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The Changing Pattern in International Trade and Capital Flows of the Gulf Cooperation Council Countries in Comparison with Other Oil-Exporting Countries

Marga Peeters[1]

Abstract

During the past decade the GCC countries have achieved a remarkably high degree of trade and financial integration in the world economy. Before the global crisis began, they invested their abundant oil income which resulted from high energy prices and high world demand, in return abundantly abroad. Thanks to policies that are geared towards opening up borders, the GCC countries have imparted a significant stimulus to the world economy, to a much greater extent than other oil exporting countries in similar conditions. The development of the gross capital flows in view of the recent global crisis and their composition are the main focus of this study. It aims at providing a comprehensive overview of the pattern of the current and capital account of the balance of payments of the group of six GCC countries, and benchmarks this group with the other OPEC countries that have a comparable size of natural resources. Aspects of globalization, trade and financial integration, such as the dependence on oil, "Dutch disease", regional integration, foreign direct investment and cross-border assets and loans are addressed. The impact of the crisis is found to have reverted international capital flows of the GCC, in particular cross-border bank loans and deposits.

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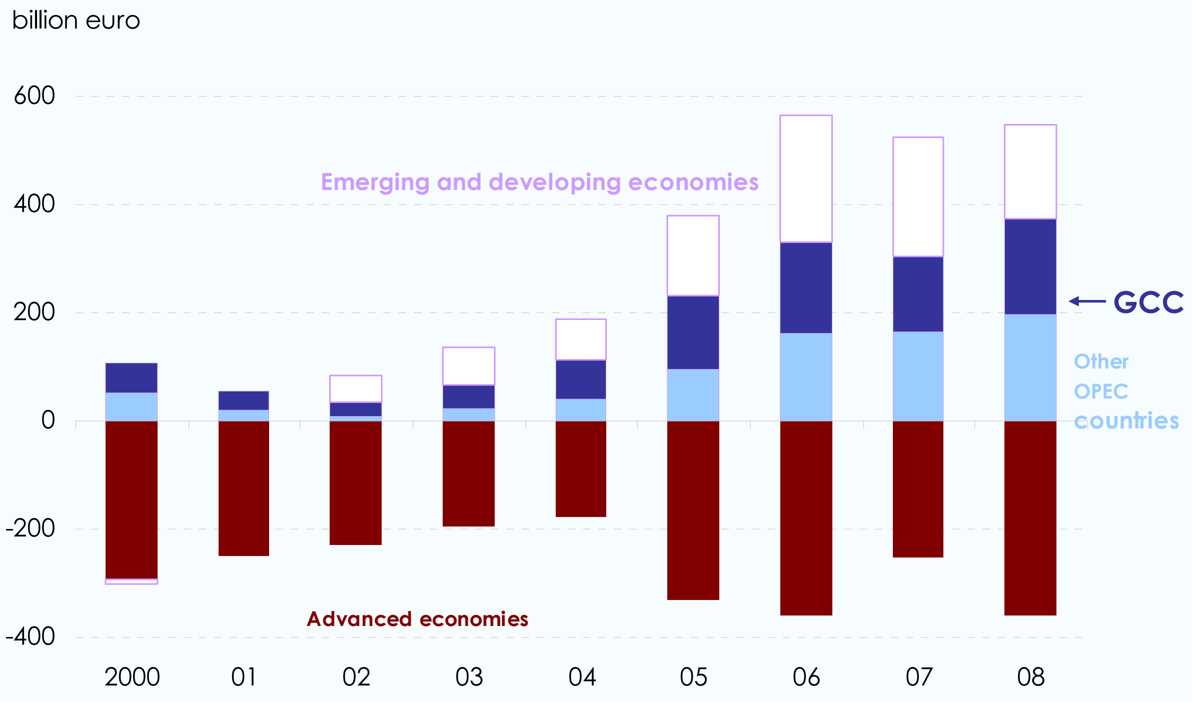
1. INTRODUCTION

The Gulf countries which together make up the Gulf Cooperation Council (GCC) – namely Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates - have up to the global crisis created abundant oil revenues due to positive price shocks and strong world demand. This holds in particular for the years 2007 and 2008. The current account of the GCC went up from 53 billion euro in 2000 to 177 billion euro in 2008 (see Graph 1). In 10 years time it recorded almost 1 trillion euro. A comparable group of countries is the other oil-exporting countries of the Organisation of Petroleum Exporting Countries (OPEC), which includes Algeria, Angola, Ecuador, Iran, Iraq, Libya, Nigeria and Venezuela[2]. Together with the Asian economies that have a comparative advantage at the world markets through cheap labour, these oil exporting countries mainly accounted for the current account surpluses in the world (see also OECD, 2010). In sharp contrast, other regions in the world among which the advanced economies such as the US and the EU, had deficits at their current accounts. In the discussion on global imbalances the oil exporters therefore play an important role.

Graph 1 Development current account of oil exporters in comparison with rest of the world



Source: IMF World Economic Outlook April 2010 and own calculations.
Note: The countries in the world are subdivided in either advanced or emerging and developing. The GCC countries are part of the latter group.

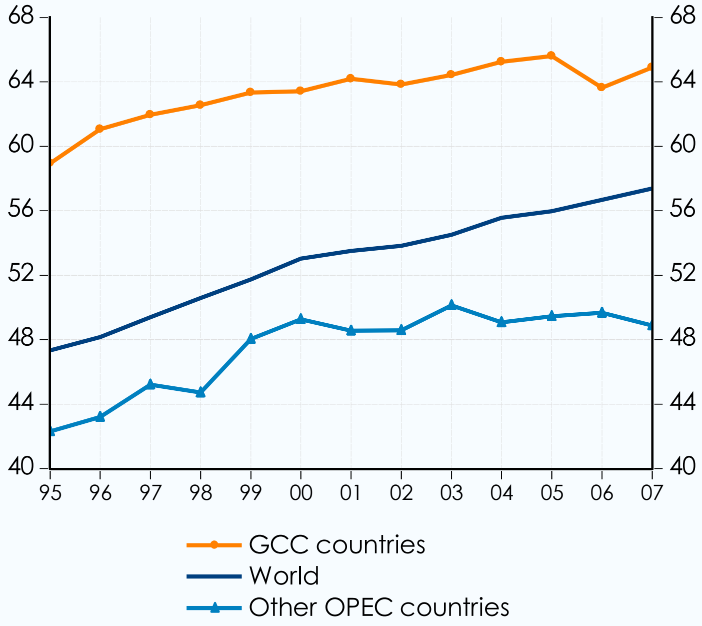
[2] In this paper the group that will be used as a benchmark for the GCC countries will be referred to as "other" OPEC countries, as Saudi Arabia, the United Arab Emirates, Kuwait and Qatar are also OPEC countries.

This holds in particular for the GCC countries. By comparison with the other OPEC economies that experienced somewhat similar conditions in terms of natural resources, the economies of the GCC countries are very open economies. Their high surpluses have led to abundant investments beyond their own borders, hence benefiting the global economy.

According to the KOF index of globalisation (Graph 2), GCC countries score far more highly than the group of other OPEC countries. According to this measure, the GCC countries are more "globalised" than the average of all 158 countries worldwide included in the KOF analyses. The degree of economic, social and political globalization (split-up not shown here), has clearly been on the rise during this whole period under review, being 1995-2007.

Graph 2 Degree of globalisation

(Mean of indices of the individual countries)



Source: Konjunkturforschunsstelle (KOF) Index of Globalisation 2010, Zürich

Note: The index has three dimensions: economic globalisation, political globalisation and social globalisation. Economic globalisation is characterized by long distance flows of goods, capital and services as well as information and perceptions that accompany market exchanges. Political globalisation is characterized by a diffusion of government policies. Social globalization is expressed as the spread of ideas, information, images and people. According to Dreher (2007), there is econometric evidence for the period 1970-2000 for a sample of 123 countries that globalization promotes growth, though not to an extent necessary to reduce poverty on a large scale.

Although the gap between the GCC countries and the average of all countries narrowed to some extent, the gap with the other OPEC countries actually widened - which is due more to the other OPEC countries (among which Venezuela) than to the GCC countries. In terms of long-distance flows of trade in goods, capital and services – which include foreign direct investment, portfolio investment, tourism income and transfers as percent of GDP - the GCC countries are therefore relatively highly integrated in the global economy.

