

Abdullah Al-Hassan (USA), May Khamis (USA), Nada Oulidi (USA)

The Gulf Cooperation Council (GCC) banking sector: topography and analysis

Abstract

In this paper, we analyze the evolution of the Gulf Cooperation Council (GCC) banking sectors in the six member countries. Since the existing literature is devoid of analyses or regional comparisons of GCC countries' financial systems, this paper provides a comprehensive analysis of the GCC banking sector, including ownership, concentration, cross-border linkages, balance sheet exposures and risks, recent trends in credit growth, and financial soundness from the period of 2003-2008. We also identify risks to the banking sector's financial stability in the context of the current global crisis and their mitigating factors.

Keywords: Gulf Cooperation Council, banking sector, credit growth, financial statements.

JEL Classification: G20, G21.

Introduction

The economies of the country members of the Gulf Cooperation Council (GCC)¹ share a number of commonalities. All GCC countries are large oil exporters with fixed exchange rate regimes², which expose them to the vagaries of international oil prices. The similarities in economic structure imply common sources of strengths and vulnerabilities of their financial systems. The existing literature is, however, devoid of analyses or regional comparisons of GCC countries' financial systems.

An analysis of GCC banking sectors is essential in gauging sources of strengths and vulnerabilities, and understanding how these systems could be affected with changing economic conditions. In this paper, we examine GCC banking sectors' balance sheet exposures, funding sources, shareholders and capital base structures, and financial soundness. We show that the financial systems in the region are dominated by the banking sector, which exhibits a number of common structural characteristics across countries. These have supported to a large extent GCC banks' resilience to the financial crisis. First, the predominance of domestic banks across the region minimized direct cross-border spillovers through the ownership channel within GCC and from international banks. Second, the high share of the traditional banking book in banks' on- and off-balance sheets limited losses from exposures to structured products and derivatives to a few isolated cases. Third, the banking sectors in the GCC countries were buttressed by high profits and capital buffers in the run-up to the 2008-09 global recession and international financial crisis.

However, the GCC banking systems had some vulnerabilities that were revealed by the recent global crisis and the impact it had on the economies of the

GCC countries. Among those are increased reliance on external financing, and high exposures to the real estate and construction sectors and equity prices. During the 2003-08 oil price boom, procyclical government spending, abundant banking sector liquidity, and bullish consumer and investor sentiments spurred non-oil real sector and rapid credit growth with associated build-up of domestic imbalances (e.g., asset price bubbles). While credit growth was essentially funded by a relatively stable domestic deposit base, more volatile external funding became increasingly important. The 2008-09 global recession put an end to the boom by diminishing oil revenues, reversing short-term capital inflows to the GCC region, and straining the rollover of private sector external debt.

The remainder of this paper is organized as follows. Section 1 describes the structure of the financial sector, including cross-border ownership within the GCC. Section 2 analyzes the balance sheet of the banking sector including recent trends in credit growth and its contributing factors. Section 3 examines the funding sources for banks and the importance of external funding in view of the current drought in international capital markets. Section 4 examines the loan portfolio exposures and the resulting credit risk. Section 5 analyzes the financial soundness of the banking sector with regard to capitalization, earnings quality and sustainability, asset quality and concentration, and liquidity, and the final Section concludes with policy lessons.

1. Structure of the GCC financial system

The financial sector in the GCC is generally dominated by the banking sector, which is relatively concentrated with a few domestic players dominating the market (Box 1, and Table 1)³. Islamic banks have grown in recent years to become a prominent source of financial intermediation in the Gulf coun-

© Abdullah Al-Hassan, May Khamis, Nada Oulidi, 2010.

¹ Includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (U.A.E.).

² With except to Kuwait, where its currency is pegged to a basket of currencies.

³ In this paper, the term "domestic banks" refers to banks that are majority-owned by domestic shareholders, while foreign banks refer to banks with majority foreign ownership. The latter are mostly in the form of foreign bank branches.

tries, controlling on average 24 percent of the region's banking system assets. In all six countries, the largest five banks are domestic and account for 50-80 percent of total banking sector assets.

Table 1. GCC: Total banking sector assets, 2002-2008 (in percent of GDP)

| | Bahrain | Kuwait | Oman | Qatar | Saudi Arabia | U.A.E. |
|-------|---------|--------|------|-------|--------------|--------|
| 2002 | 106 | 120 | 52 | 85 | 68 | 111 |
| 2003 | 106 | 103 | 52 | 84 | 64 | 105 |
| 2004 | 108 | 94 | 50 | 76 | 65 | 107 |
| 2005 | 105 | 81 | 45 | 80 | 61 | 120 |
| 2006 | 123 | 84 | 50 | 85 | 61 | 133 |
| 2007* | 254 | 101 | 64 | 103 | 71 | 162 |
| 2008 | 258 | 84 | 66 | 94 | 68 | 142 |

Note: * The increase in 2007 for Bahrain is due to the fact that some wholesale banks were re-licensed to retail banks.

Sources: IFS, and authors' estimates.

1.1. Highlights of the GCC financial sector. The following are the main highlights of the structure of the financial sector in the individual GCC countries.

Bahrain. The retail banking sector is the largest in the region, with assets amounting to close to 260 percent of GDP at end-2008. Together with the U.A.E., Bahrain's retail banking sector is the least concentrated among the GCC systems. The three largest retail banks (Bank of Bahrain and Kuwait, National Bank of Bahrain, and Ahli United Bank) constitute 41 percent of the total banking sector's assets. Bahrain also has a vibrant wholesale banking sector¹ – the largest of which is Arab Bank Corporation – which provides off-shore, investment banking, and project finance services to the rest of the region. The financial sector altogether contributes about one-third of the country's GDP and employs around 3 percent of its workforce, with total assets at around 1200 percent of GDP. In view of its linkages with global financial markets, the wholesale banking sector has been strongly affected by the global crisis. In addition to the banking sector, Bahrain is home to a number of investment funds with assets under management close to 80 percent of GDP.

Kuwait. The banking sector is highly concentrated with the two largest banks (National Bank of Kuwait and Kuwait Finance House) accounting for half of the banks' total assets. In addition to the banking sector, there are 95 Investment companies (ICs) with total assets (both on- and off-balance sheet) of around 102 percent of GDP – around 42 percent of

which is on account of proprietary trading. This sector has been strongly affected by tight global liquidity conditions and falling asset prices.

