

INTERNATIONAL MONETARY FUND

**The GCC Monetary Union—Choice of Exchange Rate Regime**

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## EXECUTIVE SUMMARY

One of the critical decisions in the formation of a monetary union is the choice of an appropriate exchange rate regime for the single currency. The member countries of the Gulf Cooperation Council (GCC) agreed in 2003 to peg their currencies to the U.S. dollar and to maintain the parity until the establishment of the GCC Monetary Union in 2010. A decision on the exchange rate regime for the single GCC currency would be made then. Although the choice of the U.S. dollar peg as the external anchor for monetary policy served the countries of the GCC well for many years in maintaining macroeconomic stability, rising inflationary pressures in the last two to three years, the continuing depreciation of the U.S. dollar against major currencies, and differing economic cycles and policy needs to that of the anchor country (the United States) have raised questions about whether the peg to the dollar remains appropriate, and therefore would be appropriate for the GCC Monetary Union.

The standard criterion for determining the optimal exchange rate regime is macroeconomic and financial stability in the face of real or nominal shocks. Ideally, the exchange rate regime chosen should yield external and internal stability, preserve monetary credibility and international competitiveness, and reduce balance sheet risks and transaction costs. In applying these criteria to the GCC, however, it is necessary to take account of: the dominant influence of the oil sector in GDP, exports, and government revenue; the labor market structure; and the ability of these countries to pursue domestic goals of inflation and growth if they had monetary policy independence.

Although good arguments can be made for adopting a more flexible exchange rate policy after the monetary union, particularly in order to be able to use monetary policy as a stabilization tool, there are equally valid arguments in favor of maintaining the current currency peg to the U.S. dollar. Specifically, the peg to the U.S. dollar allows the region to reduce volatility in the exchange rate and in capital flows that could result from nominal shocks (such as continuing geopolitical risks and oil price volatility unrelated to fundamentals), provides a credible and easily understood anchor for monetary policy, and simplifies trade and financial transactions, accounting and business planning. A more flexible exchange rate regime would allow the countries to adjust to real shocks better than under a fixed exchange rate regime, but the structural and institutional characteristics of the GCC countries, the challenge of choosing an alternative nominal anchor, and the need to implement a number of financial reforms and decision-making processes to operationalize a floating regime suggest that moving to a float is more of a longer-term option. The intermediate regime of a basket peg can be a useful way to introduce some flexibility in the exchange rate, and to reduce the adverse effects of swings among values of major currencies, but at the same time would not yield monetary independence. Furthermore, it would also be less easily understood and hence potentially less able to anchor expectations. Pegging to the export price of oil (PEP) delivers automatic accommodation to terms-of-trade shocks, but that could transmit significant volatility to other sectors of the economy.

On balance, of the four main options—pegging to the U.S. dollar, managed floating, pegging to a basket, or pegging to the export price of oil—the dollar peg seems at this stage to be the most appropriate, leading up to and likely also in the short-run after the establishment of the monetary union. If the current inflationary pressures are temporary in nature the benefits of the dollar peg outweigh the costs of changing to another exchange rate regime. However, the authorities would need to reconsider their options if inflation persists and there is a further sharp depreciation of the dollar against other major currencies. In such circumstances, as floating is not at this stage a viable option, pegging to a common basket of currencies may turn out to be the more appropriate exchange rate regime. Also, the commitment to pegging at given parities in 2003 was based on the GCC monetary union being established in 2010, with the exchange rate regime to be decided at that point. If the monetary union is postponed, that commitment may no longer be binding, and other exchange rate regime options could be considered earlier by the individual GCC member countries.

## I. INTRODUCTION

1. **The recent rise in world oil prices and the resulting large current account surpluses generated by the GCC member countries brought to the forefront the issue of the appropriate exchange rate regime.**<sup>1</sup> The jump in inflation in the GCC countries in the last two years has also raised questions about the U.S. dollar peg regime adopted by these countries since 2003. For the present, the GCC members remain committed to the peg to the U.S. dollar until the formation of the GCC Monetary Union, slated for 2010, except for Kuwait which went back to pegging to a currency basket in May 2007. However, the authorities of these countries have stated that after the monetary union is established, all options are open in choosing the exchange rate regime for the single GCC currency.

2. **This paper outlines the main alternative exchange rate regimes that could be considered for the common GCC currency and discusses their advantages and disadvantages.** As such, it does not assess the appropriateness of current nominal and real exchange rate regimes for the individual GCC countries, an exercise that is conducted regularly as part of the Article IV consultation process. To begin, the paper presents a brief background on the GCC. Section III discusses general considerations in determining exchange rate regimes. Section IV discusses the pros and cons of alternative exchange rate regimes, specifically pegging to the U.S. dollar, managed floating, pegging to a currency basket, and pegging to the export price of oil. Section V discusses transition issues, and Section VI presents some concluding observations.

## II. BACKGROUND

3. **The GCC was established on May 25, 1981 with the aim of forging closer ties and stronger links among the six member states.** A few months after the establishment of the GCC, member states signed (in November 1981) an agreement that established the GCC Free Trade Area and outlined the steps for closer economic cooperation. On December 31, 2001, member states agreed to a revised economic agreement to advance economic integration, and to put in place a Common Market and Economic and Monetary Union by 2010.<sup>2</sup>

4. **The GCC is a relatively homogenous group.** GCC countries share a common language and cultural and political history, and are mainly exporters of oil, gas, and refined products. They jointly account for over 40 percent of global oil reserves and 23 percent of natural gas reserves. Oil and gas production contributes about one half of total GDP and three-fourths of total exports and annual government revenues. With full currency

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<sup>1</sup> The 6-member GCC includes: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (U.A.E.).

<sup>2</sup> A useful description of the GCC is contained in a recent study by the European Central Bank; see Sturm et. al. (2008).

convertibility and pegged exchange rates, fiscal policy has been the main policy instrument in steering the economy.

**GCC Countries: Selected Economic Indicators for Selected Period Averages 1/**

	1981–90	1991–2000	2001–07
Nominal GDP (in billions of U.S. dollars)	184.3	251.3	530.0
Real GDP growth	0.6	3.8	5.4
Non-oil Real GDP growth	n.a.	4.5	6.7
GDP per capita (in U.S. dollar)	10,206	9,313	15,582
Oil Production (millions of barrels per day)	11.0	13.5	14.9
Oil exports (millions of barrels per day)	8.2	10.7	11.7
CPI (period average; percent change)	1.2	1.5	2.4
Fiscal balance (in percent of GDP)	-6.3	-5.2	10.6
Non-oil Fiscal Balance (in percent of Non-oil GDP)	n.a.	-50.1	-43.7
Gross Public Debt (in percent of GDP)	13.2	57.0	41.8
Exports of goods (in billions of U.S. dollars)	80.4	111.9	320.1
Of which: hydrocarbon	69.6	86.0	243.7
Imports of goods (in billions of U.S. dollars)	44.9	69.0	142.9
Imports growth rate (in percent)	0.7	5.7	16.6
Current account balance (in percent of GDP)	5.1	-3.0	18.9
Current account balance (in billions of U.S. dollars)	12.0	-3.8	114.0
Gross official reserves (in billions of U.S. dollars)	102.2	67.5	175.8
Total External Debt (in percent of GDP)	11.8	21.5	22.2
Broad Money (percent change)	9.2	6.0	15.7
Credit to the Private Sector (percent change)	6.9	11.3	20.9
Population (in millions)	18.9	26.8	33.5

Sources: Country authorities; and Fund staff estimates.

1/ Weighted averages, except for population.

**GCC Countries: Selected Economic Indicators, Selected Years**

	1998	2001	2004	2007
Per capita GDP	(In U.S. dollars)			
Bahrain	9,660	11,720	15,601	22,771
Kuwait	11,425	15,114	21,567	33,687
Oman	6,467	8,221	9,994	15,714
Qatar	18,306	27,030	41,949	78,754
Saudi Arabia	7,484	8,736	11,127	15,724
U.A.E.	17,119	21,685	27,595	42,501
GCC Average	8,967	11,000	14,594	22,426
External current account	(In percent of GDP)			
Bahrain	-12.6	2.8	4.2	16.7
Kuwait	8.5	23.9	30.6	43.1
Oman	-22.3	9.8	2.4	8.0
Qatar	-18.7	27.3	22.4	29.2
Saudi Arabia	-9.0	5.1	20.7	25.1
U.A.E.	1.8	9.5	10.0	20.5
GCC Average	-6.3	9.4	18.4	25.8
Hydrocarbons exports/Total exports	(In percent)			
Bahrain	44.2	56.4	54.2	63.4
Kuwait	74.4	83.6	82.1	81.9
Oman	63.1	76.0	77.2	73.0
Qatar	80.0	81.2	78.7	83.4
Saudi Arabia	74.6	81.7	83.7	85.0
U.A.E.	35.4	46.2	40.8	44.7
GCC Average	59.9	70.1	69.0	75.7
Hydrocarbons revenue/Total government revenue	(In percent)			
Bahrain	50.2	71.3	73.8	80.0
Kuwait	58.7	68.7	77.1	76.7
Oman	70.4	83.2	84.0	79.8
Qatar	49.9	68.4	66.0	60.7
Saudi Arabia	56.6	80.6	83.3	87.5
U.A.E.	49.0	71.7	73.8	74.9
GCC Average	54.1	77.3	79.5	79.0

Sources: Country authorities; and Fund staff estimates.

5. **There has been steady improvement in the macroeconomic performance of the GCC countries in recent years.** Average real GDP growth rates have trended upwards, reflecting increases in both oil production and non-oil economic activity. The total GDP of the six GCC member countries in 2007 was \$815 billion, with an average per capita income of about \$22,000. Inflation has averaged 1.5 percent over the last three decades.<sup>3</sup> Fiscal and external current account balances have largely followed movements in the price of oil. With oil prices rising sharply since 2003, the GCC countries have been recording large fiscal and current account surpluses, amounting in 2007 to 19 percent and 26 percent of GDP, respectively. Credit to the private sector expanded rapidly, reflecting increased private sector participation in economic activity.

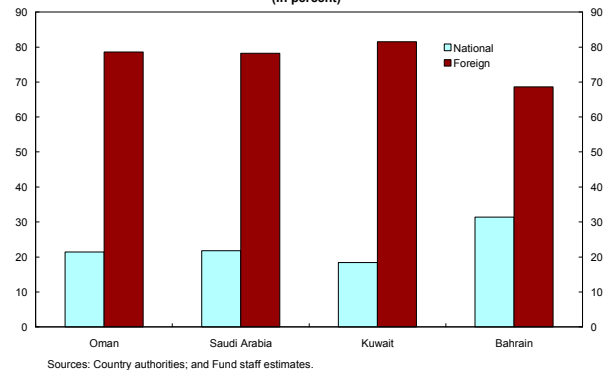
6. **The GCC economies have traditionally been open to international trade in goods and imported labor.** Asia and the European Union have accounted for about two-thirds of GCC exports and imports, with Asia receiving over 50 percent of exports in recent years. Intra-GCC trade has been low, reflecting the dominant role of oil in these economies, but with economic diversification increasing, trade shares have been rising. Non-nationals account for about two-thirds of employment and comprise about one-third of the total GCC population (Figure 1). This policy of importing labor has allowed the GCC countries to have very flexible labor markets, in which even nominal wages can adjust.

**GCC: Direction of Trade, Selected Years**  
(Share in percent)

	1981	2001	2006
<b>Exports to World</b>	100.0	100.0	100.0
<i>Of which:</i>			
Exports to United States	10.5	11.2	8.8
Exports to European Union	35.4	10.2	10.1
Exports to Asia (including Japan)	37.3	56.4	57.8
Exports to GCC	1.3	1.9	4.8
<b>Imports from World</b>	100.0	100.0	100.0
<i>Of which:</i>			
Imports from United States	17.8	12.5	11.4
Imports from European Union	35.2	32.5	31.9
Imports from Asia (including Japan)	29.1	29.9	34.8
Imports from GCC	7.8	8.9	7.9

Source: Direction of Trade statistics; and Fund staff estimates.

**Figure 1. Selected Shares of Employment by National Origin, 2005**  
(In percent)



Sources: Country authorities; and Fund staff estimates.

7. **From the early 1980s, the establishment of a monetary union has been an important objective of the regional economic integration process among GCC members.** Presently, there are five monetary unions in the world. Three of these unions are in Africa, one in the Caribbean, and one in Europe. In all of them, a new common currency was created, except in the Southern African Common Monetary Area (CMA), in which the South African rand is the common currency in circulation. The GCC countries are probably

<sup>3</sup> Based on a weighted average using nominal GDP weights.

the most homogeneous among these unions, and meet generally-accepted criteria for a single currency among its members, namely proximity, size, fluctuations of output, trade structure, and inflation performance.<sup>4</sup>

8. **Much progress has been made toward achieving the goal of a full-fledged GCC Monetary Union.** GCC countries have achieved virtually unrestricted intra-regional mobility of goods, national labor and capital, and prudential regulations and supervision of the banking sector are being gradually harmonized. All members (except Kuwait since May 2007) have pegged their currencies to the U.S. dollar since 2003, and a common external tariff was introduced in 2003. Although the GCC currencies were de facto pegged to the U.S. dollar for decades (Figure 2),<sup>5</sup> a single GCC currency is expected to encourage trade and financial integration, facilitate foreign direct investment, and foster the development of the GCC into an “optimum currency area” ex post even if the GCC countries were not to constitute one ex ante (Rose (2000) and Frankel and Rose (1998, 2000) and Buitier (2008)).

