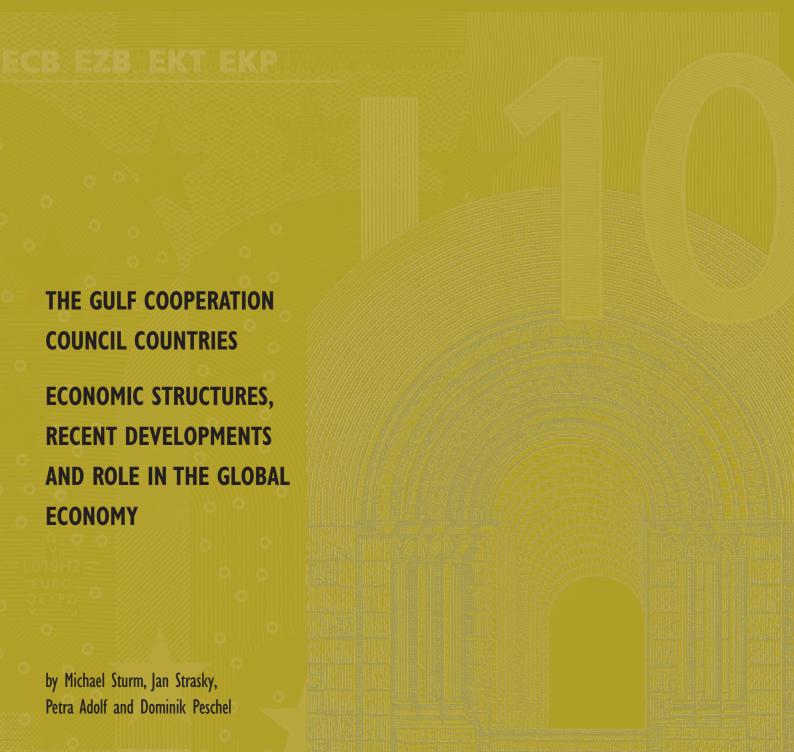


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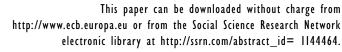
THE GULF COOPERATION COUNCIL COUNTRIES

DEVELOPMENTS AND ROLE IN THE GLOBAL ECONOMY





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ABSTRACT

In the wake of high and rising oil prices since 2003, the member states of the Gulf Cooperation Council (GCC) have seen dynamic economic development, enhancing their role in the global economy as investors and trade partners. Real GDP growth has been buoyant, with non-oil activity expanding faster than oil GDP. Macroeconomic developments have also been characterised by large fiscal and current account surpluses as a result of rising oil revenues, notwithstanding fiscal expansion and rapid import growth. The most significant macroeconomic challenge faced by GCC countries is rising inflation in an environment in which the contribution of monetary policy to containing inflationary pressure is constrained by the exchange rate regimes. The overall favourable macroeconomic backdrop of recent years has provided GCC countries with an opportunity to tackle long-standing structural challenges, such as the diversification of oil-centred economies and reform of the labour markets. In a global context, apart from developing into a pole of global economic growth, GCC countries – together with other oil-exporting countries – have become a major net supplier of capital in global markets, second only to East Asia. As a result, they have become part of the international policy debate on global imbalances. Furthermore, GCC countries are home to some of the world's largest sovereign wealth funds, which raises several financial stability issues. Their role as trade partners has also increased, with the European Union being the only major region in the world maintaining a significant surplus in bilateral trade with the GCC. GCC countries are also key players in global energy markets in terms of production, exports and the availability of spare capacity. Their role is likely to become even more pivotal in the future as they command vast oil and gas reserves and benefit from relatively low costs in exploiting oil reserves.

Key words: Gulf Cooperation Council, global imbalances, sovereign wealth funds, financial stability, oil markets

JEL: F40, F30, F14, E60, N15, O53, Q40

PREFACE

The economies of the member states of the Gulf Cooperation Council (GCC)¹ have attracted increasing attention over recent years. In the wake of high and rising oil prices since 2003, they have developed into a pole of global economic growth. They have also become more important as global investors and trade partners, and play a crucial role in global energy markets. Furthermore, together with other major oil-exporting countries, they have become part of the international policy debate on global imbalances.

Against this background, the European Central Bank (ECB) and the Deutsche Bundesbank organised a Eurosystem high-level seminar with the central banks and monetary agencies of the GCC member states. This seminar took place on 12 March 2008 in Mainz, Germany and should be seen in the light of the Eurosystem's policy of developing relations with central banks in other regions of the world, most of which also have experience of regional cooperation.

This Occasional Paper presents the analytical background documentation that was prepared for the seminar and served as the basis for discussion. The seminar's agenda focused on economic structures and developments in the GCC countries and on relevant aspects from a global perspective, in particular, with regard to current issues in money and finance, as well as energy and trade. Therefore, this paper is divided into three parts. Part 1 "Economic structures and developments in the GCC countries" reviews key structural issues and economic developments in GCC countries over recent years. Parts 2 and 3 focus on the role of the GCC countries in the global economy. Part 2 "Oil revenue recycling and implications for financial stability" analyses the financial flows of GCC countries, their role in the context of global imbalances and special issues related to sovereign wealth funds. Part 3 "Energy and trade" reviews the role of GCC countries in global energy markets and international trade. The information in this paper is based on that available as at February 2008, given the date of the seminar for which the contributions were prepared.²

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE)

In the executive summary, reference is made to some more recent macroeconomic data that has become available in the IMF World Economic Outlook of April 2008 and the IMF Regional Economic Outlook for the Middle East and Central Asia of May 2008.

EXECUTIVE SUMMARY

ECONOMIC STRUCTURES AND DEVELOPMENTS IN THE GCC COUNTRIES

Gulf Cooperation Council (GCC) countries share a number of specific structural economic features, while also displaying some significant differences. Key common features are: a high dependency on hydrocarbons as expressed in the share of oil (and gas) revenues in total fiscal and export revenues and the share of the hydrocarbon sector in GDP; a young and rapidly growing national labour force; and the heavy reliance on expatriate labour in the private sector. These features also pose common structural policy challenges to GCC economies, notably economic diversification to reduce the dependency on the hydrocarbon sector and to develop the private non-oil sector. Both are necessary to create employment opportunities for young nationals, given that the hydrocarbon sector is not labour-intensive and further increasing public sector employment is not sustainable. In order to enhance the employability of nationals, efforts to reduce the educational mismatch between nationals' qualifications and private sector needs are key.

GCC member states are moving towards economic diversification at a different pace and in different directions, with Bahrain and the United Arab Emirates (UAE) being most advanced in the process. This is also driven by the fact that hydrocarbon reserves are projected to be depleted in some countries (Bahrain and Oman) relatively soon, while they will last in others for a considerable period of time. Economic diversification needs to be supported by structural reforms, in particular, privatisation and market liberalisation, areas in which most GCC countries have made significant progress over recent years.

Recent macroeconomic developments provide a favourable backdrop for implementing reforms and addressing the structural challenges, in particular, as they have provided GCC economies with the financial means to do so.

In the wake of high oil prices, annual real GDP growth has been buoyant at around 7% on average for the GCC countries as a whole for the past five years, making the region a pole of global economic growth. Non-oil GDP growth has been impressive and has even exceeded oil GDP growth in most countries, even though the dynamics of the non-oil sector remain largely driven by government expenditure, which in turn depends on oil revenues. The nominal GDP of GCC economies has more than doubled since 2001, adding an economy the size of Sweden to the GCC in terms of aggregate output. GCC countries have accumulated large fiscal and current account surpluses in recent years. Budget surpluses are the result of rising public revenues and have masked fiscal expansion. Public expenditure has increased significantly, with a focus on developing the physical and social infrastructure required for private sector development.

Inflationary pressure has emerged in all GCC countries in response to strong domestic demand accompanied by dynamic monetary and credit growth. Average inflation in GCC countries increased to above 6% in 2007, with significant differences between GCC member states. The increase in headline CPI inflation, which may not reflect the full extent of inflationary pressure on account of shortcomings in the CPI baskets in some countries, was particularly pronounced in Qatar and the UAE. In these two countries, where, in particular, developments in the real estate sector have fuelled inflation, anchoring inflation expectations and avoiding a rent-wage-price spiral appear to be challenges.

The contribution of monetary policy to containing inflationary pressure has been very limited in view of the exchange rate pegs to the US dollar, as interest rates broadly follow US rates in an environment of free capital movements. The policy challenge for central banks in GCC countries to curb inflation appears to have further increased following the rising cyclical divergence between the GCC and US economies. Most GCC countries have resorted to administrative and prudential measures to curb inflation.

In view of the prevailing exchange rate regimes, fiscal policy is the key macroeconomic tool to control inflation. At the same time, GCC countries face domestic pressures to increase public expenditure in view of expectations to share windfall revenues of recent years with wider parts of the population and development needs in areas such as infrastructure. Governments in GCC countries have also been called upon internationally to raise spending in the context of the debate on global imbalances. Thus, the policy challenge is to balance the fiscal stance between cyclical and intergenerational considerations and the need for spending on physical and social infrastructure, taking account of bottlenecks and the absorptive capacity of the economies.

OIL REVENUE RECYCLING AND IMPLICATIONS FOR GLOBAL FINANCIAL STABILITY

GCC economies have been experiencing substantial revenue increases in the wake of the prolonged and marked hike in oil prices of this decade. There are indications that about half of the GCC region's oil revenues are currently absorbed through the trade channel, with the imports to exports ratio having picked up in comparison to the 1970s. The other half of GCC countries' petrodollar inflows are invested in financial assets, resulting in a sizeable buildup of traditional foreign exchange reserves and, increasingly, stabilisation and savings funds, which are also referred to as sovereign wealth funds (SWFs). As only about half of these financial resources can be tracked with the help of international statistics, a large part of investment activities by the GCC countries remains opaque to international financial market participants. Based on the available evidence, however, two tentative conclusions can be drawn. First, diversification in asset classes, countries and currencies seems to play an important role for GCC economies. Second, the United States has nonetheless continued to be a main recipient of oil-related financial funds.

In view of the remarkable increase in its combined current account surplus during the recent episode of rising oil prices, approaching

USD 200 billion per annum in recent years, the GCC region has emerged as a major net supplier of capital on a global scale, second only to East Asian countries. As a result, GCC economies form part of the international community's fourpronged approach, aimed at avoiding a sudden and disorderly unwinding of global imbalances. However, the related policy plans, above all the acceleration of domestic absorption, will probably have only a limited effect on global imbalances. Given the structure of the GCC region's external trade, the absorption channel is much more likely to benefit the European Union and Asia than the country with the world's largest current account deficit, namely the United States. Enhancing exchange rate flexibility, a recommendation usually made with reference to China rather than the GCC region, might also support the adjustment process to a limited extent only, even though a gradual nominal appreciation of the GCC countries' currencies against the US dollar might be in their own interest given the region's domestic macroeconomic conditions. In particular, it could contribute to dissolving inflationary pressures resulting from domestic absorption of high and rising oil revenues.

As a consequence of the sheer size of financial petrodollar recycling, oil-exporting countries in general and GCC countries in particular have emerged as new big players in world financial markets. As such, they are alleged to exert some influence on asset prices, especially on US long-term interest rates, emerging market yields and the US dollar exchange rate. However, empirical studies fail to identify a significant impact for oil revenue investments, in part owing to data constraints, but also because the relatively broad diversification of investment portfolios reduces the influence on individual asset markets. Moreover, the strength of the impact is likely to vary with the size of the respective market. On a more general scale, the effects of petrodollar recycling on global financial stability may be summarised as positive, mainly because the longer-term orientation and the presumed reluctance of GCC countries to engage excessively in highlyleveraged positions contribute to diversifying the global investor base and its asset allocation. However, in adverse situations, the overall size of oil-related flows, as well as the very limited knowledge market participants have about petrodollar investments, may give rise to market rumours and, possibly, financial instability.

In recent years, SWFs from both oil-exporting and other countries have proliferated and have increased in scale and diversity of activity. The GCC is home to some of the world's largest SWFs, and the entire GCC region is estimated to have assets in the range of USD 1-1½ trillion under sovereign management. Not least because of their opacity, SWFs have raised fears of politically or strategically motivated investments, which - although hypothetical at the current juncture - might ultimately fuel protectionism. Instead, however, the proliferation of SWFs should be viewed in the context of a general trend towards deeper financial globalisation. In this respect, it is essential that the international community abstain from measures that unduly restrict the free movement of capital on a global basis – all the more so as empirical evidence and country experience suggest that concentrating statebacked investment within an oil fund might prove to be beneficial for the domestic economy, provided that promoting fiscal discipline is one of the fund's dominant characteristics. On the other hand, in the light of the very limited knowledge market participants have about SWFs, a certain wariness regarding their activities is likely to persist. Thus, enhancing transparency in respect of the management and operation of these funds, along the lines of the work done, for example by the International Monetary Fund (IMF), would be welcome.

ENERGY AND TRADE

GCC countries are major players in global oil markets in terms of current production and the availability of spare capacity. As they hold about 40% of global oil reserves, they are likely to remain pivotal in providing the world

economy with oil in the future. To this end, they are raising investment spending on oil exploration and the development of new oil fields, as they benefit from comparatively low costs in exploiting oil reserves, notwithstanding the lower quality of GCC countries' crude oil. In addition, GCC countries are active in mitigating oil refinery capacity bottlenecks.

Global oil demand is being driven mainly by growth in emerging market economies, including oil producers and thus GCC countries themselves. Moreover, in Europe, as well as in the United States, the depletion of reserves will increase oil import dependency, despite stagnating oil consumption in the case of Europe. This will raise the importance of external providers, including GCC oil producing countries, in meeting domestic demand. Other sources of energy, including substitutes for crude oil, such as oil sand, synthetic oil and biofuels, as well as progress in raising energy efficiency may dampen global demand for crude oil, in particular, in an environment of elevated oil prices. However, without major technological breakthroughs in energy production and/or energy savings, crude oil and oil derivatives will continue to play the dominant role in meeting rising global energy demand in the foreseeable future. As for natural gas, its production is projected to increase both globally and in the GCC region, but it is expected that large parts of the GCC gas production will be used to meet rising domestic energy needs.

Trade by GCC countries has risen substantially in recent years, driven by higher oil prices, with exports and imports differing substantially in terms of the structure of goods traded and the geographical pattern of trade. While the bulk of GCC countries' exports consist of oil and oil derivatives, their imports are dominated by machinery and mechanical appliances, vehicles and parts, electrical machinery and equipment. The EU is the main trading partner of the GCC countries, as most of their imports originate in Europe. By contrast, exports by GCC countries – mainly consisting of oil and oil derivatives – are

strongly oriented towards Japan and emerging Asia, while Europe's oil imports originate mainly from oil producing countries in the Commonwealth of Independent States and North Africa and only to a smaller degree (24% in 2006) from the Middle East, including GCC countries. As a result, the EU is the only major region in the world to have a trade surplus with the GCC countries as a group.

GCC countries have made substantial investments to establish themselves as a regional trade hub. While the physical infrastructure has been upgraded, further progress is needed in the area of trade facilitation. In terms of institutional trade links and integration, all GCC countries have now become members of the World Trade Organisation (WTO). Moreover, Free Trade Agreements (FTAs) are currently being negotiated with several countries and regions, including with the EU, which might further contribute to the GCC countries' integration into the world economy. At the same time, intra-GCC trade is still limited, but is expected to expand with further progress in diversifying GCC economies and regional integration.

I ECONOMIC STRUCTURES AND DEVELOPMENTS IN THE GCC COUNTRIES³

I.I INTRODUCTION

Part 1 reviews key structural features of the economies of the six member states of the Gulf Cooperation Council (GCC) and macroeconomic developments over recent years. In doing so, it identifies a number of policy issues faced by decision-makers in GCC countries.

Notwithstanding some differences between GCC countries with regard to hydrocarbon (oil and gas) dependence and economic diversification, GCC member states together with some neighbouring countries represent the most hydrocarbon-centred economic region in the world. In the wake of high oil prices, GCC countries over recent years have experienced favourable macroeconomic developments. Real GDP growth has been buoyant, with non-oil GDP growing even faster than oil GDP. Dynamic economic development has led to inflationary pressure, although this differs between GCC member states, and may not be fully reflected in CPI figures. In view of the long-standing exchange rate pegs to the US dollar, there is little room for monetary policy to counteract inflationary pressure. Under these exchange rate regimes, fiscal policy plays a particularly important role in ensuring macroeconomic stability. GCC countries have accumulated large current account and fiscal surpluses, and the use of higher oil revenues overall appears to have been prudent.

The generally favourable macroeconomic backdrop of recent years offers an opportunity for GCC countries to tackle some structural issues specific to many highly oil-dependent countries in general and the GCC economies in particular. These include the diversification of the oil-centred economies and the development of the private non-oil sector. Both are key for absorbing the young and rapidly growing national labour force into the economy, against

the background of a continued high reliance on expatriate labour in GCC economies.

Part 1 of this paper takes stock of the developments and policy issues described above. It is structured as follows: Section 1.2 highlights key structural features of GCC economies; Section 1.3 reviews economic developments and policies; and Section 1.4 concludes.⁴

1.2 KEY STRUCTURAL FEATURES OF GCC ECONOMIES

1.2.1 SIZE OF COUNTRIES AND ECONOMIES

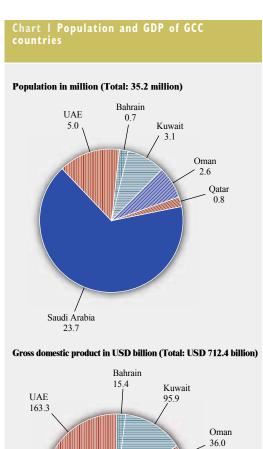
GCC member states differ significantly in terms of population and aggregate output, while differences in terms of GDP per capita are somewhat less pronounced. In terms of population and nominal GDP, Saudi Arabia is by far the largest of the six countries, comprising about 24 million inhabitants (about two thirds of the GCC's total population) and accounting for around half of the total GDP of GCC countries. The other five countries are considerably smaller. The second largest country both in terms of population and nominal GDP is the UAE, with five million inhabitants and a share of around a quarter of the total GDP of GCC countries (Chart 1).

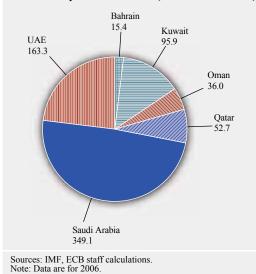
GDP per capita (in purchasing power parity terms) is highest in Qatar and the UAE at USD 36,600 and 34,100, respectively, and lowest in Saudi Arabia (USD 16,500) and Oman (USD 18,500). Average GDP per capita in GCC countries stands at USD 19,800 and thus at 63% of the euro area average, with Qatar's and the UAE's per capita income exceeding the euro area average (Chart 2). The dispersion of GDP per capita is somewhat lower than within the euro area: Saudi Arabia's income per capita is around 45% of Qatar's, while Portugal's GDP

³ By Michael Sturm and Jan Strasky (ECB).

⁴ The macroeconomic analysis in Part 1 is mainly based on IMF WEO data of October 2007 in view of limited data availability.

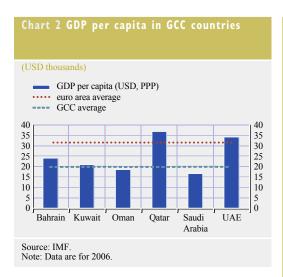
I ECONOMIC STRUCTURES AND DEVELOPMENTS IN THE GCC COUNTRIES





per capita (the lowest in the euro area in 2006) is equivalent to 28% of Luxemburg's (the highest in the euro area).

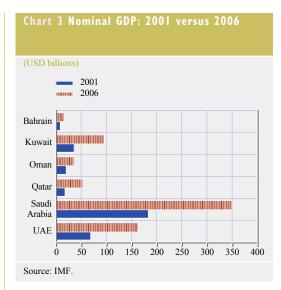
The high oil prices of recent years have significantly increased GCC member states' nominal GDP and GDP per capita. In 2001, the combined GDP of the six GCC countries was USD 332 billion and thus comparable to that of Australia. In 2006, the nominal GDP reached USD 712 billion, which is comparable to that



of Canada. This increase of more than 100% or USD 380 billion in absolute terms implies that, within five years, an economy the size of Sweden was added to the GCC in terms of aggregate output. Saudi Arabia and the UAE accounted for the bulk of this increase with USD 166 billion and USD 95 billion, respectively, over these five years in absolute terms (Chart 3).

In GCC countries, like in other oil-exporting countries, it is useful to look at increases in nominal GDP in addition to real GDP growth in order to gauge the underlying economic dynamics, given that higher oil prices are reflected in nominal GDP growth figures, while only higher oil production increases real GDP. However, nominal GDP increases resulting from higher oil prices – assuming that they are not short-lived - represent "real" income, and are not just an expression of inflationary price increases. In particular, nominal oil revenue is the basis for government expenditure, which is a key driver of economic activity in GCC countries (see sub-section 1.3.1 for a more detailed account of economic growth in the GCC).

Between 2001 and 2006, GDP per capita for the GCC as a whole increased by 30%, with Bahrain and Qatar experiencing the strongest increases at 42% and 37%, respectively (in PPP terms). At the same time, population growth in the GCC was significant at 3% on average per annum between 2001 and 2006. This



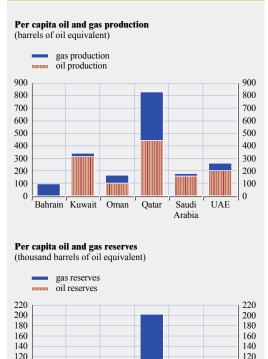
population growth reflects both high birthrates and the inflow of expatriate labour in the wake of the recent economic boom. Labour inflows were particularly pronounced in the UAE, the population of which has grown at 6% per annum since 2001 and in Qatar and Kuwait at around 5.6% per annum. By comparison, in 2006 the population of the EU27 grew by 0.4%, of which 0.3% was accounted for by net migration flows and only 0.1% by natural growth.

1.2.2 THE ROLE OF OIL AND GAS IN THE ECONOMY

Saudi Arabia is – alongside Russia – the world's largest oil producer, with an average production of 8.75 million barrels per day (mb/d) in 2007,5 and by far the largest net oil exporter. Kuwait and the UAE are also among the top ten world net oil exporters.6 Saudi Arabia holds more than one fifth of global oil reserves and accounts for more than half of all oil reserves in GCC countries. Although possessing relatively little oil, Qatar commands the third largest natural gas reserves worldwide after Russia and Iran and has in recent years rapidly increased gas production. Oil and gas resources in Bahrain and Oman are considerably lower.

Expressed in per capita terms, the differences between GCC countries with regard to both oil and gas production and reserves are pronounced (Chart 4). Qatar stands out as the country with

Chart 4 GCC countries' oil and gas production and reserves per capita in 2006



Sources: BP Statistical Review of World Energy 2007, IMF and ECB staff calculations.

