971 to 37 million in 2007.

[4] Source: British Petroleum Statistical Review of World Energy, June 2008. The data are for 2007.

Table 1

Average Growth Rates of Nominal GDP

Period	Bahrain	Kuwait	Oman	Qatar	SA	UAE	GCC average
1970s	25.1	30.6	46.4	31.3	47.7	51.1	38.7
1980s	3.0	–3.3	7.1	0.1	–2.5	2.1	1.1
1990s	6.6	11.3	5.9	10.3	5.2	8.0	7.9
2001–2007	13.9	17.3	10.9	20.8	10.8	15.7	14.9

Sources: United Nation Statistics Database.

A number of factors characterizing the GCC economies or have arisen recently led these countries to give serious concern to the urgent need for developing their manufacturing sectors. Among such factors are; 1) the fact that oil resources are finite and there is a global tireless search for energy alternatives that might soon compete oil; 2) the unanimous realization of GCC countries that oil will not continue to boost economic growth at the same pace as it did in the 1970s and the first half of the 1980s, and in recent years (2003–2008), given the persistent demographic changes in the GCC countries and the increasing oil supply from other regions of the world. These factors along with other economic and political challenges brought about by the move to more globalised economy demand more diversified economies in the Gulf.

Thus far the industrial development in the Gulf is limited to industries such as basic petrochemicals, fertilisers, and steel as well as aluminium and non-durable consumer goods, most of which are targeting consumers outside the region. Broadly speaking, an individual GCC country cannot carry out its independent industrial development and at the same time enjoys economies of scale, given the relative small size of most GCC economies if considered separately. Collective integration of industrial development schemes, will allow the whole block to gain greater economies of scale and hopefully have more diversified economic bases.

3.3 Costs and benefits of a Gulf Monetary Union

In general, it is hard to quantify economic benefits and costs of having a single currency for a group of countries. This would be harder in case of the GCC, given data limitation. Theoretically speaking, there are some promising benefits of the GMU, which include the followings:

- Bargaining power: After realization of the single currency, the GCC members will have an additional incentive (i.e. intrinsic incentive) to widen the scope of their collective bargaining power that allows them to pursue their negotiation with other economic blocks and form a stronger bargaining position. Therefore, monetary union is more likely to pave the way towards more access to industrial country markets in less discriminatory way.
- More intra-trade: Given that all GCC countries have firm plans to diversify their revenues by developing their industrial sectors and the fact that trade would be cheaper between countries that use the same currency, there seems to be a brighter future of more intra-trade (home bias effect) as a result of the new Gulf currency. This in turn will bring in more synchronization of business cycles, which will deepen the benefits of the single currency and facilitate the formulation and adoption of union-wide monetary policy.

- Economies of scale and ease of comparison: To the extent that more trade is created by the new GMU, producers are likely to gain economies of scale when border barriers are dismantled and the whole region becomes their market. Along with the ease of price comparison brought about by the single currency and in the absence of any form of monopolistic practices, theoretically speaking, and the increase in competition is more likely to bring up benefits to customers in the form of lower prices. In addition, there would be more flexible prices since suppliers of goods and services will no longer have the power to set prices, as it would be the situation when markets are fragmented. Launching a common currency promotes the regional competition in the banking and financial services and the quality of services introduced, which will reflect positively on customers in the GCC countries, reduce costs, and lead to the diversification of services, which could lead to further integration between their institutions at the regional level to take advantage of the economies' size.
- Partial release of foreign exchange reserves: The monetary union will allow GCC firms to pay for their regional imports in the new currency so that national central banks will no longer need to keep aside some of their foreign exchange reserves for the purpose of settling intra-trade transactions.
- Using a single currency eliminates the risks related to currencies exchange rates between the GCC countries. Additionally, the common currency will contribute effectively to the development and integration of financial markets, especially the bond market and the stock market.
- More potential investments: The GMU will make GCC economic prospects more promising for both domestic and foreign investors, by lowering search costs, administrative procedures and offering a bigger market. A more crucially factor, is the prospects for repatriation of GCC national funds held abroad.
- The integration of financial markets in the GCC countries, coupled with its positive effect at the level of monetary and fiscal policies will enhance transparency and financial discipline at the regional level, a necessary condition for financial stability in the region. These are all factors that help attract more investment from national, regional, and international levels to the GCC countries.
- More disciplined economic policy: It also promises to offer more disciplined economic policy management (e.g. prudent fiscal policies) by having members adopt appropriate policy measures that take the whole union into considerations.

Costs: But what are the foreseeable costs?

- Surrender of exchange rate and monetary policy instruments: The costs of a monetary union are derived from the fact that when a member country relinquishes its national currency, it also relinquishes its ability to conduct a monetary policy. Under monetary union national central banks are no longer allowed to unilaterally take the initiative of altering exchange rate of the single currency or change the interest rate. Decisions of this type should be the responsibility of the newly established union-wide central bank. Such a cost however would not be high in the case of GCC since monetary policy already has a narrow room for manoeuvring under the current pegged exchange rate system. Besides relinquishing exchange rate instrument involves little loss for very open economies like the GCC. Since opting to devaluation in very open economies will only raise domestic price level without producing long-term effects (De Grauwe. 1994).

3.4 Assessment of the proposed GMU

Is it beneficial for the GCC to abolish their existing currencies and adopt a common one? In order to assess the viability of the GCC countries for a monetary union one should look at relevant features of these economies that make them eligible for forming a monetary union. Traditionally, researchers revert to the OCA theory whose feasibility barometer for a common currency is the reduction in transaction costs. In this regard, the issue is whether savings of members of the common currency area from transaction costs reduction would outweigh costs of adjustment, where the latter would be correlated positively to the asymmetry of disturbances and negatively to inter-regional mobility of labour (Bayoumi and Eichengreen 1996).

There is an extensive application of the OCA criteria in the literature, which we will follow in examining the feasibility of the GMU, despite the fact that some analysts argue that the OCA criteria may be less crucial than often believed (Wypolsz, 2001). Recent literature has focused on the *desirability* but not the *necessity* of having higher degree of openness and intra-trade, labour mobility and symmetric business cycles. The EMU provides a case in which its member countries have not all met the criteria put forth by the OCA.

Bayoumi and Eichengreen (1997) attempted to operationalize the theory of OCA by constructing a suitability index based on empirical specification that indicates countries readiness for EMU. Their findings show European countries dividing into three groups: some countries exhibit high level of readiness, some with a tendency to converge and others show little or no signs of convergence[5].

The hypothesis is that failing to fulfil all or some of the OCA criteria might raise costs of forming the union or prevent members from reaping the desired full benefits, but not prevent the monetary union scheme from taking place. Put differently, the issue of suitability is not *either or*. Although, no single set of criteria is agreed upon in the literature, it is worthwhile to apply some of the widely discussed criteria on the GCC countries. Among such criteria are the correlations of business cycles, the intensity of intra-trade, and the extent of free movement of factors of production.

3.4.1 Business cycle synchronization

The synchronization of member countries business cycles is probably one of the least controversial criteria in literature. Countries with highly correlated business cycles tend to have higher propensity to join in a monetary union for their response to shocks tend to be symmetric too. If shocks hit member countries asymmetrically, policy responses will differ across countries. And if those countries are members of a monetary union then the common monetary policy can't serve stabilization in all member countries simultaneously.

The GCC economies are characterized by being highly oil-based and hence are subject to similar shocks originating from oil market developments. The correlation coefficients of GDP growth rates in the GCC are unsurprisingly high (Table 2). It is unlikely that demand shocks would concentrate on one GCC country causing a shift away from its products (i.e. oil and gas) in favour of another or other GCC members, given high substitutability of these products.

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[5] McCallum (1999) argues that "...true operationality of the OCA concept has not been achieved" p. 6.

Table 2

Correlation coefficients of output growth[6] (1970–2007)

Country	Bahrain	Kuwait	Oman	Qatar	SA	UAE
Bahrain	1.00					
Kuwait	0.66	1.00				
Oman	0.95	0.52	1.00			
Qatar	0.97	0.74	0.91	1.00		
SA	0.95	0.47	0.91	0.88	1.00	
UAE	0.98	0.57	0.95	0.95	0.97	1.00

Sources: United Nation Statistics Database (GDP at constant 1990 prices).

However, correlation coefficients decrease when we calculate them for different sample periods (i.e. the 1980s and the 1990s), probably for two reasons: 1) the strong influence of the sharp increase of oil prices in the 1970s relative to the 80s and 90s; 2) to some extent the more diversified GCC economies in recent years.

3.4.2 Intra-regional Trade

Since one of the main benefits generated from the single currency is the reduction in transaction costs, the larger is the bilateral trade among the GCC members, the larger is their cost savings from a monetary union. The GCC countries are all known for their liberal trade policies with the rest of the world with whom trade greatly dominates that of the intra-regional trade. Table 3 illustrates the openness degree of the GCC countries. On the other hand, the average intra trade, which is very important for this analysis regarding the GCC economic integration, among the GCC countries for the period of five years (2003–2007) is relatively small (less than 10 percent) due to the fact that all the GCC countries are mainly oil producers and have similar economic structures. Table 4 shows the intra-trade among the GCC countries as a percent to total trade, most of which are re-exported goods and agricultural products.