9. **On January 1, 2008, the GCC launched the common market.** The common market provides GCC citizens equal treatment in all economic activities, especially freedom of movement and residence; work in private and government jobs; pension and social security; engagement in all professions and crafts as well as all economic, investment, and service activities; real estate ownership; capital movements; tax treatment; stock ownership and formation of corporations; and education, health, and social services. The common market is expected to result in

increased production efficiencies and an improved negotiating position in international economic fora. Full implementation of the common market will require the adoption of national laws and regulations, a process that is underway at the GCC

Secretariat based in Riyadh,

Saudi Arabia. So far, the GCC Secretariat has developed dispute resolution mechanisms, including a common market committee, a ministerial level committee, and an arbitration center in Bahrain, and plans are underway to create a supranational court.

GCC Countries: Compliance with the Convergence Criteria—End-2006 1/					
Convergence criteria	Budget deficit lower than 3 percent of the GDP, or 5 percent when oil prices are weak	Public debt-to-GDP ratio lower than 60 percent	Foreign exchange reserves in excess of four months' imports	Interest rates not higher than two percentage points above the average of the lowest three countries' rate	Inflation not higher than 2 percent above the average rate of the six states 2/
Bahrain	✓	✓	-	✓	✓
Kuwait	✓	✓	✓	✓	✓
Oman	✓	✓	✓	✓	✓
Qatar	✓	✓	✓	✓	-
Saudi Arabia	✓	✓	✓	✓	✓
U.A.E.	✓	✓	✓	✓	-

Source: Country authorities; and Fund staff estimates.

1/ "✓" - criterion has been met; "-" - criterion has not been met.

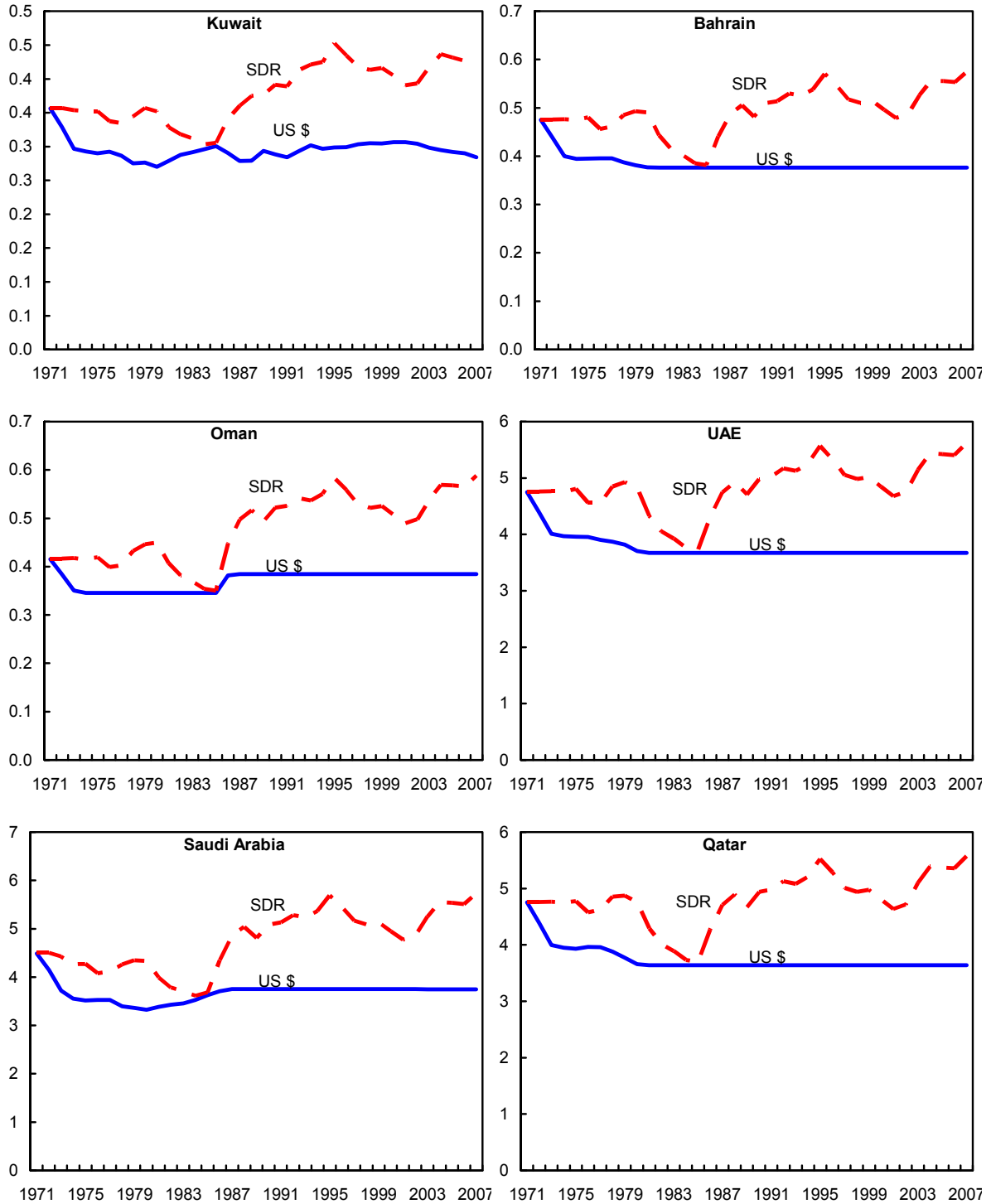
2/ A weighted average based on U.S. dollar nominal GDP of the six states.

<sup>4</sup> See, for example, Berengaut and Elborgh-Woytek (2006). Buitier (2008) has an interesting discussion of the political requirements for the monetary union, which he believes are missing at present.

<sup>5</sup> During 1980–2002 Bahrain, Qatar, Saudi Arabia, and the U.A.E. were de facto pegged to the U.S. dollar, but de jure pegged with horizontal bands to the SDR. Oman was pegged to the U.S. dollar and Kuwait to an undisclosed basket.



**Figure 2. GCC: National Currencies per US Dollar and SDR  
(Period average; 1970–2007)**

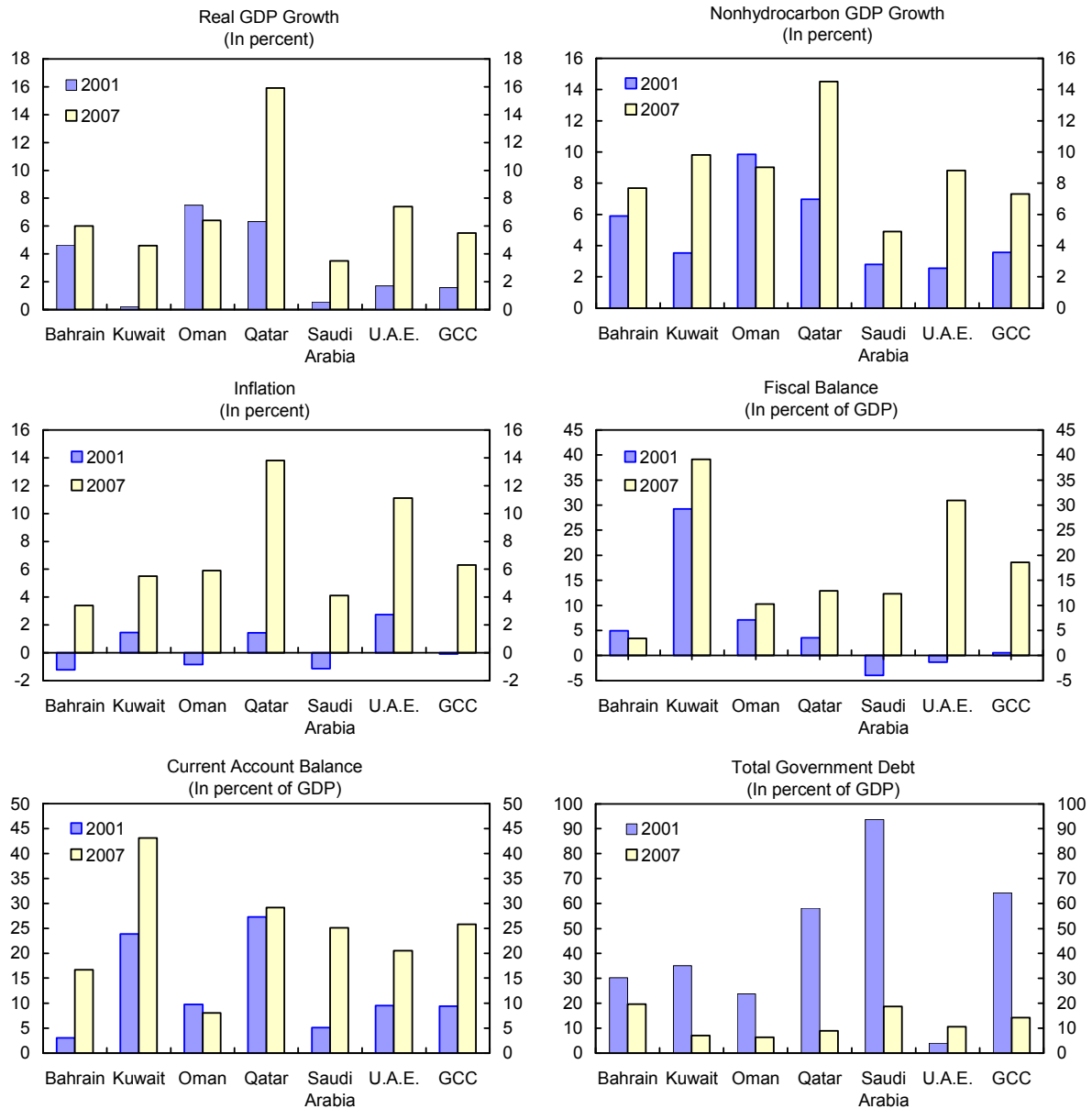


Source: International Financial Statistics (IFS)

10. **The European Central Bank (ECB) has provided the GCC with a draft Monetary Union Agreement (MUA) and statutes on the Gulf Monetary Council (GMC) and the Gulf Central Bank (GCB).** It is expected that a monetary council will be established in 2009 to serve as a transition body in preparation for the single currency and the GCC Central Bank. A set of five convergence criteria (on inflation, interest rates, reserves, fiscal balance, and public debt), similar to those in the run-up to the European Monetary Union (EMU), has been agreed in principle. Although they are not preconditions for entry, at end-2007 the GCC countries had met almost all of the convergence criteria and exhibited a high degree of convergence on many macroeconomic indicators (Figure 3). With inflation across the GCC (except in Bahrain) rising to similar rates, inflation convergence (which has been lagging) is being achieved, although at a level that is obviously too high from the standpoint of macroeconomic stability.

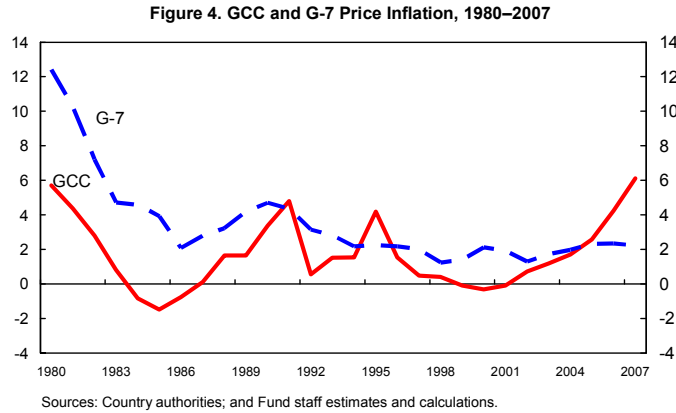
11. **The official target date for the launch of the monetary union remains 2010,** despite Oman's decision in February 2008 that it would not join the monetary union. In May 2007, Kuwait moved from the dollar peg to an undisclosed currency basket, but reaffirmed its commitment to join the union. There have also been delays in establishing harmonized systems and in institution-building. In terms of preparedness for the common currency and creation of a common independent single central bank, the monetary policy frameworks, payment and settlement systems, regulatory and supervisory structures, macroeconomic statistics, and other specific central bank functions have yet to be fully harmonized. The management of reserves and non-reserve assets has also not yet been agreed. In addition, on the fiscal side, setting up a common accounting framework and adequate budgetary procedures are a high priority in the period leading up to the introduction of a common currency. As a result, the 2010 deadline for the single GCC currency appears increasingly unachievable.

12. **Until recently, the relatively low inflation rates in the GCC region (Figure 4) have been sustained by the imported monetary discipline embodied in the pegged exchange rate regime,** and underpinned by the open trade regime, flexibility of the labor market, prudent fiscal policy, and benign global inflationary conditions. Openness has ensured the availability of goods and services in the domestic markets at international competitive prices. The flexibility of the labor market, owing mainly to the inflow of foreign workers, has limited the impact of domestic demand on prices in the nontradable sector, although the inflow of foreign labor, particularly skilled professionals, has recently contributed to property price increases. In addition, the investing of oil surpluses outside the domestic financial system (accumulation of foreign assets) and efforts to control the non-oil

**Figure 3. Convergence of Macroeconomic Indicators, 2001–07**

Sources: Country authorities; and Fund staff estimates.

fiscal deficit have helped contain monetary expansion. However, the rising inflationary pressures in the last couple of years, the depreciation of the U.S. dollar against other major currencies, and a monetary policy tied to that of the United States, where the Federal Reserve's recent interest rate policy has highlighted the divergence in business cycles between the GCC and the United States, have raised questions about whether the peg to the dollar remains appropriate.