Oatar

Saudi

Oman

100 80

60

40

20

100

60

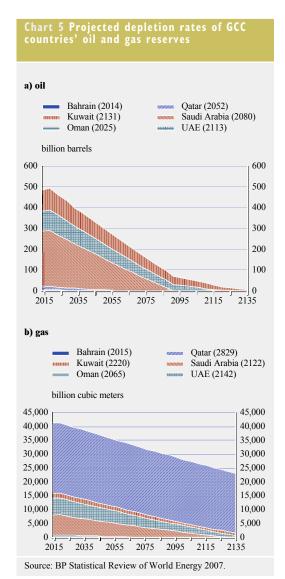
40

20

Bahrain Kuwait

by far the highest reserves and production, reflecting its large gas reserves in combination with a relatively small population (800,000, of which less than 20% are nationals⁷), while the UAE and Kuwait also have relatively high production levels (and thus revenue) and hold large reserves per capita. Saudi Arabia's production and reserves per capita are smaller

- 5 International Energy Agency (IEA) data, which may slightly differ from BP data used in Part 3, but this does not affect the ranking of countries in terms of their importance.
- 6 See also ECB (2007b) on key structural features and economic developments in oil-exporting countries.
- 7 See Table 3 in sub-section 1.2.4 for the share of expatriates/ nationals in the workforce and population of GCC countries. Per capita production and reserves are even higher if only nationals – who ultimately are the "owners" of reserves – are taken into account, in particular, in countries where the share of nationals in the total population is low, for example in Qatar and the UAE.



despite the large numbers in absolute terms, reflecting the country's larger population. Finally, resources are relatively tight in Bahrain and Oman, where at current production levels,

oil will run out within the next two decades. By contrast, oil reserves are projected to last more than 100 years in Kuwait and the UAE. With 14% of global gas reserves, Qatar's reserves will last for several centuries at current production levels, while Kuwait, the UAE, and Saudi Arabia may also still produce gas in the 22nd century (Chart 5).8

The flip side of the GCC countries' rich endowment with natural resources and their important role in global energy supply is that their economies are hydrocarbon-dependent (mainly on oil). The oil dependency of GCC countries is reflected in the share of oil (and gas) revenues in total government revenues, the share of oil (and gas) exports in total exports and the share of the oil and gas sector in GDP. On average, oil revenues account for around 80% of government revenue and for around 70% of export revenue in the GCC, while the oil share in GDP stands at almost 50% (Table 1). The hydrocarbon dependency appears to be highest in Kuwait and Saudi Arabia, and lower in the UAE and Bahrain, pointing to more diversified economies in the latter two countries (see next sub-section).

The large contribution of oil to GCC countries' government revenues, exports and GDP implies that oil price developments have been key determinants for the development of budget and current account balances and for nominal GDP over the past decades.

The oil sector is almost completely nationalised in most GCC countries with regard to upstream

8 Given that depletion projections depend on various factors that are difficult to predict, such as the future state of technology and prices, they should be regarded as highly tentative.

Table The role	of oil in GC	C countries	'governme	nt revenu	es, exports and	GDP				
(percentage of total gov	(percentage of total government revenues, exports and GDP)									
	Bahrain	Kuwait	Oman	Qatar	Saudi Arabia	UAE	GCC			
Government revenues	76.1	77.6	86.1	69.5	89.1	76.1	79.1			
Exports	64.9	86.7	79.1	73.2	87.0	44.4	72.6			
GDP	26.0	59.8	49.4	61.9	54.1	37.3	48.1			

Sources: IMF, ECB staff calculations.

Notes: Unweighted averages. Data are for 2006. Government revenues for Bahrain, Kuwait and Oman are projections and for Qatar are based on 2005 data.

activities (crude oil production), while there is more private foreign involvement in downstream activities (such as refining). The gross share of the government or national oil company in crude oil production in 2006 was estimated at 100% in Qatar, 97% in Saudi Arabia, 90% in Kuwait and 54% in the UAE.⁹

1.2.3 ECONOMIC DIVERSIFICATION

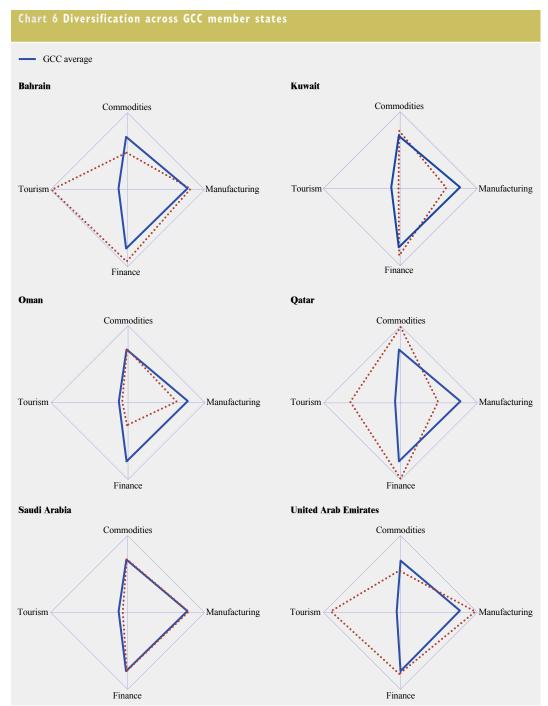
The GCC countries' strong orientation towards oil and gas implies that the diversification of their economies is a key challenge. 10 On the one hand, oil production has promoted economic development and raised living standards enormously in past decades, and GCC countries went from being essentially subsistence economies in the 1960s to wealthy countries as far back as 1980. At the same time, the strong reliance on oil has proven to be a liability. For example, when oil prices fell during the early to mid-1980s, income per capita declined considerably and in the following years stagnated – also owing to high population growth - until the oil price increase starting at the beginning of this decade again led to higher growth rates.

The need for diversification is most pressing in those countries which face a depletion of oil reserves soon, which is the case for Bahrain and Oman (see previous sub-section). However, the need for diversification is not only linked to the level of oil reserves. High population growth, a large number of young labour market entrants and rising unemployment among young nationals also call for diversification efforts in all countries of the region.¹¹ This is because the oil and gas industry offers only limited employment opportunities given that it is very capital intensive. The traditional tool employed by Gulf countries to absorb young nationals into the labour market - employing them in the public sector - has proven to have its limits and is not sustainable. Thus, the development of the private non-oil sector is crucial for easing labour market pressure (see also next sub-section on labour markets and 1.3.1) and for reducing the exposure of economic development to volatile international oil markets.

There are significant differences between GCC countries with regard to both the degree of diversification achieved so far and the direction of diversification in terms of sectors. Overall, Bahrain and the UAE appear to be most advanced in terms of reducing their dependency on oil. Chart 6 depicts the state of diversification in the four most likely areas for generating income in the GCC countries, namely commodities, manufacturing, finance and tourism.

These diversification results reveal the following differences between individual countries:

- Bahrain has established itself as a financial hub for the Gulf region and for the Arab world, particularly in Islamic banking. Tourism, in particular, of regional origin, transport and related services are other areas in which the country is well established. Bahrain is also home to a significant producer of aluminium.
- The UAE has similarly diversified into tourism, with a more international focus than Bahrain; into finance, for example with the Dubai International Financial Center (DIFC); and into transport, serving as a regional trading hub. This makes it the only other country apart from Bahrain with a relatively low level of oil dependency.
- 9 Data from the OPEC Annual Statistical Bulletin 2006. No data are available for Bahrain and Oman, as they are not members of OPEC, but in these countries state companies also dominate crude oil production. The relatively low figure for the UAE is explained by the minority-shareholdings of international oil companies in state-dominated UAE companies. If all oil production by state-dominated companies (government or national oil company share >50%) were accounted for as public sector, the share of the government and national oil companies would be above 90%.
- 10 See, for example, Fasano and Iqbal (2003) and Malaeb (2006) on economic diversification in the GCC.
- 11 Almost one third of the overall population of GCC member states is below the age of 15. Given the large share of expatriates in the total population of around 35 million, who often do not bring their families to GCC countries, the share of those under the age of 15 among nationals is considerably higher. This is particularly the case in Saudi Arabia and Oman, where the share of expatriates in the overall population is lower compared with the other GCC countries (Table 3).



Sources: ECB staff calculations on the basis of data from the AMF, the IMF, the World Tourism Organization, CIA World Factbook and

Notes: The graph gives shares of the maximum of all six countries. The blue line refers to the GCC average. "Tourism" refers to tourist arrivals per capita of national population; "Commodities" refers to income from oil and gas per GDP; "Finance" refers to stock market capitalisation plus bank loans per GDP; "Manufacturing" refers to the share of manufacturing in GDP.

- Kuwait remains highly dependent on commodities, while finance has developed recently.
 - Oman, despite having diversified into manufacturing to a certain extent and started developing infrastructure for tourism, is one

of the countries where the need for structural change away from production of oil and gas is most pressing.

- Saudi Arabia, which is not focused completely on commodities, but generates around 10% of GDP in the manufacturing sector, is quite active in the construction sector and indeed aims to develop as the region's backbone in manufacturing. Saudi Arabia also wants to further develop finance, e.g. with the planned establishment of the King Abdullah Financial District.
- Qatar is most focused on hydrocarbon exploration, in particular, by developing large capacities for the extraction of natural gas. A switch from oil to gas as the main source of export revenues would not completely solve the problems related to the Gulf countries' role as primary commodity exporters. However, this move would still reduce the effects of price volatility, as natural gas prices tend to be less volatile than spot prices on the oil market. Qatar has also advanced in tourism, in particular, as a host of conferences, fairs and events.

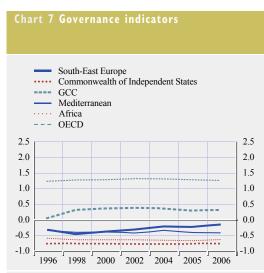
Key preconditions for economic diversification are ensuring a favourable investment climate, open markets with transparent business practices and stable regulatory frameworks, which together make investment in non-oil sectors more attractive. Furthermore, an enhanced role of the private sector in those services which so far have been mainly provided by governments, such as water, electricity and health care would be conducive to diversification, implying that GCC countries' diversification is intrinsically linked to privatisation. Indeed, GCC member states have passed privatisation laws and made progress on privatisation in recent years, for example, in the telecommunications sector. Finally, enhancing the employability of nationals, whose skills and qualifications often do not meet the requirements of private sector companies, is a key ingredient for more diversified economies in the region (see also sub-section 1.2.4).

In terms of business environment, the World Bank Doing Business indicators rank GCC countries at the top of Middle Eastern and North African countries, with Saudi Arabia in particular having improved its ranking over recent years (Table 2). In terms of governance, World Bank governance indicators also show that GCC countries do considerably better than their peers in the Mediterranean region and in other emerging markets in the broad neighbourhood of the EU, but lag behind the OECD countries (Chart 7).

However, the potential limits to diversification also need to be acknowledged. In terms of manufacturing, the comparative advantage of Gulf countries, notably of countries like Saudi

Table 2 Rankings on ease of doing business									
	World ranking	World ranking							
	2008	2008	2007	2006					
Saudi Arabia	1	23	38	35					
Kuwait	2	40	46	40					
Oman	3	49	55	52					
UAE	4	68	77	68					
Memorandum									
Jordan	5	80	78	73					
Tunisia	7	88	80	77					
Algeria	10	125	116	123					
Egypt	11	126	165	165					

Sources: MEES, "Doing Business 2008: How to Reform", World Bank and IFC, September 2007. Note: No ranking for Bahrain and Qatar.



Sources: World Bank, ECB staff calculations. Notes: Arithmetic average of six sub-indicators. Unweighted regional averages. The six governance indicators are measured in units ranging from -2.5 to 2.5, with higher values corresponding to better governance outcomes.

Arabia and Kuwait, ultimately lies in the hydrocarbon sector. Attracting energy intensive industries (e.g. aluminium production, which already plays a significant role in Bahrain and the UAE) and developing petro-chemical industries downstream activities are therefore potentially promising options. For instance, investments in refinery capacity could benefit countries in the region and at the same time help stabilise global oil markets.12 While GCC countries have significantly increased refinery capacities over the last decade (UAE +148%, Saudi Arabia +24%, Kuwait +10%, compared with a global average of +13%), their share of global capacity nevertheless stands at only 4.1% (2006).¹³ By investing in refinery capacity, as actually planned (e.g. Saudi Arabia intends to approximately double its refinery capacity of 2.1 mb/d over the next years and Kuwait is also planning a significant expansion), countries in the

region could move from being crude oil exporters to exporters of refined products, thereby helping to overcome capacity shortage at the global level and becoming exporters of products with higher value-added. Nevertheless, the contribution of these industries to job creation may be limited in view of their capital intensity.

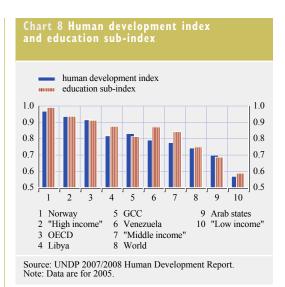
Another question related current diversification efforts concerns finance, namely how many regional financial centres the GCC can sustain. While Bahrain has developed as a successful financial hub for the region since the 1970s and Dubai has advanced in this regard, other countries in the GCC are also vying to establish themselves as financial centres, e.g. Qatar and Saudi Arabia. It remains to be seen whether these financial centres will develop in a complementary way, i.e. each of them focusing on specific financial activities and exploiting comparative advantages, or whether agglomeration effects will prevail and result in a concentration with one leading centre.

1.2.4 LABOUR MARKETS

GCC economies rely heavily on expatriate labour, with expatriates also representing a large share of the total population (Table 3). Labour markets are fragmented between nationals and expatriates. Typically, nationals of GCC countries provide the bulk of the labour force employed in the public sector, which tends to exhibit many rigidities, while expatriates are employed mainly in the private sector, which is highly flexible. Expatriate employment is found in the whole spectrum of professional skills,

- 12 Constraints on refinery capacity, in particular, for heavy crude oil from the Gulf region, have constituted one of the factors driving up prices for light crude oil in recent years.
- 13 Data from BP (2007).

Table 3 Expatriates in the GCC countries' population and workforce									
Share of expatriates as a percentage	Bahrain	Kuwait	Oman	Qatar	Saudi Arabia	UAE	GCC		
Total workforce	59	81	33	89	47	90	56		
Total population	34	53	19	83	21	80	31		



ranging from high skill jobs – often filled by staff from Western countries – to low skill jobs which are filled, in particular, by workers from Asia and non-GCC Arab countries. Thus, GCC countries have access to labour at internationally competitive prices and the large share of expatriate workers implies a significant overall flexibility of labour markets, as the number of workers can be flexibly adjusted in response to economic developments. The mobility of foreign employees between companies and sectors is impeded, however, by the sponsorship system for expatriate labour.¹⁴

The high reliance on expatriate labour is mainly the result of the educational mismatch of the local population, which has prevented GCC nationals from working in most industries that require higher education, especially technical skills, and reluctance of nationals of GCC countries to accept lower paid jobs that require less professional skills. ¹⁵ Indeed, GCC countries are peculiar with regard to labour migration insofar as a high share of the young adult population in a receiving country has been identified as a factor having a negative effect on immigration. ¹⁶ This does not seem to be the case in the GCC countries owing to the educational mismatch of young nationals.

Thus, improving education and vocational training for nationals is a key challenge and

indeed figures high on the agenda in GCC member states.¹⁷ While the level of education has been raised considerably over recent years, educational standards in the GCC countries lag behind the average for middle and high income countries (Chart 8). The sub-index for education compares unfavourably with the overall Human Development Index (HDI) for the GCC. It is lowest in Oman and the UAE, and lags behind the overall HDI, in particular, in the UAE.

Improving education and professional skills is key to creating employment opportunities for a young and rapidly growing population. These efforts are complemented by a policy of regulation, which aims at the "nationalisation" of the labour force in GCC countries. For example, quotas for nationals and stricter work permit requirements for the employment of expatriates have increasingly been imposed in the private sector.¹⁸ In this context, it will be a

- 14 In most GCC countries, expatriate workers need a sponsor (employer) to receive a work permit. Under the sponsorship system, workers are not allowed to change jobs without receiving the permission of the sponsor. If this permission is not granted, workers face the alternative of staying with the sponsor, leaving the country or working illegally. Bahrain liberalised the sponsorship system in 2006 and in other GCC countries a relaxation of the system has been implemented or is under discussion.
- 15 The educational mismatch is exemplified by Saudi Arabia, where around 70% of university students have graduated in humanities or Islamic studies.
- 16 See Hatton and Williamson (2002). They identify four main economic and demographic factors generating migration:
 (i) the gap in income per capita; (ii) economic development (some development leads to increased emigration, as poverty constraints are relaxed); (iii) young adult population (a: large share in receiving country discourages immigration; b: large share in sending country encourages emigration); and (iv) the social network (the stock of previous migrants from the sending country in the receiving country drives further migration). Labour migration to GCC countries appears to be broadly in line with these factors except for (iii, a), and to some extent (i), as the region also attracts qualified expatriates from high-income countries.
- 17 For example, the 2007 budget of Saudi Arabia included provisions for the establishment of 2,000 new schools and four new universities. Another example is the establishment of the Al Maktoum foundation announced in May 2007 by the Emir of Dubai and Prime Minister of the UAE Mohammed bin Rashid Al Maktoum. This fund endowed with USD 10 billion aims at improving education levels in GCC and other Arab countries.
- 18 This contrasts with the prevailing trend of migration policy in EU Member States, see European Commission (2007). In recent years, EU Member States have moved towards tightening conditions for entry via family reunification and asylum programmes (which dominate migration flows to the EU so far), while at the same time further opening up to economic-based migration, targeting workers in scarce supply at the local level, against the background of ageing populations.

I ECONOMIC STRUCTURES AND DEVELOPMENTS IN THE GCC COUNTRIES

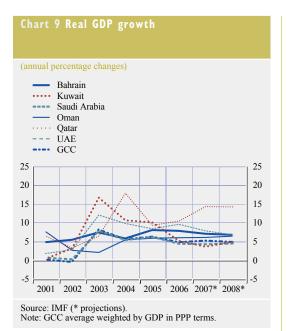
policy challenge to ensure that this process of "nationalisation" of the labour force in the private sector is not accompanied by a reduction in the flexibility that currently prevails in GCC labour markets, given that national employees may enjoy greater bargaining power than the expatriates, which could give rise to institutional arrangements entailing a higher degree of wage rigidity and job protection. Furthermore, nationalisation policies need to be implemented flexibly to avoid bottlenecks, in particular, in sectors requiring highly skilled labour, and so mitigate inflationary pressure resulting from labour shortages. ¹⁹

1.3 ECONOMIC DEVELOPMENTS AND POLICIES

1.3.1 GROWTH AND EMPLOYMENT

GCC countries have experienced strong real GDP growth since 2003 in the wake of high oil prices (Chart 9). For the GCC as a whole, real GDP increased by 6.8% per annum on average over the last five years.20 Growth since 2003 was highest (per annum on average) in Qatar (11.6%), the UAE (9.4%), and Kuwait (9.1%) and more moderate in Oman (5%), Saudi Arabia (5.5%) and Bahrain (7%). For 2008 growth rates are projected to converge in a range from 4% to 7%, with the exception of Qatar, where growth is expected to remain particularly buoyant. Nominal GDP growth, which – as pointed out in sub-section 1.2.1 - may be a useful additional indicator to gauge underlying economic developments in highly oil-centred economies, increased at almost 18% per annum on average since 2003.

Export growth was the main driver of real GDP growth in 2003, peaking at over 11% in GCC countries on average following the rise in oil prices. Domestic demand, in particular, private consumption and fixed capital formation have picked up strongly since 2004. Real private consumption increased at rates between 7.5% and 11% in each year since 2004. Real fixed capital formation grew on average at 16.7% per annum in GCC countries as a whole over the last five years, with annual figures being highly volatile, reflecting the fact that strong



investment activity is driven by large public investment projects (see below). Strong investment activity is also reflected in the share of gross fixed capital formation in GDP, which increased from 20% in 2002 to 30% in 2007 on average for GCC countries. Real fixed capital formation over the last five years increased the strongest in Kuwait at almost 29% per annum, followed by Oman at 23.4% per annum, which points to strong investment in the latter country to foster diversification in view of the dwindling hydrocarbon resources.

Government expenditure has been the key transmission mechanism for higher oil and gas revenues to translate into both higher investment and consumption (see also sub-section 1.3.3 on fiscal developments), with the exception of the UAE, where private sector investment plays a more significant role than in other GCC countries. In particular, GCC governments have embarked on large investment projects to upgrade both physical and social infrastructure.

¹⁹ An example of such flexible implementation in the face of bottlenecks is Saudi Arabia's decision in 2007 to reduce the obligatory quota for Saudi employees in the healthcare and construction sectors.

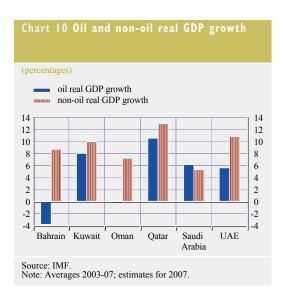
²⁰ The 2007 figure included in the average is a projection from the IMF WEO of October 2007.

The increase in private consumption – apart from being bolstered by confidence inspired by high oil prices – is also influenced by government spending, e.g. via the increase in public sector wages, which is one way to respond to political and social pressures to share increased oil wealth with the broader (national) population (see also Box 1 on wage developments).

GCC countries' investment spending plans for the next five years are worth at least USD 800 billion, i.e. in excess of their current combined GDP of USD 791 billion (estimate for 2007). These include investment in the oil and gas sector, financed mainly by national oil companies; infrastructure, often funded under public-private partnership (PPP) arrangements; and real estate development, financed largely by the private sector. 75% of the USD 800 billion is earmarked for investment in the non-hydrocarbon sector.²¹

Non-oil real GDP growth in GCC countries has accelerated and exceeded oil real GDP growth since 2003 (Chart 10). Over the past five years, non-oil GDP growth per annum on average was higher in each of the six countries than during the five preceding years. Moreover, from 2003 non-oil GDP grew faster per annum on average than oil GDP in five of the six countries. The highest non-oil GDP growth was recorded in Qatar and the UAE at 13% and 11% per annum, respectively, while it was lowest in Saudi Arabia at 5.3%, the only country where nonoil growth did not exceed oil GDP growth. The highest oil GDP growth occurred in Qatar and Kuwait at 11% and 8% per annum on average, respectively. From 2003, oil GDP contracted in Bahrain by 3.8% per annum on average and in Oman oil GDP stagnated, pointing to these two countries' declining oil resources.²²

While accelerating and high real non-oil GDP growth can be seen as an indication of some progress in diversification (see also sub-section 1.2.3), caution is warranted in terms of drawing too strong conclusions. The high non-oil growth of recent years has been driven to a large extent by government expenditure, which has been



fuelled by buoyant revenues as result of high oil prices. Thus, high non-oil growth has to be seen in the context of high oil prices, and it remains an open question as to whether and to what extent recently observed high levels of non-oil growth could be sustained if oil prices decreased and government expenditure retrenched.

Official data on unemployment in GCC countries is scarce. Unemployment among expatriates can be assumed to be negligible as staying in a GCC country is generally linked to having a job. Among nationals, unemployment is a problem in some countries. The respective country figures (or estimates thereof) differ significantly.²³ In Bahrain and Oman, unemployment is estimated at 15% and 12-13%, respectively. In Saudi Arabia, unemployment stands at 12%, with the percentage of jobseekers in the age group 20-29 as high as 25%. Unemployment has increased in recent years despite buoyant growth and about one million new jobs created in 2005-2006, as many of the new jobs were filled by expatriates (see also 1.2.4). Official figures unemployment in Kuwait at close to 5%, with some estimates pointing to a rate twice as high.

- 21 See IMF (2007f)
- 22 In Bahrain, the decline is also the result of a change in 2004 to the arrangement with regard to the Abu Saafa oil field shared with Saudi Arabia.
- 23 The figures indicated here are compiled from the IIF country reports for 2007.