In terms of trade openness (see Table 1) the GCC almost achieved double the score of other country groups. While exports and imports of goods exceeded their total nominal GDP in 2008, the other OPEC countries and the EU countries reached rates of 67% and 66% respectively. As higher foreign demand for goods by definition pushes up nominal GDP as nominal exports increase, *ceteris paribus*, the big difference between the GCC and the other OPEC countries is partly due to the level of the imports, which is far lower in the latter countries owing to their more autarkic and protectionist policies.

Like trade openness, financial integration is a measure that reflects the degree of integration of a given country with other economies. As to the GCC, financial integration increased tremendously as domestic banks, companies and citizens started cross-border banking, both for business purposes and in order to invest in foreign capital or securities. In 2008 financial integration of the GCC more than tripled that of the other OPEC-countries (74% as against 21%).

Table 1 Summary statistics for 2008

	GCC	Other oil-exporting countries[1]	European Union[2]
GDP (in EUR bn)	733	916	12,509
Population (in mn)	37	346	495
GDP per capita	19,798	2,647	25,270
Trade openness[3]	102	67	66[3]
Financial integration[4]	74	21	177
Crude oil production[5]	15	17	

1 The other OPEC-countries Algeria, Angola, Ecuador, Iran, Iraq, Libya, Nigeria and Venezuela.

[2] Bulgaria and Romania not included.

[3] Exports and imports as percentage of GDP.

[4] Foreign bank assets and foreign bank liabilities as percentage of GDP.

[5] In million barrels per day.

Sources: IMF WEO Spring '10 and IFS, Bank for International Settlements Basel, OPEC and own calculations

Although the financial channels turned out to be source of contagion in the recent global crisis, they are nevertheless an important engine for economic growth. In this respect, financial integration - like trade integration - should be embraced, although caution is the watchword when it comes to the attendant vulnerabilities such as excessive debt, credit booms and foreign currency borrowing and lending.

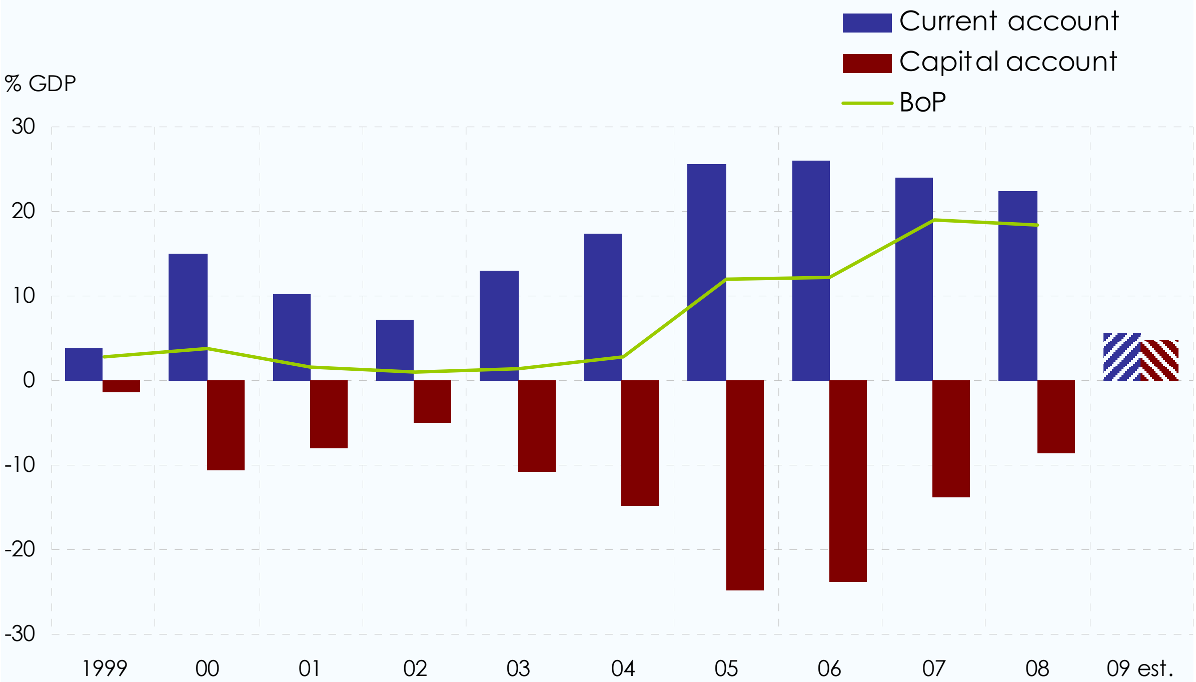
Globalisation and economic and financial integration have many dimensions. The next section shows the development of the GCC's balance of payments, which is divided into the current account and the capital account (including the financial account). It highlights the similarities among the two groups of countries of the current account developments, but also shows the big differences of the capital account developments. Section 3 continues with an analysis of the current account, looking in particular at exports of oil-related goods and the flows of remittances. Section 4 analyses the development of foreign direct investments, cross border loans and deposits and cross border portfolio investments, as these are pivotal for the capital account. Section 5 summarizes main findings, concludes and identifies some future research areas.

2. NET CURRENT AND CAPITAL ACCOUNTS OF THE BALANCE OF PAYMENTS

Although harmonization has not been fully achieved across all countries, the balance of payments tends to be split into a current account and a capital & financial account. Appendix A lists the definitions adhered to in this paper, where it is here relevant to mention that for convenience's sake all the financial and capital flows are comprised in the capital account. Therefore, the balance of payments is split into a current and capital account, where the current account includes the trade of goods, services and income, as well as current transfers. The capital flows include all other flows, such as foreign direct investment, capital transfers, portfolio investment and other investment.

The current account of the GCC countries has grown strongly until 2007, even up to almost 30% of GDP (see Graph 3a). A similar pattern, though of a smaller size, is observed for the other OPEC-countries (Graph 3b). The development of the GCC's and the other OPEC-countries' capital accounts differ however much.

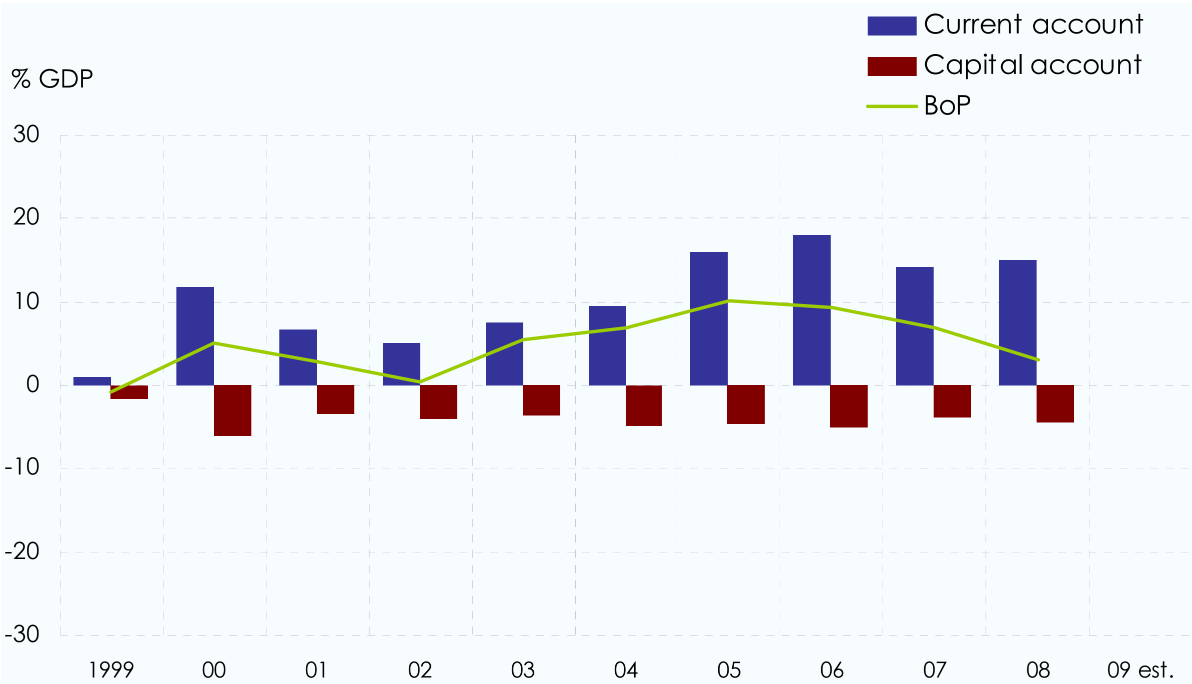
Graph 3a : Current and capital account GCC countries



Sources: Arab Monetary Fund, Monetary authorities, Bloomberg, IMF IFS and Article Ivs, ECOWIN Reuters and own calculations.