### III. GENERAL CONSIDERATIONS IN DETERMINING THE EXCHANGE RATE REGIME

13. **The most common criteria suggested by the theoretical literature for determining the optimal exchange rate regime is macroeconomic and financial stability in the face of real or nominal shocks.** The conventional view on the choice of exchange rate regime has been that exchange rate flexibility is useful for macroeconomic and financial stability in the face of real domestic or external shocks (such as terms of trade fluctuations) or foreign nominal shocks (such as an increase in trading partner inflation). Fixed exchange rates are more effective in achieving macroeconomic and financial stability in reaction to domestic nominal shocks (such as shifts in money demand). Ideally, the exchange rate regime chosen should yield external stability, internal stability (low inflation), balance sheet stability, international competitiveness, credibility of monetary policy, and low transaction costs.

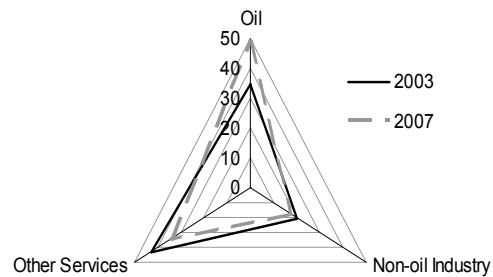
14. **External stability** is defined as a balance of payments position that is not likely to give rise to disruptive adjustments in exchange rates. A balance of payments position consistent with external stability is one in which both the underlying current account is broadly in line with its equilibrium, and the capital and financial account does not create risks of abrupt shifts in capital flows.<sup>6</sup> **Balance sheet stability** deals with the impact of exchange rate volatility on the net open position of the financial and public sectors. **International competitiveness** of the non-oil tradable goods sector is related to how well the real exchange rate supports external trade, and changes (actual and expected) in the nominal exchange rate can be an important indicator of the **credibility** of the domestic monetary policy stance. Similarly, exchange rate volatility can raise **transaction costs** in international trade and finance by increasing uncertainty and information needs. In applying these criteria, trade offs are usually necessary and political-economy considerations in the choice of regime may become relevant.

<sup>6</sup> This concept is comprehensively discussed in IMF (2007).

15. **The main argument for alternative exchange rate regimes to the dollar peg for the GCC countries is that these countries could pursue better an internal goal of low inflation if they had monetary policy independence.** The merit of this argument, however, depends on the effectiveness of the channels of the monetary transmission mechanism. For example, the independence argument has less force in GCC countries where, like other developing countries, the lack of sensitivity to changes in policy interest rates weakens the interest rate transmission mechanism channel and the efficiency of an independent monetary policy. Also, the impact of the exchange rate channel on inflation is more limited in an environment where the scope for expenditure switching between traded and nontraded goods is very limited and where administrative price controls exist, as in many of the GCC countries.

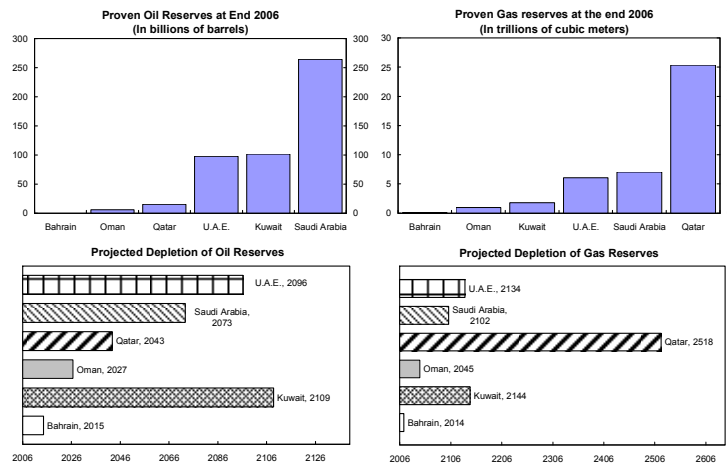
16. **Exchange rate arrangements other than the dollar peg could be considered in light of emerging changes in trade and investment patterns.** However, the insulating properties of exchange rate regimes are strongly affected by the structural characteristics of the GCC economies—such as the dominating influence of the oil sector in GDP (Figure 5), exports, and government revenue—as well as the emerging economic challenges for these countries in the near future. Given different levels of hydrocarbon endowments, countries such as Bahrain and Oman are accelerating the development of their non-oil sectors. Although the diversification process involves a mix of hydrocarbon-based industries, such as petrochemicals and energy intensive aluminum smelting, the GCC countries are developing services sectors like financial services, tourism, and education. However, in all GCC countries except Oman and Bahrain, hydrocarbons will continue to play a major role for a very long time (Figure 6).

Figure 5. GCC: Distribution of GDP



Sources: Country authorities; and Fund staff estimates.

Figure 6. GCC: Proven Reserves and Projected Depletion Dates 1/



Sources: British Petroleum; and Fund staff estimates.

1/ Based on British Petroleum Statistical Review 2007.

17. **As countries diversify in the future, greater exchange rate flexibility may be warranted.** Countries with expanded manufacturing and service sectors will also have to be internationally competitive in the non-oil tradables sector, highlighting the importance of price flexibility in their factor and product markets. In that regard, efforts to nationalize the GCC countries' labor force, by increasing the number of nationals in the private non-oil sector and raising the costs of employing expatriate workers, could reduce the flexibility of the GCC countries' labor markets in the future and constrain their ability to adjust to terms-of-trade shocks.

18. **External financial assets, which have been mainly in U.S. dollars, may also become progressively more diversified,**<sup>7</sup> as a consequence of globalization, growth prospects in emerging economies, and the rise of the Euro as a reserve currency. With increased capital mobility, trade openness, and foreign direct investment, the attractiveness of maintaining the peg to the U.S. dollar could decrease, especially if increased openness leads to greater volatility. In that regard, a more flexible exchange rate regime would have the advantage that it could provide another tool for adjusting to shocks and managing oil-price related volatility.

19. **GCC member countries officially pegged their national currencies to the U.S. dollar as of January 1, 2003, as an explicit step toward monetary integration.** Although at that time the countries (except Kuwait) were already pegged to the U.S. dollar, the decision was based on the expectation that the dollar peg would maintain stability and strengthen confidence in the economies, and therefore the countries would go into the monetary union at those parities. As such, GCC countries have pursued economic policies consistent with exchange rate pegs. For instance, they have implemented appropriate fiscal policies and have flexible labor and products markets.<sup>8</sup> Also, GCC members have accumulated significant foreign exchange reserves, underpinning the credibility of the peg and discouraging speculation against their currencies.

20. **GCC governments have stated that they remain open to the choice of exchange rate arrangement under the planned GCC currency union.** Ultimately, the choice of a specific exchange rate arrangement will depend on the preferences of the GCC member countries, and will presumably be based on both economic and political considerations. The next section, examines the main costs and benefits of the following exchange rate regimes: (a) single currency peg; (b) managed floating; (c) pegging to a basket of currencies; and (d) pegging to the export price of oil.

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<sup>7</sup> This could lessen the risk of balance sheet effects from exchange rate changes.

<sup>8</sup> Under the peg regime, fiscal policy is the main instrument used to promote domestic and external stability.

#### IV. ALTERNATIVE EXCHANGE RATE REGIMES FOR THE GCC MONETARY UNION

##### A. Single Currency Peg

21. **A good case can be made for the monetary union to continue pegging to the dollar.** Macroeconomic conditions in the GCC countries have been stable for the last two decades, even during periods of dollar fluctuations, and over the long run cyclical synchronicity between the GCC and the United States has been increasing (Box 1), despite the recent divergence. The peg to the U.S. dollar has helped the region avoid nominal shocks from geopolitical risks feeding into the economy. These risks are likely to continue, placing a premium on a credible U.S. dollar peg. Also, from a historical perspective, the recent fluctuations in the U.S. dollar are not fundamentally different from previous fluctuations.

22. **The dollar peg provides a credible and easily understood anchor for monetary policy** (see Abed and others, 2003). The dollar peg has clearly anchored inflationary expectations at low levels and provided certainty about future exchange rates. For example, the recent uptick in inflation notwithstanding, forward markets continue to reflect confidence in the dollar peg. The peg is easy to administer and does not require the institutions necessary for implementing an independent monetary policy. Such institutions would need to be built, become effective, and establish credibility. Since the monetary transmission mechanism is weak, given the absence of domestic capital markets, shallow size of credit markets, and the limited role of interest rates, a peg rather than a float is a realistic option for the first years of a GCC monetary union.

23. **The exchange rate peg simplifies trade and financial transactions, accounting and business planning, as well as monetary coordination among the member countries.** Exchange rate risk can be easily hedged, even in the absence of a well-developed domestic private market in forward exchange, as it is possible to work through U.S. dollar markets. With cross-rates constant, intra-GCC transactions benefit<sup>9</sup> as traders and investors do not have to take on any exchange rate risk, thereby encouraging further integration of the members. Absent developed financial markets, and particularly forward markets in which to hedge, the central banks would probably have to take on the task of providing forward cover.

24. **Labor market flexibility can support international competitiveness under a fixed exchange rate regime.** At present, GCC countries face a relatively elastic supply of labor (mostly unskilled) coming from low-income countries in the Middle East and South Asia. GCC countries have been also applying the policy of nationalization of the labor force in a very flexible manner, so as to avoid labor shortages and minimize output disruptions.

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<sup>9</sup> Intra-GCC trade would benefit from any regime that fixes cross-rates, including a common basket peg or a narrow currency trading band.

25. **Pegged exchange rate regimes are preferred by major oil exporters.** Of the 26 countries whose oil exports account for over 50 percent of total exports, 18 (including the GCC countries and members of the Central African Economic and Monetary Community (CEMAC) have conventional fixed pegs. Other countries with a peg include Brunei (a currency board) and Ecuador (a dollarized economy). Algeria, Kazakhstan, and Russia have managed floats, but the volatility of their exchange rates have been contained within a tight band. In contrast, Mexico and Norway, where oil exports are less than 50 percent of total exports and the non-oil sectors are more diversified, have relatively free-floating currencies. This points to the commonality of features of their economies. In particular, with foreign exchange receipts provided predominantly from the dominant export commodity, and subject to significant price volatility, it is relatively more difficult to operate a free foreign exchange market, particularly if the institutions to support it are not well developed.



## Box 1. The Synchronization of Business Cycles and Output Volatility

**Cyclical synchronicity between GCC and U.S. business cycles has been positive and has strengthened over time, notwithstanding the most recent divergence.**

Cyclical synchronicity could play an important role in assessing the appropriateness of the peg (Husain 2004). Strong positively correlated business cycle dynamics of output and consumption minimizes the cost associated with a loss of flexibility, arising from the inability to use monetary policy to smooth business cycles, under a pegged regime.

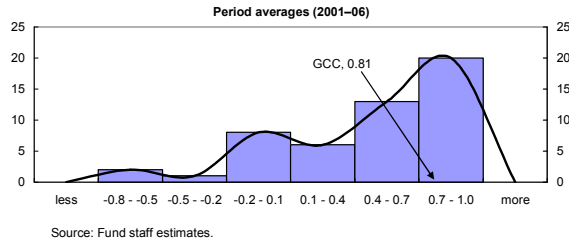
**The data through 2006 shows that the peg has not been costly to the GCC.** One way to assess the

degree of cyclical synchronicity is to measure the correlation between GCC GDP growth and the U.S. growth. For the period of 1980–2006, correlation between the growth rates in GCC and U.S. was 0.16; during 2000–06, the correlation was 0.81, one of the highest among a group of 50 countries that included developed and emerging market economies, as well as mature stabilizers.

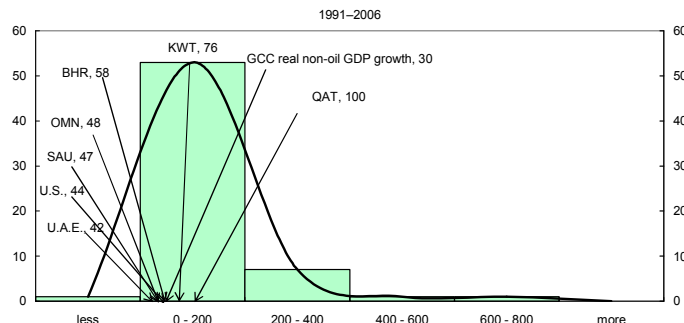
**Two key factors could explain this strengthening of cyclical synchronicity.** Globalization has increased significantly the synchronization of many countries' business cycles with that of the U.S. economy, given its dominant size. While the correlation between GDP growth and U.S. GDP growth for the highest-ranked 20 countries averaged 51 percent during 1980–99, it increased to 87 percent during 2000–06. The second factor is the limited global oil spare production capacity, which has meant pro-cyclicality of GCC oil production and international oil prices with global growth. Both trends are likely to continue in the medium-term, given the current tight oil supply conditions and the fact that an important part of future additions to production capacity would come from the GCC region.<sup>1</sup>

**Output volatility has been low.** While pegged regimes limit the use of monetary policy to smooth the business cycle, this did not translate into higher output volatility in the case of the GCC. In general, output volatility, measured by the coefficient of variation of real non-oil GDP growth, was low in the GCC region. With the exception of Kuwait, and Qatar,<sup>2</sup> output volatility was comparable to that in the U.S. during 1991–2006. In addition to cyclical synchronicity, the authorities' policy of saving oil revenues during positive terms-of-trade shocks and using these savings to smooth domestic demand, during negative terms-of-trade shocks, helped stabilize domestic demand and hence real non-oil GDP growth. The stabilizing role of fiscal policy reflects the direct impact of government consumption on domestic demand, its indirect impact through creating business opportunities for the private sector to service public sector consumption and investment demand, and its effect on private sector income and consumption through salaries, transfers, and subsidies.

Selected Countries: Correlation Between the U.S. GDP Growth and Selected Group of Countries



Selected Countries: Coefficient of Variation for GDP Growth and GCC Real Non-oil GDP Growth (In percent)



<sup>1</sup> The common stance of monetary policy under the dollar peg may also have strengthened, in part, cyclical synchronicity between the GCC and the United States.