I ECONOMIC STRUCTURES AND DEVELOPMENTS IN THE GCC COUNTRIES

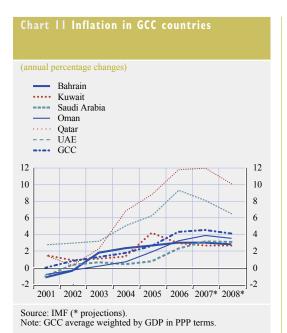
In the UAE and Qatar, at an estimated 3% and 2%, respectively, joblessness is not considered a problem, even though underemployment (in the public sector) is an issue.

1.3.2 INFLATION, MONETARY AND EXCHANGE RATE POLICIES

Inflation has increased over recent years in all GCC countries in the wake of higher oil prices, the ensuing buoyant economic growth and rising import prices. This has led to a rise in average inflation in GCC countries from below 1% in 2002 to over 4% in 2006 and 2007. However, while inflation remained at relatively moderate levels in most countries owing to the dynamics of the economic expansion, inflation rates in Qatar and the UAE have risen sharply since 2004 to around 10% (Chart 11).

Common factors driving up inflation in GCC countries in recent years have been: (i) strong domestic demand accompanied by rapid money and credit growth; (ii) emerging bottlenecks in the economy caused by the economic boom, e.g. in the areas of construction and project management; and (iii) rising food prices and prices for raw materials (e.g. steel, cement), which have been a global phenomenon. Rising import prices as a result of the US dollar pegs of GCC countries have also contributed to the increase in inflation, given that the US dollar has depreciated in recent years vis-à-vis most major currencies, including the euro and the pound sterling, the valuations of which are important for GCC countries' import prices as Europe is an important source of imports.

Differences in the inflation performance of GCC countries are mainly explained by developments in the real estate sector. While the two countries with high inflation in the GCC – Qatar and the UAE – also have the fastest growing economies in recent years, partly explaining the inflation differentials, the main driver of price increases has been the boom in the real estate sector. Soaring real estate prices – for which there is plenty of anecdotal evidence, but few systematic and comparable data – have driven up rent prices, which make up for the difference between Qatar



and the UAE and the other four countries in terms of inflation. For example, the average rent increase between November 2004 and November 2006 was 83% in Doha/Qatar and 60% in Dubai, while the comparable figure for Riyadh was 21% and for Kuwait City 24%.²⁴

The surge in Qatar and UAE real estate prices and rents is linked inter alia to: (i) more liberal regulations regarding foreign ownership of real estate (with the most open regulations in the emirate of Dubai, while in most other GCC countries restrictions are pervasive); and (ii) the large inflow of expatriates. In Qatar, the implementation of many mega-projects within a short time span and on a limited territory has been a particular driver of real estate prices and inflation. This was also linked to massive construction activity related to the 2006 Asian Games hosted in Qatar, which attracted expatriate labour. The interaction of rent, wage and general price increases, in particular in Qatar and the UAE, appears to have the potential to set the stage for a wage-price spiral, which might make it difficult to anchor inflation expectations (see Box 1 on wage developments).

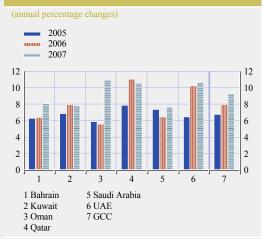
24 See GulfTalent (2006a).

WAGE DEVELOPMENTS IN GCC COUNTRIES

GCC countries experienced significant and accelerating increases in private sector wages in the past three years. Wages increased on average by 7% in 2005, by 7.9% in 2006 and by 9% in 2007 (see Chart).

Qatar and the UAE have seen the highest wage increases in the private sector over the past three years, while in 2007 Oman also recorded a sharp hike in wages. In these three countries, wage increases recently reached double-digit levels. Pay rises were highest in the construction, banking and hydrocarbon sector (reaching 11.1%, 9.8% and 9.7%, respectively in 2007). This mirrors the bottlenecks that have occurred in these sectors as a result of the buoyant economic activity in recent years as

Private sector wage increases in GCC



Source: Gulf Talent Reports.

local companies expand (e.g. in the construction and hydrocarbon sector) or foreign companies enter the market (e.g. in the banking and financial sector, see also sub-section 1.3.5). However, other sectors also experienced significant pay rises.

The following key drivers have been identified for the broad-based wage increases in the private sector:

- Rising inflation and, in particular, spiralling rents, have driven up the cost of living and forced employers to offer higher wages to retain or attract qualified employees. The sharp rent increases have been the major factor behind the particularly high pay rises in Qatar and the UAE, where employees spend around one-third of their income on rents, while in Saudi Arabia rents account only for 19% of household spending.
- The depreciation of the US dollar has decreased the value of Gulf salaries in foreign currency terms. This has been the case, in particular, for highly qualified expatriate staff. As a result, employers are reported to offer higher wages for employees from those countries whose home currencies have appreciated vis-à-vis the US dollar/Gulf currencies.
- High economic growth in combination with higher wages and increased job opportunities in Asia, in particular, India have made it more difficult to attract/retain staff from countries, which are a key source of labour supply in the Gulf. Asian expatriates are reported to have seen the highest pay rises recently.

¹ Information in this box is based on Gulf Talent (2005, 2006a,b, 2007), which conducts annual surveys on salaries among 18,000 professionals in the six GCC countries. The surveys cover 12-month periods from August to August, i.e. 2007 means August 2006-August 2007.

- GCC countries have gradually liberalised the sponsorship system for expatriate employees (see also sub-section 1.2.4), which limited the mobility of staff between sectors and companies and thus was a tool for employers to retain employees. The gradual removal of restrictions made it easier for staff to seek better jobs and higher wages. The recent spike in wages in Oman is partially explained by the liberalisation of the sponsorship system and by the movement of expatriates to GCC countries with higher wage levels such as the UAE and Qatar, forcing Omani employers to raise compensation levels.
- Public sector wages increased significantly in Gulf countries in recent years, as governments were under pressure to distribute part of the windfall oil revenues to citizens and compensate for rising costs of living. For example, a 70% wage increase is budgeted for federal employees in the UAE in 2008, public sector pay rises of 20-30% were announced in the UAE in 2007 and of 15% in Bahrain and Oman. 2006 saw a 20-40% public sector wage increase in Qatar, and in 2005 significant pay rises were recorded in Saudi Arabia and the UAE in addition to lump sum payments in Kuwait and Bahrain. The degree to which such pay rises spill over to the private sector depends on the number of new public sector jobs created and whether the private sector relies on nationals, which is mainly the case in Oman and Bahrain, but less so in the other GCC countries.

Inflationary pressure in GCC countries may not be fully reflected in headline CPI figures. This is suggested by widespread administered prices and subsidies in most countries, e.g. for oil, gas, electricity, water and some food items. Furthermore, CPI baskets may not reflect current consumption patterns (e.g. the weights in the CPI basket of Bahrain have not been updated since 1995) or are confined to nationals (e.g. in the UAE), who make up only a small part of the population and benefit more from subsidies than the large expatriate population.²⁵ Food, rents and housing-related costs, and transport and telecommunications are the biggest items in GCC countries' CPI baskets (Table 4). The current pattern of price increases in GCC countries is exemplified by Saudi Arabia. In the first ten months of 2007, CPI inflation (cost of living index for all cities) increased to 4.6%. The main drivers of inflation in this period were rents and housing-related costs (+10.5%), and

foodstuff and beverages (+6.4%). Prices for transport and telecommunication rose by only 0.9%. This probably reflects the impact of energy subsidies. This was also visible in May 2006, when Saudi Arabia lowered domestic fuel prices to alleviate the impact of the stock market correction on private households, which led to a fall in the headline CPI of 0.2% that month, while the CPI without the transportation and telecommunications component rose by 0.6%.

The substantial increases in the stock markets of GCC countries since 2003, which saw a correction in 2006 (see sub-section 1.3.5), as well as evidence of sharply rising real estate prices also point to underlying inflationary pressures, which may not be reflected in the CPI figures, but in asset price inflation.

25 While official inflation in the UAE in 2006 stood at 9.3%, private sector estimates (IIF, EIU) point to inflation rates of 13-15%.

Table 4 Major components in	ble 4 Major components in GCC countries' CPI baskets							
Weight of selected items	Kuwait	Qatar	Oman	Saudi Arabia	UAE			
Food	19.0	18.1	30.4	26	14.4			
Rents/housing	26.7	20.7	21.4	18	36.1			
Transport/telecommunications	16.1	23.4	22.2	16	14.9			

Sources: National sources.

Notes: The composition of the selected items may vary between countries, e.g. food may comprise beverages and tobacco in some cases. No data available for Bahrain.

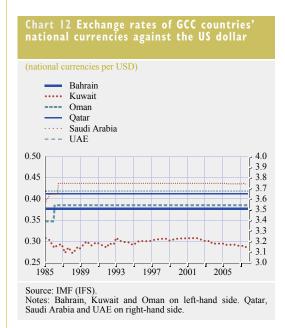
At the same time, some factors have been keeping inflation in check. Most notably, the availability of expatriate labour at competitive prices together with the flexibility of the labour market in the private sector has helped to alleviate inflationary pressures. Indeed, GCC countries have seen a large influx of expatriate labour in response to the recent economic boom. Although the inflow of expatriate labour has mitigated inflationary pressure in general, it has also contributed to price pressures in some areas, in particular, residential rents. GCC countries' open trade systems also help to keep inflation in check, in particular, the increasing share of imports from low cost countries in Asia, especially China. Finally, some progress has been made on enhancing competition in the services sector, e.g. via privatisation in the telecommunications sector or greater foreign participation in the banking and financial sector.

The role of monetary policy in containing inflationary pressure has been limited as a result of prevailing exchange rate regimes. GCC countries have a long-standing common orientation of exchange rate policies towards the US dollar (Chart 12). Five of the six GCC currencies have been de facto – and since 2003 pursuant to an agreement in the context of the

GCC's monetary integration process also de jure – pegged to the US dollar for decades, with the last major adjustment of parities taking place in 1986.

Only Kuwait operated a peg to an (undisclosed) currency basket until 2003, which was nevertheless dominated by the US dollar, and fluctuations vis-à-vis the US currency were rather limited. Unlike the other GCC countries, since 2003 Kuwait has also retained some exchange rate flexibility when pegging to the US dollar within a fluctuation band of $\pm -3.5\%$. In May 2007 Kuwait returned to a basket, the composition of which is undisclosed, but perceived to be similar to the one that was in place prior to 2003 and thus also dominated by the US dollar. Kuwait's decision of May 2007 was taken against the background of rising inflationary pressure, although inflation remains more contained than, for example, in Qatar and the UAE. Fluctuations vis-à-vis the US dollar since May 2007 have been limited, with an overall appreciation of 5.6% from 20 May 2007 to mid-February 2008.

The preference for an external anchor and orientation towards the US dollar can be explained by the fact that oil revenues, which constitute the main income flow from exports in GCC countries, are priced in US dollars. The pegs to the US dollar thus serve the aim of stabilising export as well as fiscal revenues, given the prominent role of oil revenues in the government budget. Furthermore, a large part of GCC countries' considerable foreign assets is reported to be denominated in US dollars and thus exchange rate stability vis-à-vis the US dollar shields the value of these assets from exchange rate fluctuations.26 Overall, the US dollar pegs are seen as having served GCC economies well, acting as a linchpin of stability and contributing to low inflation when viewed over a longer time horizon.²⁷ However, debate about the appropriateness of such exchange rate



²⁶ See IIF (2007b), Setser and Ziemba (2007b), sub-section 1.3.4 and Part 2 on GCC countries' foreign assets.

²⁷ See, for example, Abed, Erbas and Guerami (2003) and Jadresic (2002). For a different view see Setser (2007b).

regimes in the future has recently intensified in GCC countries.

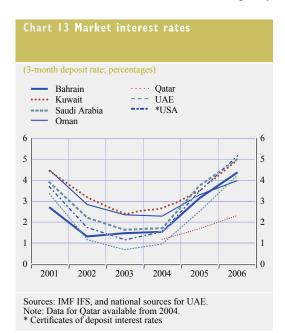
One consequence of these exchange rate regimes is that the GCC countries' terms of trade are exposed to fluctuations in the US dollar vis-àvis other major currencies, notably the euro, given that a significant share of imports comes from the euro area, even though a large share also originates in countries whose currencies are pegged or tightly managed to the US dollar (notably in Asia) and to a lesser extent in the United States.²⁸ Furthermore, the pegs imply – given GCC countries' relatively liberal capital accounts – that interest rates closely follow US interest rates (Chart 13), even though the business cycles of the United States and the GCC countries might diverge.

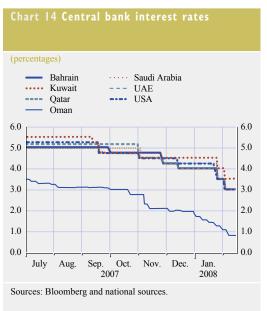
As a result, GCC central banks have been constrained in their ability to use domestic interest rates to control inflation. Indeed, US interest rates in 2003 and 2004 were relatively low, when the oil price-induced boom in GCC economies set in. The lowering of US interest rates since September 2007 by a cumulative 225 basis points in the wake of the sub-prime crisis at a time of mounting inflationary pressure in GCC countries further illustrates the policy

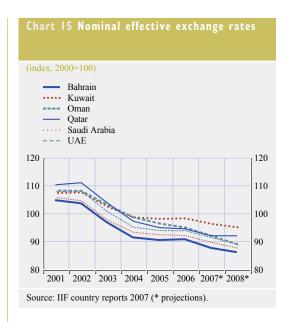
challenge that may result from the US dollar pegs. Indeed, GCC central banks were forced to cut interest rates (Chart 14) to maintain their parity with the US dollar and fend off appreciation pressure stemming from speculative capital inflows. This challenge might increase to the extent that the US economy is slowing down while global growth – driven increasingly by emerging markets – remains robust, thereby keeping oil prices high and fuelling the boom in GCC economies. It is also notable that in recent years market interest rates in GCC countries have tended to be below the comparable US interest rate, while before 2004 they generally exceeded US rates. This reflects high liquidity in GCC countries resulting from high oil prices and the ensuing economic boom, in addition to the aforementioned appreciation pressure. Real interest rates in the GCC have declined in view of rising inflation and have even become negative in several countries, most notably in Qatar and the UAE.

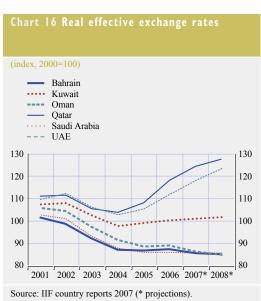
Given the constraints on monetary policy to counteract inflationary pressures, some GCC countries have resorted to administrative and prudential measures to curb inflation. For example,

28 See Parts 2 and 3 for more details.









caps on rent increases have been introduced in the UAE (7% in the emirates of Abu Dhabi and Dubai, 0% for three years in Sharjah), in Qatar (10%) and Oman (15%), with the aim of limiting rent increases, which have been a main driver of inflation.²⁹ In the same vein, in December 2007 Saudi Arabia announced the introduction of new subsidies on some food items. Furthermore. several central banks increased reserve requirements and tightened loan-deposit ratios in order to rein in fast credit growth, the latter with the additional aim of limiting speculation in view of the soaring stock markets prior to 2006. The effectiveness of such measures in curbing inflation remains to be seen and potential negative side effects in terms of resource allocation need to be taken into account, e.g. the impact of rent caps on long-term housing supply if the caps are retained rather than bridging short periods until new supplies come into the market.

The depreciation of the US dollar over recent years has added to inflationary pressure via import prices, particularly in those countries where a large share of imports come from the euro area. In fact, all GCC countries have seen a depreciation of their nominal effective exchange rate since 2002 (Chart 15). Several GCC countries have also experienced a depreciation of their real effective exchange rate since 2002, which may have been conducive to

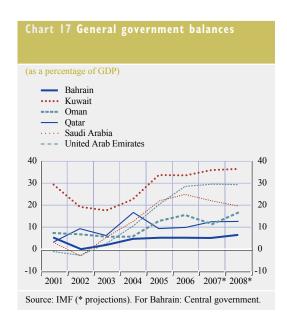
the development of their nascent non-oil sectors. Exceptions are Qatar and the UAE, where high inflation led to an appreciation, while in Kuwait the somewhat higher exchange rate flexibility prevented a stronger depreciation (Chart 16).

In short, as a result of the US dollar pegs, in recent years monetary conditions in GCC countries can be considered as having been relatively loose in view of cyclical developments. Fiscal policy remains the key macroeconomic tool in the hands of GCC policymakers to control inflation. Fiscal expansion needs to take into account the absorptive capacity of the respective economies and to avoid creating or exacerbating supply bottlenecks in parts of the economy, which in turn add to inflationary pressure (see next sub-section).

1.3.3 FISCAL DEVELOPMENTS AND POLICIES

The rise in oil prices and the associated increase in government revenues has led to a sharp increase in GCC countries' budget surpluses (Chart 17). The highest surpluses in the past two years were recorded in Kuwait and the UAE, at above and somewhat below 30% of GDP, respectively. These countries' revenues are augmented by significant investment income from particularly large amounts of foreign

29 Information as of September 2007, see Gulf Talent (2007).



assets (see also sub-section 1.3.4). The lower surpluses in Bahrain and Oman are explained by the relatively weaker hydrocarbon resource-base of the two countries, while in Qatar particularly large expenditure increases – related mainly to public investment – prevented higher surpluses.

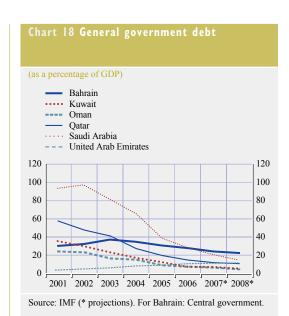
The budget surplus of Saudi Arabia, which peaked at 25% of GDP in 2006, is projected to decrease to 20% of GDP in 2008. This reflects mainly the significant increase in capital expenditure, in particular, on physical generation, infrastructure (e.g. power desalination, housing, roads, railway) and social infrastructure (e.g. education and health), addressing the needs of a growing population, and in oil production capacity. Indeed, in 2007 real gross fixed capital formation was projected to rise in Saudi Arabia by 56% year on year.³⁰ The increase in public expenditure focused on capital spending is also in line with the strategy devised in the framework of the IMF's multilateral consultation on global imbalances, in which Saudi Arabia participated.31

This trend is common to other GCC countries and most other oil-exporting countries, which following the oil price increase, have been relatively cautious in expanding public expenditure. This may be owing to the experience in the second half of the 1980s, when, after a fall in oil prices, countries found it difficult to rein in expenditure, which had sharply increased when oil prices were high in the 1970s/early 1980s. Moreover, there was uncertainty as to whether the higher oil prices of recent years are of a temporary or permanent nature. The recent relaxation of the fiscal stance may reflect: (i) that authorities now see the increase in oil prices since 2003 as more of a permanent than a temporary nature; and (ii) mounting social and political pressure to distribute the windfall profits of recent years to wider parts of the population. Indications of the latter include the increase in public sector wages in GCC countries (see Box 1) or the Emiri grant in Kuwait.32

The recent fiscal expansion is also reflected in the non-oil balance/non-oil GDP ratio, which insulates budget balances from fluctuations in oil prices and production, and is often seen as a better indicator of the underlying fiscal stance in oil-exporting countries than the overall budget balance.33 The IMF estimates that the non-oil deficit/non-oil GDP ratio (which traditionally is high in oil-centred economies given the small share of non-oil revenues and the large share of oil GDP) increased between 2003 and 2006 from -47% to -54% in Saudi Arabia, from -45% to -52% in Kuwait, from -41% to -50% in Qatar and from -58% to -60% in Oman. By contrast, this ratio declined in the same period from -29% to -15% in the UAE, while it remained broadly constant at around -33% in Bahrain.

Public debt is no longer an issue in GCC countries and has converged at low levels.

- 30 Major investment projects in Saudi Arabia relate to the establishment of six "economic cities" each of which is intended to focus on specific economic activities and industries. The economic cities are seen as key to fostering diversification and re-balancing growth between the country's regions. Unlike in the smaller GCC countries, regional disparities are an issue in Saudi Arabia. The cities are primarily to be established in regions which have not benefited from the buoyant activity of recent years.
- 31 See IMF (2007c). See also Part 2 on public spending in GCC countries in the context of the debate about global imbalances.
- 32 A lump sum of 200 Kuwaiti dinars (approximately USD 700) was paid to every Kuwaiti citizen in 2006.
- 33 See Barnett and Ossowski (2002) on this indicator for fiscal policy in oil-producing countries.



Saudi Arabia and Qatar accumulated significant public debt during the 1990s, which stood at around 100% and 70% of GDP, respectively, at the end of the previous decade (Chart 18).34 Saudi Arabia's debt was domestic, held mainly by social security institutions and domestic banks, and increased when oil prices and real GDP growth were relatively low. Qatar's debt was mainly external and was accumulated in the context of the country's massive investment in gas production capacity and infrastructure. Both countries used the recent period of high oil prices to significantly reduce their public debt. For 2007, public debt in GCC countries was projected not to have exceeded 25% of GDP in any of the member states. Given their net creditor status and large foreign assets, GCC countries could easily repay public debt completely. They may refrain from doing so in order to keep a stock of government securities, which may be used for monetary policy purposes or serve as a benchmark for corporate bond issuance in the context of financial market development (sub-section 1.3.5).

The overall fiscal strength of GCC countries is also reflected in their sovereign ratings, which all countries received in recent years (Table 5). Geopolitical risks, the developing state of institutions and volatility of economic

Table 5 Sovereign ratings of GCC countries (Moody's)									
(as of February 2008)									
	Long-term domestic currency rating	Long-term foreign currency rating							
Bahrain	A2	Aa3							
Kuwait	Aa2	Aa2							
Oman	A2	Aa3							
Qatar	Aa2	Aa2							
Saudi Arabia	A1	Aa3							
United Arab Emirates	Aa2	Aa2							

performance owing to hydrocarbon dependency are quoted as the main factors preventing even higher ratings in view of high surpluses and low debt, which indeed outperform some countries with triple-A ratings.

Source: Bloomberg (Moody's)

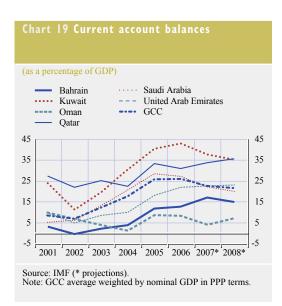
Notwithstanding the overall very favourable fiscal situation, GCC countries face a number of fiscal policy challenges, which are common to most oil-centred economies:35 (i) to avoid procyclical policies, which have characterised the conduct of fiscal policy in many oil-exporting countries in the past, and which in periods of high oil prices contribute to inflationary pressure in view of bottlenecks and limited absorptive capacity of the economies; (ii) to ensure the quality of public spending, given limited administrative capacities to oversee spending and project development; (iii) to balance expenditure expansion with intergenerational considerations and thus the need to accumulate financial assets with a view to declining oil reserves; and (iv) in the long-run, to reduce the reliance on hydrocarbon revenues by developing other sources of revenue, in particular, tax revenue.36 Appropriate fiscal rules and institutions would be helpful in addressing these

³⁴ Kuwait accumulated a large public debt of above 100% of GDP in the early 1990s to finance the reconstruction after the Iraqi invasion in 1990-1991, but rapidly reduced it within a few years, drawing on its high foreign assets.

³⁵ See Sturm and Gurtner (2007) and Sturm and Siegfried (2005) for a more detailed analysis of fiscal policy challenges in oil-exporting countries.

³⁶ Currently GCC countries do not levy personal income taxes or general consumption taxes. The introduction of a VAT, coordinated among GCC countries, is under discussion.