Oman. The banking system is the smallest in the region with a share of 66 percent of GDP. As a result, some of the largest government projects are directly financed by foreign banks. The banking sector is highly concentrated with the largest two banks (Bank Muscat and the National Bank of Oman) controlling more than 55 percent of the sector's assets.

Qatar. The banking system in Qatar is the third largest after Bahrain and the U.A.E., with assets around 94 percent of GDP at end-2008. The sector is highly concentrated with the three largest local banks (Qatar National Bank, Commercial Bank of Qatar, and Doha Bank) accounting for close to 70 percent of total assets. The entry of foreign banks under the Qatar Financial Center has increased competition, but local banks still have well-established franchises in domestic business. Foreign banks are essentially engaged in financing large infrastructure projects and investment banking. In addition to banks, there are three specialized government-owned banks operating mainly in developmental and housing projects, in addition to six finance and leasing companies, but these have a marginal share of financial sector assets.

Saudi Arabia. The banking sector is relatively small, with assets at around 68 percent of GDP at end-2008. The sector is only moderately concentrated with the three largest banks (National Commercial Bank, Samba Financial Group, and Al Rajhi Bank) accounting for 45 percent of total assets. Public ownership (including quasi government) is fairly extensive in four banks and reaches 80 percent in the largest bank, the National Commercial Bank. There are five sizable specialized credit institutions with asset size close to half that of the banking sector. These provide interest free loans for public policy purposes. There are also three autonomous government institutions (the Pension Fund, the General Organization for Social Insurance, and the Saudi Fund for Development) that dominate the primary market for government securities. The rest of the nonbank financial institutions (NBFIs) account for a marginal share of the total financial system's assets.

U.A.E. The U.A.E. has the second largest banking sector in the GCC after Bahrain, with total assets accounting for over 140 percent of GDP. The banking system is the least concentrated and the three largest banks (National Bank of Abu Dhabi, Emirates Bank International, and Abu Dhabi Commercial Bank) account for 32 percent of total assets. Bank ownership is still predominantly held by the government. In addition to banks, the financial sector of the U.A.E. includes two important Islamic mortgage finance com-

¹ Wholesale banks are prohibited from accepting retail deposits (both domestic and foreign) and are subject to minimum loan limits to the domestic economy. Loan limits do not apply to interbank loans or to investments in locally-incorporated banks. Minimum domestic loan sizes and deposits are \$27 million and \$100,000 million, respectively. Wholesale banks include branches of global banks, banks from the Middle East and South Asia, and locally-incorporated banks (domestically owned and subsidiaries of foreign banks).

panies, with combined lending amounting to around 16 percent of banks' officially reported real estate lending and 3 percent of banks' private sector credit. The two companies are being restructured by a federal committee after the Government announced in November 2008 that they were to be merged. The authorities are currently considering the possibility of converting the two companies to a bank, with the ability to obtain funding through deposit taking. The two companies have been highly dependent on short-term funds from the domestic banking sector to finance their long-term lending operations.

Table 2. GCC: concentration of the banking system, 2007 (as percent of total banking sector assets)

| | Top 3 banks | Top 5 banks |
|--------------|-------------|-------------|
| Bahrain | 40.5 | 49.5 |
| Kuwait | 63.0 | 81.0 |
| Oman | 65.6 | 81.1 |
| Qatar | 67.4 | 79.7 |
| Saudi Arabia | 45.5 | 66.0 |
| U.A.E. | 31.8 | 47.6 |

Sources: Country authorities, Moody's and authors' estimates.

Nonbank financial institutions (NBFIs) have limited presence in the GCC, with some exceptions. Investment funds have been growing rapidly in several countries, although they tend to remain largely focused on domestic equity and real estate¹. Most mutual investment funds are bank-owned; they are present, although on a limited basis, in Bahrain, Saudi Arabia, and the U.A.E. Kuwait has 95 investment companies (ICs) with total assets under management of more than 100 percent of GDP at end-2008, of which, 42 percent is proprietary². Their relatively large asset size and increasing reliance on the banking sector for financing has raised their systemic risk and possible spillover effects on the banking sector. Investment banks in Bahrain are fewer, but larger.

Nonbank finance companies are scarce, and the most important in the U.A.E., although the two largest companies, now in restructuring, had lending worth only about 3 percent of the banking sector's loans. The insurance sector remains small and is focused on property/casualty risks. Contractual savings are underdeveloped and dominated by public pension systems, which are mainly defined benefit, "pay-as-you-go" schemes. They contribute little to the accumulation of long-term resources for investment. For example, pension fund assets amounted to 3.2 percent of GDP in Saudi Arabia (end-2007), 2.7 percent in U.A.E. (end-2007), and 20.5 percent in Bahrain (end-2006).

¹ The discussion below on the GCC nonbank financial system is based on International Monetary Fund (2010).

² ICs provide asset management services such as brokerage, portfolio management, forward trading, IPOs, local and international fund management and financial services such as corporate finance advisory services (mergers, acquisitions, underwriting, and private placements) and private equity.

Stock market capitalization has grown strongly in recent years. GCC market capitalization leapt from \$117 billion (29 percent of GDP) in 2003 to \$1.1 trillion (177 percent of GDP) in 2005, but fell back to \$650 billion (73 percent of GDP) by mid-2009. GCC markets generally lack institutional investors whose long-term horizons help dampen volatility. Local debt markets are underdeveloped, particularly as governments drew down outstanding debt in recent years. However, GCC issuers boosted the use of *sukuk* until mid-2008 when *sukuk* issuance worldwide grew from around \$5 billion per year in 2001-04 to \$32 billion in 2007, before falling to \$15 billion in 2008, most of it dollar-denominated by GCC entities.

1.2. The ownership structure of banks³. The banking sector is largely domestically owned. This reflects entry barriers and licensing restrictions for foreign banks, including GCC banks. Except for Bahrain, all GCC countries have limits on foreign ownership: Oman (35 percent), Kuwait and Qatar (49 percent), Saudi Arabia (40 percent for non-GCC nationals and 60 percent for GCC nationals), and U.A.E. (40 percent). Therefore, the cross-border presence of GCC banks and other foreign banks is limited and is mostly in the form of branches, in many cases as single branches. However, foreign bank presence in Bahrain and the U.A.E. is important, at 57 and 21 percent of total assets, respectively. Market shares of foreign banks by total assets in the rest of the GCC are 2 percent in Saudi Arabia, 12 percent in Oman, 10 percent in Qatar, and 10 percent in Kuwait.