<sup>2</sup> The relatively high volatility in Kuwait was due to the Iraqi invasion in 1990 and the war in 1991 and their impact on the oil industry and investors and consumers' confidence. The recent large projects to develop the LNG industry and infrastructure have contributed to the relatively high volatility in Qatar.

26. **The familiarity of GCC authorities and private economic agents with the U.S. dollar peg**, as well as the similar preferences the GCC countries have shown for a fixed exchange rate, speak in favor of maintaining the current arrangement after the implementation of the planned monetary union. In fact, in 2003 GCC member countries opted to fix their bilateral parities and to peg their currencies to the dollar in the run up to GCC Monetary Union in 2010 to benefit from the greater certainty about the parities at which they would enter the monetary union. Keeping the single GCC currency peg to the dollar would leave the public and policymakers on already familiar grounds.

27. **The dollar peg does have a number of disadvantages.** First, it imports a monetary policy from the United States, which at times may not be appropriate for local needs (see Setser, 2007).<sup>10</sup> With an open capital account, the dollar peg requires the GCC countries to follow U.S. interest rate policy, which has the potential to result in policies unsuited to the needs of their business cycles.<sup>11</sup> Where the divergences between the business cycles are likely to be temporary, policy tools other than interest rates or exchange rates would have to be used to influence domestic activity. In particular, fiscal policy, and to a lesser extent quantitative credit restrictions and tighter prudential regulations, would need to be used to curb aggregate demand and credit expansion. The peg also means that GCC countries cannot defend against imported inflation, although in the long run, higher inflation in trading partners would tend to be offset by depreciation of their currencies against the U.S. dollar. Further, the peg forces adjustment of the real exchange rate to a new equilibrium to go through inflation rather than the nominal exchange rate. Adjustment through inflation is slower compared to through the exchange rate, and may trigger price-wage spirals, generate low real interest rates, and increase the risk of asset bubbles as investors switch into real estate and equity assets. It also reduces the real value of financial savings.

## **B. Managed Floating**

28. **Letting the single GCC currency float against other currencies would have the advantage of being able to use monetary policy to smooth business cycles.** A more flexible exchange rate regime would also allow the countries to absorb large adverse real shocks more easily than a fixed exchange rate regime. As the GCC economies, their exports, and their international asset portfolios become more diversified, flexibility of the labor market may decrease because of increased participation by nationals, the exposure to shocks (including to capital movements) may increase, and greater flexibility of the exchange rate would become more desirable. It is also arguable that if current trends continue, the GCC

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<sup>10</sup> That can also happen with a basket peg; for example, in the case of a SDR peg if the dollar, euro, and yen zones are all easing while the GCC needs tightening.

<sup>11</sup> For example, the current U.S. policy of low interest rates is at odds with the booming GCC economy, as was the U.S. policy of high interest rates in the late 1990s when oil prices and growth in the GCC were low.

would be sufficiently large economically to have its own currency unattached to another major currency.

29. **In light of the current structural characteristics of the GCC economies, however, it is questionable whether active monetary and exchange rate policies would achieve domestic and external stability.** This stems from the fact that the interest rate channel of the monetary transmission mechanism may be ineffective in an environment where economic agents' decisions are highly insensitive to changes in the interest rate. Corporate sector investment and spending decisions (investment and consumption) depend to a large extent on actual and projected government spending, limiting the role of the interest rate. Thus, fiscal policy has to bear the burden of smoothing the effect of shocks on domestic activity.<sup>12</sup> In addition, the exchange rate channel is weak because of the lack of sensitivity of exports to changes in the exchange rate.

30. **A further issue relates to the choice of the nominal anchor under a float.** The two main alternatives would be inflation targeting and monetary targeting. Inflation targeting has to be based on a good understanding of the inflationary process and its determinants, in addition to institutional and technical requirements, such as sophisticated market-based monetary operations, central bank independence, and transparency of policy to build accountability and credibility. The new GCC central bank would be untested, and likely to take some time to develop these institutional requirements. Monetary targeting would require a stable and predictable money demand function, the development of instruments and adequate forecasting ability to undertake efficient liquidity management. Given the structural changes that are ongoing in these economies, the stability of the money demand function is uncertain. To have an alternative anchor to the exchange rate, GCC countries would need to improve the measurement of inflation, develop inflation forecasting capacity and instruments to manage liquidity, and enhance communication strategies.

31. **There are also risks of high exchange rate volatility associated with a floating regime.** Given the open capital account, the dominance of oil as the main export commodity, the inherent difficulty of distinguishing between temporary and permanent terms-of-trade shocks, and thin foreign exchange markets that are dominated by a relatively small number of agents, large swings in oil prices could lead to volatile exchange rates,<sup>13</sup> which could lead to larger fluctuations in non-oil output and higher and more volatile inflation, or the central bank would need to intervene heavily if it wants to stabilize the exchange rate in line with fundamentals. More generally, there is evidence that greater nominal exchange rate volatility is associated with greater real exchange rate volatility (Taylor, 2002), potentially adversely affecting non-oil sectors. To illustrate, Figures 7 and 8 simulate the case for Saudi Arabia

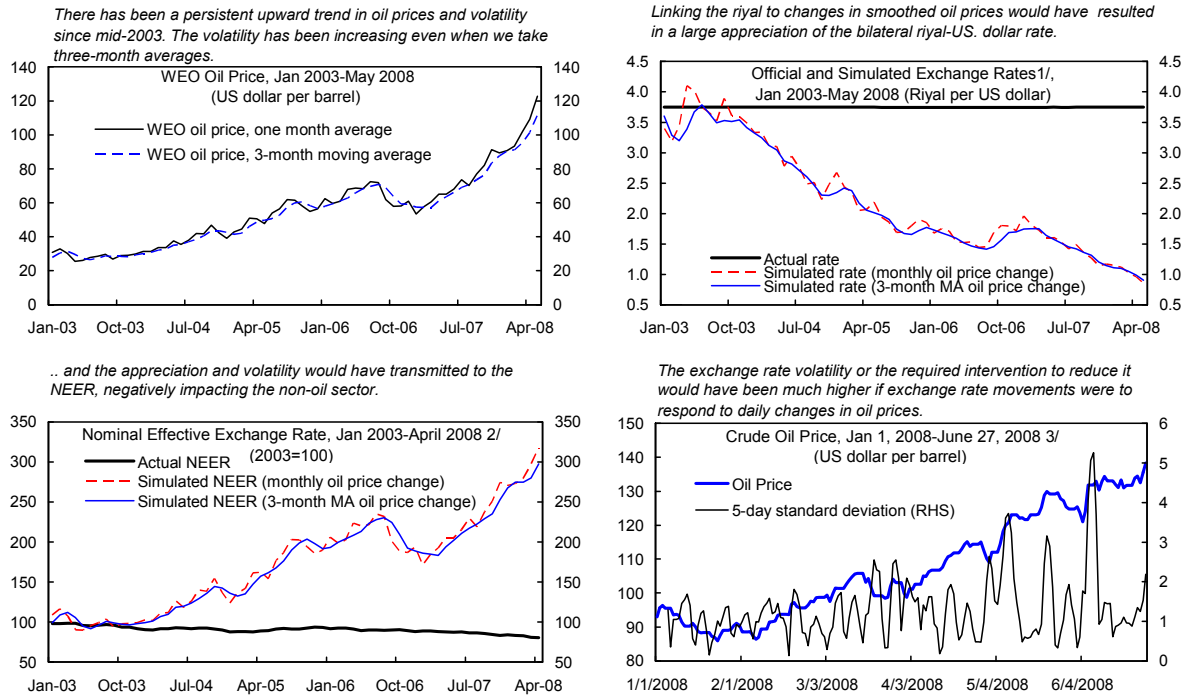
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<sup>12</sup> Countries like Kuwait, the U.A.E., and to some extent Oman, were able to use countercyclical and expansionary fiscal policy to overcome the prolonged weakness in oil prices since the mid-1980s through 1990s by utilizing a part of their SWF resources. However, Saudi Arabia had to rely on increasing domestic debt and drawing down international reserves to finance its countercyclical fiscal stance during that period.

<sup>13</sup> Cashin and McDermott (2001).

where the price of oil in Riyals is kept constant (the same result as under an oil peg) by \$/Riyal fluctuations that offset any \$-oil price changes. Even with perfectly stabilized fiscal revenues in Riyals (allowing perfect expenditure planning), changes in oil prices induce massive swings in the \$/Riyal rate that may be beyond the capacity of the financial system to handle. At the same time, the large relative price volatility would make investment planning in the non-oil sector extremely difficult.

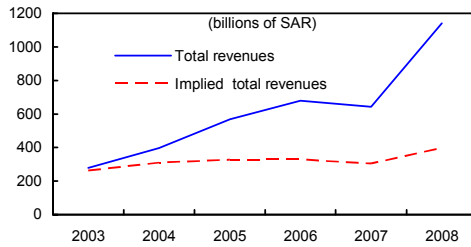
Figure 7. Saudi Arabia: Simulation for the Impact of Linking the Riyal rate to Changes in Oil prices



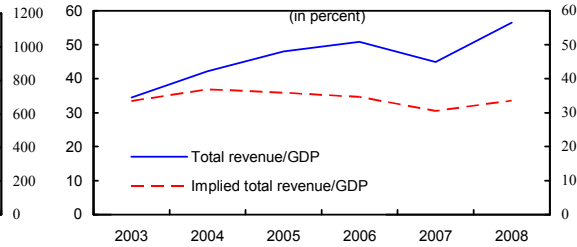
Source: World Economic Outlook; Bloomberg; and Fund staff calculations.  
 1/ Simulated riyal rate in Jan-2003 = actual rate (Dec-2002) x average oil prices (Dec-2002) / average oil prices (Jan-2003).  
 For February 2003 and beyond, simulated riyal rate in Month (t) = simulated riyal rate in Month (t-1) x average oil prices in Month (t-1) / average oil prices Month (t).  
 2/ An increase indicates appreciation.  
 3/ Simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh.

**Figure 8. Saudi Arabia: The Fiscal Impact of Linking the Riyal Rate to Changes in the Three-Month Moving Averages of Oil Prices, (2003–08) 1/**

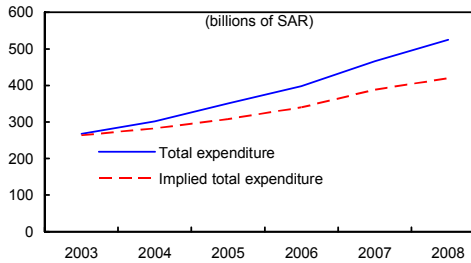
*The appreciation in the riyal would have reduced the nominal value of government revenues ..*



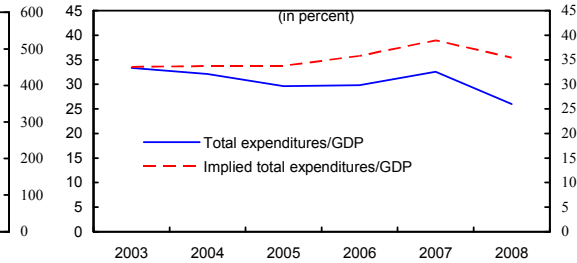
*.. but it would have stabilized it as a share of GDP.*



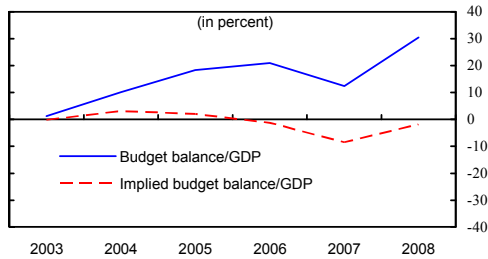
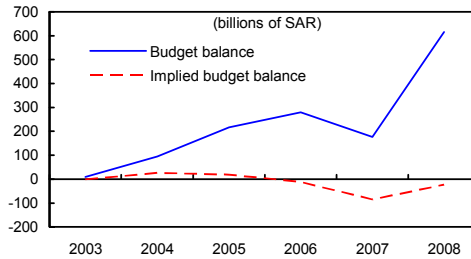
*Similarly, government expenditures would have increased at a slower rate..*



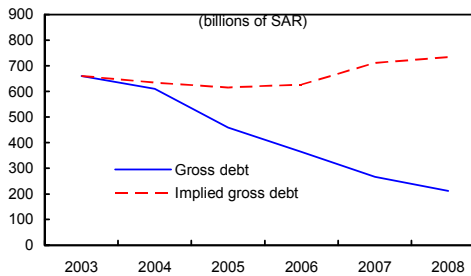
*.. and would have become more stable as a share of GDP.*



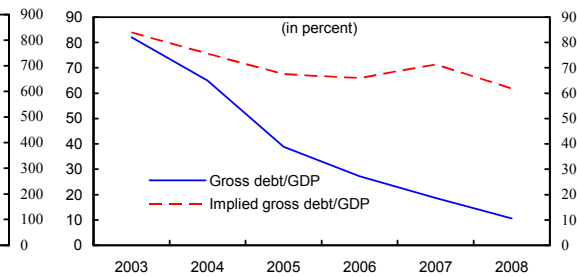
*However, this would have transformed recent large surpluses to small deficits...*



*..and consequently increased the gross government debt*



*and resulted in significantly higher debt to GDP ratios.*



Sources: Authorities data; and Fund staff estimates, projections, and simulations.