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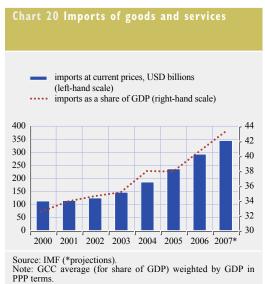


challenges.³⁷ All GCC countries with the exception of Saudi Arabia have set up oil stabilisation and savings funds in this context, which manage considerable foreign assets.³⁸

1.3.4 EXTERNAL DEVELOPMENTS

GCC countries have accumulated large current account surpluses since 2003, peaking at around 26% of GDP in 2005-06 on average (Chart 19). The sharp rise observable over recent years is the result of both higher oil prices and oil production. Since 2004, Kuwait has had the highest current account surpluses, while Oman has had a relatively small surplus, reflecting its lower endowment with hydrocarbon resources combined with large investments.

The current account of GCC countries is typically – with some country-specific variations – characterised by a very high trade surplus given the role of hydrocarbon exports. Most countries have a deficit in the services balances as a result of high services imports, e.g. related to project development, with the exception of Bahrain, which has a surplus in the services balance in view of the country's role as a financial hub. GCC countries also have a deficit in net current transfers, which reflects high remittances outflows by expatriate labour and, in some cases, significant official development assistance, while most countries have positive and rising net



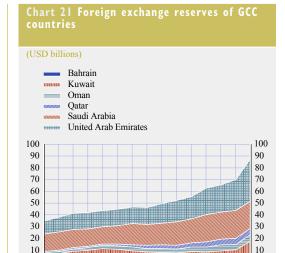
factor income, reflecting the return on large and increasing foreign assets (see below).

The current account surplus of the GCC was projected to decline in 2007 from its peak (in terms of GDP) of previous years and is expected to fall somewhat further in 2008, mainly driven by developments in Saudi Arabia. However, current accounts are expected to remain comfortably in surplus over the medium term. The decline from the extraordinary high levels of 2005-06 stems from increased imports, which mainly reflects an acceleration in investment spending, in particular, on infrastructure projects, but also higher private consumption and, to a lesser extent, slightly lower export revenues owing to lower production in view of OPEC decisions in 2006 to reduce output (this is mainly relevant for Saudi Arabia).

Import growth in GCC countries has been buoyant with double-digit rates every year since 2004. In absolute terms, imports of goods and services in the six GCC countries more than tripled from USD 114 billion in 2000 to USD 345 billion in 2007 (IMF projection). Saudi Arabia

³⁷ See Sturm and Siegfried (2005) for a discussion of fiscal rules in GCC countries.

³⁸ See Davies, Ossowski, Daniel and Barnett (2001) on oil stabilisation and savings funds, which are also referred to as sovereign wealth funds. See also sub-section 1.3.4 and Part 2.



Source: IMF.
Notes: Semi-annual aggregated data. Data for Bahrain available up to February 2005.

2000 2001 2002 2003 2004 2005 2006 2007

(USD +90 billion) and the UAE (USD +80 billion) account for almost three-quarters of the additional imports over this period. As a share of GDP, since 2000 imports have increased on average by 10 percentage points, from 33% to 43%, notwithstanding the rapid expansion of nominal GDP in GCC countries (Chart 20). Looking at overall absorption, the growth of real domestic demand has exceeded real GDP growth in the GCC every year since 2004, and is projected to continue to do so in 2008.

Against the background of large current account surpluses, GCC countries have recorded large capital outflows in recent years, which have mainly taken the form of reserve accumulation and portfolio investment. ³⁹ The foreign exchange reserves of GCC countries' central banks, as reported in IMF data on foreign exchange developments, have increased only moderately in recent years, given the magnitude of current account surpluses, from USD 35 billion in June 2000 to USD 88 billion in June 2007 (Chart 21). The central banks of the UAE and Saudi Arabia are the biggest holders of foreign exchange reserves in the GCC.

These figures, however, give an incomplete picture of official foreign assets held by GCC

countries, as SWFs, not central banks, are the main accumulators of foreign assets in most GCC countries.⁴⁰ The SWFs of GCC countries do not disclose information about the total amount of assets under management or the composition of assets. Private sector estimates, which are surrounded by a high degree of uncertainty, point to the Abu Dhabi Investment Authority (ADIA) as managing the largest amount, which is estimated at USD 250-500 billion, ahead of the Kuwait Investment Authority (KIA), with an estimated USD 160-250 billion under management.⁴¹ Qatar, Oman, Dubai and Bahrain have also set up SWFs, but assets under management are estimated to be significantly lower.

Saudi Arabia is an exception with regard to foreign asset accumulation in the GCC insofar as it has not set up a SWF. Foreign assets are mainly accumulated by the Saudi Arabian Monetary Agency (SAMA), which holds net foreign assets worth USD 259 billion (September 2007), up from USD 43 billion in January 2001. 42 Formally, the bulk of these assets are not classified as foreign exchange reserves as reported to the IMF in Chart 21. Saudi Arabia's foreign assets have not increased to the extent that could be expected given the size of the country's oil revenues, as in the late 1980s and 1990s, it exhibited sometimes large fiscal deficits and used the windfall revenues of recent years to repay the previously high public debt.

GCC countries have seen a sharp increase in foreign direct investment (FDI) inflows since 2003 (Table 6). Until a few years ago, the UAE attracted the highest inflows in absolute terms,

³⁹ See Part 2 for a more detailed discussion of GCC countries' capital exports and their role in global finance.

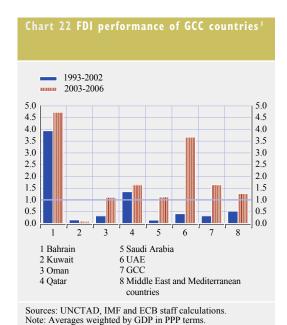
⁴⁰ See Part 2 for more detailed information on the GCC's sovereign wealth funds and related policy issues.

⁴¹ See also ECB (2007c). Some estimates put ADIA's assets even higher at up to USD 900 billion. KIA is managing the General Reserve Fund (stabilisation purpose) and the Fund for Future Generations (savings purpose). Kuwait's finance minister stated that the assets managed by these two funds amounted to USD 213 billion (as of March 2007).

⁴² Some foreign assets are also held by the Public Investment Fund (PIF), which is not a classical SWF, as the main focus of its activity is providing loans to and holding stakes in domestic companies for development purposes, and by social security institutions, which generate large surpluses.

Table 6 FDI inflows in GCC countries									
(USD millions)									
	2001	2002	2003	2004	2005	2006			
Bahrain	80	217	517	865	1,049	2,915			
Kuwait	-111	3	-67	24	250	110			
Oman	5	109	494	229	900	952			
Qatar	296	624	625	1,199	1,152	1,786			
Saudi Arabia	504	453	778	1,942	12,097	18,293			
United Arab Emirates	1,184	1,307	4,256	10,004	10,900	8,386			
GCC total	1,959	2,713	6,603	14,263	26,348	32,442			
Source: UNCTAD.									

reflecting its outward-oriented development strategy and more diversified economy. Its FDI inflows tend to be less focused on the hydrocarbon sector compared with other GCC countries. The sharp increase in FDI inflows to Saudi Arabia in 2005-06 is notable. It points to the gradual opening up of the economy to foreign investment, which has inter alia been fostered by the country's accession to the World Trade Organisation in 2005, of which all other GCC countries were already members. Thus, of the GCC countries, recently Saudi Arabia has been absorbing the most FDI inflows in absolute terms, which can be considered as a normalisation given the size of its economy.

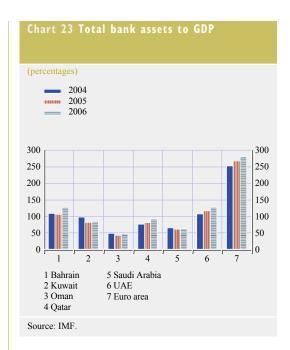


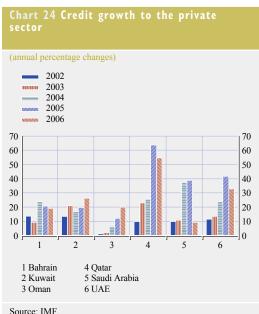
1) The values indicate a countries' share in global (gross) FDI inflows divided by its share in global GDP.

In relative terms, a way to measure FDI performance is to compare a country's share in world FDI inflows with its share in world GDP. In this regard, the GCC's performance since 2003 contrasts with the previous decade (Chart 22). While prior to 2003 the GCC's share in FDI inflows was below what could be expected given the size of the economies, this trend has since reversed. Furthermore, before 2003 the GCC countries in relative terms attracted less than the Middle Eastern and Mediterranean region as a whole, while since then they have overtaken this benchmark. The rise in FDI since 2003 may be attributable to a combination of (i) higher oil prices, which made investment in the hydrocarbon sector more profitable; and (ii) ongoing structural reforms, which have opened more sectors for foreign investment and have tended to improve the business environment. In relative terms, Bahrain, which already recorded high inflows over the last decade, and the UAE by far attract the most FDI. By contrast, it is notable that Kuwait has had very low FDI inflows. Although FDI outflows from GCC countries have been considerable in view of high oil revenues over recent years, most of them have been net recipients. Kuwait is recording significant net outflows, which reflects the low level of inflows and the country's particularly high current account surpluses.

1.3.5 FINANCIAL SECTOR DEVELOPMENTS

The financial sector in the GCC countries is bank-based, with instruments geared towards short-term maturities. Banking systems are dominated by domestic banks (depending on the





country, private or public), but foreign participation and competition in the sector is on the rise, with banks from both other GCC countries and from outside the region entering the market or applying for licences. GCC banks in general are well-capitalised and profitable, and banking systems in the region are among the most developed in the Arab world. Financial markets tend to be underdeveloped. While stock markets have significantly advanced over recent years, bond markets remain in their infancy. Insurance and mortgage lending are also in the early stages of financial development in the GCC countries.

The ratios of total bank assets to GDP are still relatively low, e.g. compared with the euro area, indicating substantial room for further expansion (Chart 23). At the end of 2006, the UAE and Bahrain (including the offshore sector) had the largest banking sectors, with total assets standing at over 100% of GDP. By contrast, in Oman, with the smallest banking sector, total assets accounted only for around 50% of GDP, and Saudi Arabia's banking sector is also relatively small in the regional context.

Banks in the GCC countries are the main source of corporate financing – a fact that reflects the

nascent stage of the region's capital markets. Companies still rely on bank borrowing, whether bilateral or syndicated. Moreover, the credit facilities in the region are mostly short term, for example in 2006, 56% of all credit in Saudi Arabia had a maturity of shorter than one year.

In recent years, GCC countries have seen rapid credit growth to the private sector (Chart 24). Credit growth was particularly buoyant in Qatar and the UAE, the two fastest growing economies in terms of GDP, but expansion of credit to the private sector was also strong in the other countries. In several countries, in particular, in Saudi Arabia, credit growth slowed down in 2006 following the stock market correction (see below). This may be an indication that bank loans were used for speculation in the stock market boom prior to 2006.

Personal loans, especially those for consumption purposes, are generally the part of banks' assets that are increasing most dynamically. For example, between 2003 and 2005, in Saudi Arabia consumer loans, including credit card debt, grew at an annual rate exceeding 55%,

43 See Creane, Goyal, Mobarak and Sab (2003).

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while total credit in the same period only grew by 35% per annum. The boom in retail banking is driven by favourable demographics, previously low levels of consumer credit and relatively high returns, but it also provides a means of revenue diversification for the financial institutions. Although still somewhat focused on wealthier customers, it is expected to become widely available.

Personal lending at the GCC level increased from 23% of total lending in 2000 to 33% in 2006. This reflects a catching-up process, but also the recent strong economic growth and the increasing maturity and sophistication of the markets. The GCC-wide figure, however, conceals a variety of country positions. In Saudi Arabia, personal lending increased from 15.5% of all credit in 2000 to 37.8% in 2006. In other GCC countries, the increases were less pronounced, for example in Kuwait, where personal credit increased from 36.1% of total credit in 2000 to 40.5% in 2006. The UAE is on the other end of the scale, where personal loans as a fraction of all credit stayed virtually constant, representing 23% of all credit in 2000 and 25.1% in 2006.

The share of claims on the government in total bank assets has declined substantially in the last three years, with Qatar and Saudi Arabia leading the trend (with declines from 33% to 14% and from 32% to 18%, respectively, between 2003 and 2006). This reflects the repayment of public debt in these two countries (see sub-section 1.3.3) and dynamic growth in credit to the private sector. Other GCC countries have had shares of claims on the government in total bank assets of below 10% throughout the whole period.

On the liability side, GCC banks' balance sheets are dominated by deposits. Since religious considerations prevent many customers from accepting interest payments on their deposits, GCC banks have access to substantial amounts of non-interest-bearing deposits, which in 2004 were estimated at 35-40% of all customer deposits. However, deposits are mostly short-term, i.e. in order to participate in the profitable financing of long-term projects without engaging

in maturity mismatches, banks need to raise longer-term funds (see below on bond markets).

In 2006, the ratio of capital to risk-weighted assets (capital adequacy) in the GCC ranged from 16.7% in the UAE to 21.9% in Saudi Arabia.44 This is considerably more than the level required by the Bank for International Settlements (BIS) regulation, but it may well reflect the higher economic and geopolitical uncertainties of the region. Despite this prudent approach, the GCC banks show healthy profitability, also partially owing to favourable tax regimes and a low share of non-performing loans (NPL) in total loans. A potential risk for banks in GCC countries could be the exposure to the real estate sector, in the event that this sector experienced a serious correction and a decline in credit quality in view of the rapid credit growth in recent years. In this context, it should be borne in mind that NPL-ratios tend to be a lagging indicator, which falls during periods of rapid credit extension and favourable macroeconomic backdrop, but increases in economic downturns.

The share of public banks in GCC countries' financial sectors varies from country to country. It is highest in the UAE, with over 60% of total bank assets being held by public banks (2006 data). In Saudi Arabia, this ratio stands at 23%, while in Bahrain and Kuwait, less than 5% of total bank assets are held by public banks (2003 data). However, in Bahrain, which has a significant offshore banking sector, this ratio increases to about one-third, if only onshore bank assets are taken into account. 45

Foreign participation is still relatively low in GCC countries' banking sectors, reflecting institutional restrictions, but has been increasing over recent years, as countries such as Saudi Arabia and Kuwait have started to open up their

⁴⁴ From the annual reports of the national monetary authorities. The ratio for Oatar is based on 2005 data

⁴⁵ Even if the role of the state is not reflected in bank ownership, in the past, strong government support for banks has been virtually a norm. Both liquidity support and additional capital to refinance non-performing loans have been provided in most of the GCC countries.

banking sectors. 46 The share of foreign banks' assets in total assets is by far highest in Bahrain at almost 60%, reflecting foreign involvement in the country's offshore banking sector. In the UAE, which hosts some thirty foreign banks, often using the country as a hub for activities in other GCC countries, and in Saudi Arabia, this ratio stands at around 20% while it is significantly lower in Qatar and Kuwait at 11% and 4%, respectively. 47

Banking sectors in the GCC have the potential to consolidate, given the high number of banks in most countries and their relatively small size by international standards. A trigger for consolidation could be increasing competition from foreign banks and the financing of mega projects in the Gulf region. In this promising business segment, local banks face tough competition from international banks, whereby being on a larger scale would put them in a more favourable position. 48

With regard to financial markets, from 2003 GCC stock markets developed very dynamically, which resulted in a major stock market correction in 2006 (Chart 25). With oil revenues skyrocketing and exchange rate pegs preventing interest rates from rising, excess liquidity poured into stock markets, where it met a limited number of stocks, notwithstanding new

issues through IPOs. Fast growth in private sector credit (and personal lending in particular) has helped to fuel the growth in equity (and real estate markets). Furthermore, the GCC stock markets are dominated by retail investors, who tend to be prone to less sophisticated investment behaviour than institutional investors. The dominance of domestic retail investors in GCC markets reflects restrictions on foreign participation in GCC stock markets. 49

The 2006 market corrections were most substantial in Saudi Arabia, Qatar and Dubai, which had previously seen the sharpest rise in valuations. Kuwait experienced only a relatively small correction of its stock market despite a considerable hydrocarbon-driven economic boom. This may be on account of tighter prudential regulation, which limited credit growth, for example via loan-deposit ratios. Bahrain and Oman with lower hydrocarbon resources were outliers in the region, as they experienced neither the sharp rise nor the correction of stock market valuations seen in other GCC countries

The 2006 stock market correction was not caused by a real economy crisis and did not impact negatively on economic activity in an environment of high oil prices and ongoing investment. In 2007, the GCC stock markets stabilised and partially recovered, and the number of listed companies, market

Chart 25 Stock market developments in GCC countries



- 46 For example, starting in 2003, Saudi Arabia has granted ten licences to foreign banks (five to GCC banks and five to international banks), allowing them to open branches in the country. Before, based on a decision of 1976, all banks operating in the country had to have majority Saudi shareholdings. The opening up of the banking sector has been fostered by WTO accession and the GCC economic integration process.
- 47 2006 data for the UAE, 2005 data for Bahrain and Qatar, 2003 data for Kuwait and Saudi Arabia.
- 48 The merger between the Emirates Bank and the National Bank of Dubai (both UAE-based banks) in 2007 to form the largest bank in GCC countries is an example of consolidation. However, some constraints appear to have prevented consolidation in the GCC banking sector so far, such as limited shareholder activism, conflicts of interest and regulatory impediments.
- 49 Opening stock markets to more foreign (non-GCC) participation seems to be under discussion in several GCC countries. Saudi Arabia, for example, in 2006 allowed foreign residents of the country to directly buy stocks at the Tadawul stock exchange. For non-residents, participation in the Saudi stock market is so far only possible indirectly via mutual funds.

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capitalisation and turnover increased. The impact on the banking sector has also been limited against the background of favourable macroeconomic development. economic fundamentals - as well as the absence of significant exposure – also shielded the region from the fallout of the US subprime crisis in 2007. 50 However, the impact of the financial turmoil in mature credit markets on the financing conditions of international banks, e.g. syndicated loans for projects in the corporate sector of the region, remains to be seen. Corporate bond spreads are reported to have been 40-80 basis points higher on average at the end of 2007 than earlier in the year. 51

GCC bond markets are still relatively underdeveloped, but have seen a rapid increase in issuance – albeit from low levels – in the past two years. While bond markets in the region have so far remained relatively illiquid, with limited activity in secondary markets, the corporate bond market in particular appears to have vast potential for development in view of the high number of large projects to be financed over the next years (see sub-section 1.3.1).

Total bond issuance in GCC countries reached USD 47.8 billion in 2007, compared with an issuance of less than USD 15 billion two years earlier. 52 The most significant increase was observed for corporate bonds. In 2007 there was a record corporate bond issuance in the GCC region amounting to USD 23.7 billion. Thus, corporate bond issuance represented about half of total issuance in 2007, up from 36% in 2006, while it was still negligible in 2005. Sovereign bond issuance, which, besides financial institutions' issuance, was the major element of the nascent bond market prior to 2007 and originated mainly in Qatar and Bahrain, is on the decline owing to the favourable fiscal situation in GCC countries (see sub-section 1.3.3). Nevertheless, in 2007 the emirate of Abu Dhabi for example - while obviously not requiring any funds - obtained a sovereign rating (Aa2) and issued a bond. In doing so, it aimed to foster capital market

development by creating a local benchmark. Indeed, the increase in corporate bond issuance in the GCC in 2007 corresponded to a sharp rise in rated relative to unrated issuance: close to 54% of total issuance was rated in 2007, as opposed to 28% in 2006.

Corporate bond issuance is still dominated by government-related issuers, which represent more than 80% of the total newly issued bonds in both 2006 and 2007. 53 Moreover, the absolute number of companies issuing bonds is relatively small: in 2007, a total of 18 corporates tapped into the capital markets (compared with 13 in 2006). Geographically, the UAE (and Dubai in particular) remained the main player in the GCC, accounting for 65% of corporate bond issuance. However, regional diversity seems to be on the rise, with the share of Saudi Arabia increasing from 7% in 2006 to 31% in 2007. Funds raised via corporate bond issuance have mainly been used to finance inward investment in infrastructure projects in a wider sense and to some extent mergers and acquisitions.

Sukuks ("Islamic bonds") play an increasingly important role in bond issuance in the GCC, given the dynamic growth – albeit from a relatively low basis – of Islamic finance in the region and increasing demand for Shariah-compliant investment products worldwide (see Box 2 on Islamic finance). In 2007, about half of the almost USD 24 billion corporate bonds issued in the Gulf countries were sukuks,

⁵⁰ The absence of exposure may possibly reflect attractive investment opportunities in the region, which may have mitigated the pressure "to search for yield" in US subprime-related assets.

⁵¹ Moody's (2008).

⁵² See Moody's (2008) for data on GCC bond markets.

⁵³ Government-related issuers, an important feature of the GCC countries' corporate sector, are commercial companies that are government-owned or undertake key strategic responsibilities on behalf of the government, e.g. in developing local infrastructure or diversifying the economy. Dubai's real estate sector, for example, is dominated by such companies. Closeness to the government tends to give government-related issuers quasi-sovereign status, which facilitates the obtaining of a high credit rating and issuing bonds. For companies in the region in general, factors which complicate obtaining a rating and issuing bonds are corporate governance and financial transparency, notwithstanding progress in these areas.

and the GCC, in particular, the UAE, has become the major source of international sukuk issuance (sukuks primarily denominated in US dollar and governed by English or US law). 54

Key ingredients for deepening financial markets will be the strengthening of the regulation and supervision of security markets and the broadening of the investor base. Reforms in this regard are ongoing. For example, most GCC countries have established special authorities for the regulation and supervision of security markets in recent years, and are in the process of developing or reforming related legislation.

54 Deutsche Bank (2007).

Box 2

ISLAMIC FINANCE

Islamic finance is based on the principle of compliance with Shariah law. In addition to the well-known rejection of interest (riba), there are also restrictions on contractual uncertainty (gharar), such as in derivatives, betting and gambling (maisir), and several prohibited industries (haram), including pork products, pornography, firearms, tobacco and alcoholic beverages.

In order to interpret the Shariah and other rulings, Islamic banks often appoint boards of scholars, a practice that aims at ensuring

Shariah-compliant assets by country

Country	Islamic assets, USD billions	Percentage of total assets
1. Iran	154.6	100.0
2. Saudi Arabia	69.4	31.6
3. Malaysia	65.1	25.1
4. Kuwait	37.7	37.3
5. UAE	35.4	29.2
6. Brunei	31.5	100.0
7. Bahrain	26.3	31.1
8. Pakistan	15.9	25.5
9. Lebanon	14.3	75.1
10. United Kingdom	10.4	0.1

Source: The Banker 2007.

compliance and promoting consistency among Islamic banks in terms of services and products offered. Conventional banks wishing to offer Islamic products must ensure that the Islamic funds are strictly separated from the non-Islamic investments ("Islamic windows"). In operational terms, this means separate funds, accounts and reporting systems, as well as compliance with specific accounting and auditing standards.

In efforts to introduce clear accounting, auditing and regulatory standards, two multilateral bodies have been set up – the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI), and the Islamic Financial Services Board (IFSB) – but the industry-wide standards are still far from established. There is some competition between Malaysia, Bahrain and Dubai for the position of global centre of Islamic finance.

Islamic banking is a still small, but fast-growing segment of the financial industry. In 2007, the reported amount of global Shariah-compliant assets reached USD 500 billion. Although this is only some 0.7% out of the USD 74,232 billion assets of the top 1000 global banks, it represents an increase of 30% on the figure for 2006. Since many banks do not report Islamic assets, the true figure is probably considerably higher.