Note: The current account balance as a percentage of GDP is calculated as the sum of the current account balances of the six GCC countries divided by the sum of the nominal GDP of the six GCC countries. Similarly, the capital account and balance of payments are calculated. Errors and omissions are included in balance of payments but not in he current and capital accounts; the sum of the current and capital accounts in addition to the errors and omissions equal the balance of payments.

Graph 3b : Current and capital account other OPEC countries



Sources: Arab Monetary Fund, Monetary authorities, Bloomberg, IMF IFS and Article IVs, ECOWIN Reuters and own calculations.

Note: See note of Graph 3a. Iraq is not included due to lack of date at the beginning of this millennium.

Up until the start of the global crisis in 2007 the GCC the capital account had become the mirror image of its current account, indicating that the money flowing out of the GCC was about the same size as the money entering the GCC. In sharp contrast, the capital account balance was much smaller in the other OPEC-countries (as follows from a comparison of the brown bars in Graph 2a and 2b).

The current account of the GCC countries has posted strong surpluses for many years in succession, as the positive trade balance more than compensates for the deficit in the balance of services and the outflow of remittance. The global crisis temporarily reduced imbalances across the world, including the oil-exporting countries, as commodity exporting countries faced falling exports, while developed economies - of which many are commodity importers - reduced their imports following a drop in their domestic demand. Although imbalances are expected to widen again in times where world demand picks-up, the GCC countries are likely to be on the high side of the imbalances in the world. Their strong export position offsets the deficits they incur on their services and the relatively high amounts of remittances that they pay for the large numbers of foreign workers who are employed in all sectors of their economies. See section 3 for in-depth information concerning the current account.

Information about the capital account is in general more difficult to obtain than information on the current account and this holds in particular for these groups of countries. In comparison with the current account developments, the capital account consists of items that are more volatile, vulnerable and therefore difficult to measure accurately.

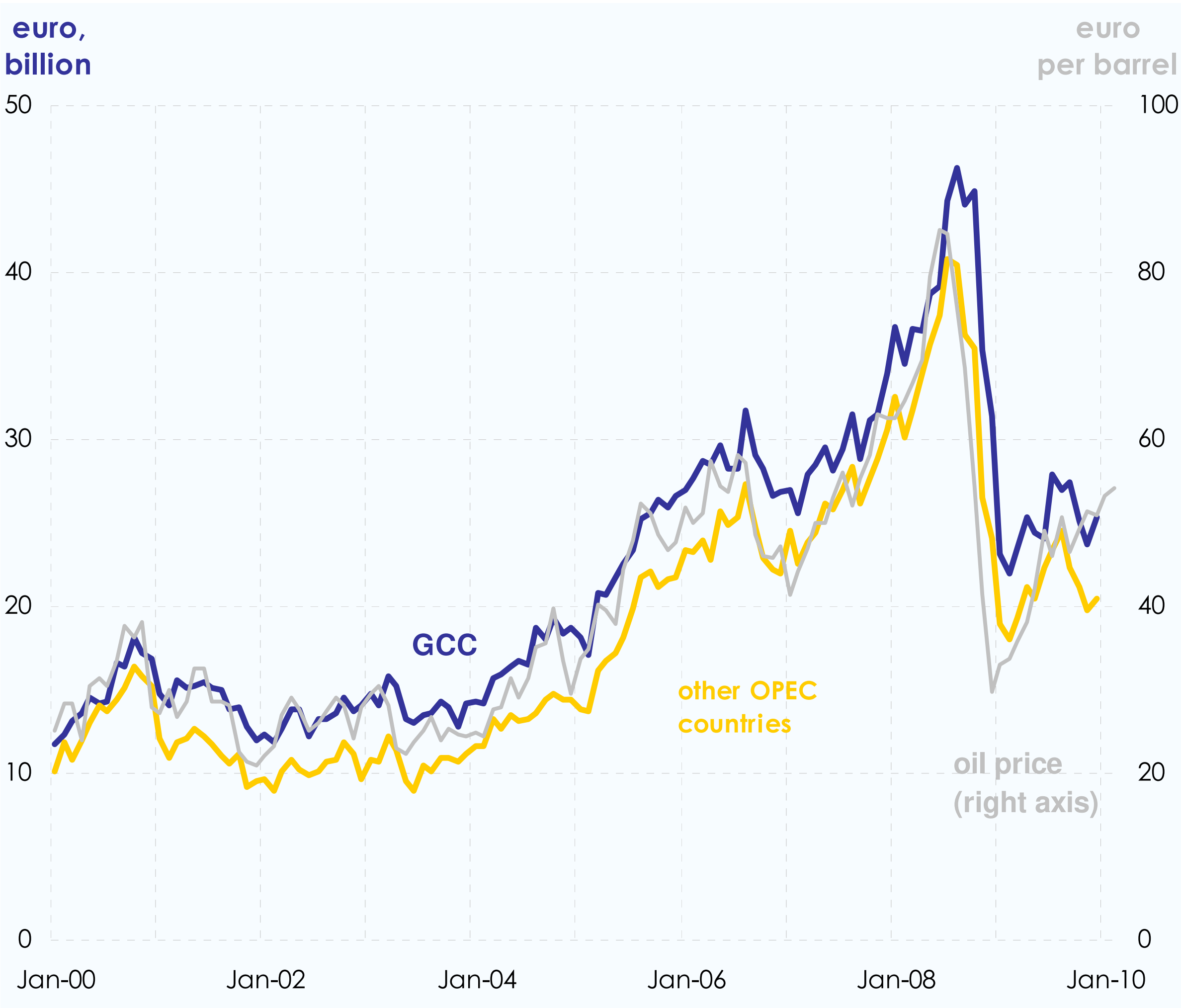
According to our information here, obtained from various sources (see appendix C for the detailed information), the balance of this account for the GCC was negative from 2000 until 2008 (as can be seen from Graph 2a). This by definition reflects a change in ownership of assets. The change in domestic ownership of foreign assets exceeded the foreign ownership of domestic assets. Consequently, net investments by the GCC abroad were higher than net investments by foreigners in the GCC. The balance of their foreign direct investment, portfolio investments and other investments such as bank loans & deposits was negative. A change in the pattern came in 2007, as repatriation of foreign funds by the GCC narrowed the capital account in relation to their current account. More details on the FDI and cross-border bank loans can be found in Section 4.

3. GROSS FLOWS OF THE CURRENT ACCOUNT

a) Fluctuations in the oil price affect nominal exports by 80%

The main inflows of the current account for these groups of countries follow obviously from the exports of goods. Exports in both the GCC and the other OPEC countries closely follow the developments in the oil prices. The sharp fall in oil prices from more than €85 in June 2008 to less than €30 in December 2008 was accompanied by a sharp drop in nominal exports of goods from oil exporting countries, with a short lag (see Graph 4a). Monthly exports fell by more than half, from €45 billion to just over €20 billion. This illustrates the strong dependence of exports on oil. Also, the resurgence of the oil price at the beginning of 2009 led to a similar rebound in the exports.