The domestic banking sector in the GCC (i.e. banks that are majority owned by domestic shareholders) continues to have significant public and quasi public sector ownership, but its extent varies considerably, ranging between 13 percent in Kuwait and over 52 percent in the U.A.E. (Table 2)⁴. Oman and Saudi Arabia have a relatively high public sector ownership (30 percent and 35 percent, respectively), although the majority of this is attributed to quasi government ownership. The U.A.E.'s domestic banking system stands out with almost half of the domestic sector's assets owned by the public sector, a significant amount of which is attributed to direct ownership by the Government (41.5 percent) and the Royal family (10.3 percent). Contrary to common perceptions, except in the U.A.E., royal family ownership in the GCC is almost nonexistent.

In view of the above, direct cross-border linkages within the GCC and also with other foreign jurisdictions through cross-border ownership are relatively low, with some exceptions. As noted above, the

³ The discussion below is based on end-2007 data to abstract from the impact of capital injections by the U.A.E. and Qatari governments in 2008-09.

⁴ Data on bank ownership is as of end-2007 in order to abstract from capital injections by the public sector in 2008 and 2009 in response to global developments, as these should be viewed as temporary.

U.A.E. and Bahrain have important foreign bank presence in the banking sector, and Bahrain and Oman have sizeable joint ventures in the domestic banking system with foreign investors, mostly from

the GCC. Joint ventures in the domestic banking sector in Saudi Arabia are small, mostly by non-GCC investors (around 13 percent of the domestic sector's assets), and are negligible in Kuwait and the U.A.E.

Table 2. GCC: ownership structure of the domestic banking system, end-2007 *
(in percent of total assets)

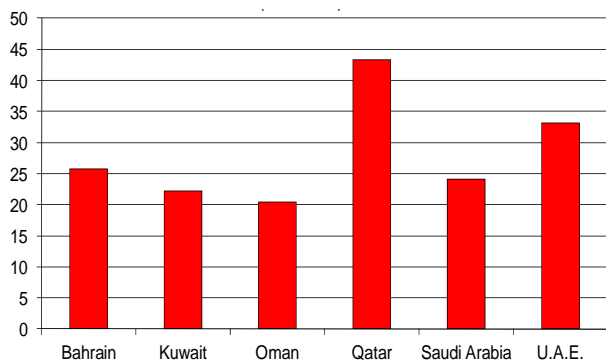
| | Public | | | | | Private domestic | Private foreign | | |
|--------------|--------|------------|---------------------|-----------------------|--|------------------|-----------------|------|---------|
| | Total | Government | Quasi government ** | Domestic royal family | | Total | Total | GCC | Non-GCC |
| Bahrain | 20.4 | 9.0 | 11.4 | ... | | 41.8 | 37.8 | 34.7 | 3.1 |
| Kuwait | 13.0 | 12.0 | 1.0 | ... | | 87.0 | ... | ... | ... |
| Oman | 30.0 | 10.0 | 19.0 | 1.0 | | 40.0 | 30.0 | 14.0 | 16.0 |
| Qatar | 20.7 | 20.4 | 0.3 | ... | | 75.6 | 3.7 | 3.7 | 0.0 |
| Saudi Arabia | 35.0 | 18.0 | 17.0 | ... | | 52.0 | 13.0 | ... | 13.0 |
| U.A.E. | 52.3 | 41.5 | 0.5 | 10.3 | | 47.6 | 0.2 | 0.2 | ... |

Notes: * The domestic banking system refers to banks that have domestic majority ownership. ** Quasi government includes public pension funds and social security.

Sources: Bank's annual reports, and authors' calculations.

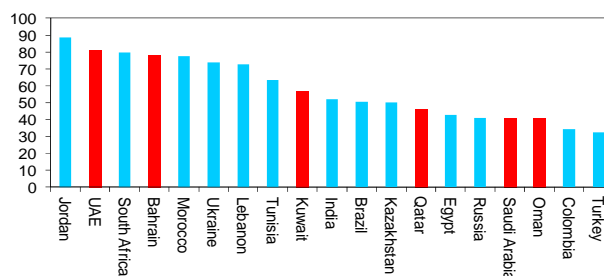
2. Recent trends in credit growth

The GCC region has witnessed in recent years rapid credit growth to the private sector (Figure 1). Over the period of 2003-08, Qatar and the U.A.E. experienced significant private sector credit growth at around 45 and 35 percent, respectively, while Oman had the slowest rate in the region at around 20 percent. In view of this growth, the ratio of private sector credit to GDP compares favorably to other emerging countries (Figure 2). When measured in relation to non-oil GDP, credit to the private sector in the GCC registers the highest rates among emerging countries. Notwithstanding the positive impact of increasing bank intermediation in the GCC on economic activity, as international experience shows, high rates of credit growth during an economic upturn almost invariably lead to high levels of credit defaults when economic activity slows. Therefore, high rates of credit growth witnessed in some GCC countries during 2003-08 have increased these systems' vulnerability to a downturn in economic activity.



Source: Country authorities.

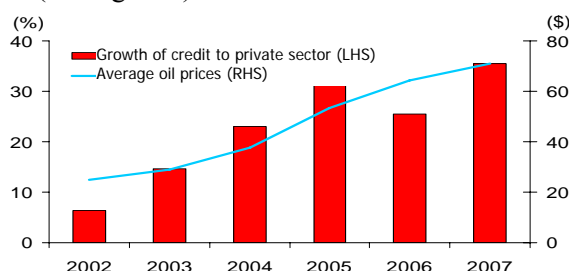
Fig. 1. GCC: average annual private sector credit growth, 2003-2008 (in percent)



Source: IFS and World Economic Outlook (IMF).