¹ All figures in this box are based on the survey on Islamic banking in The Banker (2007).

² Only some 44% of the 525 financial institutions involved in Islamic banking worldwide reported their Shariah-compliant assets in 2007.

I ECONOMIC STRUCTURES AND DEVELOPMENTS IN THE GCC COUNTRIES

The GCC countries and the non-GCC Middle East and North Africa each represent some 35% of global Shariah-compliant assets, followed by Asia with 24%. Iran, Saudi Arabia and Malaysia are the three most important countries in terms of overall Islamic assets (see Table). There is considerable variation in the share of the Shariah-compliant assets in the total assets of banking sectors. Iran has a 100% share of Shariah-compliant assets in total assets, which explains its top position in absolute terms. Similarly, Brunei, Sudan and some other countries report 100% of Shariah-compliant assets, but the size of their financial sectors is relatively small. GCC countries, on the other hand, have considerable conventional financial sectors; Shariah-compliant assets form only 32% of total assets, for example in Saudi Arabia.

Furthermore, it is likely that the process of regional cooperation and integration within the GCC will be conducive to further financial market development. After establishing a free trade area in 1983 and a customs union in 2003, in December 2007 GCC Heads of State agreed to launch a common market starting from 1 January 2008. The common market is based on the principle of equal treatment of all GCC citizens regarding economic activities in GCC countries. It is expected to facilitate, in particular, the movement of persons (confined to nationals of GCC member states) and of capital. For example, citizens of the GCC countries should now be able to buy stocks in listed companies in other member states under the same conditions as nationals and to purchase property and land anywhere in the region. The GCC monetary union planned for 2010 may also spur on financial market development and integration. 55

1.4 CONCLUSIONS

GCC countries share a number of specific structural economic features, while also displaying some significant differences. Key common features are a high dependency on hydrocarbons as expressed in the share of oil (and gas) revenues in total fiscal and export revenues and the share of the hydrocarbon sector in GDP; a young and rapidly growing national labour force; and the heavy reliance on expatriate labour in the private sector. These features also pose common structural policy challenges to GCC economies, notably economic diversification to reduce dependency on the hydrocarbon sector and to develop the

private non-oil sector. Both are necessary to create employment opportunities for young nationals, given that the hydrocarbon sector is not labour-intensive and that further increasing public sector employment is not sustainable. In order to enhance the employability of nationals, efforts to reduce the educational mismatch between nationals' qualifications and private sector needs are key.

GCC member states are moving towards economic diversification at a different pace and in different directions, with Bahrain and the UAE being most advanced in the process. This is also driven by the fact that hydrocarbon reserves are projected to be depleted in some countries (Bahrain and Oman) relatively soon, while in others they will last for a considerable period of time. As a result, GCC economies might become more heterogeneous over time and thus be more prone to asymmetric shocks in the future. Economic diversification needs to be supported by structural reforms, in particular privatisation and market liberalisation, areas in which most GCC countries have made significant progress in recent years.

The macroeconomic developments of recent years have provided a favourable backdrop for implementing reforms and addressing the structural challenges, particularly in providing GCC economies with the financial means, for example, to further develop physical and social infrastructure as a basis for private sector development. In the wake of high oil prices,

⁵⁵ See Sturm and Siegfried (2005) on regional monetary integration in the GCC

real GDP growth has been buoyant. Non-oil GDP growth has been impressive and has even exceeded oil GDP growth, even if the dynamics of the non-oil sector remain largely driven by government expenditure, which in turn depends on oil revenues. GCC countries have accumulated large fiscal and current account surpluses in recent years. The use of higher oil revenues has been prudent overall, with expenditure increases setting in only after it had become evident that the rise in oil prices might not be a temporary phenomenon and focusing on infrastructure development.

Inflationary pressure has emerged in all GCC countries in the wake of strong domestic demand accompanied by dynamic monetary and credit growth. The increase in headline CPI inflation, which may not reflect the full extent of inflationary pressure, has been particularly pronounced in Qatar and the UAE. In these two countries, where, in particular, developments in the real estate sector have fuelled inflation, it may present a challenge to anchor inflation expectations and avoid a rentwage-price spiral. The contribution of monetary policy to containing inflationary pressure has been very limited in view of the exchange rate pegs to the US dollar, and some GCC countries have resorted to administrative and prudential measures to curb inflation. Against this background, a key role in maintaining or restoring price stability falls to fiscal policy, which needs to be balanced between cyclical and intergenerational considerations and the need for spending on physical and social infrastructure, taking account of bottlenecks and the absorptive capacity of the economies.

The economic outlook for GCC economies is generally positive as hydrocarbon prices are likely to remain at elevated levels and as the large investments currently undertaken may set the stage for a more self-sustained growth process. Key risks to this generally positive outlook, which is shared by most observers of the region in the private and public sector, appear to be a – seemingly unlikely – sharp fall in hydrocarbon prices, adverse geopolitical

developments, to which the region is exposed to a significant extent, and complacency as a result of the currently favourable economic environment, which could impede further structural reforms. THE ROLE OF THE GCC COUNTRIES IN THE GLOBAL ECONOMY: OIL REVENUE RECYCLING AND IMPLICATIONS FOR GLOBAL FINANCIAL STABILITY 56

2.1 INTRODUCTION

Part 2 reviews the role and extent of oil revenue recycling and its implications for global financial stability. It identifies a number of policy issues relevant to the international debate on current issues in money and finance relating to the six member states of the Gulf Cooperation Council (GCC).

One of the distinctive features of the world economy in recent years has been the ongoing and marked increase in oil prices. The nominal price of Brent crude oil reached a historical peak in the first quarter of 2008, while its real price has roughly quadrupled since early 2002, exceeding the record level reached in 1974, though still falling short of its maximum in 1979. Hence, the scale of the present price hike is in many respects comparable to the oil price shocks of the 1970s, even if it is taking much longer to unfold. Moreover, the hike in oil prices coincided with a rise in global oil production by 9.6% and an increase in global oil consumption by 7.7% from 2002 to 2006.57 As a result, oilexporting countries have experienced substantial windfall gains. It is important to note that the main beneficiaries of these windfall gains are just a handful of countries, among them the six economies of the GCC, which together hold roughly 22% of world crude oil production.

The way in which oil revenues are recycled attracted much attention in the aftermath of the oil price crises of the 1970s. After all, the two crises caused many oil-importing countries to slide into a major recession. Furthermore, most observers believe that the financial petrodollar recycling at that time was at the root of the international debt crisis of the 1980s. In the 1970s, many petrodollars were deposited with a small number of large international banks, which lent on the funds to developing countries at relatively cheap rates. Latin American

countries, in particular, were close to default when the global economy headed into a recession in the early 1980s, warranting a massive debt restructuring. At the current juncture, however, the world economy has shown remarkable resilience to the steady rise in oil prices. Steady Global GDP growth has been above its long-term average since 2003. Although the global economic expansion began to moderate in 2007, a large part of the slowdown is attributable to challenges related to the recent financial market turbulence rather than high and rising oil prices. On the financial side too, oil revenue recycling has given rise to notable changes. They will be addressed in this part.

Section 2.2 first outlines the scale of oil revenue recycling. It then explores the two basic channels of petrodollar deployment, namely the trade channel and the capital account channel, and the extent to which both are used by GCC countries. Section 2.3 focuses on financial stability issues, first discussing the role GCC economies play in today's debate on global imbalances before moving on to the impact of oil revenue recycling on asset prices and the financial system in general. Finally, special issues related to sovereign wealth funds (SWFs) are presented. Section 2.4 concludes.

2.2 OIL REVENUE RECYCLING

2.2.1 THE EXTENT OF OIL REVENUE RECYCLING

In line with oil prices, oil-related revenues have risen substantially. According to IMF estimates, oil and gas exports by the Middle East and Central Asian oil-exporting countries will amount to about USD 650 billion in 2007.⁵⁹ This represents an almost fourfold increase on annual levels at the start of the decade. Moreover, with oil prices close to a record high and a continuing

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⁵⁶ By Petra Adolf (Deutsche Bundesbank).

⁵⁷ See BP (2007).

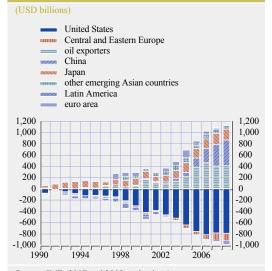
⁵⁸ Numerous reasons have been put forward as to why oil seems to have lost the capacity to shock. See, for example, IMF (2006) and Walton (2006).

⁵⁹ Of the entire crude oil exports of the Middle East and Central Asian region, almost 60% can be attributed to the GCC economies.

increase in global oil demand – as forecasted by the International Energy Agency (IEA) and OPEC – the outlook for the region's future export revenues remains favourable.⁶⁰

Taking cumulative current account surpluses as a rough benchmark for measuring the pool of petrodollars available for (financial market) recycling is common practice. The upswing in these balances has been remarkable. Whereas many GCC countries exhibited current account deficits during the 1990s, sizeable current surpluses have been since 2003, ranging from an estimated 7.1% of GDP in Oman to 35.7% in Qatar in 2008.61 The total current account surplus of the GCC region is expected to increase from USD 25.5 billion in 2002 to USD 207.3 billion in 2008. Taking a broader perspective, the rapid rise in oil-exporting countries' current account balances is even more impressive. The joint current account surplus of Norway, Russia and the OPEC member states 62 is forecast to surge from USD 88.2 billion in 2002 to USD 412.5 billion in 2008.

Chart 26 Current account balances in key economic regions

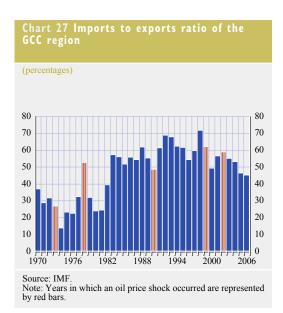


Source: IMF (2007 and 2008 projections). Notes: Oil exporters: OPEC member states (not including Iraq and Indonesia), Norway and Russia. Other emerging Asian countries: Hong Kong, India, Indonesia, Singapore, South Korea, Taiwan and Thailand. The flip side of these huge current account surpluses is a significant redistribution of income from oil importers to oil exporters. This has contributed to the current configuration of global current account imbalances. As depicted in Chart 26, external positions have widened on an unprecedented scale in recent years, with world deficits mainly concentrated in the United States (estimate for 2008: USD 788.3 billion) and world surpluses spread across a larger number of economies, including many emerging market countries. In particular, within less than a decade, oil-exporting countries have emerged as a major net supplier of capital, even outpacing the overall current account surplus growth posted by emerging Asian countries (including China) from 2004 to 2006. In the medium term, however, oil exporters are not expected to keep up with the rapidly growing Chinese position – as already corroborated by the 2007 and 2008 forecasts.

2.2.2 RECYCLING PETRODOLLARS VIA THE TRADE AND THE CAPITAL ACCOUNT CHANNELS

Basically, if oil exporters want to deploy their oil revenues, they have two options: oil revenues can be used either for the import of goods and services (trade channel or absorption channel) or for the purchase of foreign assets in international capital markets (capital account channel).⁶³ In the first case, some of the oil revenues are re-directed towards goods and services markets in other (often oil-importing) countries, which lowers the GCC countries' current account surpluses and reduces the negative effects that higher oil prices have on purchasing power (and thus growth) in oil-importing countries.

- 60 Natural gas is also an important resource in several GCC member states (see Part 3). For the sake of simplicity, however, this text does not differentiate between the two commodities and speaks of "oil" only
- 61 Figures are taken from the IMF World Economic Outlook Databases October 2007.
- 62 OPEC member states include Algeria, Angola, Ecuador, Iran, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela. Bahrain and Oman are not member states of OPEC
- 63 A third alternative is the reduction of public debt, which is usually subsumed under the capital account channel. As laid out in Part 1, Saudi Arabia and Qatar have used a significant part of their recent oil revenues to repay the bulk of their public debt.





In the case of the capital account channel, those negative effects on growth will also be dampened as capital exports from oil-exporting countries help to sustain consumption and investment spending in oil-importing countries. It goes without saying that the destinations of oil exports on the one hand and oil revenue deployment on the other are independent of one another, so that some oil-importing countries will benefit more from recycling than others.

Owing to a lack of precise data on oil revenues and absorption, Chart 27 shows on a more general scale that the overall imports of the GCC region absorb a considerable part of its overall exports, the latter serving as a proxy for oil revenues. In fact, the imports to exports ratio, which averages 52% in the period 2002-2006, is broadly in line with several research estimates, according to which about half of the oil revenues in GCC countries has been used to fund imports.64 Chart 27 also reveals that the GCC region's imports lag behind its exports. Since 1970, almost every episode of rising oil prices has been accompanied by a contraction of the imports to exports ratio. Whilst this pattern has not changed in principle, recent declines have been less pronounced than those of the 1970s (see sub-section 2.3.2 for details).

All in all, this balance of payments data evidence suggests that GCC countries currently invest roughly half of their oil revenues in financial assets. Traditionally, financial investment has been channelled through central banks and monetary authorities. Particularly in recent years, however, the fairly stable increases in the official foreign exchange reserves of the GCC region, whose stock totalled USD 76 billion in 2006, have not kept pace with the surge in its current account surpluses (Chart 28). Instead, there has been a proliferation of SWFs.65 These funds are nothing new – one of the world's first SWFs was founded in Kuwait as early as 1953 - but only in recent years has their rapidly growing size attracted public attention. None of the GCC region's SWFs disclose detailed figures on their assets under management, but rough market estimates corroborate that their assumed overall size already forms a multiple of recorded foreign exchange reserves, from USD 750 billion to USD 1,500 billion. It should be noted, however, that the lines of 2 THE ROLE OF THE GCC COUNTRIES IN THE GLOBAL ECONOMY: OIL REVENUE RECYCLING AND IMPLICATIONS FOR GLOBAL FINANCIAL STABILITY

⁶⁴ See, for instance, Ruiz and Vilarubia (2007) und Higgins, Klitgaard and Lerman (2006).

⁶⁵ There is no generally accepted definition of a SWF. However, the term usually refers to state-owned entities that manage the government's foreign currency assets separately from official foreign exchange reserves.

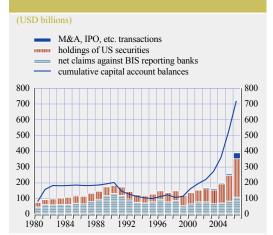
demarcation between investment by a SWF and a central bank may be blurred – as in the case of the Saudi Arabian Monetary Agency (SAMA).⁶⁶ As of 31 December 2007, SAMA reported USD 335 billion in non-reserve holdings of international assets on and off its balance sheet. Consequently, in its recent Global Financial Stability Report, the IMF included these assets in its analysis of SWFs.⁶⁷

When analysing financial petrodollar investment it is essential to keep in mind the governments' motives. Although the GCC countries disclose very little on that issue, three possible motivations can be identified. First, traditional foreign exchange reserves, which are generally managed by a central bank. The management is required to focus on highly liquid assets and to follow a relatively conservative investment policy. Second, stabilisation funds, the purpose of which is to smooth government expenditure and decouple it from the short-term volatility of oil revenues so as to avoid boom-andbust cycles. Though stabilisation funds have a medium-term horizon, considerations of liquidity and low risk remain important because the funds may be drawn upon at relatively short notice. Last, petrodollars are "genuinely" saved, i.e. handed on to future generations. These funds are particularly relevant in countries where the lifespan of the known oil resources is relatively short, i.e. namely in Bahrain and Oman. Their long-term horizon means that savings funds can afford to invest in a much broader range of assets and to take on more risk. Basically, both stabilisation and savings funds can be managed by central banks or SWFs, but they are usually associated with the latter.

2.2.3 TRACKING PETRODOLLAR-RELATED CAPITAL FLOWS

Analysing financial petrodollar recycling in detail is much trickier than assessing trade aspects, because the related disaggregated capital flows are reported only sketchily by the GCC countries' central banks, monetary authorities and SWFs.⁶⁸ As a consequence, the analysis mainly relies on counterparty information – which is rather thin on the ground

Chart 29 Identified cross-border investment by GCC countries



Sources: BIS, Bureau van Dijk, IMF, US Department of the Treasury. Notes: Data on M&A, IPO, etc. are flow figures and are available from 2000 onwards only. TIC data on GCC countries includes Iran and Iraq and is not available on a yearly basis before 2002. The missing years are therefore estimated by simple extrapolation.

owing to the limitations of official statistics. Taking the cumulative current account surpluses of the GCC region as a rough benchmark for financial petrodollar recycling, only about half of the available financial resources (as identified by this benchmark) can be tracked (Chart 29). It is particularly difficult to obtain information about the riskier asset classes such as non-US securities and innovative financial instruments, which might thus constitute a significant part of the untracked petrodollars.

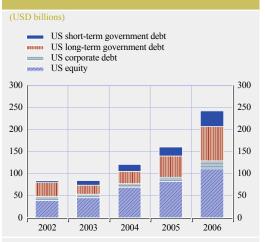
The BIS locational banking statistics are an important source of counterparty information. These report (inter alia) on international commercial banks' net liabilities vis-à-vis individual countries. The GCC countries' net

- 66 Saudi Arabia is the only GCC country which has not set up a formal sovereign wealth fund. Instead, its monetary agency manages foreign assets on behalf of various government agencies.
- 67 See IMF (2007d).
- 68 GCC countries reveal only the minimum amount of information about their assets, so that little is known about the composition of official currency reserves and even less (or close to nothing) about SWFs, which are not subject to reporting requirements of any kind. In Kuwait and Qatar, for instance, it is argued that public disclosure of operations and financial positions of oil funds will only add to public spending pressures.

claims against the international banking sector, worth USD 65 billion in the third quarter of 2007, amount to only half of their historical peak in 1990. Moreover, against the benchmark of the region's cumulative current account surplus, it becomes evident that the GCC economies' claims reported to the BIS represent a rapidly declining percentage of their overall financial resources invested abroad - or, in other words, that the recent additional oil export revenues have mostly been invested in other asset classes. Further evidence provided by the BIS shows that of the roughly USD 450 billion stock of gross deposits made by OPEC member states in the fourth quarter of 2006 (63% of which can be attributed to the GCC region), 11% was placed in BIS reporting banks in the United States, 20% in offshore centres and the lion's share in Europe (with the United Kingdom being the main recipient). These figures hint at oil exporters having a geographical preference for London as an international financial centre. It can also be deduced from the data that geographical preferences seem to be unrelated to considerations of currency composition, since OPEC member states hold 70% (65%) of their European (offshore centre) deposits in US dollar accounts. Nevertheless, there is evidence that the currency composition of OPEC deposits in BIS reporting banks has recently been more sensitive to changes in interest rate differentials than in the past.69

A second source of publicly available counterparty information is the US Treasury International Capital (TIC) data, which provide a geographical breakdown of foreign portfolio holdings of US securities.⁷⁰ The GCC region's investment in US securities has risen noticeably in past years (Chart 29). In a worldwide comparison, the holdings of GCC countries showed the most rapid growth during the period from June 2005 to June 2006 on a percentage growth basis, increasing by just over 50% from USD 161 billion to USD 243 billion. Thus, a considerable part of the recent additional oil export revenues has been invested in the US financial market. A more in-depth look at the breakdown of the TIC data suggests that GCC countries have diversified

Chart 30 Identified US securities holdings by GCC countries



Source: US Department of the Treasury. Notes: Holdings as of 30 June of the respective year. Data include Iran and Iraq.

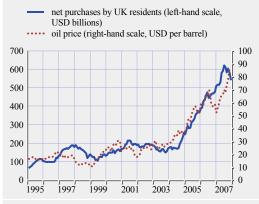
their reported assets over the full range of US securities. Since 2002, the share of US equities has hovered at around 50% of the GCC region's US securities portfolio, while its demand for short-term US government debt (both Treasury and Agency bonds) has - most notably increased from 4.4% to 14.5% during the same period (Chart 30). But an important caveat must be added: the TIC statistics do not track the original source of funds entering a country so that third-party purchases (e.g. from the United Kingdom or offshore centres – which both play an increasing role according to BIS data) cannot be identified. In view of the enormous size of recent UK purchases of long-term US securities and the apparent correlation between these purchases and the oil price (Chart 31), it may be assumed that securities purchases via the United Kingdom represent a key channel for petrodollar investment. As a consequence, the true extent of

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⁶⁹ See BIS (2005), BIS (2007a) and BIS (2007b).

⁷⁰ The TIC statistics provide only aggregate data for Middle East oil-exporting countries, i.e. the GCC economies plus Iraq and Iran. Apart from the TIC data, an additional source of information is the data provided by France, Germany, Japan, the United Kingdom and the United States, to name some of the world's largest economies, on the geographical breakdown of their international investment positions. From this data, net securities purchases and foreign direct investment by oil exporters can be deduced. However, the results are incomplete and time-consuming to extract.

Chart 31 UK net purchases of long-term US securities and the price of oil



Sources: US Department of the Treasury and IMF. Notes: Monthly data. Net purchases are cumulated over 12 months. The oil price refers to Dubai Fateh.

oil exporters' investment in the United States may be significantly understated in the official statistics.

A third source of counterparty information is the Zephyr database, distributed by the Bureau van Dijk, which contains flow data on M&A, IPO and venture capital deals on an international basis. Reliable data are only available from 2003 onwards, but it can still be seen that the GCC countries' appetite for these transactions is strong and picked up considerably in 2006 and 2007 (clearly exceeding the worldwide growth rates of M&A activity), with total (known) deal values amounting to USD 37 billion in 2006 and USD 51 billion in 2007.

Piecing together the information obtained from these three sources leads to the following conclusions. First. GCC countries have international diversified their investment portfolios. In contrast to the 1980s and 1990s, the importance of international bank deposits has declined. Instead, US securities and M&A make up a more significant share of the GCC region's identified net foreign assets. This rise in risk propensity is corroborated by anecdotal evidence. According to this, the region's SWFs make use of their more progressive investment mandates and of today's broader investment opportunities in order to hold instruments ranging from fixed income, shares and real estate to hedge funds, private equity and other high-yield product classes. It is also felt that GCC countries currently tend to invest in a more profit-oriented way than other major oil-exporting countries, such as Nigeria, Norway, Russia and Venezuela. Second, as indicated by both the TIC data and the currency decomposition of the BIS data, the United States is still the main recipient of GCC countries' funds. Third, and in contrast to the previous episodes of higher oil prices, growing risk appetite seems to be resulting in an increasing role for emerging market investment – which is not captured in the above mentioned third-party statistics. 71 The dynamic development of many Middle Eastern and North African stock and real estate markets - especially in the GCC region, but also elsewhere - and future earning prospects as well as improved fundamentals of emerging market economies in general have rendered such investments more attractive. The emergence of a regional bias will, however, eventually be limited by the absorption capacity of local goods, services and financial markets. A case in point is the major correction of the GCC countries' stock markets in 2006, which drew attention to the vulnerability of the financial boom in the region.⁷²

2.3 IMPLICATIONS FOR GLOBAL FINANCIAL STABILITY

2.3.1 GLOBAL IMBALANCES, CAPITAL FLOWS AND THEIR SUSTAINABILITY

Global imbalances have widened since the mid-1990s, but it is only since 2003 that they have been treated as a major cause for concern on the international policy agenda. Various theories and, accordingly, various determinants of global imbalances have been identified over the

⁷¹ In a 2006 interview with Euromoney, an official from the Abu Dhabi Investment Authority, which is alleged to manage the world's largest SWF, claimed that investments in emerging markets equities are "far greater than what the biggest US pension fund would have".