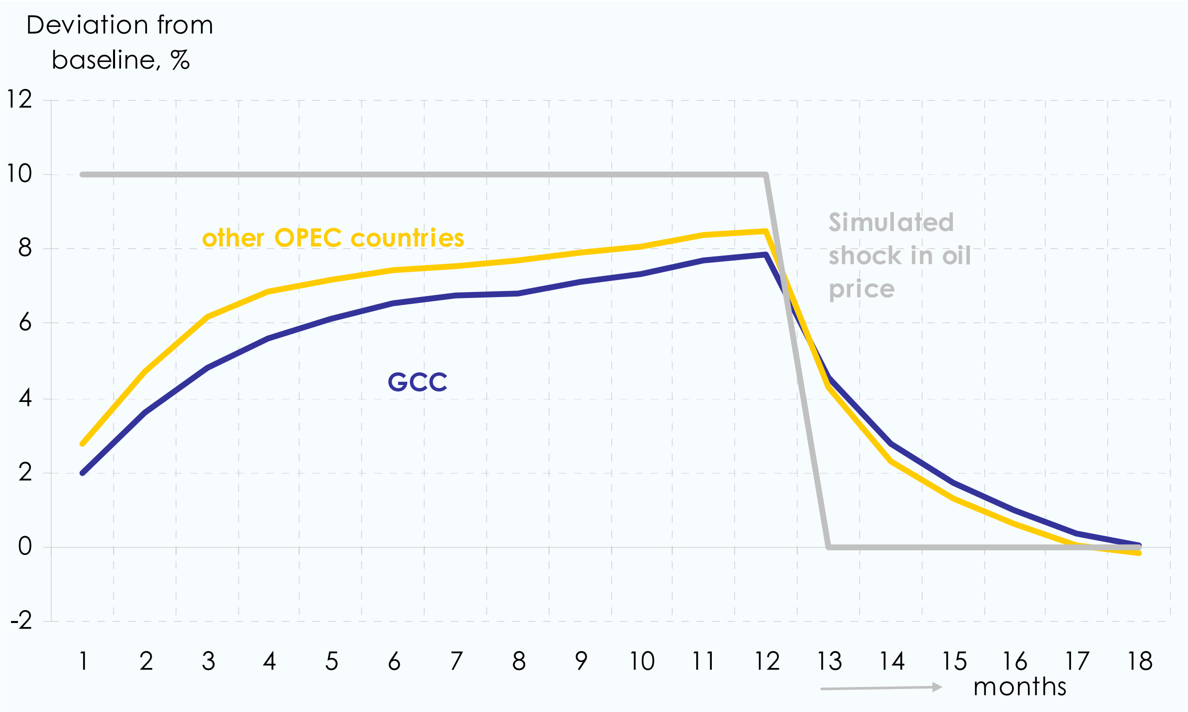
Graph 4a Developments of the exports of goods in relation to the oil price



Source: IMF DOTS, ECOWIN Reuters and own calculations.

But much more relevant than the correlation between oil prices and nominal exports is the degree to which changes in oil prices cause changes in nominal exports. Using monthly data for the period from January 2000 to December 2009, it follows that a 10% change in oil prices leads to 2% change in nominal exports of the GCC directly for the GCC (Table 2 and Graph 4b). For the other OPEC countries the short-term impact is even more than 3%. A shock of 10% during a year leads at the end of the year to around 8% for both groups of countries (see Graph 4b). The oil price elasticities with respect to exports are thus high and, as follows from Table 2) highly significant.

Graph 4b Response of exports of goods to a 10% increase in oil prices



Note: The simulation results are based on the regression results presented below. They are calculated from a baseline scenario on the basis of the SUR-model as described in Table 2 and a scenario in which the oil price is 10% higher in comparison with the baseline for 12 months in a row (see grey line in graph above).

Table 2 SUR-regression results of exports of the GCC and the other OPEC countries

	GCC	other OPEC countries
$exports_{t-1}$	0.69**	0.61**
oil_t	0.24**	0.32**
Adj-R^2	*0.94*	*0.92*
Durbin-Watson statistic	2.18	2.08

Note: These are regression estimates of the monthly growth rate of nominal exports on the monthly growth rate of nominal exports one month lagged, the growth rate of oil prices and monthly dummies, for the GCC countries (second column) and for the other OPEC countries (last column). Subscript *t* indicates the *t*-th month. A ** and * indicate significance at the 1% and 5% level, respectively. The sample period is January 2000 – December 2009. The computing programme and data are available upon request. See also appendix B for similar regressions with leading indicators.

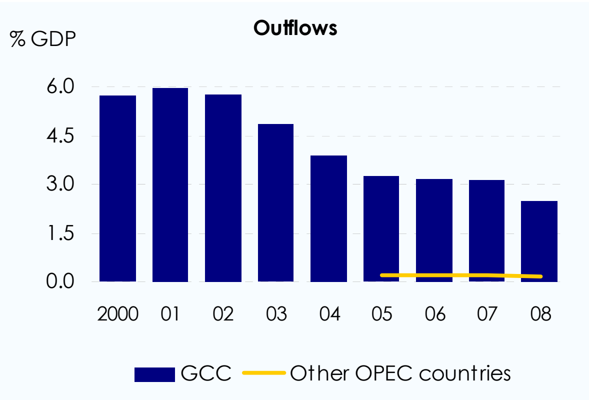
From similar calculations at country level for the GCC countries, it appears that Saudi Arabia is the country most affected by the oil price, followed by Qatar, the liquefied natural gas exporter and Kuwait, the oil-exporter. Bahrain and Oman are least affected by the oil price. Another noteworthy phenomenon is the increasing impact of oil on exports from the United Arab Emirates.

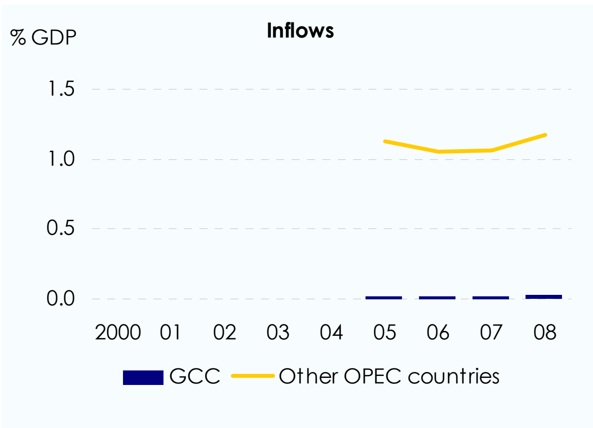
Hampering the analyses, in general, of balance of payments data for the GCC is the delay in their publication. For trade data, however, the timely published GCC's trading partners data are good indicators. Appendix B addresses this issue.

b) Remittances dropped

High oil prices during the last decade fuelled the GCC's region boom and, in return, forced local economies to look abroad to other countries for cheap labour. As the GCC economies employ many foreigners, the outflows of workers' remittances are high. The high level of the remittances is the reason that the balance of net factor income is deeply negative. In size, this deficit is however only a tiny share of the proceeds from the exports of goods, so that the current account of the GCC remains positive.

Graph 5 Outflows and inflows of workers' remittances





Source: World Bank Group.

Note: Outflows from Qatar and the UAE are not included due to lack of information. Inflows from Bahrain, Kuwait, Qatar and the UAE are not included.

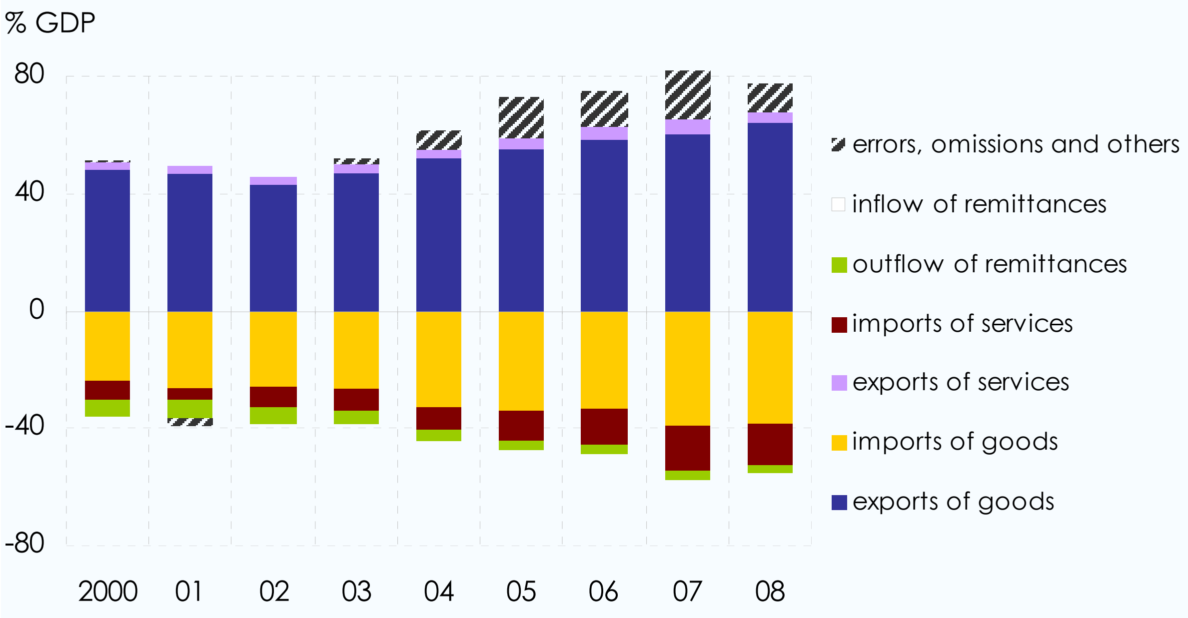
While there are many uncertainties around the precise amount of remittances, estimates indicate that Saudi Arabia transferred USD 20 billion in 2008 (World Bank, 2009). For the GCC (with Qatar and the UAE not included) the annual outflow of remittances grew strongly in the period 2005-07 and stabilized in 2008 (Graph 5). It is estimated that the outflow in 2009 fell 9% year-on-year.