Fig. 2. Selected emerging countries: private sector credit to GDP, 2008 (in percent)

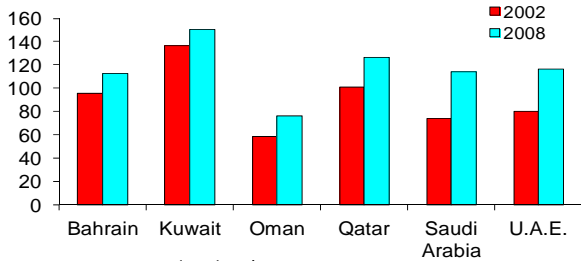
Albeit indirectly, credit to the private sector has been spurred by the increase in international oil prices (Figure 3)¹. Higher oil prices have boosted government spending and non-oil GDP growth and, as a result, spurred business confidence and local and regional private sector activities and investments. The impact was translated into a concomitant increase in the demand and supply of credit. As regard to supply, deposits in the banking sector grew as private sector income increased (Figure 4). This in turn boosted banks' lending capacity. As for demand, banking sector credit was reoriented from the public to the private sector, where the latter expanded economic activities and investments (see Figure 9).



Source: IFS, and autor's estimates.

Fig. 3. GCC: oil prices and private sector credit growth

¹ See Crowley (2008) and Hesse and Poghosyan (2009).

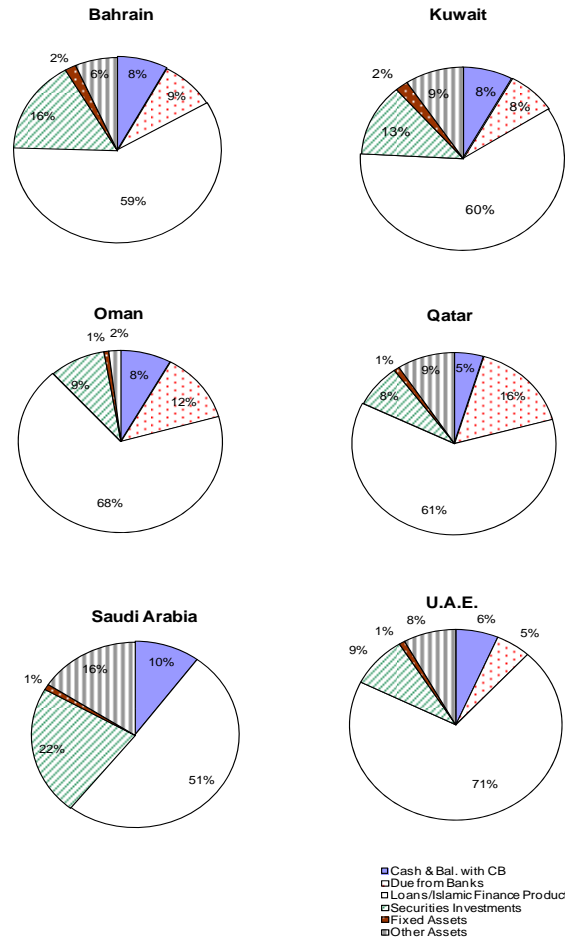


Source: IFS, and autor's estimates.

Fig. 4. GCC: deposits as percent of non-oil GDP

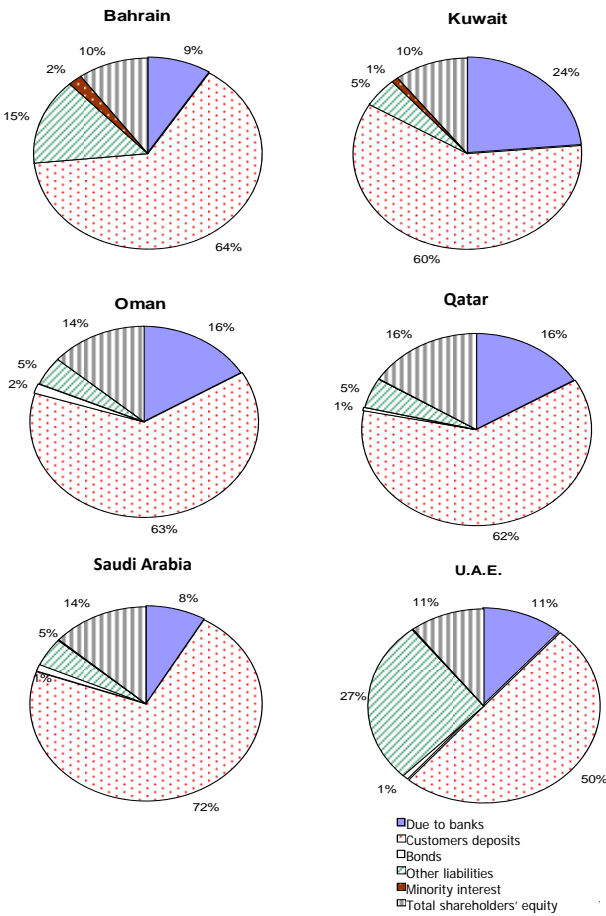
3. GCC banking sector balance sheets: stylized facts

The banking sector in the GCC still relies on the traditional deposits and loans as the main sources and uses of funds (Figures 5 and 6). The role of foreign liabilities as a source of funding is still limited, although it has increased in some countries particularly in 2006 and 2007 (Figure 7). Interbank liabilities are significant in Kuwait and also important in Oman and Qatar at 27, 16, and 16 percent of the total balance sheet (end-2008), respectively. GCC banks continue to have a very small share of bond financing (up to 2 percent of total liabilities). This has exacerbated the maturity mismatches between assets and liabilities in GCC banks in general.



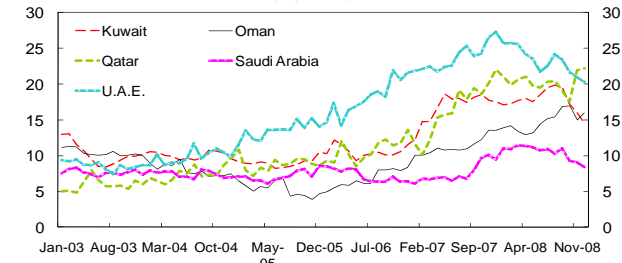
Source: Banks' annual reports from Zawya, and authors' estimates.

Fig. 6. GCC: banking sector assets structure, 2008



Source: Banks' annual reports from Zawya, and authors' estimates.

Fig. 5. GCC: banking sector liability and equity structure, 2008



Note: Bahrain is excluded from the chart as the relicensing of some wholesale banks into retail banks in early 2007 complicates the analysis of the ratio of foreign liabilities to total liabilities. Sources: Country authorities, and IMF staff estimates.