⁷² See Part 1 for details.

past years. Whereas discussions initially focused on conditions in the United States, the perspective has broadened to cover developments in Asia and, more recently, oil-producing countries. At the current juncture, significantly more than half of the US current account deficit is financed not by private agents, but by governments. Thereof, the overwhelming majority is identified as Asian (which includes the Middle East). Even if this means that both East Asian and oil-exporting countries are frequently mentioned in the same breath, their investment motives differ decisively. With regard to East Asian governments, they are often perceived to have a vested interest export competitiveness. Accordingly, one explanation for global imbalances, the Bretton Woods II view,73 postulates that countries such as Japan and China accumulate USD-denominated assets in order to avoid a substantial appreciation of their currencies and to sustain export-led growth.

Oil-exporting countries, by contrast, might feel less inclined to subordinate their investment objectives to the maintenance of such an informal international exchange rate system. Given the limited lifespan of known oil resources, some of the region's main economic challenges include accumulating financial assets, spurring broad-based non-oil private sector growth and creating employment opportunities for the rapidly growing local labour force.74 On account of this need for comprehensive structural reforms, one might expect GCC countries to look for the most profitable deployment of petrodollars - both in terms of financial returns and, more generally, to ensure the welfare of future generations. A comparison of East Asian and GCC countries' assets - as reported in the BIS and TIC statistics - underlines that the GCC region has a stronger profit orientation, because the latter's portfolio is more diversified than that of its East Asian counterparts (Chart 32). With this in mind, sub-section 2.3.3 discusses whether the specific characteristics of GCC countries as global investors have an impact on the sustainability of capital flows into certain asset classes, countries and currencies.





Sources: BIS, US Department of the Treasury. Notes: TIC data as of June 2006, TIC data on GCC countries include Iran and Iraq. BIS data as of December 2006. Emerging Asia includes China, Hong Kong, India, Indonesia, South Korea, Singapore, Taiwan and Thailand.

As for the overall level of the currently immense capital outflows from GCC economies, it can be assumed to be sustainable in the medium term, not least because, with oil prices at historical highs, financial petrodollar recycling will remain important in absolute terms.

2.3.2 GLOBAL IMBALANCES, POLICY PLANS AND THEIR FEASIBILITY

In the third quarter of 2007, the US current account deficit amounted to less than USD 200 billion for the fourth time in a row. In view of the slowdown in the US economy, the ongoing price adjustments in the US housing market and the depreciation of the US dollar, the US current account deficit is likely to shrink further. Nonetheless, warnings about a sudden and disorderly unwinding of global imbalances have not subsided. Such a scenario could result in a pronounced revaluation of currencies, a severe drop in economic growth and heightened risk aversion in capital markets. To avoid this, the international community has agreed on a four-pronged approach that asks key players

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⁷³ See Dooley, Folkerts-Landau and Garber (2003) for details.

⁷⁴ See Part 1 for more details.

such as the United States, Europe and Japan, emerging Asia and oil-exporting countries to address global imbalances in a multilateral process. Respective policy plans for oil-exporting countries focus on the absorption channel and in some cases also entail enhanced exchange rate flexibility. Though these plans are essential, it is important to highlight that the GCC economies are only part of the solution. Even if oil exporters have become integral participants in the adjustment process, the risk of a disorderly unwinding of global imbalances requires concerted action by both current account surplus and current account deficit countries.

THE ABSORPTION CHANNEL AND FISCAL POLICY IMPLICATIONS

One of the policy goals of the international agenda postulates that oil-exporting countries accelerate investment in production capacity and strengthen economic diversification. Apart from stabilising global oil markets, the logic behind this is that if oil exporters spend their oil revenue, part of the petrodollar inflows will flow out again to pay for imports from oil-importing countries, thus mitigating global imbalances. At the same time, less excess savings would flow into international financial markets, thereby reducing pressure on global interest rates. As a result, domestic demand in current account deficit countries, especially in the United States, would be curbed. The international agenda's policy plan largely coincides with the GCC economies' structural reform plans. As is explained in greater detail in Part 1, the region's strong macroeconomic performance of the past few years and the still favourable external environment provide a golden opportunity to exploit the petrodollar windfall to further diversify the oil-dependent economies and improve the functioning of the local labour and product markets.

The impact of the GCC countries' trade channel on global imbalances is determined not only by the scale of their investment, but also by the speed with which petrodollars are recycled into imports. In that respect, there is an ongoing empirical debate on the question of whether the speed of petrodollar recycling has picked up or, in other words, whether the pattern of import lags in oil-exporting countries during episodes of rising oil prices has changed. The IMF (2006), on the one hand, estimates marginal propensities to import, as well as import functions for GCC countries for the period 1970-2005. It finds that oil revenue recycling has become more conservative in recent years – a statement which is in line with reports on the GCC countries' initially cautious spending behaviour, but which raises doubts in view of the recent pick-up in investment. On the other hand, for instance, the OECD (2005) argues that in the period from 1997 to 2004 the re-spending of petrodollars was broadly on track and was thus not becoming more conservative. This is corroborated by a simple error-correction equation according to which between 60-65% of extra export revenue is spent in the Africa and Middle East region.

Although the pattern of import lags in the GCC region is open to some dispute, the existence of such lags is recognised as a fact. In part, they reflect the fact that economies only adapt slowly to income shocks, be it because of "habit persistence" or more practical concerns, such as planning and implementation lags associated with new investment projects. Additionally, import lags can be explained by uncertainty associated with the volatility in oil prices as a result of which the GCC region has only gradually been adjusting its initially rather conservative pricing assumptions in fiscal budgets.⁷⁶ Conversely, the argument of import lags should not be overstated. By definition, import lags carry less weight over the medium term as investment builds up progressively. Moreover, the gradual diversification of the

⁷⁵ See, for instance, annex on global imbalances to the statement by the G7 finance ministers and central bank governors of 21 April 2006, and the first multilateral consultation on global imbalances launched by the IMF.

⁷⁶ On the other hand, the slow upward revision of oil price assumptions in fiscal spending programmes contributes to smoothing fiscal expenditure against the background of volatile oil price movements.

GCC region's economies has allowed for broader investment opportunities and opened up sectors where investment lags are relatively short compared with the capital-intensive oil business. These developments are still ongoing and the massive medium-term investment plans in the GCC region - if successful - will contribute to boosting demand for goods and industrialised countries.77 services from Therefore, the GCC region's absorption capacity and with it the speed of petrodollar recycling could potentially increase further in the medium to long term.

In the context of global imbalances, oil revenue recycling through imports has mitigated the negative impact of the ongoing oil price hike on the purchasing power of oil-importing countries. However, several caveats must be added. First, the import lag in the GCC countries translates into an impact lag in the oil-importing countries; hence the full effect of rising oil-related imports has probably not yet come to bear. Second, though time lags have shortened in recent years (as seen in Chart 27), the gap between exports and imports has been growing considerably in absolute terms, adding weight to the delayed effects in oil-importing countries. Third, even if the absorption channel gains in importance in the GCC region, the amount of petrodollars saved will remain substantial. Fourth, and most importantly, the geographical distribution of the GCC region's imports favours some parts of the world more than others. In 2006, 35.1% of the GCC economies' imports originated from Asia (7.2% thereof from Japan), 31.4% from the EU and merely 11.4% from the United States. Possible explanations for this regional distribution are geographical proximity and a matching assortment of products. In particular, Asian countries (excluding Japan) seem to have benefited from petrodollar recycling via the absorption channel. Between 2000 and 2006 they succeeded in expanding their share of the GCC import markets by 6.7 percentage points. By contrast, the EU's share slightly decreased by 0.8 percentage point – thus remaining at elevated levels – the United States' share fell by 1.7 percentage points and Japan's share by 3.0 percentage points. As a result of these developments, the absorption channel is much more likely to partly compensate for the oil price induced cost-push shocks in Asia and Europe than in the United States.

EXCHANGE RATE REGIMES IN THE CONTEXT OF GLOBAL IMBALANCES

Exchange rates are another issue discussed in the context of global imbalances. Nominal exchange rate stability is a policy choice broadly adopted by nearly all Middle Eastern and North African countries. The GCC currencies, in particular, have maintained a remarkable degree of nominal stability vis-à-vis the US dollar since the mid-1980s and have been de jure pegged to the US dollar as part of the region's road map for the introduction of a common currency. Recently, however, the advantages of the currency peg are increasingly being overshadowed by adverse domestic developments (see Part 1 for details). As a consequence of the oil price hike, the ensuing buoyant economic growth and rise in import prices as a result of the US dollar peg, average inflation in GCC economies has grown from below 1% in 2002 to above 4% in 2006 and 2007 and real interest rates have in turn become very low and in some cases negative. Against this backdrop, Kuwait revalued its currency against the US dollar and, in May 2007, opted out of the US dollar peg in favour of a currency basket of undeclared composition. Subsequently, calls for gradual changes to the exchange rate regimes in the entire GCC region have been gaining ground (see Box 3 on the impact of a revaluation of oil-exporting countries' currencies on domestic inflation). Nonetheless, as the region's largest nation, Saudi Arabia has frequently reaffirmed its desire to maintain its current US dollar peg unchanged.

In a global context, changes in the currency regimes of the GCC countries might be considered supportive of a more rapid and efficient adjustment to global imbalances.

77 See Part 1 for details

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Therefore, the situation in the GCC region seems, on the surface, to bear some similarities to that in China. However, while the international community's calls for greater exchange rate flexibility in countries with large current account surpluses are usually targeted at China, such recommendations have not been made explicitly with reference to the GCC economies. The reasons for this lie in the trade and the capital account channel.

With regard to the trade channel, as oil exports are priced in US dollars, both a revaluation and a repegging of the GCC countries' currencies is currently expected to result in a cut in the region's oil export volumes - although probably to a limited extent only. On the import side, the impact of a gradual change in exchange rate regimes is likely to be stronger. However, as shown above, the majority of additional imports related to a rise in purchasing power are likely to originate in the EU and Asia, so that no marked pressure would be taken off the US current account deficit. Another reason for the relatively weak interest in the exchange rate regimes of the GCC region might relate to the fact that export goods and services from oil-producing countries - contrary to those from Asia – hardly compete with goods and services produced in the industrialised world, making it less likely that protectionist fears are raised.

Moving on to the capital account channel, it is often argued that the GCC region's US dollar peg creates a strong incentive to invest petrodollars into USD-denominated assets. Thereby, the argument goes, GCC economies support consumer spending and investment in the United States, e.g. by lowering US interest rates, and consequently contribute to deferring adjustment to global imbalances. However, there are several counter-arguments against this line of argumentation. First, the discussion in sub-section 2.3.3 shows that it is hard to find empirical evidence that petrodollar recycling has an impact on the level of long-term US interest rates. Second, GCC economies will continue to invest in US markets for reasons other than a US dollar peg, particularly because of the United States' deep capital markets, its status as a safe haven and, to some extent, the fact that oil revenues are traditionally denominated in US dollars. Third, indirect oil revenue recycling must also be taken into account. Even if GCC countries increased their share of financial investment in emerging markets to the detriment of financial investment in the United States, the negative effect on the United States would be dampened if part of these redirected petrodollars crowded out domestic saving in emerging market countries and made them turn to US assets instead.78

78 See Higgins, Klitgaard and Lerman (2006).

Box 3

IMPACT OF A REVALUATION OF OIL-EXPORTING COUNTRIES' CURRENCIES ON DOMESTIC PRICES

Nominal exchange rate stability has long been considered a reasonable policy choice for oil-exporting countries. The main reasons for this policy orientation include the desire to:
(a) import credibility to domestic currencies; (b) stabilise oil revenues (priced in US dollars) and, in turn, government revenues, with a view to their prominent role in fiscal budgets¹; and (c) to avoid Dutch disease symptoms by pegging to the currency of a country that does not export oil. Currently, however, importing an interest rate policy that is set for the slowing-down US economy poses a serious challenge to the booming GCC countries. In the light of

¹ Obviously, pegging a currency to the US dollar can only guard against exchange rate fluctuations, not against the volatility of oil prices.

the mounting domestic inflationary pressures in the Gulf region, the exchange rate issue has gained in importance.

Against this background, the global macromodel of the National Institute of Economic and Social Research, NiGEM, is used to discuss what effect a one-off nominal appreciation of oil-exporting countries' currencies would have on inflation and output. NiGEM is a large, empirically-estimated model covering OECD countries, with the rest of the world included in regional blocks. Therefore, GCC countries are not modelled separately, but instead the focus is on the OPEC block.² NiGEM uses a new-Keynesian framework in that agents are forward-looking, but where nominal rigidities slow the process of adjustment to external events. Countries within the model are mainly linked through the effects of trade and competitiveness.³

To assess whether a formal revaluation of the GCC countries' currencies against the US dollar helps to alleviate price pressures in their economies, a macroeconomic reference scenario is chosen that somehow reflects current global conditions and possible risks. It assumes a housing-market-induced slowdown in the US economy (simulated by an exogenous permanent decrease in US housing prices by 10% and an endogenous reduction in housing investment by 3% at a time over four consecutive quarters), combined with an exogenous permanent oil price hike by 10% in each of these quarters. Table A presents the effects that this scenario would have on consumer prices in OPEC member states. As can be seen, the combination of an oil price hike and a slowdown in the US economy leads to a surge in domestic inflation. The basic model can be extended by adding a policy reaction in line with the international agenda that consists of an increase in the OPEC bloc's domestic demand by 1% at a time over eight quarters. However, faster petrodollar recycling through imports only slightly reduces the inflationary effects by curbing output fluctuations.

The second scenario complements the first scenario with a formal one-off nominal revaluation of the OPEC bloc's currency against the US dollar by 10%. Under these assumptions, the price effects of the first scenario turn, in the short run, deflationary (thus even alleviating some of the inflationary pressures of the baseline scenario). It is interesting to note that, following the currency revaluation, the OPEC bloc experiences only slight losses in real GDP (see Table B). Transferring these results to the GCC economies, it thus seems possible to dissolve price and inflationary pressures resulting from the assumed income and demand shocks by a sufficiently large nominal

- 2 As a further caveat, within NiGEM, the currency of the OPEC bloc is pegged to a currency basket, in which the US dollar has a weight of almost 51%, followed by the Japanese yen with 35%, the euro with 8% and the Canadian dollar with 7%. As model parameters can be modified within NiGEM, it is possible to create a model alternative with a 100% US dollar peg. However, the resulting impact on the price level and output effects in OPEC countries is not significant.
- 3 Apart from trade and competitiveness, countries are also linked via financial markets and asset stocks, i.e. the structure and composition of wealth. Wealth effects, however, relate to consumption only.

Table A Inflation effects of an appreciation of the OPEC countries' currencies against the US dollar by 10% $^{\rm I)}$

			plus: nomina	plus: nominal appreciation		
	basic model	faster recycling	basic model	faster recycling		
year 1	1.07	0.99	-2.32	-2.39		
year 2	6.18	5.35	-3.00	-3.64		
year 3	14.87	12.64	0.55	-1.18		

Source: NiGEM model simulations.

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¹⁾ Difference from baseline in percentage points.

Table B Output effects of an appreciation of the OPEC countries' currencies against the US dollar by 10%

			plus: nominal appreciation		
	basic model	faster recycling	basic model	faster recycling	
year 1	1.76	0.99	1.54	0.88	
year 2	5.52	4.00	4.97	3.59	
year 3	6.74	6.26	6.32	5.78	

Source: NiGEM model simulations.

1) Difference from baseline in percentage points.

appreciation. Nonetheless, it goes without saying that such a one-off adjustment will not solve all the problems associated with a 100% US dollar peg in most of the GCC region.

2.3.3 OIL EXPORTERS AS NEW BIG PLAYERS IN WORLD FINANCIAL MARKETS

The massive size of oil exporting countries' recent investments puts their role as players on international financial markets into a new perspective. As stated above, in GCC countries, the bulk of financial petrodollar investment is made by SWFs, which tend to enjoy greater investment flexibility and less reputational risk and may thus invest more progressively than central banks and monetary authorities. Sometimes, the overlapping view is taken of seeing SWFs (of any geographical origin) as a new class of investors, as opposed to traditional institutional investors, hedge funds and others. Tentative market estimates indicate that SWFs manage between USD 1.9 trillion and USD 2.9 trillion on a worldwide scale, with the IMF expecting their overall assets to grow to USD 12 trillion by 2012, not least because of anticipated massive transfers of foreign assets from traditional central bank reserve portfolios into SWFs. These figures contrast with an estimated USD 1-2 trillion currently managed by hedge funds and USD 6 trillion of total foreign exchange holdings reported to the IMF in the third quarter of 2007. While currently about two thirds of today's SWF assets stem from oil-related funds, it is believed that nonoil funds will catch up soon. As a consequence, a large part of the international attention focuses not so much on the well-established SWFs of the GCC region (currently estimated at USD 0.75 trillion to USD 1.5 trillion, see sub-section 2.2.2), but on the rapidly

growing, often newly-founded funds, in particular on the China Investment Corporation and Russia's National Wealth Fund.

The following discussion will consider all external investment activities by the GCC governments ranging from the impact of petrodollar recycling on asset prices, exchange rates and financial stability in general to some specific issues on SWFs. It will show, however, that data constraints make it impossible to derive precise financial market implications.

FINANCIAL SYSTEM IMPLICATIONS

The sheer size of capital flows, especially into the US economy, has suggested that part of the globally low real interest rates of the past few years can be explained by exogenous factors, among them Bernanke's "global saving glut". Indeed, it seems plausible that the GCC countries' sizeable build-up of financial assets – a significant part of which has flown into long-term US government securities – has exerted some downward pressure on US long-term interest rates ⁷⁹. The extent of that influence, however, is debatable. Empirical evidence mostly concentrates on the overall impact of long-term US government securities purchases by foreign central banks of any origin on bond

79 Meanwhile, some financial market analysts have already subscribed to the opposite story. As East Asian countries, in particular, are starting to rebalance their so far relatively conservative investment portfolios, there are likely to be sizeable portfolio shifts from US government securities into riskier assets. All things being equal, US bond yields would consequently face upward pressure. yields, which is usually estimated to range between 20 and 100 basis points. However, so far it has not been possible to single out a distinct influence from petrodollar investment (see Box 4 for more details).

Another phenomenon related to increasing financial globalisation, which could be observed until the recent global financial market turmoil, is the decline in the credit spreads of emerging market bonds and the surge in emerging economies' equity markets. Part of the past decrease in risk premia can be attributed to a general change in risk aversion owing to a global search for yield

in combination with improved fundamentals of many emerging market countries. But in addition to that, it is often assumed that petrodollar investment has also had a benign influence on the cost of capital of these economies. This is not only because GCC countries show a keen interest in emerging market investments, but also owing to an indirect effect of lower risk-free rates in the United States which might have intensified the search for yield in emerging markets. That is to say that the impact of petrodollar recycling on US Treasury bond yields – if existent – also has second-round effects on the price of emerging market yields.

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Box 4

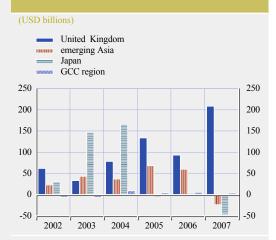
EMPIRICAL EVIDENCE OF THE EFFECT OF PETRODOLLAR RECYCLING ON ASSET PRICES

Empirical evidence of the effect of oil revenue recycling on US Treasury bond yields is hard to detect. The IMF, following Warnock and Warnock (2006), opts for a relatively broad approach, regressing monthly yields of long-term US government securities on foreign capital inflows and control variables over the period 1987-2005. Although it finds evidence that the combined foreign capital flows to the United States put downward pressure on US interest rates, the model suggests that this effect is mostly attributable to capital inflows from East Asia. By contrast, a significant role of petrodollar-related inflows cannot be singled out. One explanation for this result might be the magnitude of petrodollar flows. According to TIC data, recent net purchases of long-term US Treasury bonds and notes by Emerging Asia and Japan far exceed those from the GCC region (see Chart). For instance, in the period from June 2004 to June 2006, i.e. during the time of Greenspan's interest rate conundrum, net transactions amounted to USD 76.5 billion for emerging Asia, USD 38.3 billion for Japan and USD 18.3 billion only for the GCC economies.

However, the difference in dimension should not come as a surprise. At least three caveats must be taken into account. First, instead of investing the oil-related windfall gains in international financial markets, several GCC economies used a significant part of their petrodollars to repay the bulk of their public debt in the first years of the recent oil price boom. Second, given the relatively broad diversification of petrodollar investments, one might conclude that it is precisely because of this asset diversification that GCC countries exert only a relatively small influence on individual asset markets. Third, TIC data cannot identify third-party purchases of US securities and might therefore be substantially biased (see also sub-section 2.2.3). This becomes evident when looking at net purchases of long-term US Treasury bonds and notes by UK-based investors. During the above mentioned period, the United Kingdom's investment added up to USD 233.5 billion, i.e. more than the combined inflows from emerging Asia, Japan and the GCC region. As the true extent of investment by GCC countries remains uncertain, the IMF's analysis should not be taken as proof of the negligibility of the petrodollar effect on US long-term interest rates.

As for the effect of petrodollar recycling on emerging market yields, the IMF, following Warnock and Warnock (2006), also fails to supply sufficient statistical evidence. Based on a fixed-effects panel regression of emerging market bond spreads that controls for variables related to US financial markets and for the impact of country-specific and global macroeconomic fundamentals, the IMF shows that any link between oil prices and emerging market bond spreads becomes statistically insignificant once world industrial production is included into the regression. This is the case as the parallel movement of oil prices, world industrial production and the global economic cycle makes it difficult to disentangle an independent influence of any one of these variables. However, the explanatory power of the regression should not be overstated. After all, the use of oil prices as a proxy for

Net purchases of long-term US Treasury bonds and notes



Source: US Department of the Treasury. Notes: Data on GCC countries include Iran and Iraq. Emerging Asia includes China, Hong Kong, India, Indonesia, South Korea, Singapore, Taiwan and Thailand.

petrodollar investment in emerging market countries might be justified by the lack of identifiable transaction data; nevertheless, it adds a considerable amount of vagueness to the analysis.

Moving on to financial stability issues, it appears useful to revisit the GCC countries' savings motives. It seems a reasonable assumption that the bulk of petrodollars does not flow into official currency reserves, but into medium-term oriented stabilisation funds and long-term oriented savings funds. Furthermore, with oil prices and subsequently oil revenues having attained ever-new historical highs in the past five years, it seems increasingly unlikely that the entire assets of stabilisation funds will be run down in the foreseeable future. Hence, the savings motive, and with it long-term investments that, in principle, allow for taking on more risk should have been gaining in importance.

This suggests that, overall, the emergence of oil-exporting countries in general and of GCC countries in particular as new big players on international financial markets has had a positive impact on financial stability. First, GCC economies manage a vast and growing pool of capital. Second, they have a tendency to favour long-term

investments. Third, and contrary to hedge funds and private equity companies, the large SWFs, in particular, are presumed to be reluctant to engage strongly in highly-leveraged positions, because this might run counter to the GCC region's savings motives. Fourth, petrodollar investments are believed to be diversified and thus to cover a broad range of financial instruments, countries and currencies. Fifth, being major oil producers in the Middle East, GCC countries make their investment decisions against a different backdrop in terms of the current macroeconomic environment than institutional investors of industrialised countries. All these distinct characteristics improve market liquidity and render the global investor base more heterogeneous and asset allocation more efficient. Provided that the GCC region's SWFs act according to risk and return considerations, they thus contribute to dampening asset price volatility and lowering liquidity risk premia. In particular, the rise in global investor heterogeneity makes a sudden stop or reversal of overall capital flows less likely – at least in the absence of herd behaviour. Moreover, there have been several recent examples

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where globally active financial institutions, e.g. banks and stock exchanges, were pleased to tap the financial resources of the GCC region in order to receive liquidity injections and maintain their financial independence at times when capital from western investors was in short supply.