1/ Simulation assumptions are:

a- The annual exchange rate is the twelve months average for the simulated exchange rate (see footnote 1 in figure 1).

b- Non-oil GDP and revenues would not be affected by changes in the exchange rate.

c- Implied oil GDP (t) = Actual oil GDP (t) x simulated annual exchange rate (t) / actual exchange rate (3.75).

d- Implied oil revenues (t) = Actual oil revenues (t) x simulated annual exchange rate (t) / actual exchange rate (3.75).

e- 50 percent of the capital expenditures are indexed in foreign currency while 20 percent of current expenditures are indexed in foreign currency. Hence,

Implied capital expenditures (t) = 0.5 x actual capital expenditures (t) x simulated annual exchange rate (t) / actual exchange rate (3.75) + 0.5 x actual capital expenditures (t).

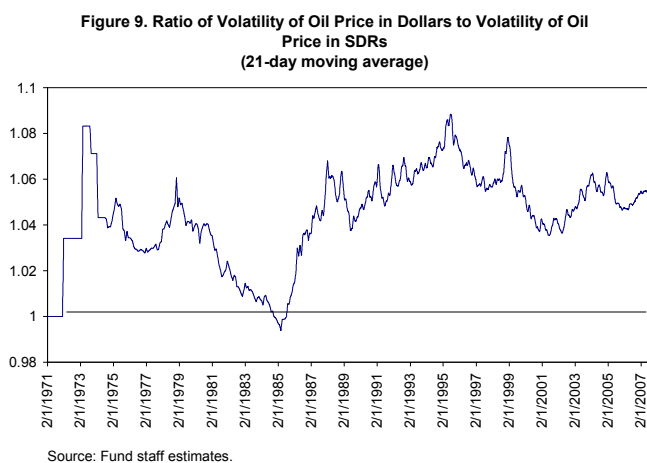
Implied current expenditures (t) = 0.2 x actual current expenditures (t) x simulated annual exchange rate (t) / actual exchange rate (3.75) + 0.8 x actual current expenditures (t).

f- No impact for higher gross debt on expenditures.

32. **Letting the exchange rate of the GCC currency float would also introduce a new and different type of uncertainty and risk into international transactions,** as well as complicate budgetary accounting and business planning. At the same time, underdeveloped and incomplete financial markets would make hedging against exchange rate risk costly and sometimes impossible. Much will depend on the extent of the development of financial instruments and markets by the time of the establishment of the monetary union. In fact, experience suggests that in switching exchange rate regimes, the timing of exits and the extent of institutional development are critical (Box 2).

### C. Basket Peg

33. **Adopting a basket peg may be a useful way to introduce some flexibility in the exchange rate.** With a basket peg, the main anchor properties of an exchange rate peg could be retained, while at the same time gaining some adaptability to the adverse effects of swings among the values of the major reserve currencies. For example, with oil priced in U.S. dollars, volatility in the price of oil is reflected, under a dollar peg, directly in volatility in oil export receipts. Under an SDR peg, for example, the volatility of oil export receipts would have been much less than it was under the dollar peg (Figure 9). The volatility of the nominal effective exchange rate would be reduced, benefiting external trade, investment, and balance sheet stability. In the short run, a basket peg can help contain imported inflation by sheltering the exchange rate against cross-rate movements such as the recent dollar slide.



34. **Basket pegs may however reduce the microeconomic and informational benefits of maintaining constant one bilateral exchange rate relevant for price comparisons and economic transactions.** Also, they tend to be less transparent, more difficult to explain to the public, and less credible than single pegs, especially when the currency weights are not known.<sup>14</sup> A failure to disclose the relative weights and composition of the currencies used in the basket could complicate the assessment of exchange rate risk and lead to unanticipated behavior. In Kuwait, speculation after the move to an undisclosed basket resulted in strong demand for the dinar, large capital inflows, and an increase in liquidity (Box 3).

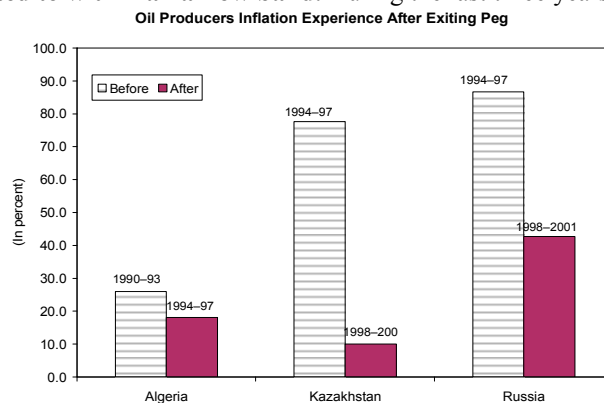
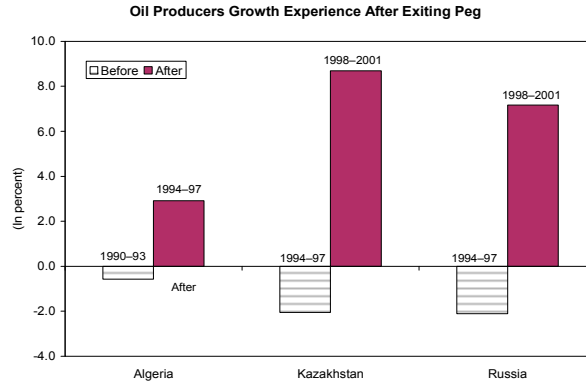
<sup>14</sup> This effect is minimized in the case of a peg to a basket, where the composition and weights are known, for example, the SDR.

## Box 2. Selected Non-GCC Oil Exporters: Experience Under Managed Float

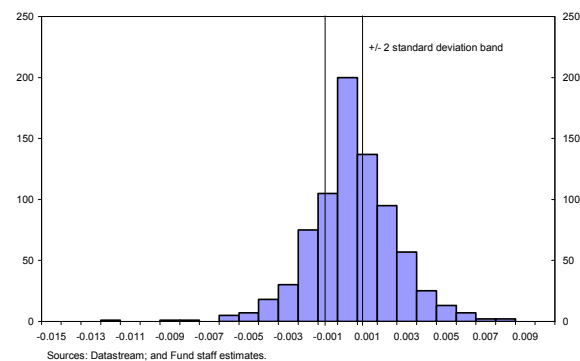
The literature on the performance of fixing versus floating exchange rates is inconclusive. In the cases of the oil-exporting countries of Algeria, Kazakhstan, and Russia, the growth and inflation performance improved significantly after exiting the peg. These moves to greater flexibility however, can be characterized as disorderly exits. In the case of Algeria the exit in 1994 was triggered by a balance of payments crisis resulting from unsustainable fiscal deficits and external borrowing by public enterprises; Kazakhstan's was associated with the Russian crisis; and Russia moved to a managed float after the 1998 crisis. Economic fundamentals in the GCC are not similar to these two cases.

In each case, exchange flexibility was limited to within a narrow band. During the last three years, the coefficients of variation of daily percentage changes of the Kazak tenge and Russian ruble were 21 and 10 respectively, comparable in magnitude to those of other oil exporters with de facto fixed exchange rates such as Iran, Nigeria, and Venezuela. Only the Algerian dinar had greater flexibility in this group. Daily percentage changes in the exchange rates suggest that the monetary authorities were intervening to smooth the path of the exchange rate when faced with excess volatility.

Experience shows that an orderly transition to greater exchange rate flexibility requires a number of reforms, including developing a deep and liquid foreign exchange market, defining the role of intervention by the central bank in managing oil receipts, and building capacity of market participants and supervisory agencies in managing and assessing risks. In view of the fiscal dominance in many oil producing countries, closer coordination with monetary authorities in managing liquidity, and development of medium-term expenditure frameworks are important in mitigating the transmission of oil price volatility to the rest of the economy.



**Russian Ruble: Histogram of Daily Percent Change**



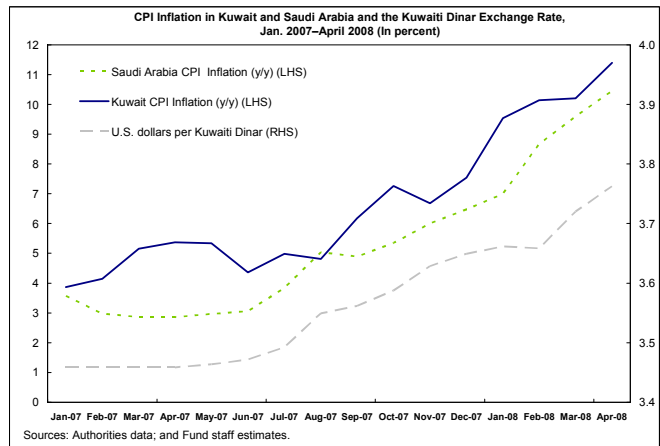
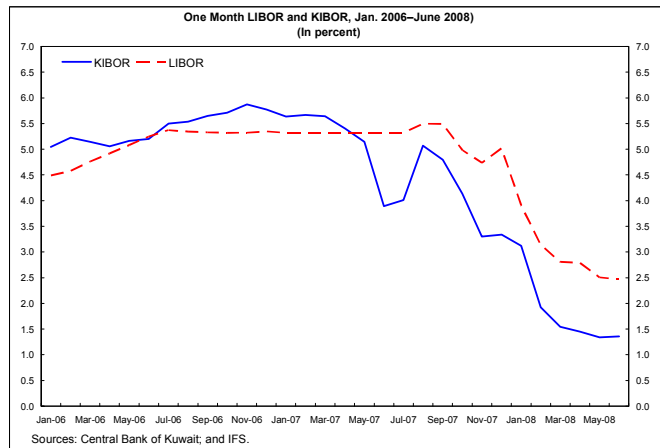
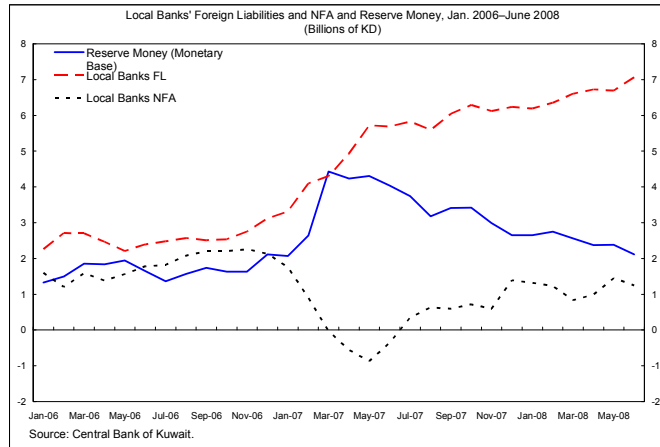
### Box 3. Kuwait's Experience With the Move To A Basket Peg

**On May 2007, Kuwait abandoned the Kuwaiti dinar (KD) peg to the U.S. dollar in favor of a peg to an undisclosed currency basket, reverting to the exchange system before January 2003.<sup>1</sup>** The decision, as stated by the authorities,<sup>2</sup> was motivated by the depreciation of the U.S. dollar against other major currencies, and the potential impact of increasing inflationary pressures from imported goods. By July 21, 2008 the KD had appreciated by 8.2 percent.

**The new system has required a more active monetary policy.** Currency speculation before and after the move to the new regime (see Figure 11) resulted in a strong demand for the KD, capital inflows, and large increases in the KD liquidity. The CBK sought to dampen capital inflows at the time of depegging by driving down the KD interbank rate (KIBOR) to 4.13 percent from 5.19 percent within a few days in May 2007, and since then to a level lower than the LIBOR rate. While the CBK's decision has increased the cost of maintaining KD excess liquidity and hence discouraged speculation, it fueled further the strong growth in credit to private sector, with the annual growth rate accelerating from about 25 percent in January 2007 to about 34 percent in July and August and to 36 percent by December. To hedge against exchange rate risk, banks closed their open position in foreign currency in 2007, in part through foreign borrowing. In addition, the large capital inflows and changes to interest rates have increased banks' liquidity and interest rate risks.

**The impact on inflation of the move to the basket peg has been limited so far.**

Inflationary pressures accelerated toward the end of 2007 and in early 2008, with inflation reaching 11.4 percent y/y in April 2008. While inflation in Kuwait was close to that of Saudi Arabia (which remained pegged) in early 2007, it became slightly higher toward the end of 2007 and in early 2008.



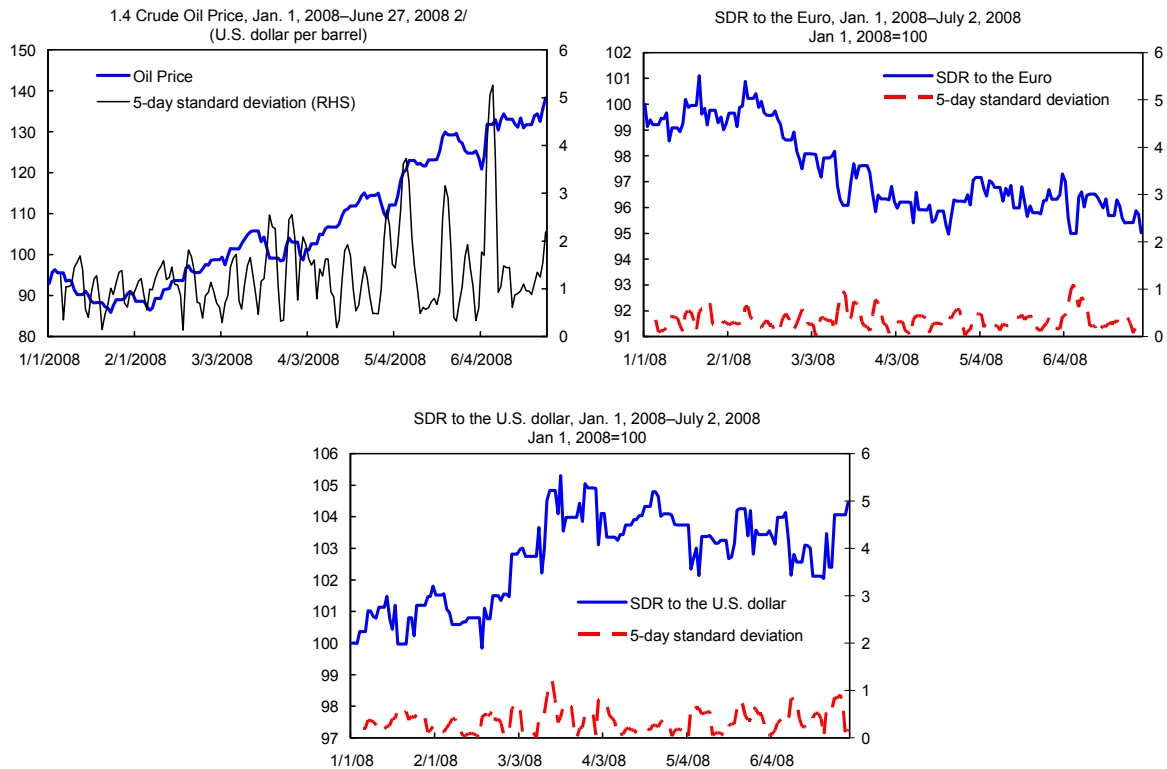
<sup>1</sup> From March 18, 1975 to the end of 2002, the Central Bank of Kuwait (CBK) followed an exchange rate policy of pegging the KD to a weighted currency basket.