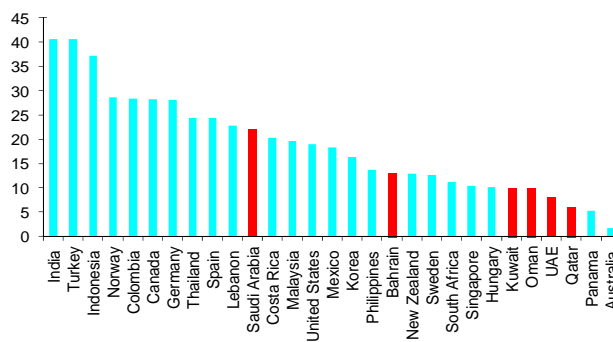
Fig. 7. GCC: foreign liabilities to total liabilities, 2003-2008 (in percent)

Banks' assets are mainly composed of loans and, to a lesser degree, securities investments. Loans and Islamic finance products constitute between 50 percent (Saudi Arabia) and 71 percent (U.A.E.) of banks' portfolios¹, and securities range between 8 percent in Qatar, up to 23 percent in Saudi Arabia, which is an important share of banks' balance sheets by international comparison (Figure 8). In the current crisis, banks have registered significant

¹ Islamic banks' finance products include Murabaha, Ijara, Istisnaa, Mudaraba, Musharaka, and other Islamic banking products.

losses related to these investments through market-to-market valuations of their trading portfolios, although there is no indication that these assets were held in high risk asset classes, equities, or financial derivatives. An analysis of the 50 top GCC banks (conventional and Islamic) based on Bankscope data indicates that, on average, banks in the GCC held 18 percent of their portfolios in securities at end-2008. Of which, only about 1 percent was held in equities or derivatives (2 percent in the case of Islamic banks)¹.

3.1. Funding of credit growth. A breakdown of credit growth during 2002-08 into its contributing factors confirms that client deposits have been the main contributor to credit growth for the six countries over the period (Table 3). The funding pattern, however, has been relatively volatile, which increases banks' funding risk generally². A closer look shows that foreign liabilities have played a significant role in explaining the rapid credit growth for the U.A.E. in 2006 and for Oman, Qatar, Saudi Arabia, and the U.A.E. in 2007. The increase in 2006 in net foreign liabilities in the U.A.E. relates largely to banks' issuance of foreign debt to support credit growth and also to address asset/liabilities maturity mismatches through the issuance of medium-term notes. In 2007, the increase in the four countries reflects short-term capital inflows in speculation of an appreciation of GCC currencies. As oil prices declined in the second half of 2008, foreign financing markedly declined as speculative capital inflows reversed and, to a lesser extent, international capital markets dried out.



Source: A. Sy (2005).

Fig. 8. International comparison of banks' holdings of securities (in percent of total assets)

4. Credit concentration and risks

The concentration of credit portfolios in GCC countries varies considerably within the GCC (Figure 9). Banks' exposures to the construction and real estate sectors are significant in Kuwait and Bahrain and are also important in Qatar and the U.A.E. This exposure increased sharply since 2002 in Qatar and Bahrain and, to a lesser extent, Kuwait. U.A.E. banks' exposure to the construction and real estate sectors appears relatively low in view of the construction and real estate boom that the country witnessed during this period. This could be attributed to the presence of domestic real estate and mortgage finance companies (although these are relatively small), but more importantly to direct external financing of large real estate projects, in particular by Dubai corporates. As regards large exposures, GCC banks have a relatively high concentration of credit to large business groups and high net worth individuals.

Table 3. GCC: contribution of balance sheet items to private sector credit growth, 2002-2008 (percent)

| | | Cash and reserves | Net claims on government | Foreign assets | Foreign liabilities | Net foreign liabilities | Client deposits | Other debt | Capital | Other items net | |
|---------|------|-------------------|--------------------------|----------------|---------------------|-------------------------|-----------------|------------|---------|-----------------|-----|
| Bahrain | 2002 | -13 | 18 | -12 | 11 | -1 | 61 | ... | 23 | 12 | |
| | 2003 | -68 | -18 | -84 | 105 | 21 | 170 | ... | 21 | -26 | |
| | 2004 | 2 | 11 | -47 | 82 | 35 | 24 | ... | 18 | 11 | |
| | 2005 | -20 | -9 | -35 | -4 | -39 | 135 | ... | 23 | 10 | |
| | 2006 | -4 | 14 | -292 | 188 | -105 | 95 | ... | 46 | 54 | |
| | 2007 | -57 | 12 | -604 | 532 | -72 | 127 | ... | 52 | 39 | |
| Kuwait | 2002 | 6 | 14 | -116 | 161 | 45 | 56 | ... | 0 | -21 | |
| | 2003 | 23 | 28 | -53 | 59 | 6 | 51 | 56 | 11 | -75 | |
| | 2004 | 46 | 12 | 1 | -6 | -5 | 41 | -4 | 14 | -3 | |
| | 2005 | 11 | 53 | -51 | -7 | -58 | 83 | -29 | 20 | 19 | |
| | 2006 | -21 | 24 | -30 | 22 | -9 | 68 | -19 | 25 | 31 | |
| | 2007 | -23 | 24 | -47 | 28 | -19 | 90 | 8 | 12 | 9 | |
| Oman | 2007 | -10 | -24 | -48 | 63 | 15 | 101 | 4 | 27 | -12 | |
| | 2008 | 26 | -2 | -30 | -14 | -44 | 115 | -18 | -2 | 24 | |
| | Oman | 2002 | -248 | 379 | -832 | -446 | -1277 | 1096 | 0 | 62 | 88 |
| | | 2003 | -285 | -127 | -39 | -183 | -223 | 117 | 0 | 162 | 455 |

¹ International Monetary Fund (2009).