Remittances slowed down significantly during the global crisis due to slackening demand for labour following the onset of the global credit crisis. The higher cost of lending in the region led to a number of expensive industrial projects in the region to be delayed or cancelled in this year and, subsequently, forced many expatriates working in the GCC region to cut back on cash transfers to their spouses and family members.

The much higher domestic population in the other OPEC countries makes that there is no shortage of labour, and there is thus hardly an outflow in the form of remittances.

c) *The composition of the current account of the GCC*

Graph 6 Composition of gross flows of the current account of the GCC



Sources: See appendix C.

The composition of the current account during the last decade has been dominated by the exports of goods of more than 40% of GDP (see Graph 6). While the imports of goods approached this level of 40%, and gained in importance over the years up before the global crisis as did the imports of services, the outflow of remittances looks rather bleak.

A substantial part of the current account remains unexplained, due to errors and omissions and other in- or outflows (such as transfers).

4. GROSS FLOWS OF THE CAPITAL ACCOUNT

d) The strong increase in inward and outward foreign direct investment

Many oil exporting countries have a reasonable amount of inward Foreign Direct Investment that is invested among others in the energy sector for extraction purposes, but also in infrastructure projects. By comparison with other oil exporting countries, the GCC countries receive a considerable amount of inward FDI and, moreover, also invest a considerable amount of FDI abroad in relation to this inward FDI (see Graph 7). In 2007, GCC's inward FDI peaked. In return, Bahrain, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates invested as much abroad as they received in the form of inward FDI. Apart from the GCC countries, Libya is also showing more openness, as the FDI it received accounted for of 6.5% of its GDP in 2007 and it invested 5.5% of its GDP abroad. Apart from Libya and the GCC countries, none of the oil-exporting countries spent more than 5% of their GDP on foreign investments.

FDI is in general an investment involving a long-term relationship. The flows of FDI comprise equity capital, reinvested earnings and intra company loans. The large sums of money invested abroad by Saudi Arabia, the United Arab Emirates and Kuwait mainly come from their Sovereign Wealth Funds. At the end of 2008, the Saudi Arabian Monetary Agency (SAMA) possessed USD 501 dollar, the Abu Dhabi Investment Authority (ADIA) and the Abu Dhabi Investment Council (ADIC) USD 328 billion, and the Kuwait Investment Authority (KIA) USD 228 dollar (see UNCTAD, 2009).

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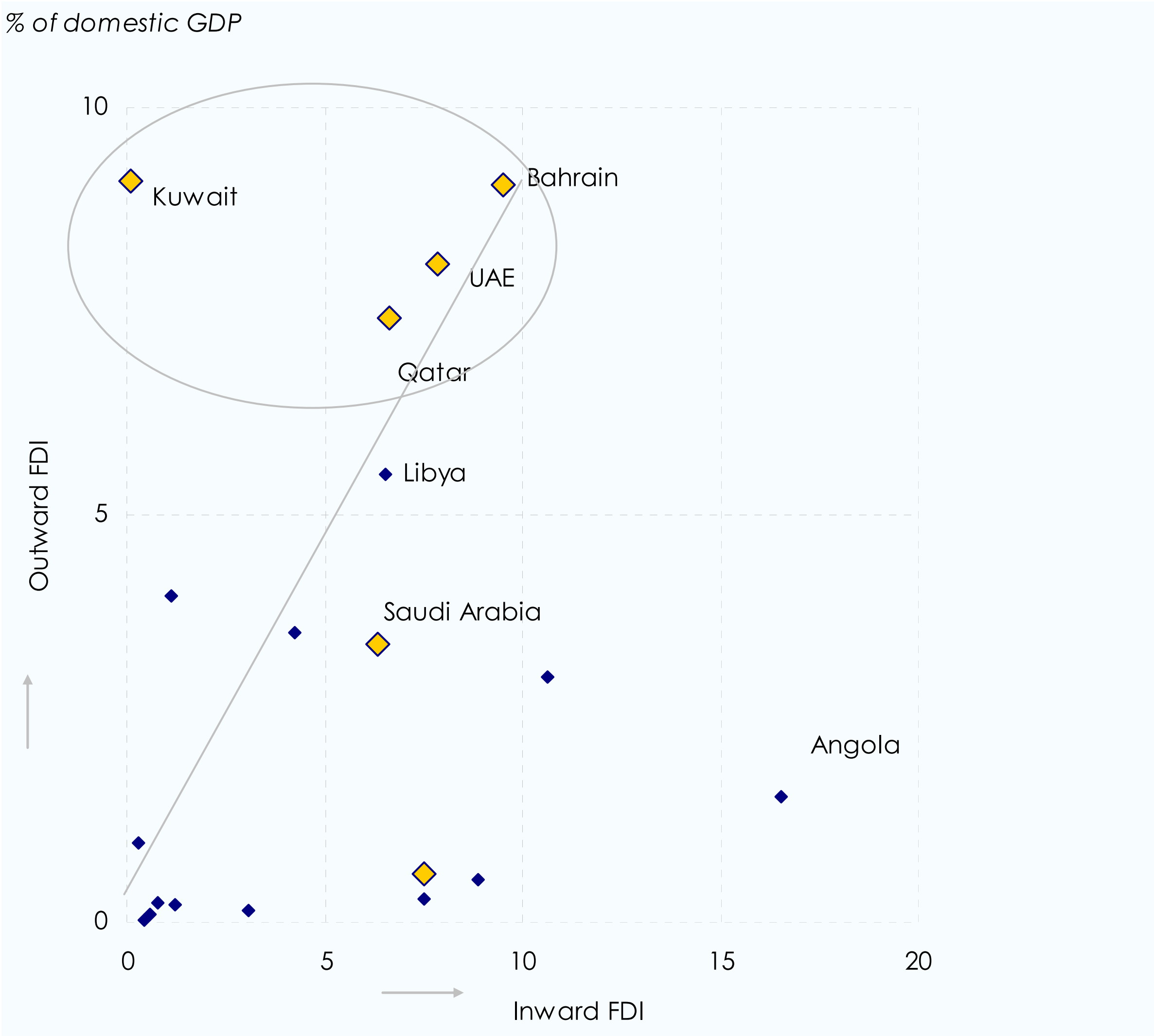
Graph 7 Inward & outward FDI of oil-exporting countries '07

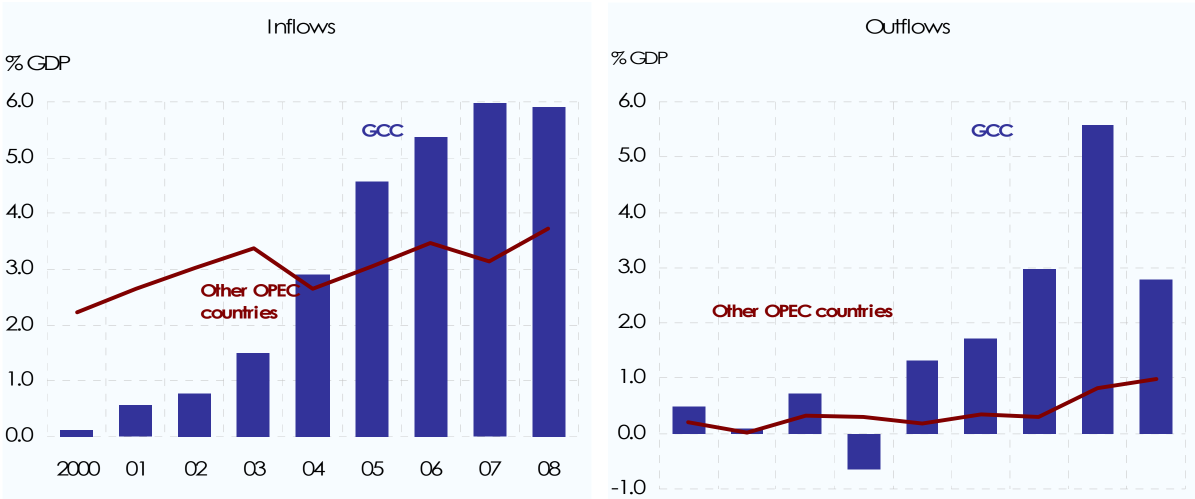


Note: Included are the six GCC countries (in orange), the other OPEC countries (Algeria, Angola, Ecuador, Iran, Iraq, Libya, Nigeria and Venezuela) but also Egypt, Norway, Kazakhstan, Russia and Syria. *Source: UNCTAD, IMF WE0 and own calculations.*

Up until the start of the turmoil on the global financial markets in 2007, the inflows of FDI had been steadily growing (see Graph 8). In 2007 – which was the best year - the GCC countries spent almost 6% of their GDP on FDI abroad, while 6% was also invested by foreigners in the GCC. This inward FDI has contributed significantly to domestic investment, and thus to economic growth in the GCC. Similarly, outward FDI has helped economic development, particularly in Northern Africa (Algeria, Egypt, Morocco and Tunisia).