However, the sheer size of financial petrodollar recycling and the lack of transparency about the related investment portfolios and objectives has also intensified unease in financial markets and tempts analysts to form a critical, often biased view on financial stability issues. One such example is the discussion on the quality and sophistication of risk management techniques put in place by central banks and SWFs. Requirements in terms of risk management are on the rise as the share of more diversified and riskier assets under management increases. Indeed, anecdotal evidence on the management of the GCC region's SWFs is encouraging. Nevertheless, the issue will remain on the agenda as the GCC economies' central banks, monetary authorities and SWFs are typically unregulated and less subject to market discipline.

Another potential source of global financial system vulnerabilities are abrupt and sizeable portfolio adjustments.80 In this respect, interest currently focuses on the dependence of the United States on international capital inflows. However. current statistical evidence demonstrates that the GCC region has so far shown no signs of abandoning the US dollar. In particular, the TIC data indicate that, in the second half of 2007, i.e. in the aftermath of the global financial market turmoil, GCC countries - instead of disinvesting long-term US securities – merely shifted their portfolios towards riskier asset classes within the universe of US securities. Plausible reasons for the GCC region's adherence to the US dollar can be found. First, in view of the long-term orientation of a large part of its savings, the reasons mentioned in sub-section 2.3.2 (and, in particular, the status of the United States as a safe haven) render it unlikely that the GCC region will all of a sudden substantially reduce

the high US dollar share in its portfolios – even if certain readjustments might occur over the medium term. Second, with the United States still commanding the deepest markets in most asset classes, GCC economies are able to move up the risk curve without having to turn away from the US dollar. Third, a massive sell-off of the US dollar would not be in the region's own interest given its large US dollar exposures and its US dollar peg.

However, from a financial stability perspective, a certain element of risk is based on the observation that not only actual capital flows can cause volatility on international foreign exchange markets, but that market rumours may suffice, as previous speculation about an increased currency diversification by central banks has shown. Such market rumours may, in a worst case scenario, amplify herd behaviour, with a potentially destabilising impact on the global financial system. In the case of the GCC countries, it is often argued that such rumours are nurtured by the scarce information available on their petrodollar investment policies and by mounting speculation about the sustainability of their exchange rate pegs. Thus, to sum up, the predominantly positive effects of financial petrodollar recycling may turn negative, mainly, because in adverse situations the sheer size of overall petrodollar flows, as well as the very limited knowledge market participants have on petrodollar investments, might give rise to market rumours and, possibly, financial market tensions.

SPECIAL ISSUES CONCERNING SOVEREIGN WEALTH FUNDS

As stated above, it is not the existence of SWFs that is new, but their profusion, scale and diversity. As a consequence, official capital flows from emerging market countries are increasingly attracting the attention of financial market participants and policymakers from industrialised countries. Apart from the

80 It is important to keep in mind that financial stability analysis aims at identifying the major downside risks to the financial system. As a consequence, the issues discussed do not represent the most likely risk scenario. abovementioned financial stability concerns, two issues are currently being debated. The first is related to the investment targets of SWFs. As many of the countries under discussion have accumulated foreign exchange reserves in excess of their immediate needs, SWFs are increasingly striving to generate higher returns on these "excess" assets. As shown by Summers (2007), emerging market countries could increase their return on excess reserves by 5 percentage points if they pursued an investment strategy similar to that of pension funds.

But even if a more profit-driven investment attitude seems legitimate in general, the fact that SWFs both from the GCC region and elsewhere have recently bought stakes in what might be considered to be strategically or nationally important companies abroad has raised fears of politically or strategically motivated investments. a reversal of privatisations in recipient countries and a subsequent distortion of international competition. Admittedly, such fears are mostly hypothetical at the current juncture and do not coincide with SWFs' presumably diversified and commercially-motivated financial investments. Nonetheless, such fears may fuel protectionism, potentially dampening the global economy. Initial indications of a change in sentiment are indeed visible in recent political initiatives in Europe and the United States, which, among other things, call for the establishment of an internationally agreed set of best practices to guide the management of government cross-border investments. While the question of how to strike a balance between maintaining the freedom of capital movement, enhancing transparency of SWFs and respecting the national security concerns of recipient countries is a difficult issue, it will be essential to separate the wheat from the chaff, i.e. to abstain from measures that unduly restrict the free movement of capital on a global basis.

Another SWF-related issue is whether oil funds actually enhance a country's effectiveness in managing oil-related windfall gains or, in other words, whether the existence of oil funds makes sense from a theoretical perspective. While many

oil funds were founded as early as the 1970s, when domestic absorption was far too low to counteract the spike in oil revenues, it is still a contentious issue whether oil funds improve the conduct of fiscal policy and if they entail certain risks, such as fragmenting fiscal policy, creating a dual budget and reducing transparency and accountability.

Leaving aside individual negative examples of operational mismanagement, such as Venezuela (in the 1970s) and Nigeria (in the early 1990s), where oil funds were poorly integrated with the fiscal budget and used for macroeconomically inefficient purposes, Davis et al. (2001) show that both econometric evidence and country experience generally cast doubt on the effectiveness of oil funds. In particular, in countries where oil funds seem to have enhanced fiscal prudence, the effect might simply be ascribed to self-selection effects. Thus, the mere establishment of SWFs is no substitute for an appropriate fiscal rule in oil-producing countries.

In the same vein, it is currently argued that the sheer size of professionally-managed SWFs might prompt funds to lose sight of their original mandates, which are part of the general fiscal policy framework, and, in the extreme, become self-perpetuating investment entities. Such a change in purpose would undeniably defer the necessary structural adjustment in the region. This view, however, overlooks not only the currently growing public pressure in oil-producing countries aimed at accelerating government spending, but also non-fiscal effects. According to Shabsigh and Ilahi (2007), the question whether oil funds reduce macroeconomic volatility within oil-producing countries also has to be taken into account. Based on a panel data set of 15 oil-exporting countries (including Bahrain, Kuwait and Oman), the results indicate a robust negative relationship between the presence of an oil fund on the one hand and domestic inflation, the volatility of prices and the volatility of broad money on the other. This relationship may be attributed to the fact that SWFs tend to be used

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as a tool for neutralising the monetary impact of oil-related capital inflows. Hence, concentrating state-backed investment within a SWF may indeed prove beneficial, provided that the fund is integrated into a general policy framework with a special focus on fiscal discipline.

2.4 CONCLUSIONS

GCC economies have been experiencing substantial revenue increases following the prolonged and marked hike in oil prices this decade. There are indications that about half of the GCC region's oil revenues are currently absorbed through the trade channel, with the imports to exports ratio having picked up compared with the 1970s. The other half of GCC countries' petrodollar inflows are invested in financial assets, resulting in a sizeable build-up of traditional foreign exchange reserves and, increasingly, stabilisation and savings funds. As only about half of these financial resources can be tracked with the help of international statistics, a large part of the GCC countries' investment activities is opaque to international financial market participants. Based on the available evidence, however, two tentative conclusions can be drawn. First, diversification in asset classes, countries and currencies seems to play an important role for GCC economies. Second, the United States has nonetheless remained a main recipient of oil-related financial funds.

In view of the remarkable upswing in its combined current account surplus during the recent episode of rising oil prices, the GCC region has emerged as a major net supplier of capital on a global scale, second only to East Asian countries. As a result, GCC economies form part of the international community's four-pronged approach, which aims at avoiding a sudden and disorderly unwinding of global imbalances. There is general consensus that concerted action by both current account surplus and current account deficit countries is required in order to combat global imbalances effectively. As far as GCC countries are concerned, the respective policy plans, above all an acceleration of domestic absorption, have only a limited effect on global imbalances. Given

the structure of the GCC region's external trade, the absorption channel is much more likely to benefit the EU and Asia than the country with the world's largest current account deficit, i.e. the United States. Enhancing exchange rate flexibility, a recommendation usually made with reference to China rather than the GCC region, might also support the adjustment process to a limited extent only. Nevertheless, a gradual nominal appreciation of the GCC countries' currencies against the US dollar might be in their own interest given the region's domestic macroeconomic conditions. In particular, it could dissolve inflationary pressures resulting from domestic absorption of high and rising oil revenues.

As a consequence of the sheer size of financial petrodollar recycling, oil-exporting countries in general and GCC countries in particular have emerged as new big players in world financial markets. As such, they are alleged to exert some influence on asset prices, especially on US long-term interest rates, emerging market yields and the US dollar exchange rate. However, empirical studies fail to identify a significant impact of oil revenue investments, in part because of data constraints, but also because the relatively broad diversification of investment portfolios reduces their influence on individual asset markets. Moreover, the strength of the impact is likely to vary with the size of the respective market. On a more general scale, the effects of petrodollar recycling on global financial stability may be summarised as being positive, mainly because the longer-term orientation and the presumed reluctance of GCC countries to engage excessively in highly-leveraged positions contribute to diversifying the global investor base and its asset allocation. However, in adverse situations, the overall size of oil-related flows, as well as the very limited knowledge market participants have about petrodollar investments, may give rise to market rumours and, possibly, financial instabilities.

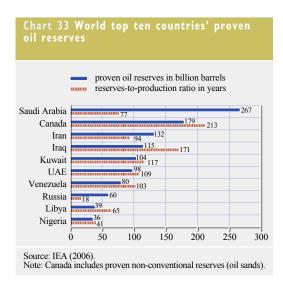
In recent years, SWFs from both oil-exporting and other countries have proliferated as well

as gained in scale and diversity of activity. Not least as a result of their opacity, these funds have raised fears of politically or strategically motivated investments, which though hypothetical at the current juncture might ultimately fuel protectionism. Instead, however, the proliferation of SWFs should be viewed in the context of a general trend towards deeper financial globalisation. In this respect, it is essential that the international community abstains from measures that unduly restrict the free movement of capital on a global basis all the more so as empirical evidence and country experience suggest that concentrating state-backed investment within an oil fund might prove beneficial to the domestic economy, provided that promoting fiscal discipline is one of the fund's dominant characteristics. On the other hand, in the light of the very limited knowledge market participants have about SWFs, a certain wariness regarding their activities is likely to persist. Thus, enhancing transparency in respect of the management and operation of these funds, along the lines of the work done by the IMF and the World Bank, would be welcome.

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3.1 INTRODUCTION

Gulf Cooperation Council (GCC) countries have seen impressive economic development in recent years, making the region one of the most prosperous in the world. Based on surging hydrocarbon revenues, these countries as a group have nearly doubled their nominal GDP since 2003 to an estimated USD 791 billion in 2007 (IMF, 2007f). The tripling of oil prices over this period has further strengthened the already prominent role played by the hydrocarbon sector, which accounted for nearly half of the aggregate GDP in GCC countries in 2006. The main export good is oil, representing, on average, 82 70% of GCC countries' total exports over the period 2003-2007 (IMF, 2007g). In 2006 the GCC region accounted for more than one fifth of world oil production. Moreover, 40% of proven world oil reserves and about 23% of proven world gas reserves are located in the GCC area (BP, 2007). Three GCC countries (Saudi Arabia, Kuwait, and the UAE) are among the top ten countries in terms of proven oil reserves. On current production levels, Saudi Arabia's oil reserves are expected to last for 77 years (see Chart 33).



Part 3 focuses on GCC countries' role as energy suppliers and trading partners from a global and regional perspective. It provides facts and figures on issues related to energy and trade and complements Part 1, which deals with economic structures and developments in the GCC region and Part 2 on current issues in money and finance. Section 3.2 sheds some light on global energy supply and demand, as well as the current and likely future role of GCC countries in providing the global economy with oil and gas. Section 3.3 describes the GCC countries' role in international trade, with special emphasis on their global and regional trade patterns, as well as their progress in terms of trade integration and trade facilitation. Section 3.4 concludes.

3.2 GCC COUNTRIES' ROLE IN WORLD ENERGY MARKETS

3.2.1 TRENDS IN WORLD ENERGY MARKETS

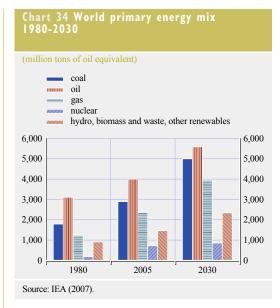
Oil and gas are the main sources of world primary energy supply (see Chart 34). Fossil fuels (coal, oil and gas) were the dominant source of energy in 2005, accounting for 81% of world primary energy supply. While oil as a percentage of primary energy resources declined from 43% in 1980 to 35% in 2005, the share of gas increased from 17% to 21%. Oil and gas together therefore still satisfy more than half of total global primary energy consumption. At the same time, coal accounted for 25%, nuclear energy for 6%, and hydro, biomass and waste and other renewables together for 13% of world primary energy supply (IEA, 2007).

The IEA expects this world energy mix to remain fairly constant over the next 25 years. In terms of fossil fuels, the share of coal and gas in primary energy is expected to increase by 3 and 1½ percentage points, respectively, whereas the share of oil should decline by 3½ percentage points. While the aggregate share of hydro, biomass and waste and other renewables should remain nearly constant, nuclear energy is expected to lose 1½ percentage points

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⁸¹ By Dominik Peschel (Deutsche Bundesbank).

⁸² Unweighted averages.

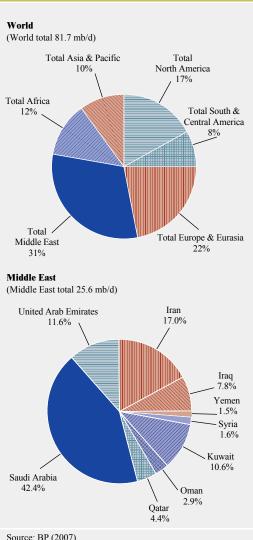


(IEA, 2007). The remainder of Part 3 is based on the assumption that there will be no significant changes in the primary energy mix in the foreseeable future.

Global oil production grew by 17% between 1996 and 2006, with Middle Eastern oil producers, including GCC countries as a group, contributing significantly to this increase (BP, 2007).83 In 2006, a total of nearly 82 million barrels of oil were produced per day, up from 70 million barrels per day (mb/d) in 1996. The increase in Middle Eastern oil production somewhat outpaced that in the rest of the world (rising from about 20½ mb/d to about 25½ mb/d). As a result, the region's share in world production rose by 2 percentage points to about 31% (see Chart 35). GCC countries as a group still provide the lion's share of crude oil production in the Middle East, even though – as a percentage of aggregate Middle Eastern production - their share declined slightly from 74% in 1996 to 72% in 2006.

Looking forward, world oil production is expected to rise by another 41% (to 116 mb/d) until 2030 (Chart 36), driven by increases in the Middle East, Russia and Latin America (IEA, 2007). The increase is expected to be most pronounced in the OPEC countries of the Middle East. GCC countries' production alone

Chart 35 Oil production in 2006, worldwide and in the Middle East

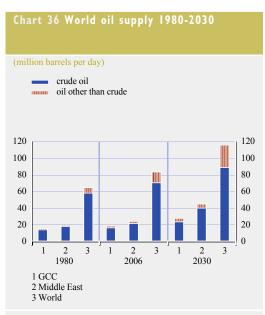


Source: BP (2007). Note: Other countries in the Middle East provide about 0.1% of the region's oil production.

is set to rise from about 18½ mb/d to 27½ mb/d (IEA, 2006, 2007 and BP, 2007). Furthermore, Brazil and Russia should expand their oil

83 According to the BP (2007) classification, the six regional groups include – inter alia – the following major oil producing countries (with a share in world oil production of at least 1%): Middle East (Iran, Iraq, Kuwait, Qatar, Saudi Arabia and the UAE); Europe & Eurasia (Kazakhstan, Norway, Russia, United Kingdom); South & Central America (Brazil, Venezuela); Africa (Algeria, Angola, Libya, Nigeria); Asia-Pacific (China, India, Indonesia); North America (United States, Canada, Mexico).

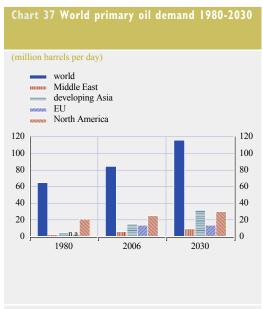




Sources: Calculations based on IEA (2006, 2007) and BP (2007). Note: Oil other than crude includes natural gas liquids, non-conventional oil and processing gains.

production, together adding some 3½ mb/d to global production (IEA, 2007). By contrast, production is expected to fall in North America and Western Europe, as oil fields mature. In the United States and Canada, conventional crude oil production is forecast to drop from 6½ mb/d in 2005 to below 5 mb/d in 2030. Even more pronounced, crude oil production in Europe (in particular, Norway and the United Kingdom) should decline from nearly 5 mb/d in 2005 to 1½ mb/d in 2030 (IEA, 2006).

Looking at recent oil consumption, global oil demand grew strongly between 1996 and 2006, in particular, in North America, the Middle East and the Asia-Pacific region. The strongest increase (+36%) was recorded in the Middle East, with consumption reaching nearly 6 mb/d in 2006. At the same time, oil consumption in the EU has remained constantly below 15 mb/d over the past decade. Besides regional differences in economic growth, taxation and subsidies have an important effect on overall energy demand, energy efficiency and the use of alternative energy sources. While taxation is high in many industrialised countries (in particular, in Europe), providing an incentive



Sources: IEA (2007) and BP (2007). Note: Oil demand as defined by the IEA includes crude oil, natural gas liquids, non-conventional oil and processing gains.

to raise energy efficiency, subsidies on fuel and other oil derivatives are a prominent feature in many emerging market and developing countries, including oil producing countries. Looking forward, primary oil demand in the Middle East is forecast by the IEA (2007) to rise by 58% to 9½ mb/d in 2030 (see Chart 37), while it should remain constant in the EU at about 14 mb/d. North America's primary oil demand is forecast to grow to 30 mb/d in 2030 (+20%). Consumption by developing Asia will double by 2030, by which time it should exceed North America's primary oil demand by nearly 2 mb/d.

GCC countries' primary energy demand, consisting of oil and increasingly of gas, is expected to more than double by 2030,84 given fast population growth and progress in diversifying GCC countries' economies (see Box 6). Energy requirements for water desalination and power generation are expected to rise one-and-a-half-fold. In addition, energy demand for transport, as well as for industrial

⁸⁴ Compared with 2003, as included in IEA (2005). Data excludes Bahrain and Oman

use will approximately double, the latter also reflecting rising energy consumption by the newly established energy-intense aluminium industry in some GCC countries (IEA, 2005).

Dependency on oil imports is high in the EU, the United States and China, and is projected to rise even further (IEA, 2006). In 2004, the oil dependency rate⁸⁵ of the EU was 79%. Oil, including oil derivatives, and gas accounted for 37% and 24% of energy consumption in the EU. respectively, followed by coal (18%), nuclear energy (15%), and renewable energy (6%) (Destatis, 2006). The EU's oil-import dependency rate is expected to reach 92% in 2030, mainly reflecting the depletion of oil reserves in the North Sea, while demand is expected to remain virtually constant. In the United States, 64% of oil consumption was imported (net) in 2004; in 2030, this share is expected to rise to 74%, reflecting both increased demand and lower domestic production. IEA estimates also suggest that China's oil import dependency rate will climb to 77% in 2030, up from 46% in 2004. As in other dynamic emerging market economies, the increase in China's dependency on oil imports is mainly caused by a strong increase in fuel consumption.

The tripling of crude oil prices since the beginning of 2003 may necessitate a reassessment of demand and supply projections. In early 2008, the oil price hit USD 100 per barrel, bringing it close to its all-time high of 1979 in real terms. While OPEC's oil supply assessment is based on an implicit price target in the range of USD 60-70 (IMF, 2007g), most observers expect that the price of oil and oil derivatives will remain at an elevated level and may increase even further both in nominal and real terms. This could lead to significant changes in future demand and supply patterns. At the same time, experience suggests that the price of oil, like the price of other commodities and raw materials, has a strong cyclical component. Moreover, the oil price has frequently been subject to various shocks on the supply side, including natural disasters, political developments in major oil-producing countries and geopolitical tensions.

To sum up: Available projections indicate that oil is likely to remain key in meeting increasing world energy demand, mainly driven by emerging market economies and oil producers, including the GCC countries themselves. Middle Eastern countries in general and the GCC region in particular are likely to remain pivotal to providing the world economy with oil in the future, as oil import dependency is expected to increase in mature and emerging market economies as a result of rising consumption and/or the exhaustion of domestic deposits. This second factor is particularly relevant to Europe, where oil import dependency is likely to rise significantly despite stagnating oil consumption.

3.2.2 OIL SUBSTITUTION AND GAINS IN EFFICIENCY

High oil prices create incentives for the production of oil substitutes and for advancing energy efficiency. The increasing scarcity of easy-to-exploit crude oil and the correspondingly higher prices will drive innovation and new technology towards generating crude oil substitutes, as well as the exploitation of previously unattainable reserves. In this context, a number of substitutes for crude oil have received increasing attention. These include both alternative fossil sources (Canadian oil sands and synthetic oil generated from gas or coal) and renewable sources (biofuels). If available on a significant scale at competitive prices, these substitutes could supplement conventional oil supply, thereby mitigating the upward pressure on oil prices. In addition, further technological innovations in energy efficiency have the potential to generate significant energy savings in the future. Increasing energy efficiency - in particular, in developing countries, transition economies, as well as in North America - is a potentially important factor for containing energy demand. For example, in its projections the IEA (2007) assumes that there will be a decline in global energy intensity - i.e. higher energy efficiency – of about 1.8% per year over the period 2005-2030.

85 Net oil imports including oil derivatives as a percentage of consumption.

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However, the impact of synthetic oil generated from coal or gas, as well as oil stemming from oil sands is likely to be modest in the foreseeable future. The overall market share of these non-conventional oils is estimated to represent about 8% of world oil supplies in 2030, up from slightly more than 2% in 2006 (IEA, 2007). Production costs for the exploitation of oil sand or synthetic oil are currently high. For the integrated mining of Canadian oil sand, the current costs of producing synthetic crude are about USD 33 per barrel (IEA, 2006). Without further technological progress, it seems unlikely that oil derived from oil sand will reach a volume which could compensate for crude oil to a significant degree. The output stemming from Canadian oil sands is estimated by the IEA (2006) to be close to 5 mb/d in 2030. For the time being, the impact of synthetic oil obtained from natural gas or coal via Gas-To-Liquids (GTLs) or Coal-To-Liquids (CTLs) processes on overall oil supply also appears to be limited. Non-OPEC production of oil from CTLs and GTLs is only expected to reach 1.5 mb/d and 0.5 mb/d, respectively, by 2030, with most of the supply coming from the United States and China (OPEC, 2007).

Biofuels currently replace only a small fraction of gasoline derived from oil, and options for significantly increasing biofuel production are limited. Biofuels – bioethanol and biodiesel – are defined as raw biomass processed into a more convenient form, which can be used as fuel. World production of biofuels was about 0.7 mb/d in 2005 and is based predominantly on grain, sugar or oil crops. In 2006, Brazil and the United States produced more than 80% of

world output in bioethanol (and had nearly the same share of world consumption), while at the same time 88% of world biodiesel output was produced in Europe (OPEC, 2007). Biofuel is not a complete substitute for fuels since it must be mixed with conventional petrol. Moreover, since technologies for processing crops for biofuel production are well established, further process optimisation in this area is currently not in sight. In addition, the expansion of biofuel production - implying a large scale replacement of food production - has a potentially serious humanitarian impact. There have already been calls for a moratorium on biofuel production in order to reduce food shortages caused by the substitution of farmland with land dedicated to grow crops with biofuel.86

As a result, further technical progress in energy efficiency remains key to reducing the use of crude oil, in particular, in the automotive sector. Unlike energy consumption for industrial purposes, energy demand in the transport sector is still nearly exclusively (94%) covered by oil (IEA, 2007). The IEA (2007) estimates that oil demand for transportation purposes will grow at an annual rate of 1.7% over the period 2005-2030. Since oil demand grows with higher rates of motorisation, the IEA (2007) expects nearly half of the increase in oil demand for transport purposes to come from China and India, where rates of motorisation are still relatively low.