[6] The mainstream in the literature uses the movements of GDPs. Bayoumi and Eichengreen (1996) however argue that output movements reflect the influence of both disturbances and responses and therefore it is important to know whether a high correlation of output movements reflects symmetric shocks or rapid, symmetric responses (p. 2).

Table 3

Degree of openness in GCC countries* (%)

Country	2003	2004	2005	2006	2007
Bahrain	128.5	133.0	145.9	150.7	136.2
Kuwait	66.1	69.4	75.1	70.5	76.6
Oman	85.5	89.4	89.5	91.3	101
Qatar	76.9	77.1	83.4	88.9	90.1
Saudi Arabia	62.9	69.3	76.1	78.8	84.3
UAE	134.0	152.0	145.2	149.7	164.3

* Openness = {(exports + imports of goods)/GDP}*100.

Source: National Central Banks.

The fact that members of the GCC produce competitive products rather than complementary ones is one important reason explains their search for markets outside the GCC rather than trade among themselves. In spite of the modest volume of intra-regional trade, GCC members are determined to give an impetus to the GMU. As a matter of fact, having modest intra-regional trade by itself is one reason to push for the adoption of a single currency in the GCC. The formation of a single currency may provide a substantial impetus for trade expansion. In the words of the former GCC Secretary General "... the single currency became a basic requirement for the common market and the customs union..." (Alsharaq Alawsat, Thursday 28 March 2002).

Table 4

The intra-trade ratios among the GCC members

Country	Bahrain	Kuwait	Oman	Qatar	SA	UAE	Average
2003	15.4	4.8	17.3	7.5	4.8	5.5	9.2
2004	16.6	4.6	16.3	8.4	4.9	4.4	9.2
2005	18.5	4.4	16.4	10.0	4.6	4.5	9.7
2006	18.6	4.6	15.2	10.0	4.8	4.7	9.7
2007	19.2	4.7	15.0	8.6	5.1	4.7	9.6

Source: Directions of Trade Statistics, IMF.

3.4.3 Stable exchange rates

Since early the GCC countries have realized the significant importance of the US dollar for their foreign trade whose transactions are settled mainly in US dollar. In particular the GCC oil revenue, which consist a lion share of the GCC revenues (Table 5). It is also worth mentioning that petroleum activities are accounted for a large proportion as a percentage to GDP. In 2007, on average petroleum activities are 45.7 percent to GDP among the GCC countries (Table 6).

Table 5

GCC oil revenues to total revenues (%)

Country	2003	2004	2005	2006	2007
Bahrain	73.0	72.6	75.7	77.1	80.1
Kuwait	88.7	91.2	94.4	93.6	93.1
Oman	70.1	71.9	70.1	64.8	62.1
Qatar	64.1	66.0	67.1	64.6	60.7
SA	78.8	84.1	89.4	89.7	87.5
UAE	73.7	77.4	69.4	81.9	77.1

Source: National Central Banks.

They therefore pegged their national currencies to the US dollar. As a result, the GCC currencies demonstrated a history of synchronized exchange rate movements against the US dollar and stable cross exchange rates. In the 1970s all were revalued by as high as 14 to 18 percent, with the exception of the Omani riyal (OR) that took a reverse trend and was devalued by 9 percent. Although to a lesser extent in the 1980s the Bahraini dinar (BD), Qatar riyal (QR) and Emirate dirham (ED) were revalued again, and the other three were devalued by as high as 11 percent for both the Saudi riyal (SR) and the OR and by about 7 % for the Kuwaiti dinar (KD). In the 1990s, BD, QR, SR, and ED were virtually fixed, neither devalued nor revalued. Unlikely, the KD and the OR ended the decade with a devaluation of 6 percent and a revaluation of 8 percent, respectively.

Table 6

GCC petroleum activities to GDP* (%)

Country	2003	2004	2005	2006	2007
Bahrain	24.5	22.8	25.0	26.0	24.6
Kuwait	40.6	44.7	51.8	55.7	54.5
Oman	40.9	42.2	48.7	47.8	45.3
Qatar	57.6	54.5	59.6	57.2	56.5
SA	41.5	45.6	52.7	54.4	54.9
UAE	28.4	31.9	35.7	38.1	38.6
Average	*38.9*	*40.3*	*45.6*	*46.5*	*45.7*

* Including gas sector.

Source: National Central Banks.

In general, all the six currencies have surpassed a period of large adjustments particularly in the 1970s, which was considered a new phase of development following the unexpected changes in international oil market. However, oscillation has been restrained in the second half of the 1980s and the 1990s.

Policy makers in the GCC are aware of the risk of devaluation, particularly the issue of its provocation of detrimental expectations. They also are aware that if devaluation is used

once, it will be more difficult to use it in the future. Similarly, when devaluations are used systematically, they will lead to more inflation with no gains in output (De Grauwe, 1994). Nevertheless the preceding should not give an impression that exchange rate instrument should be thrown away, when it can be used effectively.

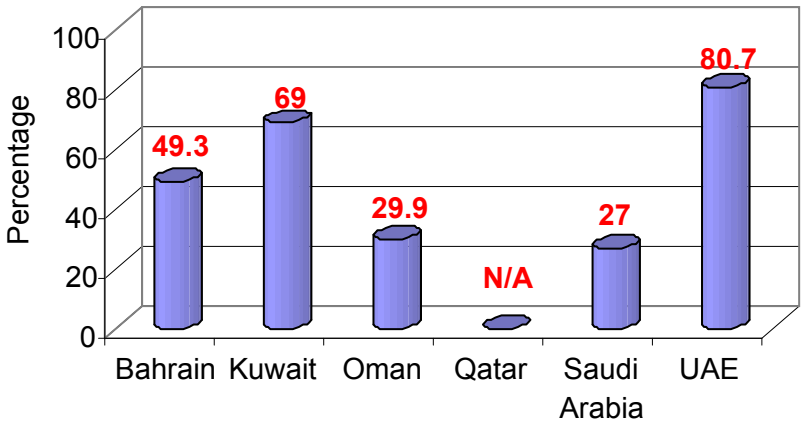
The upshot of this analysis is that as long as exchange rate risk is virtually nonexistent, what is the motive behind the adoption of a single currency. One argument is that the single currency may promote trade if the effects of exchange rate risk are significant. It seems that all GCC currencies have managed to maintain credibility of their fixed exchange arrangements by avoiding the devaluation option even in periods of very real depressed oil prices (e.g. 1998).

3.4.4 Labour and capital movement

Article 8 of the UEA calls for freedom of GCC citizens to move and work in any GCC country without any discrimination. By the same token, it calls for free movement of capital. Thus far, movement of labour among GCC countries has been limited, despite the fact that GCC countries share same language. Statistics show that the bulk of labourers in GCC are foreign expatriates, who are claimed to be less costly and demanding. Conservative estimates put the number of foreign workers in the Gulf at about 13.9 million in 2007[7]. Given the ease of recruiting less paid foreign labours, the private sector in the Gulf has not been willing to employ nationals. The number of nationals employed by the private sector is still modest.

Graph 2

Foreigners as percent to total population in GCC countries in 2007*



* Qatar data are not available.

Source: National Central Banks;

GCC governments have been the main employer of nationals, but due to the fiscal constraints since the mid 1980s governmental job opportunities have been squeezed to a minimum. At the same time the rapid increase in educational attainment of GCC nationals has caused an increase in the number of GCC nationals entering the labour market.

[7] Without Qatar's data whose foreign labour estimated to be 800 thousands in 2008.

The economic rationale behind the adherence of labour movement among the Gulf countries could be based on two grounds, the first of which is of particular importance to GCC. First, free movement of labour would contribute in reducing the high degree of reliance on foreign expatriates in the Gulf, who drain great amounts of hard currencies out of the GCC economies. The problem of substituting nationals for expatriates seems to be of a structural nature.

The second reason, though to a lesser extent, is that free movement of labour would operate as an adjusting mechanism whenever demands for one country's products decreased, causing a rise in that country's unemployment. Nevertheless, the fact that GCC labour markets are still besieged by such structural problems, it is unlikely that the movement of labour will be enhanced soon. As a result going through structural reforms in the labour markets, could be viewed as a prerequisite which would bring in the sought after market-driven adjustment mechanism.

On the other hand, capital movement[8] among the GCC countries is relatively free. Technology adoption by GCC markets has eased mobility of capital among members and hence dismantled the old barriers. Yet, further steps such as mutual listing of shares are needed.