<sup>2</sup> Based on a statement by the Governor of the CBK.



35. **Pegging to a basket of currencies, however, rules out active monetary policy, much as in the case of a single currency peg.** Under capital convertibility, interest rates would likewise have to follow a “basket” of interest rates. This will reduce the likelihood for a recurrence of the actual extreme de-synchronization between monetary policy needs in the GCC and the anchor currency.<sup>15</sup> However, the central bank would have to actively manage foreign exchange operations and foreign exchange risk. Relatively low levels of financial intermediation and breadth of financial instruments would limit the scope and effectiveness of these operations (see Roger and others, 2008). And pegging to a basket of currencies would not fully address the management of oil price volatility or the rise in liquidity from high oil prices. A basket that included the price of oil (see Section D on pegging to the export price of oil) would mirror the relatively higher volatility of oil prices (Figure 10).

**Figure 10. Volatility of Oil Price, U.S. Dollar, and the Euro**



Source: Authorities' data; and Fund staff calculations.

<sup>15</sup> However, the potential difference between the interest rate of an anchor currency and that of a basket of currencies will depend on the relative movements of interest rates of these currencies over time. In the case of Saudi Arabia, for example, a peg to the SDR would have raised current domestic interest rates by only 1 percentage point (as of July 2008).

36. **One option could be a transparent basket consisting only of the U.S. dollar and the Euro.** It would be simple to interpret, would reduce monetary dependence of the GCC on the U.S. Federal Reserve, account for the bulk of transactions in goods, services, and financial instruments (now in the U.S. dollar and the Euro Area), and allow for the use of dollar or Euro hedging instruments to efficiently manage financial risks given the considerable depth in Euro financial instruments. The timing of a move to a basket peg would, however, need careful deliberation. Also, exchange rate stability would likely be highest if repegging to a basket occurred when the currencies in the basket were broadly in equilibrium, which may be difficult to establish.

#### D. Pegging to the Export Price of Oil

37. **Pegging the domestic currency to the export price of the main export product (PEP) has sometimes been suggested for small open economies that are relatively specialized in the production and export of a particular mineral or agricultural commodity.**<sup>16</sup> The argument for PEP is that it simultaneously delivers automatic accommodation to terms-of-trade shocks, as floating exchange rates are supposed to do, while retaining the credibility-enhancing advantages of a nominal anchor, as dollar pegs are supposed to do (Frenkel and Saiki, 2002). A peg to the price of oil would allow the real exchange rate to move in line with the real price of the main export commodity. Essentially, it would decouple oil exporters' monetary policies from those of oil importers.

38. **But there are several important qualifications and drawbacks attached to this type of exchange rate policy.** First, the GCC countries taken together account for a sizeable part of total world output and exports. Therefore, the small economy assumption is not applicable in the case of the GCC, as the price of oil cannot be regarded as exogenous. Indeed oil can be seen as a major international currency in itself, and pegging their national (fiat) currencies to their own (commodity) currency would not anchor the GCC countries' currencies to something truly exogenous.

39. **Second, it is questionable whether an automatic adjustment to TOT shocks would be effective under a PEP system.** For example, an adverse TOT shock (decline in oil prices) would under PEP result in a real depreciation. However, with oil production in most GCC countries constrained by capacity and extraction limits, as well as by the OPEC quota system, all adjustment would have to come through expanding non-oil exports or cutting imports. However, in the GCC, non-oil exports depend on hydrocarbon production for inputs, and are therefore not independent from the level of oil and gas production.

40. **Third, pegging to the price of oil would introduce greater volatility in the exchange rate.** As shown in Figures 7 and 8, illustrating the case for Saudi Arabia, this could lead to lower government revenues and expenditures and higher government debt.

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<sup>16</sup> A variant of this approach is pegging to a basket of commodities and currencies.

41. **Fourth, pegging to the price of oil would create significant volatility for other sectors of the economy** (see Figure 7). For example, a consequence of high oil prices would be a real appreciation which would raise the cost of other exports and dampen the diversification effort. In the event of a decline in oil prices, it is unclear whether the oil peg would permit sufficient depreciation of the national currency in order to accommodate the adverse change in the terms-of-trade and stabilize export earnings. Further, it can be argued that a gradual adjustment in the real exchange rate may be preferable, until the terms of trade shift appears permanent. In any event with daily fixing of the exchange rate, PEP requires transparency and credibility which may take time to be established.

## V. TRANSITIONAL ISSUES

42. **The determination of the most appropriate exchange rate regime will depend on economic developments at or near the establishment of the GCC Monetary Union, as well as the impact of prospective developments on the cost and benefits of alternative regimes.** In that regard, a specific decision on the exchange rate regime should be conditioned on whether the monetary union is delayed, inflation persists, the depreciation of the dollar continues, business cycles in the United States and the GCC continue to diverge, and real exchange rates are broadly in line with fundamentals.

43. **Staff analysis in recent GCC Article IV staff reports suggest that the current inflationary pressures are likely temporary, resulting largely from supply bottlenecks (particularly in housing) and sharp increases in the international prices of food, raw materials, and equipment (Box 4).** Increased government spending, particularly on infrastructure and social projects as well as declining real interest rates have also spurred aggregate demand. Although significant increases in the terms of trade suggest some undervaluation of real exchange rates, the medium-term outlook suggests that the large fiscal and external account surpluses are likely also to be temporary, and hence real exchange rates are expected to fall in line with fundamentals in the near future.

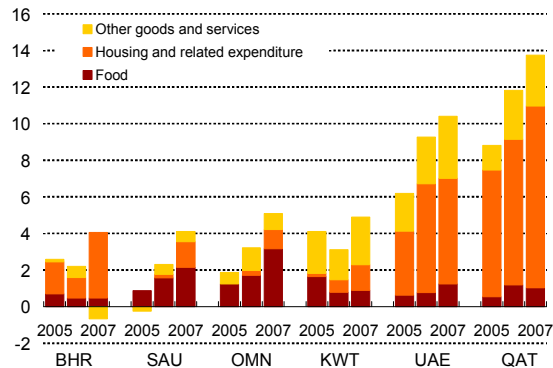
44. **If inflation and the current account surpluses are temporary, they will likely be reduced by the time of the GCC monetary union,** and maintaining the current peg, to which the authorities are committed, would be the best option as the new common central bank would inherit a well-functioning anchor and monetary framework. The persistence of high inflation over the medium term, however, would tilt the balance of cost and benefits to more flexible regimes. Although the GCC countries have had to cut interest rates during a period of rising inflation, the costs of this procyclicality are relatively small because the interest rate channel of the monetary transmission mechanism is weak. Whether inflation

### Box 4. GCC Inflation: Causes and Policy Options

**Gulf Cooperation Council (GCC) oil export revenues during 2003–07 amounted to a staggering \$1.5 trillion.** At an oil price of about \$100 per barrel, the Gulf countries received oil revenues averaging \$1.5 billion a day. These huge inflows enabled the GCC to grow at an annual rate of about 7 percent in real terms over that period. But at the same time, inflation went from about 1 percent to over 6 percent, ranging from almost 3.5 percent in Bahrain to just under 14 percent in Qatar. That trend has continued in 2008, with Kuwait and Saudi Arabia recording double-digit inflation, and Oman, Qatar, and U.A.E. well into the double-digits so far (year-on-year).

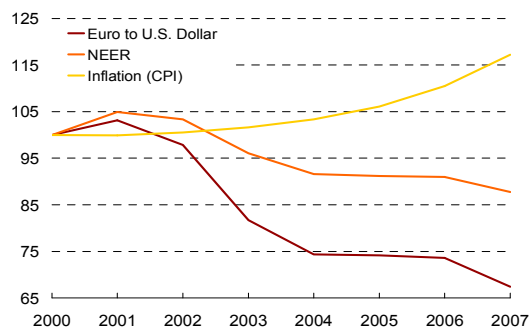
**Both domestic and external factors, have contributed to the rising inflation.** On the domestic front, aggregate demand has been growing rapidly. Government capital expenditure almost doubled from about 8 percent of non-oil GDP in 2003 to about 16 percent in 2007, while government current spending has risen cumulatively by 60 percent, mainly from increases in wages and subsidies. The private sector has also contributed significantly to the spending boom, supported by high investor and consumer confidence, inflows of foreign direct investment, and increased external and domestic financing. In particular, credit to the private sector has expanded rapidly, growing at about 30 percent per year since 2004, and reaching an estimated 56 percent of GDP in 2007.

**GCC: Contributions to Inflation (In percent)**



**Supply constraints arising from inadequate investment in the past have accentuated inflationary pressures.** Shortages of residential and commercial housing units, aided by large inflows of expatriate labor and the opening up of real estate markets to foreign investors in Qatar and the U.A.E., have led to higher rents in all GCC countries. In Qatar, which has the highest inflation rate among the GCC countries, transportation bottlenecks from inadequate port facilities have limited the processing of imported goods.

**GCC: Nominal Effective Exchange Rate and Inflation**



**Rising international prices of food, capital equipment, and raw materials, and to a lesser extent the depreciation of the U.S. dollar against other major currencies, have also contributed to inflationary pressures.** Although the GCC average nominal effective exchange rate (NEER) was relatively flat during 2004–06, inflation in the region was rising, in particular in Qatar and the U.A.E. However, in 2006–07 international food prices rose 30 percent and the nominal effective exchange rate for the U.S. dollar depreciated 6 percent, combining to increase inflation in GCC countries.

**The macroeconomic policy response is complicated by the need to balance higher investment to alleviate infrastructure bottlenecks with rising inflationary pressures from rising aggregate demand.** An appropriate response should consider the sources of inflation, whether the inflationary shocks are short term or potentially long term, available policy instruments, and the potential impact on medium-term growth and employment goals. With a commitment to a pegged exchange rate regime in the period leading up to the proposed GCC Monetary Union, fiscal policy is the most effective instrument available to the authorities. But with monetary policy tied to that of the United States, whose business cycle requires an easier policy stance compared to that needed by the GCC countries, the central banks need to support the required fiscal stance with measures to ensure slower credit growth, and contain financial risks.

**Box 4. (concluded)**

**Governments across the GCC have instituted various measures to either contain inflation or reduce the impact of inflation on their populations.** Short-term measures include lowering import duties (Saudi Arabia), granting waivers of customs duties (Qatar), limiting the increase in rents (Qatar, U.A.E., Oman), increasing subsidies on food and basic items (Oman, Saudi Arabia), imposing maximum retail prices on specific commodities (U.A.E.), and increasing public sector wages and transfers. Complementary longer-term measures to improve infrastructure and increase housing units (in particular, low-income rental properties) are ongoing. At the same time, the central banks have raised reserve requirements (Saudi Arabia, Qatar), issued certificates of deposits (Oman, Qatar, U.A.E.), and set loan-deposit ratios (Kuwait, Qatar) and caps on consumer loans (Kuwait, Qatar).

**Some of these measures do help contain inflation, but they are only stop-gap measures, have fiscal costs, and create market distortions.** Under the peg, success in preventing inflation from becoming entrenched will depend on a concerted effort to contain aggregate demand, while building infrastructure and capacity, improving efficiency through structural reforms, and on a moderation in prices of imports. In the short term the policy choice is difficult: live for a short time with higher inflation until supply constraints are eased, or slow down fiscal spending and experience somewhat lower inflation, but at the cost of slower private sector growth.

remains temporary will depend, in part on the authorities' ability to strike a delicate balance between increasing investment to reduce supply bottlenecks (especially in infrastructure and housing) and tightening fiscal policy, especially current expenditure, to avoid adding to demand pressures, and on the effectiveness of prudential measures to contain credit growth.

45. **If inflation and current account surpluses persist, a move to greater flexibility via a basket peg is advisable.** Pegging to a common basket in the transition to monetary union would by itself not address any misalignment issues, but as discussed above, may shield the GCC market from the impact of dollar movements against other global currencies. Further, there would be some loss of credibility and transparency, which could perhaps be mitigated if all countries were to peg to the same disclosed basket. As under a float, the extent of progress prior to monetary union in developing the institutional infrastructure to facilitate market-based operations and for building accountability and credibility will determine the feasibility of these regimes.