86 E.g. Jean Ziegler, UN Special Rapporteur on the Right to Food, as quoted in FAZ, 17 October 2007.

Box !

OIL QUALITIES, REFINERY CAPACITIES AND OIL PRICES

Oil characteristics are crucial for the refinery process since heavy and sour crude oils require more complex and costly refining. Oil can be defined by its degree of sulphur content and by its gravity. Heavy oil refers to crude that has a high gravity per volumetric metre; sour oil has relatively high sulphur content per unit. Oil is classified by the American Petroleum Institute (API) as heavy if the so-called API gravity is below 30 degrees and intermediate if it is between

30 and 40 degrees. Heavy, sour crude oil requires additional and more complex distillation to turn it into light, low-sulphur products. However, currently only 18% of global refining capacity can handle complex refining (IMF, 2007g).

Heavier and sourer oil is predominant in the Middle East and Russia where most of the future production increase will take place (IEA, 2006). At present, heavy or sour crude oil represents 54%, intermediate crude 26% and light crude 20% of world production (IMF, 2007g). The world's crude oil production is going to become heavier and more sour as North American and European oil fields, where light crude is prevalent, mature.

A shortage of overall refinery capacity, as well as a mismatch between the structure of refining plants and the rising demand for light petroleum products has contributed to the recent oil price increase (Fattouh, 2006). The price differential between light sweet crude oil (e.g. WTI) and heavy sour crude oils (e.g. Dubai's Fateh) is substantial, reaching a maximum of almost USD 16 per barrel for WTI at the end of 2004. Since 2005, the spread has noticeably diminished to values of USD 9 per barrel at the very maximum. Although they fluctuate widely, a significant fall in spreads indicates an improvement in refinery capacity for heavier and sourer crude oil.

To sum up: While there is potential to raise oil production derived from crude oil substitutes (oil sand, synthetic oil, biofuels) and gain further efficiency in oil usage, without any major technological breakthrough in energy production and energy saving (which cannot be ruled out), crude oil and oil derivatives can be expected to play a dominant role in meeting rising energy demand in the foreseeable future.

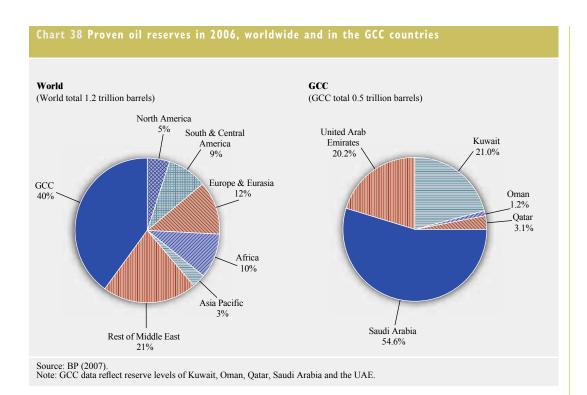
3.2.3 GCC COUNTRIES' POTENTIAL TO ACCOMMODATE INCREASING ENERGY DEMAND

Existing oil reserves place GCC countries in a unique position in terms of covering future oil demand. According to BP (2007), proven oil reserves comprised 1.2 trillion barrels worldwide in 2006, of which the Middle East holds 61% (see Chart 38). Two-thirds of Middle Eastern reserves are located in GCC countries. Hence, the GCC countries own approximately 40% of the world's oil reserves. In addition, Qatar holds 14% of world proven gas reserves (see Box 6 for details). While oil reserves, as well as their projected depletion rates, differ significantly among GCC economies, GCC countries as a group have by far the largest share of the world's proven oil reserves. However, these oil reserves are of lower quality (heavier and more sour; see Box 5) and are therefore more costly to process.

Despite higher processing costs for lower quality crude oil, the cost of exploiting oil reserves in GCC countries is relatively low compared with other oil rich regions. Exploration and exploitation costs are rising globally, as easy to explore and easy to deploy oil fields are becoming scarce and the rates of return for existing fields are declining. In the GCC region, however, oil extraction costs per barrel are still low, ranging from below USD 2 in Kuwait and Saudi Arabia to USD 12 in Oman (Ibrahim, 2007). In addition, oil finding costs in Saudi Arabia are estimated to be among the lowest worldwide. On balance, GCC oil producing countries are likely to remain highly competitive in providing oil and oil derivatives.

GCC countries' investments in the exploration and development of oil are estimated to grow significantly. The IEA (2005) projects an increase in GCC oil producing countries' investment from USD 39 billion for the period 2004-2010 to USD 90 billion between 2010 and 2020, climbing to USD 131 billion between 2020 and 2030. However, the comparatively low costs of oil exploration and development mean that the GCC countries' total investments will represent less than one-tenth of global investment over the period 2004-2030 (IEA, 2006).

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As a result, GCC countries' share in global oil supply should increase to 24% (or 27½ mb/d) by 2030. Approximately one-fifth of GCC countries' oil production in 2030 is expected to come from fields currently awaiting development; about another fifth is projected to come from reserve additions and new discoveries (IEA, 2005). The aggregate market share of the Middle Eastern oil producers is estimated to increase to 39% (IEA, 2007). This results partly from an expected strong increase in Iraq's oil production (IEA, 2006).

Saudi Arabia – and to a lesser degree the UAE and Kuwait – are among the few countries in the world which hold spare capacity in crude oil production on a significant scale. According to the IEA (2008), OPEC effective spare capacity was 2.2 mb/d in December 2007, of which 80% was held by Saudi Arabia. Even though Saudi Arabia officially relinquished its role as OPEC's swing producer in the middle of the 1980s, it accommodates oil demand in periods of tight world supply through higher oil production. According to some observers, Saudi Arabia

still seems to be willing and should be able to maintain a volume of spare capacity of 2-3 mb/d (Fattouh, 2006).

On a global scale, there is currently a significant lack of refinery capacity. Increasing refinery capacities are pivotal to meeting the growing demand for gasoline and other oil derivatives. In addition, existing refining capacities must be upgraded in order to meet demand for higher quality oil derivatives as China and India among other countries – are progressively tightening their fuel quality standards and adopting Euro-standards for transport fuels (OPEC, 2007). Furthermore, as noted above (see Box 5), available crude oil is becoming heavier and more sour, while demand for light and middle distillates is on the increase. At the same time, current refinery bottlenecks are likely to remain in place for some time to come:

 Expanding distillation capacity takes time and is uncertain. The lead time for a refinery project is from four to five years. Additionally, not every announced capacity expansion actually takes place (OPEC, 2007). The Middle East is seen by OPEC (2007) to account for 2.6 mb/d out of 7.4 mb/d in distillation capacity additions over the period 2006-2012. These overall additions equate to one-tenth of current global distillation capacity (IEA, 2008).

- Implementation of planned projects to alleviate refinery shortages is subject to some degree of uncertainty. A lack of skilled labour and rising material costs could delay projects, while environmental concerns can raise investment costs significantly. Moreover, uncertainty about future returns can discourage investors as margins in the refinery business have been low in recent decades and have only recently been improving (IMF, 2007g).
- The US refinery bottleneck is expected to continue. In the United States, no new refineries have been built since the late 1970s, reflecting environmental restrictions, while local demand is growing (IMF, 2007g).

GCC countries continue to invest in refinery capacity. In 2030, GCC countries' refinery capacity should reach 7.3 mb/d, ⁸⁷ which will then represent about 6% of world capacity (117.8 mb/d). Saudi Arabia's total refinery capacity alone should more than double by 2030, reaching 4.5 mb/d (IEA, 2005). The aim of the capacity expansions in the oil producing GCC countries is to increase the processing of domestic heavy crude oils, which have been most difficult to place on the market in recent years owing to limited availability of the necessary complex refinery capacity, as well

as the demand for light products (OPEC, 2007). Significant refinery capacity increases will also take place in neighbouring MENA countries 88 where capacity will reach 16 mb/d in 2030 (IEA, 2005). By comparison, the EU's refinery capacity was about 15 mb/d in 2006 (BP, 2007).

Growing oil demand increases the need for higher oil transport capacity. Leaving aside oil pipelines, long distance oil transport is projected to require a total tanker fleet with a deadweight tonnage of 460 million by 2020, which is 100 million deadweight tons more than at the end of 2006 (OPEC, 2007). Since 2001, there has been an increase in new tanker deliveries and order books are filled until 2009. Therefore, refinery capacity – and not transport capacity – most likely remains the limiting factor.

To sum up: Substantial oil reserves – 40% of the world total – place the GCC countries in a unique position to cover future oil demand at competitive production costs. Moreover, they are among the few countries with spare capacity in oil production. Exploration and exploitation costs, though rising globally, are relatively low in GCC countries, which are expected to significantly raise investment spending on oil exploration and the development of new oil fields. GCC countries will also contribute to mitigating the current shortage of refinery capacity.

⁸⁷ Data excludes Oman and Bahrain.

⁸⁸ According to the IEA definition, the MENA region includes Middle Eastern countries (Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, UAE, Yemen) and North African countries (Algeria, Egypt, Libya, Morocco,

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GCC COUNTRIES' CONTRIBUTION TO MEETING WORLD GAS DEMAND

While the GCC countries as a group own about 23% of global gas reserves, their gas production is significantly less than one-tenth of current global production (BP, 2007). Qatar is the only GCC country with significant gas reserves on a global scale, accounting for 14% of the world's natural gas reserves.¹ Saudi Arabia has a share of 3.9% of global gas reserves, the UAE account for another 3.3%. Bahrain, Oman and Kuwait together have a share of less than 2%. Annual growth in world gas production is projected to be 2.1% between 2005 and 2030, reaching nearly 4.8 trillion cubic metres (tcm) in 2030, up from less than 2.9 tcm in 2005 (IEA, 2007). Over the period 2004-2030, GCC countries are expected to invest around USD 120 billion in gas exploration and development, with Qatar being the main investor, contributing more than half of total GCC investments. Qatar is expected to be the only net gas exporter among GCC countries in 2030; net gas exports are estimated to increase from 19 billion cubic metres (bcm) in 2003 to 152 bcm in 2030, accounting for nearly 5% and 16% of world gas trade, respectively (IEA 2005, 2006).²

Gas is expected to bear the brunt of the rise in primary energy demand within the GCC countries. This is partly caused by the GCC economies' efforts at strengthening their position in the world aluminium market by taking advantage of their comparative cost advantage in the energy-intensive aluminium production business. While energy represents 38% of total costs for a smelter in China, the equivalent figure for Saudi Arabia is 7% given cheap domestic gas, which is mainly conveyed as a by-product (Saudi British Bank as reported in FT, Special Report, October 9, 2007). In addition, gas is used for domestic power generation and water desalination.

- 1 The world's largest gas reserves are located in Russia (26.3%) and Iran (15.5%).
- 2 For GCC countries (excluding Bahrain and Oman), the latest available data is for 2003 or 2004, as included in IEA (2005).

3.3 TRADE AND TRADE POLICY IN THE GCC COUNTRIES

3.3.1 TRADE PATTERNS

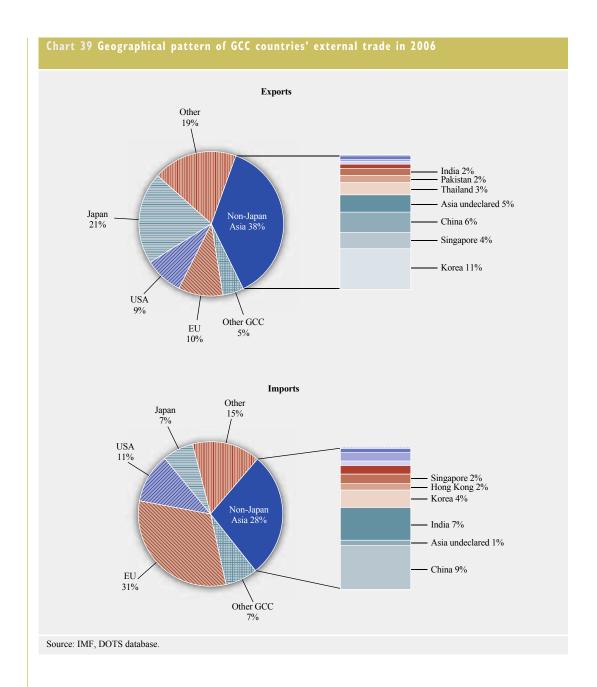
As oil revenues increased, GCC countries' trade in goods more than doubled between 2003 and 2006. During the same period, GCC countries' share in world trade rose from 1.9% to 2.7% (IMF, DOTS database). In 1990, total exports in goods were USD 86 billion, at the end of the 1990s they reached USD 110 billion and grew to USD 422 billion in 2006. Imports amounted to USD 48 billion back in 1990, reaching USD 82 billion at the end of the 1990s and USD 238 billion in 2006. In 2006, the gap between exports and imports reached USD 184 billion.89 As already mentioned, oil accounted for 70% of total exports over the period 2003-2007. At the same time, GCC countries mainly import machinery

mechanical appliances, vehicles and parts as well as electrical machinery and equipment (Australian Department of Foreign Affairs and Trade, 2005).

Studying the GCC countries' global trade patterns, Asia is the predominant destination for GCC countries' exports in goods, while the EU accounts for nearly one-third of GCC imports. In 2006, nearly 60% of GCC economies' exports were shipped to Asia, while the EU (and the United States) accounted for only a small part (see Chart 39). Japan alone accounted for 21% of GCC economies' aggregate exports. GCC economies' exports to South Korea were nearly twice as high as exports to China and exceeded those shipped to the EU. With 81% of its oil imports stemming from the GCC countries

89 No appropriate statistics are available for services.

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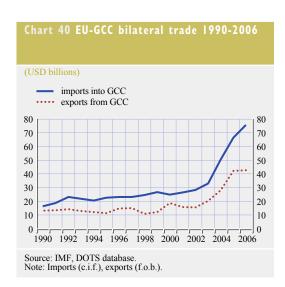
(BP, 2007), Japan's share in GCC countries' exports was larger than those of the United States and the EU together. By contrast, Asia (including Japan) accounted for only one-third of GCC countries' imports.

The GCC is currently the EU's fifth largest export market and the EU is the main trading partner of the GCC countries. Focusing on bilateral EU-GCC trade in goods, 90 the GCC countries'

exports to the EU added up to USD 42 billion or 10% of total exports in 2006 (see Chart 40), mainly consisting of mineral fuels, lubricants and related materials (72%). At the same time, exports from the EU to GCC countries as a group amounted to

⁹⁰ Data on the EU-GCC trade structure is taken from Eurostat. Regarding trade in services, the EU in 2005 exported services (excluding government services) in the value of €13.2 billion to the GCC countries, which in turn exported services in the value of €7.4 billion to the EU, according to Eurostat data.

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USD 74 billion (4.6% of the EU's total exports), as European exporters have been among the main beneficiaries of GCC countries' increasing oil revenues. Machinery and transport equipment accounted for more than half of the EU's total exports to GCC countries, followed by manufactured goods, which accounted for roughly one quarter. On balance, the EU has been registering an increasing trade surplus with the GCC area (see Chart 40), partly because the entire Middle East, including GCC oil producing countries, accounted for only 24% of Europe's oil imports in 2006, while the oil-producing countries of the former Soviet Union accounted for 44% and North Africa for another 14% (BP, 2007).

Intraregional trade among the GCC economies is relatively limited at around 6% of total imports and exports. This is significantly lower than in other regional trading blocs, such as the EU or NAFTA. The low degree of regional trade integration is mainly on account of the dominance of hydrocarbons in GCC countries' external trade. Taking into account non-oil trade only, the share of intra-GCC trade rises to one-third (Jadresic, 2002)⁹¹ and can be expected to increase in line with economic diversification and regional integration in the GCC (Sturm and Siegfried, 2005).

To sum up: In US dollar terms, GCC countries' exports and imports have been rising

significantly in recent years, reflecting the increase in global oil prices. While the bulk of exports consist of oil and oil derivatives, GCC countries' imports are dominated by machinery and mechanical appliances, vehicles and parts, electrical machinery and equipment. Most of GCC countries' imports originate in Europe, while exports are strongly oriented towards Japan and Emerging Asia. At the same time, the entire Middle East, including GCC oil producing countries, accounted for only 24% of Europe's oil imports in 2006. As a result, the EU is the only major region in the world to have a trade surplus with the GCC countries as a group. Intra-GCC trade is still limited, but is expected to expand with further progress in diversifying GCC countries' economies and regional integration.

3.3.2 INSTITUTIONAL ASPECTS

The GCC is expanding its role as a regional trading hub. In recent years, GCC countries have invested substantially in physical infrastructure, including roads, ports and airports. These investments are now increasingly bearing fruit. Improvements in physical infrastructure have been accompanied by remarkable efforts at trade facilitation. GCC countries have formed a customs union, which came into effect at the beginning of 2003. Furthermore, at the beginning of 2008, the GCC common market was launched, which allows, in particular, for the free movement of labour (for GCC countries' citizens) and the free movement of capital.

The GCC region's role in regional and international trade could be further strengthened by improving trade facilitation. The GCC countries' future role as a regional trading hub will depend not only on the quality of physical trade infrastructure, but also on a competitive legal and institutional framework. According to World Bank data, GCC countries are

⁹¹ Jadresic's calculation bases on data for the middle of the 1990s.

⁹² This customs union has a common external tariff with three levels. A 5% tariff rate applies to most commodities, however a zero rate applies to 419 commodities including fish, meat, vegetables, fruit, sugar, and medical items. In addition, selected higher tariff rates apply to a number of restricted or protected products (Australian Department of Foreign Affairs and Trade. 2005).

Table 7 World Bank trading across borders indicators for GCC countries							
	1						1
			Cost to			Cost to	Global ran
	Documents	Time for	export	Documents	Time for	import	("tradin
Region or	for export	export	(USD per	for import	import	(USD per	across borders
economy	(number)	(days)	container)	(number)	(days)	container)	category only
Kuwait	8	20	935	11	20	935	99
Oman	10	22	665	10	26	824	104
Saudi Arabia	5	19	1,008	5	20	758	33
UAE	7	13	462	8	13	462	24
Average GCC	7.5	18.5	767.5	8.5	19.75	744.75	
Middle East &	7.1	24.0	002.2	9	20.7	1 120 00	
North Africa	7.1	24.8	992.2	8	28.7	1,128.90	
OECD	4.5	9.8	905	5	10.4	986.1	
South Asia	8.6	32.5	1,179.90	9.1	32.1	1,417.90	

Source: World Bank, Doing Business database 2008.

Note: No rankings for Bahrain and Qatar; GCC average without Bahrain and Qatar.

already highly competitive in terms of import and export costs (see Table 7). However, the number of documents needed for export and import transactions, while being lower than in neighbouring Middle Eastern and North African countries and in South Asia, is substantially higher than the OECD average. Moreover, import and export clearing is much more time-consuming than in OECD countries. By and large, trade indicators show that the GCC countries have an advantage over South Asian countries in terms of import and export facilitation, but still lag significantly behind the OECD average.

The GCC is currently negotiating a number of free trade agreements (FTAs). Negotiation partners include the EU, Japan, China, New Zealand, Singapore, Australia and India.⁹³ In addition, a US-Middle East Free Trade Area (US-MEFTA) is currently under negotiation, which covers a broader range of Middle Eastern countries. In the case of US-MEFTA, the GCC countries are pursuing a "go alone" policy, whereby each country negotiates separately with the United States (Fiorentino et al., 2007).

EU-GCC talks on a FTA have been underway for nearly 20 years. FTA negotiations started in 1990, but came to a standstill following the decision of the GCC in 1999 to move towards a customs union. In March 2002, negotiations

resumed and are still ongoing. In a recent press release, the EU pointed out that "[1]ike other EU FTAs under the Global Europe framework, an agreement with the GCC countries aims to build on WTO agreements and deepen progressive and reciprocal liberalisation of trade in goods and services. It aims to foster economic integration between the parties and develop rules on investment, intellectual property rights, rules of origin and public procurement. The agreement would also cover political issues such as human rights, illegal immigration and the fight against terrorism." ⁹⁴

To sum up: GCC countries have made substantial investments to establish themselves as a regional trade hub. While the physical infrastructure has been upgraded, further progress is needed in the area of trade facilitation. In terms of institutional trade links and integration, all GCC countries have now become WTO members. Moreover, FTA agreements are currently being negotiated with several countries and regions, including with the EU, which might further contribute to the GCC countries' integration into the world economy.

⁹³ See Australian Government, www.dfat.gov.au/trade/fta/gcc/agcc-fta-study.html.

⁹⁴ See EU press release http://trade.ec.europa.eu/doclib/docs/2007/ january/tradoc 133087.pdf dated 12 January 2007.

3 THE ROLE OF THE GCC COUNTRIES IN THE REGIONAL AND GLOBAL ECONOMY: ENERGY AND TRADE

3.4 CONCLUSIONS

GCC countries are major players in global oil markets in terms of current production and the availability of spare capacity. As they hold about 40% of global oil reserves, they are likely to remain pivotal to providing the world economy with oil in the future. To this end, they are raising investment spending on oil exploration and the development of new oil fields, as they benefit from comparatively low costs in exploiting oil reserves, notwithstanding the lower quality of GCC countries' crude oil. In addition, GCC countries are active in mitigating oil refinery capacity bottlenecks.

Global oil demand is being driven mainly by growth in emerging market economies. Moreover, in Europe, as well as in the United States, the depletion of reserves will increase oil import dependency, raising the importance of external providers, including GCC oil producing countries, in meeting domestic demand. Other sources of energy, including substitutes for crude oil, such as oil sand, synthetic oil and biofuels, as well as progress in raising energy efficiency may dampen global demand for crude oil, in particular, in an environment of elevated oil prices. However, without major technological breakthroughs in energy production and/or energy savings, crude oil and oil derivatives will continue to play the dominant role in meeting rising global energy demand in the foreseeable future.

GCC countries' trade has risen substantially in recent years, driven by higher oil prices, with exports and imports differing substantially in terms of the structure of goods traded and the geographical pattern of trade. While the bulk of GCC countries' exports consist of oil and oil derivatives, their imports are dominated by machinery and mechanical appliances, vehicles and parts, electrical machinery and equipment. The EU is the GCC's main trading partner, as most GCC countries' imports originate in Europe. By contrast, GCC exports – mainly consisting of oil and oil derivatives – are strongly oriented towards Japan and emerging

Asia, while Europe's oil imports originate mainly from oil-producing countries in the Commonwealth of Independent States and North Africa and only to a smaller degree from the Middle East, including GCC countries. As a result, the EU is the only major region in the world to have a trade surplus with the GCC countries as a group.

GCC countries have made substantial investments to establish themselves as a regional trade hub. While the physical infrastructure has been upgraded, further progress is needed in the area of trade facilitation. In terms of institutional trade links and integration, all GCC countries have now become WTO members. Moreover, FTAs are currently being negotiated with several countries and regions, including with the EU, which might further contribute to the GCC countries' integration into the world economy.

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