² The break down follows the following formula:

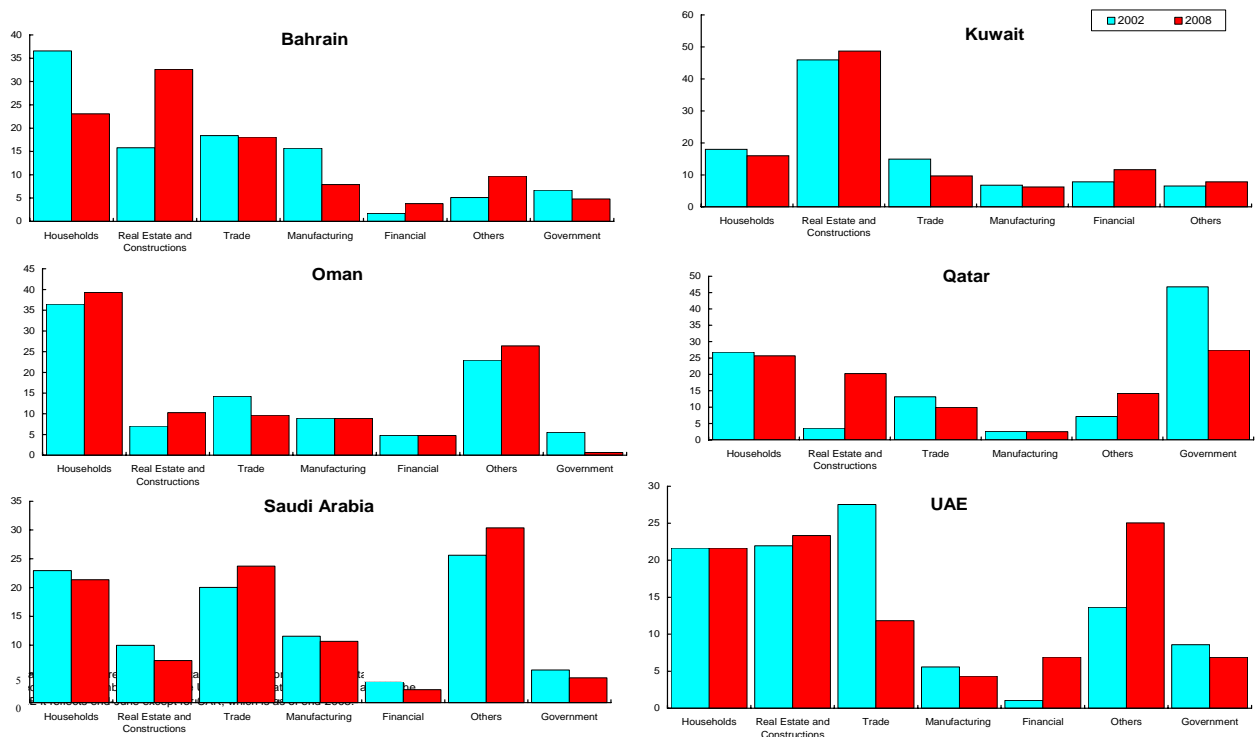
$$\frac{\Delta CPR}{CPR} \frac{t}{t-1} = \sum_i \frac{\Delta L^i}{L^i} \frac{t}{t-1} \cdot \frac{L^i}{CPR} \frac{t-1}{t-1} - \sum_{j=1}^k \frac{\Delta A^j}{A^j} \frac{t}{t-1} \cdot \frac{A^j}{CPR} \frac{t-1}{t-1},$$

where *CPR* is credit to the private sector, *A^j* are bank assets other than credit to the private sector, and *Lⁱ* are bank liabilities including capital.

Table 3 (cont.). GCC: Contribution of balance sheet items to private sector credit growth, 2002-2008 (percent)

| | | Cash and reserves | Net claims on government | Foreign assets | Foreign liabilities | Net foreign liabilities | Client deposits | Other debt | Capital | Other items net |
|--------------|------|-------------------|--------------------------|----------------|---------------------|-------------------------|-----------------|------------|---------|-----------------|
| | 2004 | 38 | 51 | -114 | -43 | -157 | 44 | 0 | 39 | 85 |
| | 2005 | -46 | 65 | -55 | -26 | -80 | 142 | 4 | 18 | -2 |
| | 2006 | -11 | 10 | -85 | 47 | -39 | 108 | 5 | 11 | 16 |
| | 2007 | -76 | 9 | -3 | 48 | 44 | 95 | -1 | 49 | -21 |
| | 2008 | -3 | 25 | -20 | 1 | -19 | 51 | 30 | 15 | 0 |
| Qatar | 2002 | 19 | 205 | 137 | -10 | 127 | -179 | 5 | -34 | -42 |
| | 2003 | -7 | 6 | -80 | 29 | -51 | 95 | 1 | 29 | 26 |
| | 2004 | -12 | 23 | -101 | 56 | -46 | 93 | 3 | 54 | -15 |
| | 2005 | -8 | 26 | -65 | 11 | -54 | 91 | 0 | 27 | 18 |
| | 2006 | -4 | 34 | -94 | 58 | -36 | 93 | -1 | 25 | -12 |
| | 2007 | -49 | 2 | -55 | 95 | 40 | 70 | 3 | 31 | 3 |
| | 2008 | 16 | -109 | -17 | 48 | 31 | 131 | 11 | 21 | 9 |
| Saudi Arabia | 2002 | -132 | -4 | 21 | -89 | -68 | 252 | -5 | 21 | 36 |
| | 2003 | 76 | -182 | 64 | -13 | 51 | 129 | 10 | 6 | 10 |
| | 2004 | -6 | 1 | -14 | 7 | -7 | 78 | -2 | 11 | 25 |
| | 2005 | -1 | 13 | 1 | 16 | 17 | 49 | -2 | 19 | 3 |
| | 2006 | -48 | 3 | -96 | -24 | -120 | 267 | -2 | 56 | -56 |
| | 2007 | -56 | -23 | -18 | 45 | 28 | 128 | -1 | 21 | 3 |
| | 2008 | 7 | -39 | -3 | 5 | 1 | 38 | 7 | 16 | 19 |
| U.A.E | 2002 | 14 | 20 | -90 | 0 | -90 | 103 | 0 | 28 | 26 |
| | 2003 | -14 | -42 | 3 | 2 | 5 | 125 | 0 | 17 | 9 |
| | 2004 | -25 | 1 | -35 | 29 | -6 | 109 | 0 | 19 | 2 |
| | 2005 | -9 | 7 | -52 | 46 | -6 | 79 | 0 | 27 | 3 |
| | 2006 | -15 | -6 | -51 | 82 | 32 | 63 | 0 | 23 | 3 |
| | 2007 | -104 | -3 | 21 | 85 | 106 | 97 | 0 | 16 | -11 |
| | 2008 | 37 | 20 | -2 | -13 | -16 | 34 | 11 | 12 | 2 |

Source: IFS, WEO, and authors' calculations.