3.4.5 The political will

Overall experience from the past indicates the extreme importance of political determination and commitment as a crucial factor for successful monetary union. Recent literature has emphasized political will to overcome any obstacles and facilitate the move toward monetary union. A shaky political commitment imposes limits to the speed and depth of integration. Wyplosz (2001) states *Europe's lesson number 1 is that what matters is a political will to seek closer economic and financial integration, but not tied to any precisely defined plan and schedule.*

In the Gulf there seems to be a strong political will supporting the notion of the Gulf monetary union. This is manifested by the multilateral initiatives taken by the GCC leaders in the Manamah summit of December 2000 including the adoption of the US dollar as a common anchor of all GCC currencies and the delegation of a power to establish a working agenda toward the ultimate goal of a single currency to the Committee of Financial and Economic Cooperation. It is also manifested by the creation of the high ranking technical committee in May of 2001 whose job is to study the requirements of the GMU and come up with a blueprint of the transition to the single currency. Lately, the summit approved the monetary union agreement and the Law of Monetary Council.

In conclusion, the argument in favour of a Gulf monetary union is supported by some factors including the synchronized business cycles characterizing the GCC economies and the strong political will. In contrast, these arguments are weighed down by a number of factors such as low level of intra-trade, less developed capital markets (especially bond market), immobility of labour and already stable cross exchange rates.

Given these factors, should we conclude against the feasibility of the GMU? Then we would hastily confine ourselves to the static point of view in a real dynamic world. One should always consider the fact that there are lots of positive externalities, albeit intangible and sometimes un-quantifiable, to be gained by further integration. In the GCC, the monetary union is viewed as part of a larger integration process. When the single currency comes to fruity it will bring with it greater integration in financial and non-financial markets (McCallum, 1999). Jacobsen and Tomann (2001) put it succinctly that *the introduction of a common*

[8] It refers to the movement of capital for investment purposes, not movement of wealth per se.

currency has to be regarded as an institutional innovation which has implications for the functioning of other policy areas and which changes the assignment of objectives to policy areas.

4. Key Issues Pertaining to Monetary Unions

Before complete monetary union takes place, a number of significant issues arise that need to be clarified so that the movement to monetary integration can safely be carried out. These issues include agreements regarding the economic convergence criteria, the issue of integrated monetary policy and coordinated fiscal policy, and the need to create a unified central bank, related to that are the issues of seigniorage distribution, and the conversion rate of substituting several currencies with a single currency. We address these issues in turns.

4.1 The issue of economic convergence

The convergence terminology has recently become part of economic and monetary unions' literature. Nominal economic convergence became central part of any discussion about the formation of monetary unions. The idea that European member countries should satisfy standards of good macroeconomic behaviour before joining the EMU has gone through lively debate. The crucial question of the debate was whether nominal convergence criteria are necessary for monetary union and if so "how much convergence could be achieved before monetary union can occur?" On the contrary, it is less clear whether real convergence is a prerequisite or a consequence of closer integration.

Proponents of the convergence approach stress the need of nominal convergence to reduce the costs of losing monetary policy independence. Although failing to achieve convergence may not hinder reaching the ultimate goal of a monetary union, it would definitely make the way to the union harder (Crockett, 1994). The debate went through between two groups, known as the "economists" and the "monetarists". The economists group argues that national economies of member countries should converge before launching a single currency and proceeding to deeper economic integration. They argue that even if nominal exchange rates are fixed real exchange rates will not be permanently fixed unless member countries achieve common rates of inflation. The economic rationale behind it is that if members of the block are at different levels of economic performance, fixing exchange rates would force high inflation countries to carry out deflationary measures, which would aggravate regional disparities within the union. They therefore view the coordination and harmonization of macroeconomic policies, through a high degree of economic performance convergence, prior to a monetary union as an essential step (Pilbeam, 1992).

The monetarists group, on the other hand, asserts that the union itself would produce convergence. In their point of view convergence will be achieved through exchange rate commitments, which could be implemented without *ex ante* convergence. They doubt the notion that countries will make the efforts to coordinate their monetary policies without fixing exchange rates (Pilbeam, 1992).

The above discussion is important in so far as it briefly depicts issues addressed by the literature prior to the start of the EMU. Some analysts argue that it is hard to describe how convergence should be attained. On one hand, irrevocably fixing exchange rates before full convergence is realized involves costs. On the other hand, waiting for full convergence to occur might lengthen the process until fixing exchange rates take place (Emerson, 1992). The Europeans' experience with the EMS suggested that neither of the two extremes is a panacea. The EMS was established to enforce convergence through the ERM without necessary pre-conditions. Convergence to low inflation was considered the main

achievement of the EMS. Conversely, the difficulties the EMS experienced in the beginning of its existence was believed to result from insufficient convergence (Emerson, 1992). This experience provides evidence that exchange rate targets might be useful at forcing the convergence of monetary policies but not the convergence of fiscal policies (Giavazzi and Giovannini, 1989)[9].

Box 1

Convergence Criteria of the EMU

The Maastricht Treaty (1991) contains four convergence numerical criteria involving targets on the convergence of inflation, interest rates, exchange rates and government debt and deficits (Bayoumi and Mauro, 1999). According to the Treaty member countries are obliged to attain a rate of consumer price inflation within 1.5 percent of the average of the three best performing countries during the year prior to entry to the EMU. By developing an inflation convergence criterion, the union would be more prone to become a low-inflation zone. The second criterion of long-term interest rates is strongly connected to expected inflation. The long-term interest rates in a national currency reflect both the global real interest rate and a currency-specific premium or discount, on which expected inflation differentials are the most affecting factor. For a EMU member to be ready to enter stage three its long-term interest rates should be confined within two percentage points of the average rates prevailing in the three countries with best inflation record (Crockett, 1994). The primary aim of requiring a convergence of inflation rates and interest rates was to avoid a large real exchange rate changes once nominal rates were locked (Bayoumi and Mauro, 1999).

The third criterion obliges member countries to abide by the normal ERM fluctuation margins. Accordingly, members have to maintain their exchange rates within the ERM bands for at least two years before participating in the common currency. The last convergence criterion pertains to fiscal deficit and government debt, which meant to ensure that member countries' public finances were sustainable. The fear of the Treaty engineers was that lack of formal fiscal constraints would cause monetary and financial instability as a result of excessive deficits and lead to pressure being exerted on the ECB to inflate away countries' debts. Restrictions on deficits are said to limit the *beggar thy neighbour* type inflation that could destabilize the monetary union (Cooper and Kempf, 2000). In addition, other member governments would face a pressure to bail out the errant members. Moreover, realizing the potent effect of fiscal policy under fixed exchange rates, national policy makers might be tempted to use it actively, which may well lead to negative externalities for other members (Barry, 2001). Therefore, the Treaty imposed limits on both government debt and fiscal deficits, which should not exceed 60 percent of GDP and 3 percent of GDP, respectively. Failure to adhere to these limits would disqualify a member country from joining the union. Despite the fact that fiscal restrictions make sense, they are criticised of making no distinction between public consumption and investment. The restrictions might have adverse long-term effects specifically if they reduce expenditure on infrastructure and education (Barry, 2001).

A couple of points are worth mentioning about the fiscal convergence criteria. A country that has a deficit above 3 percent of GDP might be allowed to join in if that deficit *is only exceptional and temporary and the ratio remains close to the reference value.* In addition, a deficit might not be considered excessive if it *has declined substantially and continuously and reached a level that comes close to the reference value* (Buiter, 1993). The two reference values are said to be compatible with a stationary long-run equilibrium based on the average historical numbers of the 12 EC members. With regard to the deficit-GDP ratio, the Treaty seems to apply the "Golden Rule" of public finance. The rule says: balance the current budget while borrowing should not exceed the amount of capital formation.

[9] Policy coordination in the EMS has never extended to monetary policy targets (Giavazzi and Giovannini, 1989).

Learning from the aforementioned experience the Europeans almost unanimously adhered to the Maastricht Treaty, which provided a quantified set of convergence criteria for the final stage of the process to monetary union and a detailed timetable for achieving such nominal convergence (Box 1). These precondition convergence could be viewed as a screening device aimed at keeping out members that might be reluctant to adopt prudent macroeconomic policies once they are full members of the union. The introduction of convergence was intended to create a monetary union with a future of low inflation environment and move the focus of macroeconomic policies implemented by member countries from domestic level to union monetary level (Bayoumi and Mauro, 1999). At the same time, agreement on having fiscal criteria is more prone to reducing pressures on the monetary authority (Cooper and Kempf, 2000).

The strongest refutation however against the Maastricht convergence strategy is that it may make convergence of countries with weak currencies more difficult to achieve. In addition, the criteria are interrelated in some way. A country that fails to undertake a credible disinflationary strategy, because of its infamous record of inflation, is more likely to experience an increase in its real interest rate, as the decline in the observed inflation is not matched by a decline in market expectation of inflation. This in turn will increase the debt burden, which might force the authorities to increase taxes in order to meet the debt GDP criterion (De Grauwe, 1995).