While the GCC demonstrates its openness by the high level of the outward FDI flows, it receives - like the other OPEC countries - more FDI than it spends abroad and therefore posts a surplus on the part on net FDI on the capital account.[3] In comparison with the other OPEC countries the GCC not only has higher outflows of FDI due to its policies geared toward global investments, but also received much more FDI in % of GDP in the years 2005-08. In this way, the GCC has reaped the benefits of its openness as this form of investment directly contributes to its economic development.

Graph 8 Inflows and outflows of FDI



Sources: UNCTAD, IMF WEO and own calculations.
Iraq is not included due to lack of data in the beginning of the millenium.

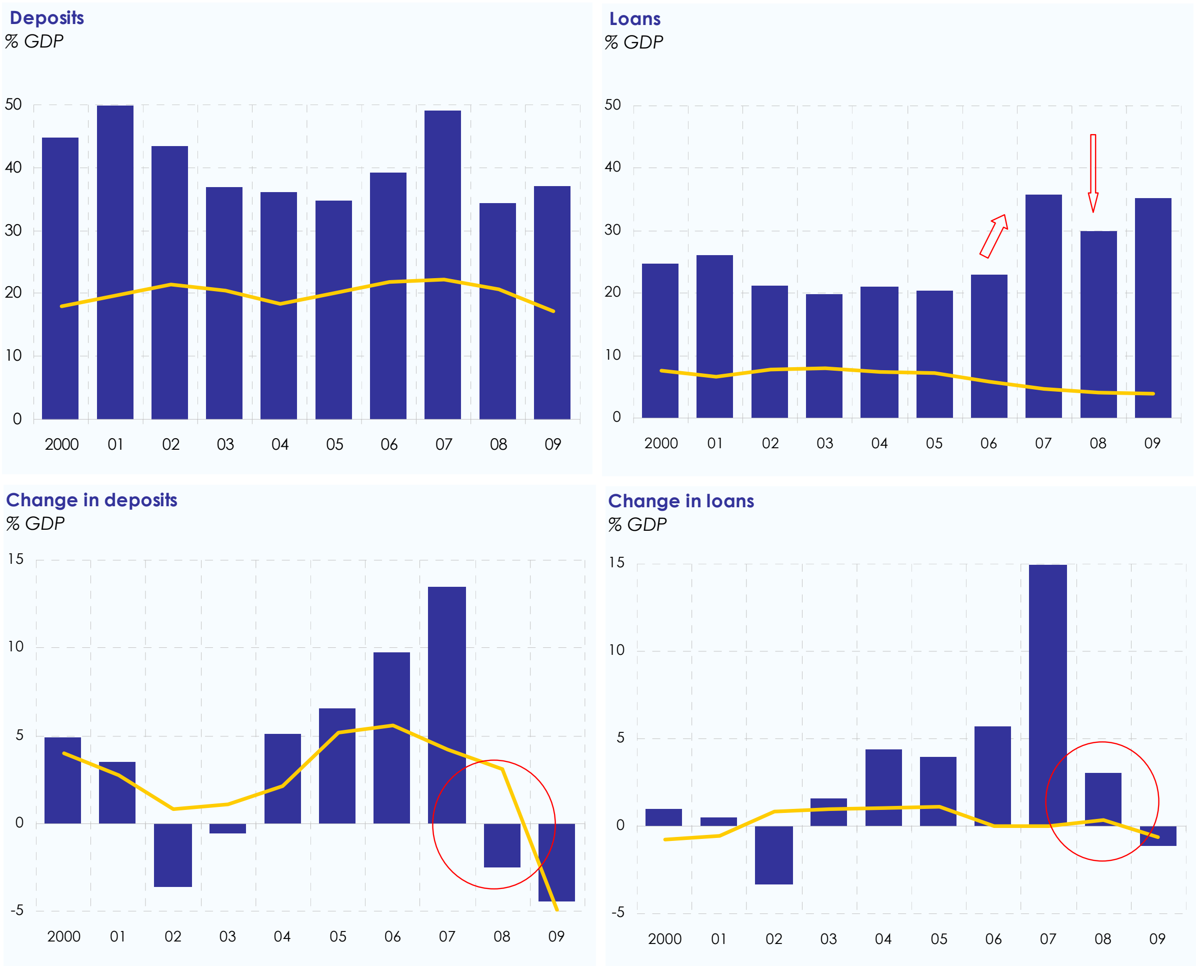
[3] In view of the negative balance on the capital account in the period 2000-06 (see Graphs 3a and 3b) this FDI balance surplus by definition (see appendix A) implies that the other components of the capital account posted more out- than inflows, which points at the high portfolio and other investments abroad by the GCC in that period.

e) The surge and recent fall in cross border loans and deposits

Along with the sharp rise in other cross border transactions until 2007, cross border banking also surged in the GCC. Deposits from citizens in the GCC at foreign banks grew significantly (see Graph 9, north-west). But, even more interesting, loans taken by GCC at foreign banks grew from 20% of GDP up to 36% of GDP in 2007 (Graph 9, north-east). The developments of cross-border deposits and cross-border loans show a clear turning point in 2008.

This follows directly from the changes in the cross border bank deposits and loans (Graphs 9, south-west and south-east), that count for the capital account of the balance of payments. In 2008 the GCC withdrew deposits from its foreign bank accounts of around 3% of GDP while citizens of the GCC still took loans from foreign bank account of 27 billion euro. Some of the GCC countries became even indebted to the outside world.

Graph 9 Cross border bank deposits and loans



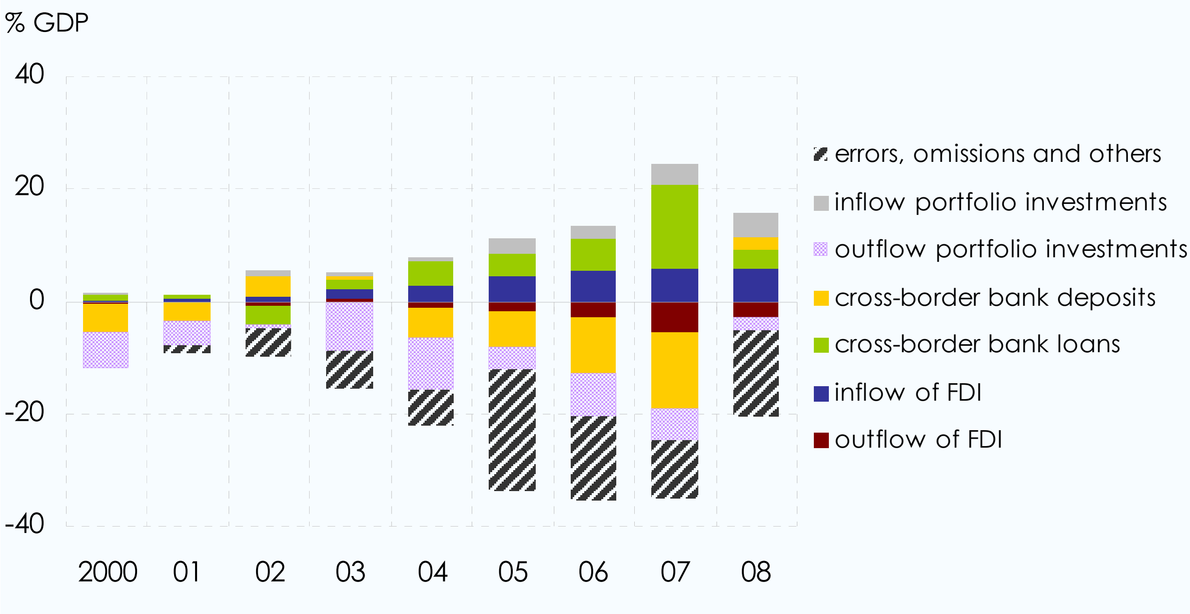
Source: BIS, IMF WEO and own calculations.