Note: Construction and real estate in Bahrain, Kuwait, Saudi Arabia, and the U.A.E. include both residential and commercial. Households sector in Oman and Qatar might include residential mortgages.

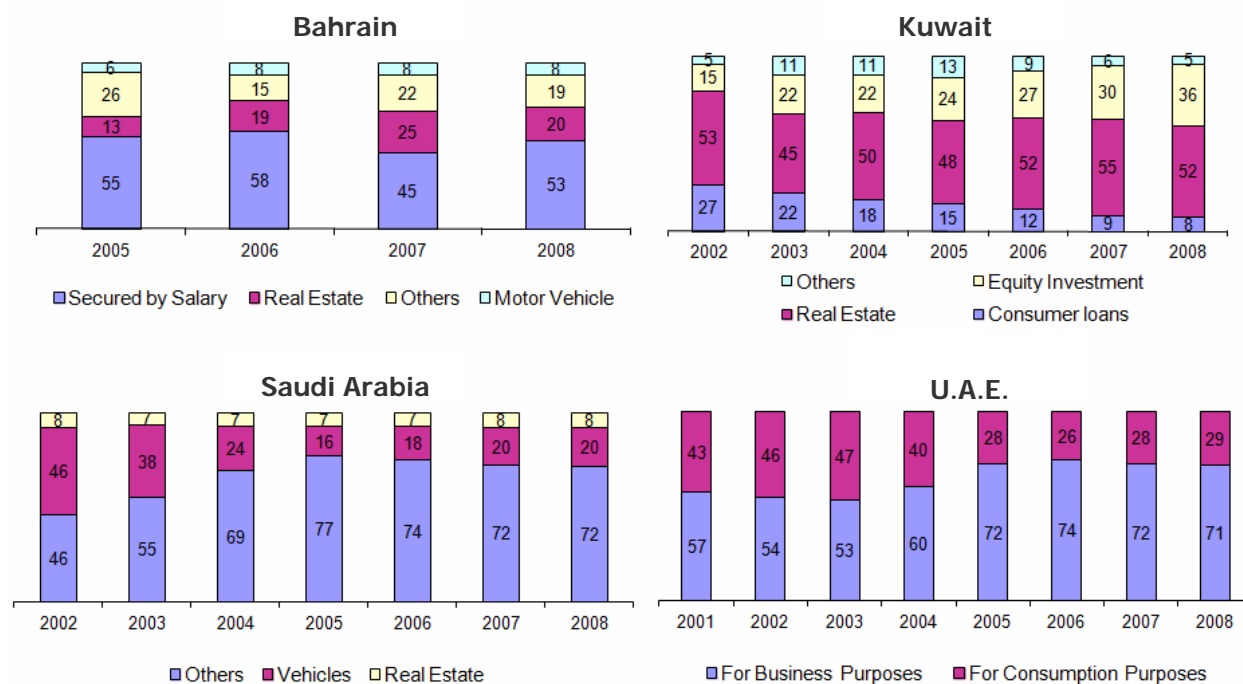
Source: Country authorities, and authors' estimates.

Fig. 9. GCC: bank loans sectoral distribution (in percent)

Credit to nonbank financial entities has witnessed a notable increase in Kuwait and the U.A.E., with levels specifically high in Kuwait. On the other hand, lending to the public sector has declined sharply as GCC governments benefited from rising oil prices in recent years and therefore, a decline in the need to finance domestic projects through bank borrowing. Direct credit to the government constitutes a marginal share of loans in most countries with the exception of Qatar, where it constitutes more than 27 percent of loans, although credit to government declined from much higher levels witnessed in the early 2000s.

Within household lending, there has been a marked increase in consumer lending in the U.A.E., and

lending for equity investment in Kuwait (Figure 10). Household lending in Saudi Arabia for consumption or possibly equity investment appears to have also increased as indicated by the increase in the “other” category from around 46 percent of household loans to 72 percent during 2002-08¹. Household loans in the GCC are generally limited to salaried individuals, which lowers the risk of lending to this category, although risks remain in relation to situations that involve significant layoffs of expatriate workers (for example, in cases where there is a significant slowdown in economic activity). The following is an analysis of the main risk exposures for the GCC, by country.



Sources: Countries’ central banks; and staff estimates.

Fig. 10. GCC: Distribution of household credit (in percent of total household credit)

Bahrain. Overall, the retail banking portfolio in Bahrain is highly exposed to construction and real estate (33 percent of total loans) and the household sectors (23 percent). However, household loans in Bahrain are mainly secured by salary which mitigates the risk of default.

Kuwait. The banking portfolio is highly exposed to the real estate and construction sectors, which constitute close to 50 percent of total loans. Household loans (excluding mortgages) and nonbank financial institutions (mainly to investment companies) are also important in banks’ loans portfolios accounting for 16 and 12 percent of total loans, respectively. With regard to household loans, these are mainly composed of

loans facilitating equity margin purchases (36 percent of total household lending, or close to 12 percent of banks’ loan portfolios in 2008)². This highly exposes Kuwaiti banks to market induced credit risk³. Additionally, banks are highly exposed to Kuwait’s troubled investment companies. The stressed domestic investment companies have put strains on the banking sector during the current crisis. Two of the largest investment companies, mainly active in the real estate and stock markets, have already defaulted on some or all of their debt (the events occurred in January and May 2009), but are in the process to negotiate or have successfully completed debt restructuring agreements.

¹ Detailed data on household lending is only available for Bahrain, Kuwait, Saudi Arabia, and the U.A.E.

² Real estate loans for households are included in the “construction and real estate”. These account for around 52 percent of household lending.

³ To address pressures created by the current global crisis, the Central Bank of Kuwait has recently prevented banks from liquidating margin trading accounts that fall below margin to limit the impact on the market and also on households. This increases the credit risk associated with this category.

Oman. Oman's banking sector is highly exposed to the household sector, which accounts for approximately 40 percent of total loans¹. Rising consumer indebtedness raises concerns as Omani households are highly leveraged with household loans accounting for 17 percent of GDP. Additionally, a high proportion of the corporate loan portfolio is in a handful of large exposures. This has posed important risks to Omani banks historically: banks' asset quality deteriorated in 2000-02 due to the financial troubles faced by large corporate clients to which most banks were exposed. The exposures are mostly to family-owned businesses, where despite improvements, corporate governance and transparency are still modest.