4.2 Is convergence a relevant issue in the Gulf?

According to the traditional OCA, prior convergence criteria are neither necessary nor sufficient to form a successful monetary union. It is not surprising therefore that the theory of OCA is silent on the need for prior convergence on macroeconomic aggregates. Instead, it tackles the issue of the need for real wage flexibility and mobility of labor, as prerequisite for a sound monetary union. However, if one strongly abides by the OCA, the viability of some existing monetary unions around the world, e.g. EU-15 members, would be questioned.

The significance of prerequisite nominal criteria stems from the fact that they have an inherent likelihood of making a smoother ride towards monetary union, but not trouble-free one. They also have the advantage of making national policy makers more disciplined by the time they come under one monetary authority. It is important therefore that the GCC members agree on a number of nominal criteria that better suit their economies and address the very specificity of the GCC economies. Convergence would lead to a reduction of differences between national goals, such as reduction of differences between national debt ratios. Convergence in fiscal deficits and debts, both of which are necessary for stable monetary unions, are of paramount importance for the Gulf.

But convergence of some macroeconomic indicators would not solve every problem of the GCC economies. We argue therefore that launching structural changes that address particular economic conditions of the GCC would be indispensable, too. Economies of the GCC are at different stage of development from that of the EMU and therefore have different challenges. Problems manifested in the GCC economies include the unemployment rates, and lack of diversified economies. But “how much nominal convergence needs to be established before launching the single currency?” is a hard question to answer. This is a policy matter demanding a multilateral agreement since it involves sacrifices that member countries have to go through[10].

[10] The governors of GCC central banks and monetary agencies formed a technical committee with official representatives of all member countries and the GCC General Secretariat. The task of the committee is to explore various feasible options for implementing article 22 of the Unified Economic Agreement, including the

Based on the findings of the technical committee, the GCC countries have adopted the following convergence criteria: inflation rate, interest rate, foreign exchange reserve, annual government deficit, and government public debt. The following section sheds light on each criterion and uncovers the current situation.

4.2.1 Inflation rate

A general rise in the price level will cause a reduction in the purchasing power of the member country's currency. Therefore, in order to maintain a union-wide monetary stability, it is important to think about a criterion that would bring close inflation rates among members. Price stability is an important element in facilitating the task of the new central bank. Historically, all GCC countries have been maintaining good records of price stability as a result of their flexible trading system and the strength of their anchor, the US dollar, especially in the past. An important factor that one should not forego is an establishment of harmonized and comparable price indices. The harmonized indices will serve as base for comparison among the GCC members record of price stability. It will also be important for the conduct of the future single monetary policy. To achiever convergence in inflation rates among the GCC members, the inflation rate must not be more than 2 percent points higher than the weighted average, based on GDP size, of inflation rate in all GCC countries. Table 7 illustrates inflation rates in all GCC members in the five year period (2003–2007). The two countries that deviated from the target were Qatar and UAE for the years 2004–2007. Clearly, the inflation rates of the two countries came as a result of the high spending that the two economies, capacity could not absorb easily. It is possible through the high inflation rate will diminish after years of spending on expanding economic base. Table 7 illustrates which countries have satisfied this criterion.

Table 7

Inflation rate in GCC

Year	Bahrain	Kuwait	Oman	Qatar	SA	UAE	Weighted Average	Convergence Threshold
2003	1.6	1.0	0.2	2.3	0.6	3.1	1.3	3.3
2004	2.2	1.3	0.7	6.8	0.3	5.0	1.9	3.9
2005	2.6	4.1	1.9	8.8	0.7	6.2	3.0	5.0
2006	2.0	3.0	3.4	11.9	2.2	9.3	4.8	6.8
2007	3.3	5.5	5.9	13.8	4.1	11.1	6.9	8.9

Source: Secretariat General of GCC countries, Statistics Database.

4.2.2 Interest rate

The interest rate should be calculated by using the average short-term interest rate (on three months), which is used between banks. The GCC interest rates are positively correlated to and closely follow the US interest rate due to the fixed peg to the US dollar in 2002. To achieve the convergence in interest rates between the GCC countries, the short-term interest

establishment of convergence criteria if any. The technical committee began its series of meetings on June 2000.

rates must not be more than 2 percent points higher than the average of the lowest three short-term interest rates among the GCC members. Apparently all the GCC countries satisfy this criterion (Table 8).

Table 8

Interest rate in GCC countries

Country	Bahrain	Kuwait	Oman	Qatar	SA	UAE	Convergence Threshold
2003	1.09	2.12	0.90	1.07	1.63	1.16	3.02
2004	1.50	2.02	1.16	1.45	1.73	1.56	3.37
2005	3.41	3.26	3.09	3.34	3.75	3.52	5.23
2006	4.84	5.43	4.44	4.92	5.02	5.11	6.73
2007	4.68	4.59	4.20	4.70	4.79	4.79	6.49

Source: Saudi Arabian Monetary Agency, Quarterly Statistical Bulletin, 4th Quarter 2008.

It is worth mentioning that the use of long term interest rate is more suitable. Long term interest rates underline long term risk premiums in the area.

4.2.3 Foreign exchange reserve

Members of the GCC agreed to adopt a criterion of ER sufficiency that should be met by all members before the launch of the single currency. Therefore, each country's monetary authority should hold a sufficient amount of foreign reserves of no less than four months worth of imports. Table 9 shows the status of each country for the period 2003–2007. The importance of this criterion stems from the fact that GCC countries are highly import dependent and a shortage of ER cover could mean more debt.

Table 9

Number of months covered by foreign exchange reserves of commodity imports

Country	Bahrain	Kuwait	Oman	Qatar	SA	UAE	Convergence Threshold
2003	3.2	8.4	6.3	7.0	7.4	3.5	4
2004	2.8	7.9	5.0	6.7	7.4	3.1	4
2005	2.5	6.8	5.8	5.5	5.4	3.7	4
2006	3.2	9.5	5.5	4.0	4.8	4.2	4
2007	4.4	8.5	7.2	5.1	4.8	3.8	4

Source: Secretariat General of GCC, and Oman central bank annual report.

4.2.4 Annual government deficit and debt

The total public debt represents the total volume of government bonds, bills and other securities outstanding at a particular date. It is generated mainly from annual accumulation of

successive fiscal deficits. It is argued that unwarranted increases of the public debt volume create heavy burden on the debtor country for it might deplete its financial resources and lead to indefinite postponement and cancellation of some development, both social and economic, vital projects. In addition, the increasing trend of the debt might lead to a number of negative consequences including the intergenerational transfer of the debt burden, the pressure on the risk premium factor corresponding to the debtor country and the opportunity costs involved because these savings could otherwise be used in more productive uses.

Also, there are externalities attached to unsustainable debt phenomenon, whereby the unsustainable increase in the debt of one country might force the others to follow more deflationary policies. If a member country lets its debt increase continuously, it will continue to rely on the capital markets of the union, thereby driving the union interest rate upwards. The interest rates rise will affect other member countries as well, by affecting their burden of the debt. Any attempt by those members to stabilize their debt/GDP ratios will be through more restrictive fiscal policies (Grauwe, 1994). Moreover, should a member that issues too much government debt got defaulted, the other members would face vast pressure to bail out the defaulted one. In general, high budget deficits and high public debts represent a threat to price stability and so that the monetary union will have an inflationary bias. The central bank will face a lot of pressure to inflate should these two aggregates go unrestrained.

To achieve convergence in fiscal situation, GCC countries agreed to on a criterion that annual fiscal deficit and government debt should not be more than 3 percent of GDP for[11] central government and 60 percent of GDP, respectively. Table 10 depicts the fiscal situation in the period 2003–2007.

Table 10

Budget surplus/ deficit for the GCC countries

% to GDP

Country	Bahrain	Kuwait	Oman	Qatar	SA	UAE	Convergence Threshold
2003	1.8	10.0	1.4	3.9	4.5	–4.5	–3.0
2004	1.4	15.1	2.4	16.4	11.4	–0.4	–3.0
2005	5.1	29.1	2.5	9.2	18.4	8.1	–3.0
2006	2.3	17.6	0.3	9.0	21.7	12.0	–3.0
2007	0.6	29.7	0.3	14.7	14.6	9.5	–3.0

Source: Secretariat General of GCC, and Oman central bank annual report.

Given the recent economic boom, all countries have enjoyed comfortable fiscal position. One reservation might arise when it comes to evaluating fiscal sustainability of GCC budgets. GCC incomes are strongly influenced by exogenous volatile oil prices, hence the deficit to GDP indicator might not provide a satisfactory gauge. GDPs in oil producing countries

[11] Additional measure of public debt criterion is the amount of general government debt should not exceed 70 percent of GDP.

fluctuate widely from year to year, which makes a country's deficit closer to sustainability in favourable oil price conditions even if there is no change of policy stance (Chalk, 2001)[12].

Table 11 depicts the debt situation for the period 2003-2007. Another challenging factor is the accumulated stocks of external debt that member countries or their national entities owe. Countries that accumulate short-term external debt might find it hard to persuade lenders to roll over maturing loans and be forced to pay debt in full. The ratio of a country's short-term debt to foreign exchange reserves is an important factor monitored carefully by international investors and credit rating agencies as well. Continuation of external borrowing by members of the GCC might lead to indirect costs on the entire union, be it higher interest rates or balance of payments deficits.