Also the other OPEC countries reduced their deposits at foreign bank accounts, but not earlier than 2009. Their cross border level of loans in terms of their GDP hardly changed during the crisis, but this was already at a low level, in sharp contrast with the GCC countries.

f) The composition of the capital account

Although surrounded by uncertainties due to measurement errors and omissions, the picture of the composition of the capital account of the GCC is interesting (Graph 10). In recent years the account has been dominated by flows in cross border bank loans and deposits and portfolio investments. Despite from the fact that portfolio investments are hard to measure (and probably partly contained in the "errors, omissions and others component"), a conclusion that can be drawn here is that the composition of the GCC's capital account has drastically changed over the last years. Not only FDI inflows and outflows have become more important in recent years, but the other capital account investments have widened – capital inflows tripled and capital outflows probably doubled over the years 2004 until 2007.

Graph 10 Composition of gross flows of the capital account of the GCC



Sources: See appendix C.

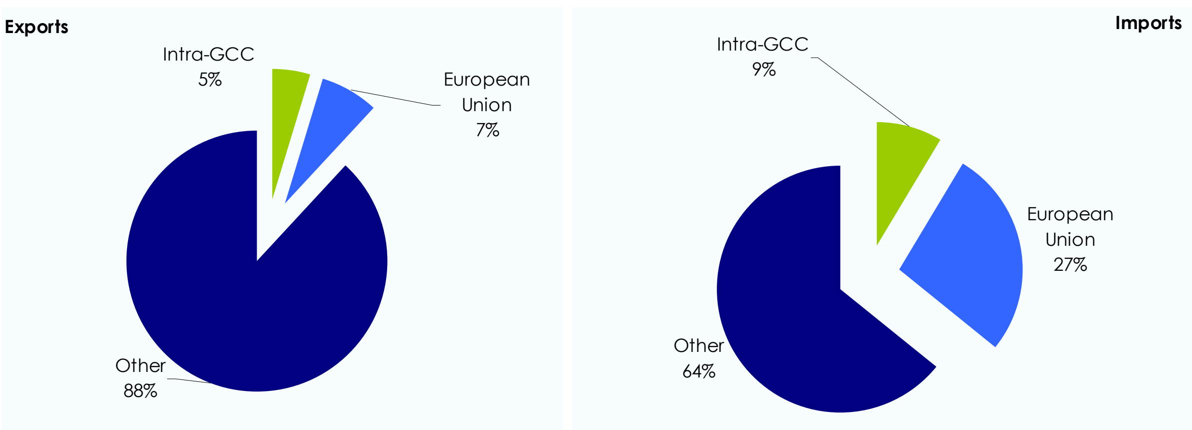
5. INTRAREGIONAL TRADE AND FINANCIAL INTEGRATION IN THE GCC

Calculations of the current and capital flows for the GCC as a region should ideally be purified from intraregional flows. Although the previous analyses included the intraregional flows, the composition of the current and capital account is expected to change little if only extra-regional flows were considered.

After all, the facts tell us that only 5% of the goods exported by one GCC country in 2008 went to another GCC country. This applies to 9% of the total goods imported by the GCC countries. The facts also tell us that this intra trade of goods within the GCC has not increased during the last decade, as these export and import shares of the GCC countries remained at 4-5% and 8-9% respectively. The interregional flows of services are expected to be even less in view of the similarity in economic structures of the GCC countries, while interregional flows of remittances in view of the relatively low population in relation to the economic activity and FDI flows seem negligible. Studies on interregional financial integration of portfolio types of investment show that flows are non-negligible and increasing but still relatively low (see Espinoza *et al*. and Balli *et al.*, both 2009)

By comparison with other regions in the world, therefore, there is a scope for the GCC region to increase this interregional cross-border trade, not least by means of a further diversification of economic activity. This will contribute to the functioning of this aspect of the common market among the GCC countries. This will require more complementary economic structures (particularly in agriculture, construction, transport, the financial sector and other services).

Graph 11 Intra trade GCC countries in 2008



Source: IMF DoTS and own calculations.

6. SUMMARY

As countries endowed with abundant natural resources, the GCC countries are fortunate to receive large streams of foreign money that, in the recent past, was spent proportionally more abroad than other countries with similar conditions. This high degree of trade and financial openness was conducive for the GCC economies and contributed also significantly to global economic growth.

This study concentrates on the developments of trade and capital flows of the GCC in comparison with its peers during the past decade. It follows that, up until the start of the global financial turmoil at the end of 2007, the GCC countries received unprecedented high oil revenues thanks to soaring global commodity prices and high world demand. Not only the exports of oil and gas, but also the high inflows of foreign direct investment and access to international bank loans helped the GCC economies to develop their financial and real estate sectors, among others. The high inflows into the GCC countries in return also generated a surge in imports of goods and services, along with high outflows in the form of foreign direct investments worldwide (but particularly North Africa) and, last but not least, high portfolio investments. To a much greater extent than other oil-exporting countries, the GCC has therefore –- opened its borders and that is why it is now closely integrated in the world economy, not only economically but also financially.

Thanks to GCC policies geared towards openness, the welfare levels of the GCC economies have been raised, but the GCC economies still remain vulnerable. Due to their high dependence on energy there is a risk that a negative oil price shock may impact the GCC economies severely. Further diversification of economic activity will be needed in order to mitigate the negative effects of a drop in oil revenues. Across the GCC countries, more diversified economic structures would also benefit the intra-GCC trade if the economies become more complementary. More trade within the GCC region will be conducive to economic growth. Where more diversified economic structures can be created, the further development of the economic union will help accelerate trade and economic growth in the region.

In successive years, the balance of payments of the GCC has been characterized by a strong current account, comprising a positive trade balance due to high oil exports, a negative balance in services and – prior to the global crisis – a net factor income account dominated by outflows in the form of remittances and inflows of dividends and profits on foreign investments. The balance of the capital account was often almost the mirror image of the current account during the period 2000-2007, implying that the abundant funds received were to a large extent invested in the global economy. Consequently, during those years the GCC decreased its ownership of foreign assets relative to foreign ownership in the GCC. These were abundant high levels of investments other than FDI investments in comparison with other oil-exporting countries. For the development of the world economy, this is highly relevant as these capital flows have been sources of income to other countries. The greater degree of openness of the GCC countries in comparison with other countries in similar situations in the past benefited the GCC economies but also the world economy.

The year 2008 was a turning point in that the capital account started shrinking, because the GCC repatriated funds for its domestic needs. The GCC authorities and the private sector in the GCC countries opted for investment opportunities in their home countries instead of abroad. The GCC economies took less foreign bank loans while bank deposits abroad were withdrawn at the same time. In 2008 outward FDI fell significantly in comparison with 2007. These changes in investment policy raise the question to what extent these (apparently) more cautious GCC investment strategies impact their own economies, but in turn, also the world economy in comparison with the booming period before the global economic and financial crisis.

The main aim of this study is to provide a comprehensive overview of the capital flows of the GCC economies. Although this aim was achieved to a great extent, the analyses were hampered, among others by the lack of statistical information on portfolio investment. Greater transparency in this respect, but also more timely statistical evidence of other balance of payments' items could help policy makers in understanding the capital flows that impact the global economy significantly. Also, more research on the trading or counter parts of the GCC could shed more light on missing elements and provide consistency checks (see appendix B providing an example for trade statistics).

APPENDIX

A. The balance of payments

In this study the following definitions are adopted:

The balance of payments = current account + capital account (i)

Current account = balance of trade

+ net factor income from abroad

+ net unilateral transfers from abroad (ii)

Capital account = foreign direct investment

+ portfolio investment

+ other investment (iii)

Following this definitions, it holds that:

Current account = changes in net foreign assets (iv)

Capital account = change in foreign ownership of domestic assets

- change in domestic ownership of foreign assets (v)

The current account reflects a nation's net income while the capital account reflects a country's net change in ownership of assets.

A current account surplus increases a country's net foreign assets by the corresponding amount, and a current account deficit does the reverse. Both government and private payments are included in the calculation. The somehow misleading term "current" account originates from the fact that goods and services are generally consumed in the current period. Remittances are part of the net factor income where money earned by foreign workers that are sent abroad is typical income outflows. Foreign direct investment and portfolio investment are part of the capital account, but income from investments (interest, dividends) is recorded in the current account.