46. **If individual exchange rate parities, however, were considered out of line with fundamentals at the time of the GCC monetary union, which would be signaled by continued high domestic inflation, the GCC could retain the dollar peg but effect a one-off coordinated adjustment of the current parities at the establishment of the common currency.** A revaluation could allow a temporary dampening of imported inflation and help bring real exchange rates closer to equilibrium. However, a revaluation would impose significant and immediate valuation losses on the large official foreign assets of the GCC countries,<sup>17</sup> and reduce international competitiveness for those countries that would have embarked on economic diversification (tourism and non-oil export sectors). If large, a

<sup>17</sup> It is true that domestic inflation imposes the same losses but more gradually, allowing economic agents time to adjust.

revaluation could generate sharply lower fiscal revenues in domestic currency and entail a significant adverse impact on the balance sheets of both the government and private sectors, including banks. There is also a risk that as soon as the signal is given that the exchange rate is a policy instrument available to tackle inflation, this could increase market expectations of further revaluations, and encourage speculation, even if fundamentals are unchanged (Figure 11).<sup>18</sup> In fact, this was observed when Kuwait moved to a basket peg, and in late 2007 when investors reacted to statements by GCC officials by transferring substantial deposits into the region, betting on an imminent currency revaluation. While relevant to any exchange rate regime, this recent experience underscores the need for GCC government officials to develop further a credible communications strategy.<sup>19</sup>

47. **Further, it would be important to estimate the needed adjustment accurately.** For oil exporters there continues to be a debate on how to determine the equilibrium real exchange rate and, hence, the appropriate level of the nominal exchange rate. This is an extremely difficult exercise that yields a wide range of results (Box 5). Ideally, the exchange rate should be set at a level that would be consistent with sustaining the current account at some desired equilibrium level (or “norm”). But the level of equilibrium real exchange rate will depend on both the level and volatility of oil prices over the medium term. In fact, any change in current or future oil prices will alter the equilibrium exchange rate and the current account norm. While there is evidence suggesting some undervaluation for the GCC countries, the available estimates are typically prone to large errors and quantification of the degree of undervaluation is difficult.

## VI. CONCLUSIONS

48. **There are plausible arguments in favor of both retaining the current fixed exchange rate regime to start with, and then, if there is a need, introducing more exchange rate flexibility in the medium term.** The dollar peg seems to be the best option leading up to and possibly even in the short-run after the establishment of monetary union in the near future. However, the authorities would need to reconsider their options if inflation persists and there is a further sharp depreciation of the dollar against other major currencies. Also, if there is a decision to delay the monetary union, the commitment to pegging at given parities until 2010 would no longer hold and other options could be examined.

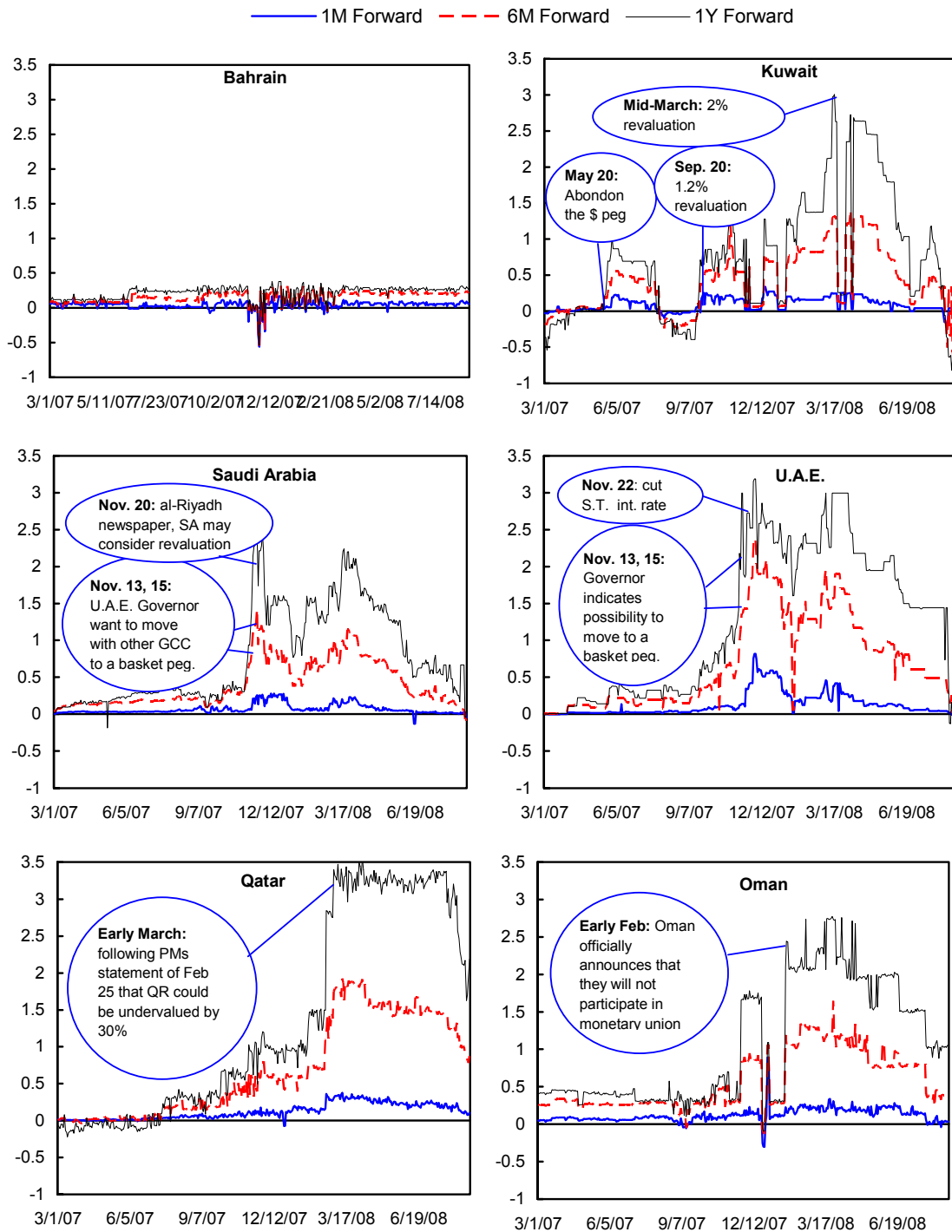
49. **The longstanding de facto peg of the GCC currencies to the U.S. dollar has contributed to a strong track record of macroeconomic stability.** The dollar peg has

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<sup>18</sup> Instead of a large revaluation, the authorities can consider incremental revaluations (a crawling peg). While similar to a revaluation, the announcement of the crawling peg would leave the currency more exposed to speculation (“one-way bets”) and to large and frequent interventions by the central bank.

<sup>19</sup> Blinder and others (2008) argue that although there is no consensus on what constitutes an optimal communication strategy, communication has the ability to move markets, improve the predictability of monetary policy decisions, and help achieve central banks’ macroeconomic objectives.

**Figure 11. GCC Currencies Forward Premium Over Spot Exchange Rate  
(Percent of spot rate; March 1, 2007–August 26, 2008)**



Sources: DataStream; and Fund staff estimates.

### Box 5. Exchange Rate Assessment in GCC Countries

**GCC countries real effective exchange rates (REER) appear undervalued.** While there is no generally accepted methodology to assess the level of the exchange rate for oil producers, the positive terms-of-trade shock experienced during 2003–07 likely resulted in an appreciation of the equilibrium REER. Utilizing a set of variables suggested by the Consultative Group on Exchange Rate Issues (CGER),<sup>1</sup> preliminary panel-based estimates show that the average deviation of the actual REER from the estimated equilibrium REER ranged from 3 percent in Kuwait to 13 percent in Saudi Arabia. The recent increase in inflation in GCC countries, owing mainly to domestic demand pressures, supply constraints, and imported inflation, should lead to a narrowing of the differential between the REER and the equilibrium REER.

**The macrobalance approach, also suggests that current accounts of the GCC countries are presently above their medium-term current account norms.**

This suggests some undervaluation of the exchange rate. However, the current account surpluses are expected to narrow over the medium term reflecting government spending and higher imports associated with investment projects. There is strong evidence that current account balances in the GCC are determined mostly by fiscal policy and only to a limited extent by the exchange rate.

**A third approach, the external sustainability approach, can be adapted to reflect intergenerational equity concerns of depletable resource-based economies.** It involves using fiscal rules for converting oil wealth into financial assets, calculating the net present value of the stock of oil wealth, and making assumptions on rates of oil extraction, future oil prices, and the discount rate. To ensure fiscal sustainability, the primary non-oil fiscal deficit should be equal to an ‘optimal’ annuity. This annuity could be a constant share of GDP, constant in real per capita terms, or constant in real terms. These estimated annuities are illustrated for Saudi Arabia assuming 264 billion barrels of reserves, a 78 percent recovery rate, depletion by 2085, real GDP growth rate of 3.5 percent, and a discount rate of 8 percent for future oil revenue. Each of these annuity definitions yields significantly different current account norms, and therefore, different degrees of misalignment.

GCC Countries: Degree of Average Undervaluation (2002-2006)

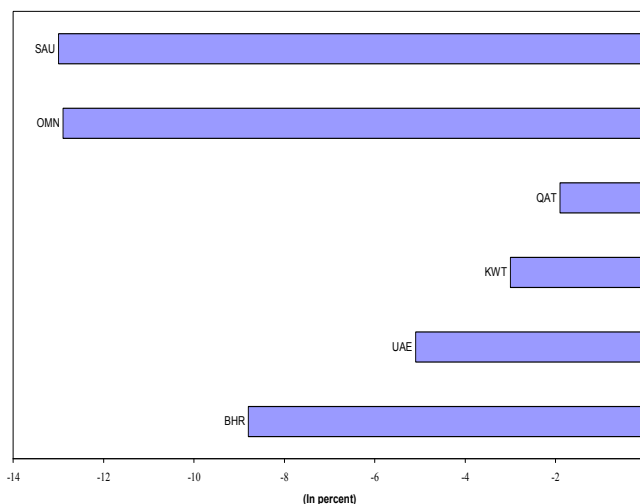
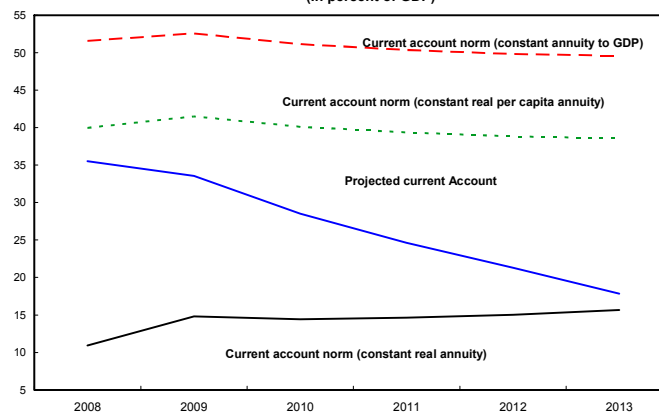


Table. Current Account Norms  
(In percent of GDP)

Country	Current Account		Current Account Norm
	Observed 2006	Medium-Term 2012	
Bahrain	13.3	5.6	6.5
Kuwait	50	33.5	41
Oman	12.2	2.6	4
Qatar	30.5	26.8	30.5
Saudi Arabia	20.3	8.1	20.3
U.A.E.	22	15	21.1

Source: IMF staff estimates.

Saudi Arabia: Current Account Norms vs. Projected Estimates, 2008–13  
(In percent of GDP)



<sup>1</sup> These include the terms of trade, productivity differential with trading partners, net foreign assets, the cumulative current account, and openness.



provided a credible nominal anchor for monetary policy and is easy to administer. It has simplified trade and financial transactions, accounting and business planning, and provided clarity about the parities at which the GCC member countries will enter the GCC Monetary Union. High labor market flexibility in the private sector also has helped international competitiveness and quick adjustment to shocks. The current jump in inflation is viewed as temporary and is expected to come down as the large infrastructure projects are completed and the absorptive capacity of their economies expand.

50. **On the other hand, with increasing integration in international trade, services, and asset markets,** the GCC countries can be more prone to external shocks, and a higher degree of exchange rate flexibility may become more desirable to ensure external stability and international competitiveness. In particular, as oil reserves are depleted in some member countries and the non-oil tradable sectors expand, the private non-oil sector will need to remain competitive to function as the main source of new employment opportunities for the rapidly growing national labor forces. And policies aimed at higher participation rates by nationals in GCC labor markets could erode over time the partial offset provided to the peg regime by flexible labor markets.

51. **Implementing a basket peg would be one way to introduce some flexibility in the exchange rate.** While capable of dampening volatility from swings among the values of major currencies, and avoiding monetary policy from being tied exclusively to one country, a basket peg would not eliminate the effects of imported inflation, nor would it allow the countries to operate an independent monetary policy. On the other hand, pegging to the export price of oil could deliver automatic accommodation to terms of trade shocks, but would be likely to transmit significant volatility to the non-oil sectors.

52. **The nature, extent, and timing of any departure from the current regime would need to reflect projected medium- and long-term developments in the GCC economies.** For instance, a common monetary and exchange rate policy would require the setting of appropriate initial parities and compensating and incentive mechanisms (e.g., a fiscal transfer system) to reflect evolving differences among the economies in both natural resource endowments and financial wealth. Also, the execution of exchange rate flexibility would require efficient decision-making processes and market-based monetary operations. Because these institutional factors take time to be fully established, exchange rate flexibility is feasible only as a longer-term option.

53. **The decision for one or the other exchange rate regime depends ultimately on the policy objectives and common preferences of the authorities involved.** It is important to also note that the choice of an exchange rate regime under the monetary union is not necessarily a permanent one. For example, the GCC could initially peg the single currency to the U.S. dollar and then move to a more flexible regime as circumstances dictate. This would allow for a smoother transition for the monetary union to a new exchange rate system. In a fast changing environment, a forward-looking monitoring framework will be essential for the monetary union. It should be emphasized, however, that the exchange rate regime is only one

element of the overall policy framework and, as such, should not be assessed in isolation. Hence, it must be compatible with the other elements of the framework, such as monetary, fiscal and structural policies (i.e., policies related to price formation in labor and product markets), and the broader institutional development of the GCC region.