Table 11

Central government debt ratio to GDP

Country	Bahrain	Kuwait	Oman	Qatar	SA	UAE	Convergence Threshold
2003	36.9	23.0	15.6	50.4	82.0	0.0	70
2004	34.4	17.3	13.8	34.1	65.0	0.0	70
2005	28.7	11.8	8.6	23.2	38.9	0.0	70
2006	23.4	8.6	8.2	18.0	27.3	0.0	70
2007	19.8	7.2	6.5	9.7	18.6	0.0	70

Source: Secretariat General of GCC, and Oman central bank annual report.

4.2.5 Monetary and fiscal policy issues

Coordination of monetary policies in a monetary union is a crucial subject. The probability of having perfect coordination in practice is very low. This stems from the fact that the prerequisites of perfect coordination are hard to accomplish. Coordination of monetary policies requires the collection, processing and evaluation of the information needed for the conduct of monetary policy. Equally important is the willingness of members to work toward a consensus, which might be sometimes impossible to get. And if a consensus over a specific monetary policy occurs, a problem might arise is that how to ensure continuous compliance with the agreed upon policy. Convincing market participants of a going harmonized coordination might also be a harder task. A workable monetary union must create a mechanism ensuring explicit procedures to reach the final objectives of a monetary policy and making sure that national monetary authorities comply with unanimously taken decisions (Ciampi, 1989).

Fiscal policy is no less demanding than monetary policy. Both of which are closely linked. In a monetary union, the existence of a single monetary policy and different fiscal policies might sometimes be an issue. The main concern of fiscal policy in a monetary union is coordination among unilaterally conducted fiscal policies. Given the fact that the possibility of using monetary tools to tackle a country-specific shock is ruled out, the more asynchronous business cycles member countries have, the more demanding fiscal policy coordination becomes.

[12] Chalk (2001) introduces what he calls the core deficit for oil producing countries. This defined as the overall deficit less net transfers and oil and investment income, where a higher core deficit leads a country further away from long-run sustainability.

Any unsustainable fiscal deficit in one member country would pressure other members of the union to assist that country, through fiscal transfers from members, and or loan guarantees as subsidy through monetary expansion is no longer an option. Discretionary fiscal coordination may not come to existence smoothly, be hard to implement and monitor (Masson and Taylor, 1992). In the EMU, it is argued that in order to discipline fiscal policies and reduce unfavourable spillover effects, mechanisms for achieving fiscal policy coordination are helpful. However, to the extent that a procedure that enables fiscal policies to be coordinated would rely on discretion rather than rules, such procedures may produce sub optimal behaviour.

Unless carefully designed agreements are in place, conflicts between the union-wide central bank and member governments about the mix of macro-economic policy would also be inevitable. Beetsma et al (2001) differentiate between two types of fiscal coordination, ex ante and ex post. The ex ante coordination could be made possible through formal agreement which constitutes an international obligation (e.g. the Maastricht Treaty). The ex post on the other hand is rather an ad hoc which depends more on the current state of affairs (e.g. Euro area finance ministers meetings to discuss fiscal policies). To avoid the issue of having fiscal policy conceal stability risk, the Maastricht Treaty contains some regulations. In this regard, the Treaty bans national central banks from granting loans to governments, rules out the possibility of having EU members responsible for the liabilities of other members with excessive budget deficits and imposes sanctions, as well as fines, on countries infringing budget deficits and public debt limits (Becker and Dallmeyer, 1996).

One area of fiscal policy deserves coordination is a need of closely coordinated decisions on overall fiscal stance at national levels (Beetsma and et al. 2001). If a fiscal policy stimulus produces an appreciation of the common currency, the other members' net exports tend to decrease (Masson and Taylor, 1992).

In the EMU the Treaty sets some guidelines for coordinating national economic policies. Given the fact that the ECB chief objective is price stability, national fiscal policies would have a multitude of objectives including the stabilization of output and maintaining a sustainable balance of payments (Goodhart, 1992).

4.2.6 Monetary and fiscal policies in the Gulf

Monetary policy: The main objective of monetary policy is to maintain domestic financial stability and preserve the pegged exchange rate system. Monetary policy in the Gulf could be perceived as less effective than in economies with floating ER arrangements, coupled with the absence of well-developed secondary capital market. The efficacy of monetary instruments on economic activities remained limited. Oil and natural gas, as the main exports of the Gulf, continue to be the principal source of foreign exchange reserves. Broadly speaking, fiscal policy is the main determinant of monetary policy. The role of monetary policy in the Gulf is to control monetary development ensuing from external factors influencing domestic economic activities through fiscal expansions (Al Hamar, 1988).

In view of that, one would expect the newly created Gulf Central Bank and the existing national central banks (and monetary agencies) to share the same monetary policy objective of price stability. As a result, the expectation is that GCB would be viewed as a centralized entity in charge of the union-wide monetary policy, where harmonized formation of monetary policy would take place. However, since day-to-day exchange rate policy falls into the responsibility of the GCB, conflicting situations between the domestic price stability and external stability of the single currency (exchange rate) may arise.

Fiscal policy: Government expenditure is the most potent instrument behind economic activities in the GCC economies and is the mainstay of fiscal policy in the Gulf. Current expenditures, mainly the government wage bill, represent large portion of the GCC members' budgets. The average current expenditures of the GCC members are usually in the neighbourhood of 71 percent of total expenditures as in 2007.

On the revenue side, with the narrow tax base, GCC members continue their continuous reliance on oil revenues, which represents 70 percent of total revenues, on average. This renders fiscal position of the GCC countries subject to oil market developments, despite the increasing role of investment income from wealth accumulated in the past.

Coordination of fiscal policies in the GCC would help the GCB achieve its objective of maintaining price stability. Absence of fiscal policy coordination might produce unsound fiscal stances, which could undermine monetary policy. As far as the GMU concerned, the current fixed exchange rate arrangement needs sufficient international exchange reserves to support the single currency. In the absence of centralizing fiscal activities or at least closely harmonizing national budgets, the risk that one country's fiscal deficit can create a balance of payments deficit for the entire union is still a possibility (Allen, 1976). There are a number of fiscal issues need to be addressed by GCC countries:

1. With the efforts being made by some GCC countries to ameliorate their overall tax systems, issues of tax coordination might arise.
2. To maintain harmony over various expenditure policies especially the rising current spending (e.g. direct and indirect subsidies) and avoid unbalanced economic growth among GCC economies, ex ante coordination is considered necessary.
3. To bring stability to GCC revenues and suppress GDP volatility, an issue of creating a multilateral oil stabilization fund could be viable.

Box 2

Monetary policy in the EMU

Before the establishment of the ECB, the European national central banks have adopted different monetary strategies. For instance, the Banque de France followed an exchange rate stabilization policy while the German Bundesbank followed a policy of money supply targeting aimed at stabilizing some monetary aggregates. Nowadays, the ECB strategy follows the mandates set by the Maastricht Treaty that price stability should be the primary objective of monetary policy. The earlier success of the Bundesbank in achieving price stability and the argument that a Philips-type trade off in the medium and long run between employment and inflation does not exist anymore provide enough justification for that strategy (Goodhart, 1992).

Many analysts have conceded that given the economic heterogeneity of the euro zone, there might be different inflationary pressures as member countries experience different shocks. It is natural that members of the Council of Governors, who happen to be governors of central banks of participating countries, will have differing views about what is to be done (Kempf, 2001).

One consideration has to do with monetary policy is whether national governments of the union, depending on the size and wealth, might be tempted to constrain the unified central bank or influence it in some way. Some members could employ their fiscal policy to force the central bank to adopt their views. Others however select officials who adhere to the price stability objective in order to help minimize the temptation to further monetary expansion. The central bank should, in order to shape and maintain its credibility, counteract such an argument by increasing its ability to operate without influence from members (Kempf, 2001)

4.2.7 A Regional Central Bank

Stabilization function is viewed as an international public good where no national central bank has the incentive to internalise all of the international spillovers. For obtaining an efficient stabilization function, centralized control of monetary policy is required (Eichengreen, 1991). Creation of a union-wide central bank would be a minimal requirement for credible commitment to the monetary union. But should the creation of the new central bank totally abolish the pre-union multiple national central banks? Or should they coexist and have different levels of responsibilities? An argument might arise is that if members of the

union have a preference of keeping their national central banks operating, leaving the union would be easier should future political pressure on a member government to exit the union takes place. This situation might undermine commitment and hence endurance of the union.

There are some advantages however in retaining national banks along with the new regional central bank. Decentralization of monetary operation might be more efficient than having a single central bank doing the whole job. After all national central banks have long experience in dealing with issues related to their economies. It could be more advantageous and probably less costly to utilize the already established national banks than to rely totally on the newly created central bank.