Cross-border loans and deposits are treated in the section on the capital flows (see section 4). Their interest payments are recorded on the current account.

The GCC countries have a positive current account if the surplus on the trade account of goods and services (abundant exports of goods) largely compensates the deficit of the net factor income account (outflow of remittances). The sign of the GCC's capital account has changed during the last decade – which is a focal point in this study.

B. Analyzing the GCC exports & imports in the absence of timely data

The analysis of the balance of payments for some of the oil-exporting countries is hampered by the lack of timely data for some of the countries or incompleteness. Among the many BoP components (exports and imports of goods, exports and imports of services, remittances, portfolio investments) this holds least for the FDI.

As the exports and imports of goods is the biggest component on the balance of payments for the GCC, and most relevant for our (internal) analyses a leading indicator is constructed. The GCC's main trading partners' imports from the GCC are used to approximate the GCC's total exports. Alike, the GCC's main trading partners' exports to the GCC are used to approximate the GCC's total imports (for this methodology, see also Welzenis (2009)).

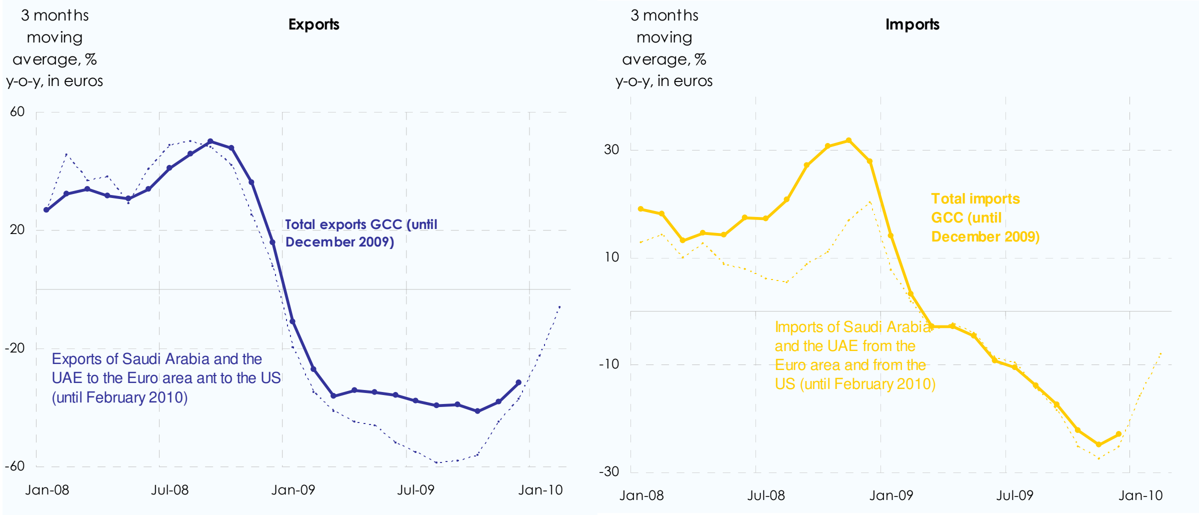
A Seemingly Unrelated Regressions model with monthly data is used for explaining the annual growth rate of total nominal exports and imports of the GCC countries (Table B1). GCC's exports are explained by the imports of the euro area and the United States from the GCC countries and the oil price. In a similar way, GCC's imports are explained by the exports of the euro area and the US to the GCC. The estimated model is subsequently used for forecasting the GCC's total exports and imports, by using the actual imports and exports from the eurozone and the US.

Table B1 SUR-regression estimates for exports and imports of goods of the GCC

	exports	imports
$exports_{t-1}$	0.60**	
$imports_{t-1}$		0.64**
oil_t	0.14**	
imports euro area and US to the GCC	0.17**	
exports euro area and US to the GCC		0.30**
Adj-R^2	*0.96*	*0.77*
Durbin-Watson statistic	2.14	1.56

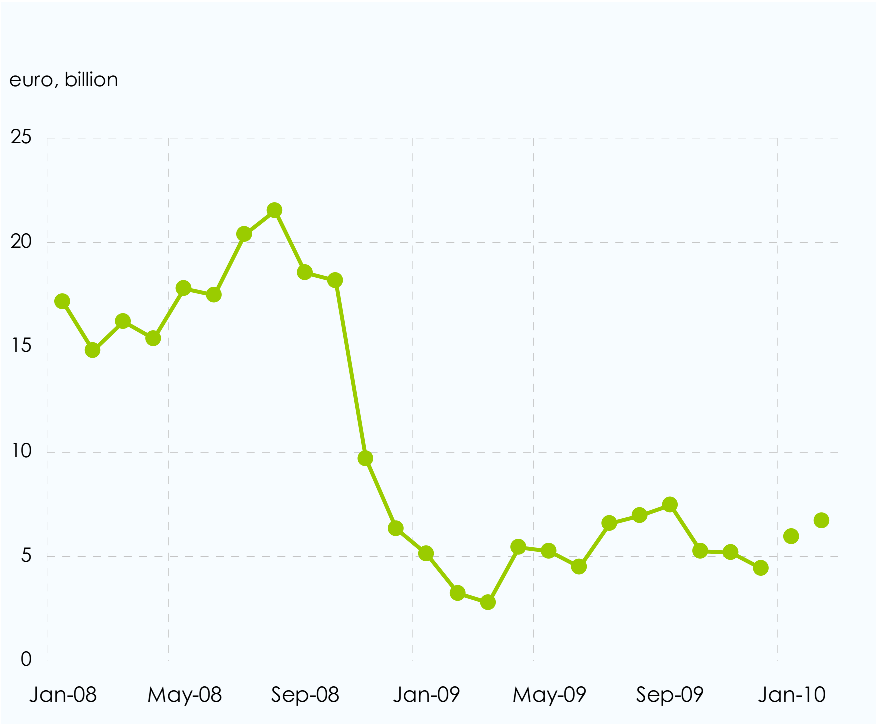
Note: These are regression estimates of the monthly growth rate of nominal exports on the monthly growth rate of nominal exports one month lagged, the growth rate of oil prices, monthly dummies and an approximation of GCC exports, *in casu* the imports of the euro area and the US from the GCC (see second column). Similarly, nominal imports are regressed (see third column), using an approximation of GCC imports, *in casu* the exports of the euro area and the US to the GCC. Subscript *t* indicates the *t*-th month. A ** and * indicate significance at the 1% and 5% level, respectively. The sample period is January 2000 – December 2009.

Graph B1 Leading indicator for GCC's exports and imports of goods



Apart from the strong downturn in the beginning of 2009, the growth rate of imports of the eurozone and US from the GCC moves nicely in line with the growth rate of total exports of the GCC (see left Graph B1). The same holds for the indicator used for the GCC's imports (see right in Graph B1). Also the econometric analyses points at the high significance of the indicators (Table B1). Using the statistical information from the main trading partners is therefore a reliable indicator. The simulated forecast for the trade balance (exports minus imports) is presented in Graph B2.

Graph B2 Trade balance of the GCC



Source: IMF DoTS and own calculations - see Table B1. The figures for January 2010 and February 2010 are forecasts.

The time lag between the trading partners' availability of statistics on the trade of goods and the IMF DoTs statistics for the GCC is two to three months. But for statistics on services, for instance, this lag is much longer. Given the high relevance of the components of the GCC's BoP for macroeconomic and financial analyses, application of this methodology is part of future research.

C. International trade and financial flows of the GCC

This appendix lists the statistical information per country that was used in this study. The multitude of data sources and the definitional differences across countries make it hard to indicate in which situation which data source provides the most reliable and best information for the purpose of analysing the balance of payments. Therefore, and out of transparency reasons, I provide here the statistics that were used in the graphs and tables of this study after cross-checking in the available data sources and using common sense.

The data sources consulted are the following:

- Arab Monetary Fund
- Bloomberg (national sources)
- ECOWIN Reuters Economic Data
- IMF Article IVs
- IMF Directorate of Trade Statistics
- IMF International Financial Statistics
- IMF World Economic Outlook
- Central Bank of Saudi Arabia, i.e. the Saudi Arabia Monetary Authority Annual Reports, United Arab Emirates' Central Bank Annual Report 2008 and resources of other central banks.

Main definitions adhered to are those used by the AMF (*in casu* consistent time series until 2007), if and only if they are in agreement with ECOWIN Reuters national data.

All data used and calculations made in this study are available upon request.

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