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## APPENDIX I

**Table 1. Real GDP Growth**

(Annual change; in percent)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>10.0</b>	<b>1.6</b>	<b>1.3</b>	<b>9.1</b>	<b>7.5</b>	<b>7.3</b>	<b>5.6</b>	<b>5.5</b>
Bahrain	5.2	4.6	5.2	7.2	5.6	7.9	6.5	6.0
Kuwait	35.9	0.2	3.0	17.3	10.7	11.4	6.3	4.6
Oman	5.5	7.5	2.6	2.0	5.3	6.0	6.8	6.4
Qatar	10.9	6.3	3.2	6.3	17.7	9.2	15.0	15.9
Saudi Arabia	4.9	0.5	0.1	7.7	5.3	5.6	3.0	3.5
U.A.E.	12.4	1.7	2.6	11.9	9.7	8.2	9.4	7.4

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 2. Nominal GDP**

(In billions of U.S. dollars)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>342.2</b>	<b>332.3</b>	<b>350.4</b>	<b>406.3</b>	<b>485.1</b>	<b>618.6</b>	<b>727.9</b>	<b>815.2</b>
Bahrain	8.0	8.0	8.5	9.7	11.2	13.5	15.8	17.4
Kuwait	37.7	34.9	38.1	47.8	59.4	80.8	98.7	111.5
Oman	19.9	19.9	20.3	21.8	24.8	30.9	35.7	40.4
Qatar	17.8	17.5	19.4	23.5	31.7	42.5	56.9	73.3
Saudi Arabia	188.7	183.3	188.8	214.9	250.7	315.8	356.6	381.9
U.A.E.	70.2	68.7	75.3	88.6	107.3	135.2	164.1	190.7

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 3. Crude Oil Production and Exports**

(Millions of barrels per day)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>Production</b>								
<b>GCC</b>	<b>14.1</b>	<b>13.8</b>	<b>12.6</b>	<b>14.6</b>	<b>15.3</b>	<b>16.0</b>	<b>16.1</b>	<b>15.7</b>
Bahrain	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Kuwait	2.0	1.9	1.7	2.1	2.3	2.6	2.6	2.6
Oman	1.0	1.0	0.9	0.8	0.8	0.8	0.7	0.7
Qatar	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Saudi Arabia	8.1	7.9	7.1	8.4	8.9	9.4	9.2	8.8
United Arab Emirates	2.2	2.1	1.9	2.3	2.3	2.4	2.6	2.7
<b>Exports <sup>1</sup></b>								
<b>GCC</b>	<b>11.2</b>	<b>11.0</b>	<b>9.7</b>	<b>11.5</b>	<b>12.0</b>	<b>12.6</b>	<b>12.6</b>	<b>12.7</b>
Bahrain	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Kuwait	1.2	1.2	1.0	1.2	1.4	1.7	1.7	1.6
Oman	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6
Qatar	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8
Saudi Arabia	6.3	6.0	5.3	6.5	6.8	7.2	7.0	7.0
United Arab Emirates	2.1	1.9	1.8	2.1	2.2	2.2	2.4	2.5

Sources: Data provided by country authorities; and Fund staff estimates and projections.

**Table 4. Consumer Price Inflation**

(Year average; in percent)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>-0.3</b>	<b>-0.1</b>	<b>0.6</b>	<b>1.1</b>	<b>1.7</b>	<b>2.6</b>	<b>4.3</b>	<b>6.3</b>
Bahrain	-0.7	-1.2	-0.5	1.7	2.3	2.6	2.2	3.4
Kuwait	1.6	1.4	0.8	1.0	1.3	4.1	3.1	5.5
Oman	-1.2	-0.8	-0.3	0.2	0.7	1.9	3.4	5.9
Qatar	1.7	1.4	0.2	2.3	6.8	8.8	11.8	13.8
Saudi Arabia	-1.1	-1.1	0.2	0.6	0.4	0.6	2.3	4.1
U.A.E.	1.4	2.7	2.9	3.2	5.0	6.2	9.3	11.1

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 5. Broad Money Growth**

(Annual change; in percent)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>8.9</b>	<b>9.5</b>	<b>12.8</b>	<b>8.6</b>	<b>17.9</b>	<b>19.1</b>	<b>22.0</b>	<b>27.1</b>
Bahrain	10.2	9.2	10.3	6.4	4.1	22.0	14.9	40.8
Kuwait	6.3	12.8	4.8	7.8	12.1	12.3	21.7	19.3
Oman	6.0	9.2	5.2	2.6	4.3	20.9	24.9	34.8
Qatar	30.1	14.0	7.6	4.8	20.8	42.9	39.6	39.5
Saudi Arabia	6.0	6.6	14.7	6.9	18.8	11.6	19.3	19.6
U.A.E.	15.3	15.3	15.6	16.1	23.2	33.8	23.2	41.7

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 6. Central Government Fiscal Balance**

(In percent of GDP)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>8.6</b>	<b>1.9</b>	<b>-0.6</b>	<b>4.0</b>	<b>11.7</b>	<b>19.5</b>	<b>21.9</b>	<b>18.6</b>
Bahrain	8.7	4.9	-0.1	1.8	4.6	7.6	4.7	3.4
Kuwait	33.0	30.1	19.2	17.4	22.3	33.9	30.7	39.1
Oman	14.4	8.4	5.2	4.7	4.5	12.1	14.2	10.3
Qatar	7.2	3.5	9.4	6.4	16.4	9.2	9.2	12.9
Saudi Arabia	3.2	-3.9	-5.9	1.2	10.0	18.4	21.0	12.3
U.A.E. <sup>1</sup>	9.0	-1.3	-2.6	2.6	10.5	20.3	28.6	30.9

Sources: Data provided by country authorities; and Fund staff estimates.

<sup>1</sup> Consolidated accounts of the federal government, and the emirates Abu Dhabi, Dubai, and Sharjah.

**Table 7. Oil Exporters: Central Government Non-Oil Fiscal Balance**

(In percent of non-oil GDP)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>-18.6</b>	<b>-19.8</b>	<b>-19.5</b>	<b>-18.3</b>	<b>-17.6</b>	<b>-18.6</b>	<b>-19.7</b>	<b>-20.1</b>
Bahrain	-21.7	-28.6	-33.7	-32.9	-28.6	-28.8	-28.5	-31.1
Kuwait	-30.8	-37.6	-45.0	-44.5	-42.4	-36.1	-48.9	-41.0
Oman	-55.1	-55.9	-58.4	-57.8	-62.7	-63.2	-64.9	-59.1
Qatar	-60.3	-49.2	-41.7	-40.6	-33.0	-47.1	-41.1	-31.7
Saudi Arabia	-45.9	-49.0	-46.9	-46.7	-45.8	-50.9	-52.7	-59.2
U.A.E. <sup>1</sup>	-31.0	-38.8	-31.1	-29.3	-22.2	-17.0	-14.9	-12.6

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 8. Total Government Debt**

(In percent of GDP)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>62.2</b>	<b>65.9</b>	<b>65.9</b>	<b>55.7</b>	<b>43.9</b>	<b>27.5</b>	<b>19.9</b>	<b>14.3</b>
Bahrain	29.3	30.1	32.1	36.9	34.2	28.6	23.3	19.6
Kuwait	34.3	35.1	29.9	23.0	17.3	11.8	8.5	7.0
Oman	24.8	23.7	17.9	16.5	15.4	9.6	9.1	6.3
Qatar	54.8	58.2	47.9	41.6	27.8	19.3	13.2	8.9
Saudi Arabia	87.2	93.7	96.9	82.0	65.0	38.9	27.3	18.7
U.A.E. <sup>1</sup>	4.6	4.0	5.2	6.6	8.2	9.2	10.0	10.6

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 9. Exports of Goods and Services**

(In billions of U.S. dollars)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>185.8</b>	<b>171.3</b>	<b>180.6</b>	<b>228.9</b>	<b>304.4</b>	<b>424.5</b>	<b>508.7</b>	<b>571.4</b>
Bahrain	7.1	6.5	6.9	7.9	10.2	13.3	15.5	17.0
Kuwait	21.3	17.9	17.0	24.9	33.8	51.7	66.6	74.2
Oman	11.8	11.7	11.8	12.3	14.1	19.4	22.5	25.7
Qatar	11.5	12.2	12.1	14.7	20.7	28.7	39.3	50.1
Saudi Arabia	82.4	73.1	77.7	99.1	132.4	188.0	219.2	242.8
U.A.E.	51.7	49.9	55.1	70.0	93.2	122.0	152.5	188.9

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 10. Current Account Balance**

(In billions of U.S. dollars)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>49.2</b>	<b>31.2</b>	<b>25.5</b>	<b>52.1</b>	<b>88.2</b>	<b>172.8</b>	<b>210.9</b>	<b>210.4</b>
Bahrain	0.8	0.2	-0.1	0.2	0.5	1.5	2.2	2.9
Kuwait	14.7	8.3	4.3	9.4	18.2	37.6	51.6	48.0
Oman	3.1	1.9	1.4	0.8	0.6	4.7	4.3	3.2
Qatar	4.1	4.8	4.2	5.9	7.1	14.1	16.1	21.4
Saudi Arabia	14.3	9.4	11.9	28.1	52.1	90.6	99.6	95.8
U.A.E.	12.1	6.5	3.8	7.6	9.8	24.3	37.1	39.1

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 11. Current Account Balance**

(In percent of GDP)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>14.4</b>	<b>9.4</b>	<b>7.3</b>	<b>12.8</b>	<b>18.2</b>	<b>27.9</b>	<b>29.0</b>	<b>25.8</b>
Bahrain	10.6	2.8	-0.7	2.0	4.2	11.0	13.8	16.7
Kuwait	38.9	23.9	11.2	19.7	30.6	46.6	52.2	43.1
Oman	15.5	9.8	6.7	3.8	2.4	15.2	12.1	8.0
Qatar	23.2	27.3	21.9	25.3	22.4	33.2	28.4	29.2
Saudi Arabia	7.6	5.1	6.3	13.1	20.8	28.7	27.9	25.1
U.A.E.	17.3	9.5	5.0	8.6	9.1	18.0	22.6	20.5

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 12. Real Effective Exchange Rates**

(CPI based; annual average percent change; increase indicates appreciation)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>2.0</b>	<b>2.7</b>	<b>-2.2</b>	<b>-7.8</b>	<b>-5.2</b>	<b>-0.2</b>	<b>1.5</b>	<b>-0.8</b>
Bahrain	2.0	1.8	-1.0	-7.7	-6.7	-2.8	-2.9	-10.0
Kuwait	3.6	5.1	-1.0	-7.2	-5.1	2.0	0.9	0.7
Oman	0.2	0.8	-3.0	-8.2	-6.1	-0.9	-1.5	-0.4
Qatar	4.3	3.3	-2.0	-5.7	-0.1	7.1	8.3	3.2
Saudi Arabia	0.9	1.8	-2.8	-8.5	-6.7	-2.6	-0.5	-2.9
U.A.E.	4.4	4.3	-1.2	-6.7	-2.7	2.5	5.4	2.4

Sources: Data provided by country authorities; and Fund staff estimates.



**Table 13. Gross Official Reserves**

(In billions of U.S. dollars)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>45.6</b>	<b>47.2</b>	<b>51.4</b>	<b>53.5</b>	<b>62.1</b>	<b>67.0</b>	<b>277.2</b>	<b>420.1</b>
Bahrain	1.2	1.4	1.4	1.4	1.6	1.9	1.0	4.1
Kuwait	7.1	10.0	9.2	7.6	7.3	8.1	12.6	15.9
Oman	2.4	2.4	3.2	3.6	3.6	4.4	5.0	7.2
Qatar	1.2	1.3	1.5	2.9	3.4	4.6	5.4	9.8
Saudi Arabia <sup>1</sup>	19.8	17.8	20.8	22.9	27.5	26.8	225.2	305.3
U.A.E.	13.8	14.3	15.3	15.1	18.7	21.3	28.0	77.9

Sources: Data provided by country authorities; and Fund staff estimates.

**Table 14. Total Gross External Debt**

(In percent of GDP)

	2000	2001	2002	2003	2004	2005	2006	Est. 2007
<b>GCC</b>	<b>23.0</b>	<b>23.2</b>	<b>20.1</b>	<b>17.5</b>	<b>16.8</b>	<b>18.3</b>	<b>25.3</b>	<b>31.7</b>
Bahrain <sup>1</sup>	4.3	4.7	5.7	12.0	10.5	9.0	7.6	6.8
Kuwait	24.1	29.4	32.1	25.6	20.4	20.4	26.8	23.6
Oman	34.9	29.6	23.8	18.8	17.8	12.2	15.0	17.2
Qatar	85.7	81.7	71.7	56.7	47.3	48.1	52.4	64.6
Saudi Arabia	15.3	14.6	11.8	11.1	9.4	9.7	10.9	11.3
U.A.E. <sup>2</sup>	25.9	28.3	22.2	18.7	23.2	30.3	50.2	69.9

Sources: Data provided by country authorities; and Fund staff estimates.

<sup>1</sup> Public and publicly guaranteed debt, as private debt data are not reliable.<sup>2</sup> Mostly foreign liabilities of U.A.E. commercial banks and private institutions that are more than offset by their foreign assets. Over the period 2003-06, deposits of non-residents in U.A.E. banks constituted around 17 percent of foreign liabilities on average.