In addition, to have them willingly cooperate with the new central bank, national central banks should not feel that their being is in jeopardy. It is highly recommended that they are granted independence of national governments and be responsible only to the supranational central bank. The role of the national central banks should be limited to carrying out instructions of the new union-wide central bank. In case national monetary interests of member countries differ, the central bank authority that includes national representations should have the power to settle these differences and have the final say. The goal is to preserve as much a harmony as possible in the system of central banks (Allen 1976). This means that decisions involving a change in the price of a currency or the quantity of money supply should be a sole responsibility of the regional central bank.

Independence of the regional central bank: An important characteristic of the newly created central bank is its independence particularly from national governments and legislative bodies. Central bank independence implies that monetary policy can be executed, even if it is against government wish, without government interference. There is ample evidence suggesting that the greater is a central bank independence from fiscal authority, the more successful it is in achieving low inflation objective. Empirical evidence shows that long-run inflation rates are lower in countries with independent central banks. It is also argued that a central bank ability to commit itself to long run price stability is improved with independence from political interests (Fratianni et al., 1992).

It has been argued that politicians would rather stimulate the economy and engineer a temporary boom, as election time comes closer, even at the expense of inflation and expected inflation. This argument has spurred the advocacy of a politically independent central bank as a necessary condition to achieve monetary stability. Under such arrangement member governments would be banned from using money supply to finance public spending or transfer payments in exchange for votes. One way to maintain immunity of a central bank is to prevent a central bank from buying “too much” government debt or overextending credit to government. It has been further contended that an independent central bank would provide faster decision-making process. In addition, independence along with the ex ante fiscal pact minimizes the pressures on the union-wide central bank (Cooper and Kempf, 2000).

In EMU the ECB and national central banks are banned since 1994 from granting loans to government institutions for budget financing (Becker and Dallmeyer, 1995). They also must not purchase debt instruments directly. Yet, the ECB may conduct open market operations since there are no restrictions on the purchase of government debt in secondary markets. The ECB retains financial independence, as well. It acts as a private entity where each national central bank will contribute to its capital and earn income according to their shares[13] (Fratianni et al., 1992). The ECB has been granted full independence and its executive board members are immune from political pressure because of their long non-renewable mandates (Box 3).

[13] Subscription to the ECB’s capital is based on a country’s size of population and GDP as a proportion of the EU total (Becker and Dallmeyer, 1996).

Box 3

Structure of the ESCB

The European System of Central banks comprises of the ECB and the national central banks. The ECB is the entity in charge of monetary policy in the EMU. There are two councils involved with monetary policy, the Executive Board (EB) and the Council of Governors (COG). The European Council appoints the EB of six members who serve in office for eight years with overlapping mandates and cannot be re-elected. Members of the EB cannot be dismissed except for misconduct or incapacity. On the other hand, the COG is composed of the six members of the EB and all EMU national central banks' governors. The two councils have different responsibilities. The EB is in charge of the centralized control and assessment of the daily implementation of decisions taken by the COG. The COG defines the orientation of monetary policy and makes strategic decisions about intervention instruments. It is the task of the national central banks to implement the decisions taken by the COG (Kemp, 2001). The COG operates on a one man-one vote principle where decisions are made on a simple majority and the president vote would be a deciding one in case of a deadlock. However, decisions on profit allocations are to be made by two-thirds majority of the weighted votes. The votes are weighted according to the national central banks shares in capital of the ECB. The EB members have no right to vote on these decisions. The ECB was granted three forms of independence from political authorities. These are institutional independence, operational independence and personal independence (Becker and Dallmeyer, 1996).

4.2.8 Setting up a system of central banks in the Gulf

The GMU would be established based on an agreement among a group of sovereign countries. It is likely that some members may attempt to decentralize monetary control at national level, which perhaps undermines stabilization tasks of central banks. It is important that member countries resolve in advance the issue of autonomy and monetary control and draw lines of responsibilities between the GCB and the national central banks (and monetary agencies). Therefore the need for a Gulf System of Central Banks (GSCB) is apparent.

Member countries of the GMU should establish the GSCB that would resemble the ESCB. This GSCB includes the newly established Gulf Central Bank (GCB) and the existing national central banks (and monetary agencies) where power over monetary policy is distributed. The national central banks (and monetary agencies) should be closely associated with the design and implementation of monetary policy. The GCC nonetheless could make an effort to arrive at more harmonized monetary policies and interest rate policies, before having these policies under one roof. The significance of prior coordination is to help reduce the possibility of having excessive interest rates differentials put pressures on exchange rates.

Independence of Gulf Central Bank: An important characteristic of the new central bank is its independence from national governments. The purpose of independence is to enable the central bank to fulfil its objectives. It is argued that removing monetary policy from the political field would improve the central bank ability to commit itself to its long-run objectives. This is true for central banks under same jurisdiction and should be more pressing for a central bank representing different sovereign countries, since it could be exposed to more divergent political pressures. There should be a reasonable degree of freedom to decide on the objectives of monetary policy, "goal independence" and the tools by which it could implement these objectives "instrument independence". The GCB should be vested with the power to extend its independence beyond the implementation phase alone.

An essential element of independence also is financial independence. The GCB should generate its own revenues and does not rely on national governments for its operations. Personal independence is another important element and therefore the executive board members should not be put under pressure or fear of being denied the continuation of their term in office. Moreover, the GCB should be independent from any obligation to finance government deficits. One must be aware however that independence does not imply

absence of accountability in the part of central bank officials. The GCB officials will still be subject to the statute of the GCB. Besides they should have limited terms in office.

4.2.9 Pooling Foreign Exchange Reserves

Before the GCB begin its operation, each member country should contribute its share of foreign exchange reserves according to the overall weight given to each member (e.g. Table 12). This will enable the GCB to defend the fixed exchange rate of the national currencies. The requirement of 100 percent currency cover in the GCC helped in preserving the fixity of their currencies exchange rates. Given that some ex ante arrangements (i.e. convergence criteria) will be made, which assure more harmonization of fiscal policies, the hope is that they will ease the task of the GCB.

Table 12

Overall weights of GCC members (%)

Country	Share of GDP	Share of Population	Degree of Openness	Share of COB	Overall weight
Bahrain	0.56	0.70	5.22	0.53	7.01
Kuwait	3.33	2.27	2.93	1.77	10.30
Oman	1.23	1.72	3.87	1.15	7.97
Qatar	2.16	1.03	3.45	0.96	7.61
SA	11.67	16.19	3.23	15.06	46.15
UAE	6.05	3.09	6.30	5.53	20.96

Source: Central Banks.

4.2.10 Seigniorage

A good currency will be demanded as a medium of exchange and a store of value. The wider the currency usage will be, the more seigniorage revenue will the issuing authority generate. Seignorage is the revenue the government collects from both currency issuance that bear no interest and required reserves that either pay below market interest rate or no interest at all (Gros, 1989). Unlike dollarization arrangement, where a foreign currency will be used and seigniorage is forgone, the issue of seigniorage distribution often arises in monetary unions. The freedom to use seigniorage as a revenue source would be eliminated under a currency union. The concept of seigniorage mostly focuses on the command over resources that the government obtained over a period of time by creating high-powered money (Fischer, 1982). In this case, seigniorage would be equivalent to the change in reserve money.

Rules of distributing seigniorage among monetary union members should not be based exclusively on the increase in monetary base. Otherwise, each member would have an incentive to increase its monetary base in order to secure as large as possible share of seigniorage revenues after becoming a member of the union. In the EU the Maastriht Treaty dealt with that issue by distributing seigniorage to national central banks according to their paid up share in the capital of the ECB, which will be determined by population and the shares in community GDP (Fratianni et al 1992).

4.2.11 Gulf Seigniorage revenue

For members of the GCC the distribution of seigniorage will be an important issue to agree on. If seigniorage distribution would consider the monetary base growth only, member countries would find it advantageous to increase growth of their monetary base to get a larger share of seigniorage. It is expected that GCC members will put a reasonable sharing rule in place to distribute seigniorage among members. The overall weight formula calculated (Table 12) as a base for dividing revenue among members one suggestion that could be considered. It might also be plausible to deter further expansion in monetary base by assigning a decreasing weight for most recent data of monetary base or relying on the average numbers of the 10 years prior to launching the single currency.

But has seigniorage been used heavily in GCC countries? Fischer (1982) differentiates between two situations, high versus low use of seigniorage,[14] and labels them active and passive seigniorage use. Seigniorage use is active in high inflation countries. In contrast, it is passive in rapidly growing countries, such as many members of the OPEC, where high-powered money is provided to meet the rapidly growing demand.

5. Transitional and operational issues

The GCC countries are committed, under the Council's Unified Economic Agreement of 1981, to adopt a single currency. There are a number of important issues need to be settled before the complete unification of the currency takes place. These issues vary in scope and nature from the establishment of the Gulf System of Central Banks to the choice of the new currency name. Some of the technical matters that might arise in the way to unification include the announcement of the conversion rates between the national currencies and the new single currency.

Reaching a prior precise agreement about weights of member economies in the union is vital for the sake of the endurance of the union. The purpose of this section is to propose a formula and have it as a guideline for sharing costs and benefits in the union. The intention is to come up with a comprehensive formula that covers as many economic aspects of members as possible and apply it whenever issues that reap benefits or inflict costs, due to participation in the union, arise. Since benefits of a monetary union membership should balance the costs of relinquishing macroeconomic independence, which will be greatest for large economies, it is likely that the formula reflects fair weight of members.

One alternative for calculating weights is to consider certain economic factors corresponding to each country. The ***first*** of these factors is the share of a country's GDP to the total GCC GDP, which reflects the magnitude of economic activity a certain member possesses relative to the total GCC countries. The ***second*** factor is the size of each country's population relative to total GCC population, which mirrors the relative consumption power of the member country and the size of circulating money. The ***third*** factor is the relative degree of openness of a member country to the rest of the world, measured by total external trade (imports plus exports) relative to that of total GCC. Statistics show that the higher the degree of openness a GCC economy will have, the more vulnerable its economy will be to fluctuations of international oil market and to possible speculative currency attacks. Henceforth, members of the GCC who hold bigger shares of the block total trade should get more say about union-wide policies. The ***fourth*** factor is the currency outside banks (COB)[15],

[14] Seigniorage use refers to [Δ in high powered money/Δ in high powered money + government revenue].

[15] We used currency outside banks (M1- demand deposits) due to the fact that monetary base statistics is not available for all countries, which is a better proxy of the size of seigniorage revenues.

which is a proxy of the size of seigniorage revenues each country forgoes after being committed to a single currency. But since the required reserve constitutes the seigniorage tax base whose revenue is positively related to currency creation, this might require members to agree *ex ante* about the required reserve ratios placed on commercial banks within their jurisdiction. Each of these four factors will be given an equal portion of 25 percent in deciding the weight of a corresponding country in the monetary union (Table 12).

5.1 Transitional stage to the single currency

On their December 2000 Summit in Bahrain, the GCC head of states authorized the use of the US dollar as a common anchor (numeraire) of the six national currencies. This is an important step toward more stable cross exchange rates, which will facilitate the move to the next step (i.e. an irrevocably fixed rate of exchange vis a vis the US dollar)[16]. After that, GCC countries need to agree about the rate at which they should irrevocably fix their bilateral exchange rate vis a vis the US dollar and declare it unanimously.

A question might arise is "how should they proceed to that step?" The answer much relies on the current system of pegged exchange rates, which brought about an inherent stability to these currencies. Members can take that step by enhancing more exchange rate coordination among themselves rather than going through drastic moves of exchange rate depreciation or appreciation, which is the least thing expected from the block for it might negate one of the purposes of the single currency (i.e. encouragement of more foreign direct investment). Therefore, all GCC members need is to ratify their official rate of their corresponding currency vis a vis the US dollar at which they irrevocably fix their cross rates. After permanently locking in their bilateral exchange rates relative to the US dollar, any exchange adjustment should be done through the union-wide central bank and therefore be subject to multilateral agreement, based on votes.

5.2 Introduction of the single currency

There are two issues that we need to think of and address about the introduction of the new currency. Theses are the conversion rate vis a vis the existing national currencies and the speed of introduction of the currency as a legal tender.

5.2.1 Conversion Rate of the new Gulf currency

Conversion rates will serve as the base for converting all money-related and cash balances as well as exchange old banknotes with the new banknote. Several methods could be suggested for converting the existing currencies into the new currency, but not all of which would be germane enough to win a unanimous approval. In the following we explore two proposals.

***Method 1*:** is to use the current common peg, the US dollar, as a valuation currency base for the new currency and set the new conversion rate equal to the prevalent bilateral exchange rates of the US dollar. The new currency could equal 1 dollar, multiple of a dollar or a fraction of it. Using the exchange rates of the US dollar relative the six currencies as of December 2007, the value of the new Gulf currency would be as follows:

1$ = 0.3670 BD = 0.2830 KD = 0.3845 OR = 3.64 QR = 3.75 SR = 3.6725 ED = New currency

[16] As the Kuwait dinar is the only currency pegged to a selected basket of currencies, this requires a further step by Kuwait to put the decision of adopting the US $ in operation. The other members have all pegged their currencies to the US dollar.

Advantages and disadvantages of that approach

The advantage of this approach is that it converts the national currencies with an already familiar exchange rate (the US dollar), albeit relative familiarity. This familiarity is limited to the exchange rate of one's own country's currency. A Saudi citizen is not expected to necessarily know the US dollar exchange rate of a Kuwaiti dinar and vice versa.

This fact might make it hard to co-circulate the six national currencies and the new one and could cause the authorities to withdraw the national currencies and introduce the new single currency pretty fast. In addition, the complexity of calculating the conversion rates by the general public, might lead to a wide array of movement toward carrying US dollar as a safe haven before the introduction of the new currency[17]. Needless to say that if such a thing happens the official foreign reserves of the six countries might face the danger of being drained away.

Moreover, there are some psychological effects involved in this method. Since none of the existing currencies is in par with the US dollar, this method might cause illusions in public minds of having gone through losses and gains of purchasing power. For currencies whose current US dollar exchange rates are multiples of local currencies (QR, SR and ED), this method would give false impression to residents that they lost some purchasing power. In contrast, currencies whose current US dollar exchange rates are fractions (BD, KD and OR) this method would make different impressions. By the same token, should the new currency set equal to multiples or fractions of a dollar conversion rates would deviate in a wider extent and be biased to either group.

***Method 2*:** This approach requires a division of the six currencies into two groups based on their current official exchange rates denominated in US dollar. Group one includes the currencies whose current exchange values are multiple of dollars (BD, KD and OR) and group two includes the currencies whose current values are fractions of the US dollar (QR, SR, ED).

Method 2 conversion rates

Currency		US $	Median	New currency*	Difference from New currency	
					Value	%
Group 1	BD	2.6596	2.6596	0.2691	–0.0031	–1.2
	KD	3.5336			0.0843	23.8
	OR	2.6008			–0.0090	–3.5
Group 2	QR	0.2747	0.2723		0.0056	2.0
	SR	0.2667			–0.0024	–0.9
	ED	0.2723			0.0032	1.2

* New currency = (one tenth of group 1 median + group 2 median)/2.

[17] A wide range of movement to the US$ might be self-fulfilling so that it counteracts the efforts to prop up confidence in the new currency.

Then we use the calculated median of each group as a base for the new currency conversion rate. The aim is to bring the value the two groups of currencies as close as possible to the new currency, by setting the new currency equal to (1/x) of group one currencies (e.g. one-tenth[18]) and at par with group two currencies. The following table shows these calculations.

As shown in the last column of the table, all the six currencies require certain official actions, revaluation or devaluation, to bring them in par with the new currency, which equals $ 0.26. With the exception of the KD, none of the currencies calls for a value change of more than 3.5 percent in absolute value. According to this method, BD, OR and the SR require revaluations by 1.2, 3.5 and 0.9 percent, respectively. On the other hand, KD, QR and the ED require devaluations of 23.8, 2.0 and 1.2 percent, respectively. Since the KD is the only currency whose difference from the new currency exceeds a margin of 7.25 percent, it could be dealt with as a special case. In this situation, we could use the cross exchange rate of the KD and the new currency relative to the US dollar. For instance, if the KD = US $3.5336 and the new currency = US $ 0.2691, the cross exchange rate of new currency/KD should be 13.13.

Broadly speaking, method 2 has the advantage of bringing easier conversion rates that facilitate the transition to the new currency. However, it entails trade off between ease of calculation and the requirement of abruptly changing the official exchange rates (revaluation or devaluation). Revaluation would increase the real value of public debts and decrease relative price of traded to non-traded goods, hence adding more stimulant for increasing imports.

Therefore, one could modify this method to avoid the revaluation measure. This could be done by choosing the exchange rate of the OR vis a vis the US dollar as a reference value, instead of taking the average of the two medians. Outcomes of the modified method would necessitate devaluating all the currencies, at different degrees, except the OR, as shown in table below.

Devaluation might disrupt the process towards attaining converging criteria, especially inflation, given the high degree of GCC dependence on imports. It is hard to get convergence of inflation rates and devaluations, simultaneously. But since none of the GCC economies has a history of high inflation except the lost 4 to 5 years (2004-2008) which could be viewed as exceptional period (see Table 7) and with the absence of flexible wages, going through devaluation is not likely to create unmanageable problems.[19] Nonetheless, it would be more suitable if exchange rates devaluations are executed at the very last step, right before the old national currencies are replaced by the single currency, when credibility of national currencies is no longer an issue (Giovannini, 1991). The following table shows results of the modified version of method 2:

[18] One-tenth is straightforward and easy to understand for the public.

[19] An argument might arise is that devaluation might have negative effects on the efforts of the GCC countries to attract FDI. The counter-argument is that all depends on how much credibility the new monetary union entails and whether the new currency is fundamentally sound.

Method 2 modified conversion rates

Currency		US $	New currency	Difference from central parity	
				Value	%
Group 1	1 BD	2.6596	0.2601	0.0059	2.2
	1 KD	3.5336		0.0933	26.4
	1 OR	2.6008		0.0000	0.0
Group 2	1 QR	0.2747		0.0146	5.3
	1 SR	0.2667		0.0066	2.5
	1 ED	0.2723		0.0122	4.5

Three points are worth mentioning regarding the search for new conversion rates methods. Firstly, it is important to introduce as much conversion rates simplicity as possible, especially if both old currencies and the new single currency would co-circulate for a period of time. Simplicity is a very important element for both consumers, who view the transition to a single currency as a radical move that might shake confidence in the national currencies and businesses as well, that need to tag their products in different currencies. For consumers, lack of simplicity might cause them to stick to their own national currencies as a medium of exchange out of fear of fraud. For the same reason, it might cause them err to the US dollar as a store of value. Similarly, businesses, especially small ones who own no electronic methods of accounting (e.g. manual cashier) might abstain from pricing at different currencies and accept only their own old national currencies.

Secondly, prior unilateral but coordinated moves similar to the adoption of the US dollar as a common anchor should facilitate agreement about the irreversible grid of fixed exchange rates that might, depending on method chosen, involve some drastic measures of devaluations or revaluations, by some or all countries. Thirdly, choice of the right conversion rate is important in determining the value of government debts denominated in the new single currency.

5.2.2 Speed of introduction

1. Fast track**:** Introduction of the single currency could be fast where the GCC countries collectively announce that in a particular day the six national currencies will be abolished and be replaced by the new Gulf currency, whose value is already agreed. Under this approach the coexistence of the old currencies and the new one should not last long, may be as long as the process of withdrawing old currencies and injecting the new currency lasts. As a result the Gulf citizens will have to convert their holdings of the national currencies into the new currency at the pre-announced and irrevocably fixed bilateral exchange rates with the US dollar as fast as they can.

The advantage of the fast track is that it might contribute to credibility of the exchange rate by demonstrating the authorities' full commitment to the single currency. It will also minimize the interlude of instability that might be caused along the process of integration of all aspects of the economy such as full capital mobility and multiple central banks, union-wide and domestic (Frenkel and Goldstein, 1991). Nevertheless, the fast track approach is more likely to upset the payment system. Besides fast introduction of the new currency might expose the general public to a wide range of swindles from some shopkeepers or moneychangers.

2. Gradual introduction**:** alternatively, the GCC countries could opt for a gradual introduction of the currency so that both the old and the new currencies will coexist for a

longer period of time. Under this approach, member countries issue new national currencies with new conversion rates relative to their common anchor currency (US dollar) so that all the six new national currencies are at par (i.e. one Bahrain dinar = one Kuwait dinar = one Omani riyal = one Qatar riyal = one Saudi riyal = one UAE dirham). Then all the six countries declare unanimously that the new national currencies are legal tender in the six countries with an equal value, common currencies. The introduction of the new currencies will not abolish the old ones, but they will both be used for an agreed upon period of time, obviously not at equivalent values with the old corresponding currencies.

The advantage of this method is that it puts the new national currencies and the new single currency at par, which makes transition later on to the single currency easier. It also carries less interruption to the payment system and allows for gradual siphoning of the psychological fear of the new currency, since it allows for an adjustment period[20]. However, it might cause confusion to the general public since both versions of currencies, 12 of them, will concurrently circulate. Similarly, it will inflict on accounting costs for businesses that will be required to price their products in several currencies. Moreover, it carries the cost of introducing new versions of ATMs that can disperse both old and new currencies, which will be readapted or changed after issuing the single currency. Furthermore, with this approach the switchover to the ultimate single currency might be deferred indefinitely.

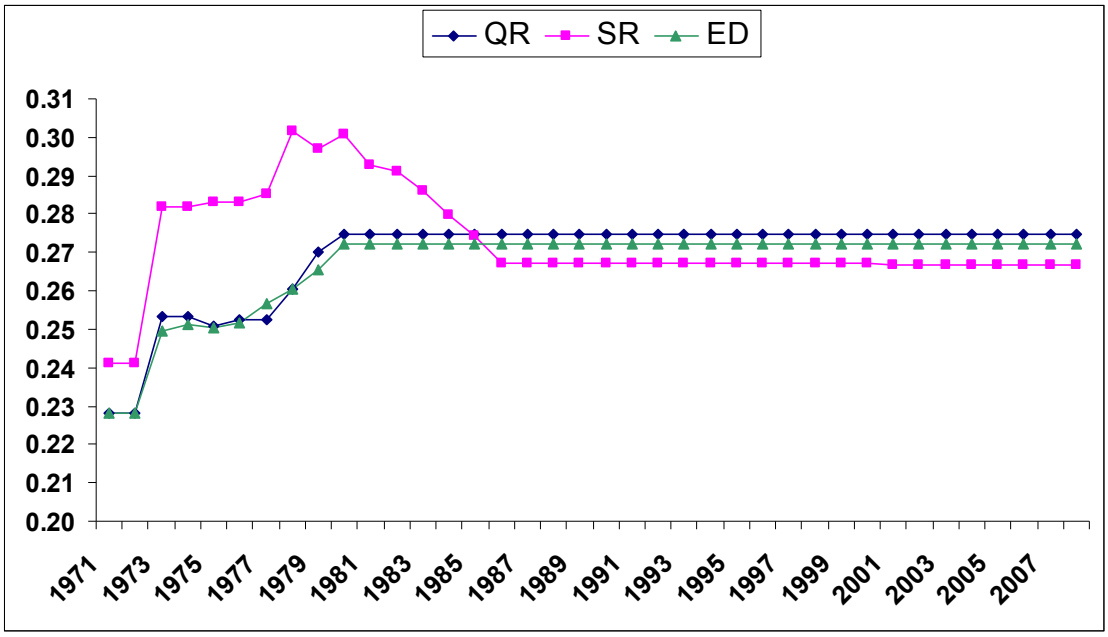
6. Conclusion

To conclude, it is possible that a number of economic arguments might not explicitly support the notion of the GMU, an example would be the modest level of intra-trade. Yet, these factors are expected to support the project in the long term. In this paper, we argue in favor of the union since we believe that mutual benefits are of long term nature and would be reaped as time goes. Though unifying the monetary policy is a necessary condition for the union to take place, it will not be sufficient to bring a successful union. Close coordination of all policies especially fiscal policy is of paramount importance for the union to flourish and ultimately bring about a strong single currency.

[20] Allen 1976 argues that the premature substitution of a union currency for the national currencies could produce widespread confusion and suspicion, causing the entire financial system of the union to suffer a serious loss of efficiency (p.13).

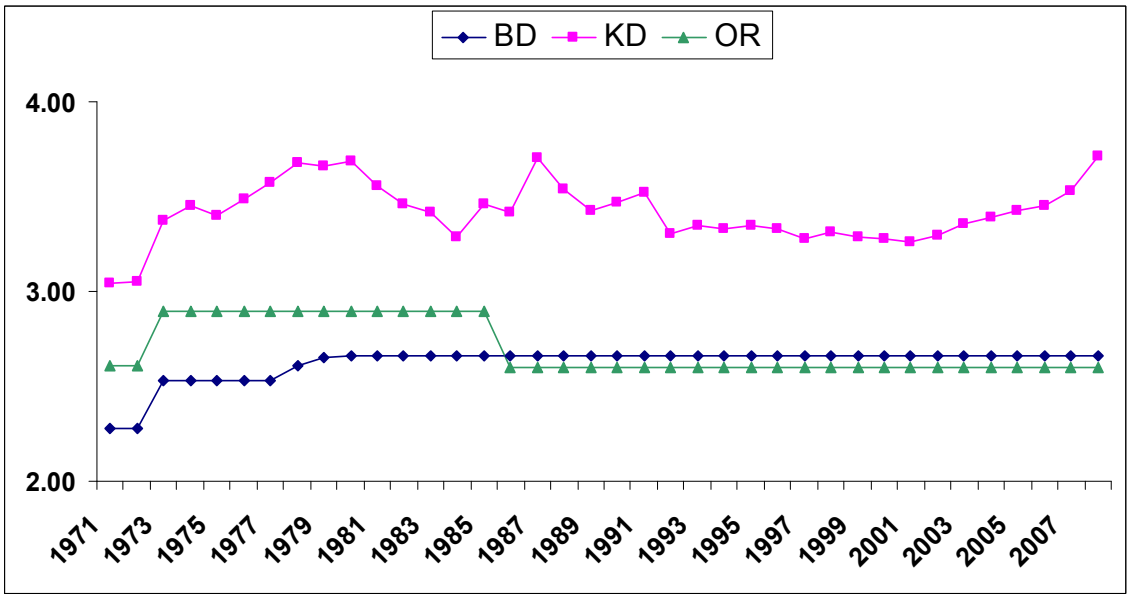
Graph 3:

US$ per a national currency



Graph 4

US$ per a national currency



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