Qatar. The banking sector is mostly concentrated in the household, construction and real estate, and government sectors, which account for 26, 20, and 27 percent of total loans, respectively. As regards the household sector, although data is not readily available on the uses of these loans, an important share of these loans might be for securities investments². This could be a potential risk due to risk concentration and the difficulty arising from monitoring margin lending. One mitigating factor, however, is that household loans are largely extended to those with a salary assignment.

Saudi Arabia. The loan portfolio appears well diversified with respect to the corporate sector with trade being the main sector at 25 percent of total loans (mirroring the structure of the economy). However, concentration of credit to high net worth individuals could pose risks, similar to other GCC countries. Household loans in turn are well diversified with no dominating sub-sector. Real estate loans in Saudi Arabia are marginal compared to the rest of the GCC at less than 10 percent of total loans. However, similar to the rest of the GCC countries, some margin lending for equities could be a source of risk. Prudential regulations in Saudi Arabia curb credit growth risks by requiring banks to obtain Saudi Arabia Monetary Authority's approval for foreign lending and by imposing statutory caps on individual indebtedness.

U.A.E. The banking sector is highly exposed to the construction sector and the highly speculative real estate sector (25 percent of total loans, including household mortgages), and to the household sector (20 percent, excluding household mortgages). Trade is also an important sector in

bank loans accounting for 13 percent of total loans. The banking portfolio is concentrated in the corporate sector, which accounts for around two-thirds of total loans. Financing, however, is mainly directed to large private business groups or government-owned related enterprises and there is currently a high level of concentration of credit risk due to large financings of a few family-owned businesses and sizeable government-related entities.

5. Financial soundness

5.1. Capitalization. The banking sectors in the GCC countries are well capitalized across the board with capital adequacy ratios (CAR) well above minimum CARs (Table 4), and comfortable leverage ratios by international comparisons^{3,4}. The high capitalization levels of the banking sectors are related to high profitability, although they have declined significantly in recent years as a result of rapid credit growth and increasing leverage. In 2008, the profitability of the banking sectors have been affected by the higher provisioning requirements related to the crisis, impacting the ability of banks to increase capital internally.

The CAR of the banking sector in the U.A.E. was the lowest among the GCC countries in 2008 at 13.3, declining significantly from 2005 when it stood at 17 percent. However, U.A.E. banks have received capital injections by the government in 2009, raising their CAR to 17.6 percent by June 2009 and making them among the best capitalized in emerging markets. Risks to capital adequacy, however, exist as the fallout from the crisis on the asset quality of banks continues to unfold, in addition to the risk of credit rating downgrades of U.A.E. corporates by major rating agencies⁵. The latter could impact banks' CARs through the valuation of risk weighted assets.

³ Currently, the minimum regulatory CAR is 8 percent in Saudi Arabia, 10 percent in Oman and Qatar, 11 percent in the U.A.E., and 12 percent in Bahrain and Kuwait. The U.A.E. has raised its minimum CAR in response to the current crisis from 10 percent to 11 percent, effective September 30, 2009, and to 12 percent, to become effective June 30, 2010.

⁴ In Bahrain, as regard to the different categories of banks, the locally incorporated retail banks held the lowest CAR at 18.1 percent in 2008 (versus 21 percent in 2007), while their Tier 1 capital to RWA still stood at a comfortable 10.9 percent in 2008 (versus 17 percent in 2007). Conventional wholesale banks held a CAR of 19.3 percent (versus 19 percent in 2007), while their Tier 1 capital to RWA stood at 17.3 in 2008 (versus 16 percent in 2007). Islamic retail banks' CARs stood at very high levels as well with a CAR of 22 percent and Tier I capital of 24.4 percent. For Islamic wholesale banks, the CAR was also robust at 25 percent in 2008 (Central Bank of Bahrain, *Financial Stability Report*).

⁵ At the end of November 2009, Standard and Poor's downgraded several Dubai government related entities as a result of a plan to restructure debt by Dubai World.

¹ The Central bank of Oman established a lending cap limiting personal loans to 40 percent of total loans.

² Except for Kuwait, GCC central banks do not report bank lending for equity purchases separately. However, personal loans in GCC countries might have been used for this objective. See Mansur and Delgado (2008).

Table 4. GCC: financial soundness indicators, 2003-08* (percent)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| <i>Capital Adequacy Ratio</i> | | | | | | | |
| Bahrain | 23.8 | 25.7 | 26.9 | 22.0 | 21.0 | 18.1 | ... |
| Kuwait | 18.4 | 17.3 | 21.3 | 21.8 | 18.5 | 16.0 | ... |
| Oman | 17.6 | 17.6 | 18.5 | 17.2 | 15.8 | 14.7 | 15.5 |
| Qatar | 25.3 | 24.9 | 24.8 | 13.5 | 12.2 | 15.1 | 15.7 |
| Saudi Arabia | 19.4 | 17.8 | 17.8 | 21.9 | 20.6 | 16.0 | ... |
| United Arab Emirates | 18.9 | 16.9 | 17.4 | 16.6 | 14.0 | 13.3 | 18.6 |
| <i>Capital to Assets</i> | | | | | | | |
| Bahrain | ... | ... | ... | ... | ... | ... | ... |
| Kuwait | 10.7 | 12.1 | 12.7 | 11.7 | 12.0 | 11.6 | ... |
| Oman | 12.6 | 12.9 | 13.7 | 13.2 | 14.1 | 15.5 | ... |
| Saudi Arabia | 8.8 | 8.0 | 8.8 | 9.3 | 9.9 | 10 | ... |
| United Arab Emirates | 11.4 | 11.1 | 11.4 | 11.1 | 9.4 | 10.6 | ... |
| <i>Return on Equity</i> | | | | | | | |
| <i>NPLs to Total loans</i> | | | | | | | |
| Bahrain | 10.3 | 7.6 | 5.8 | 4.8 | 2.3 | 2.3 | ... |
| Kuwait | 6.1 | 5.3 | 5.0 | 3.9 | 3.2 | 3.1 | ... |
| Oman | 12.8 | 11.0 | 7.0 | 4.9 | 3.2 | 2.1 | 2.8 |
| Qatar | 8.1 | 6.3 | 4.3 | 2.2 | 1.5 | 1.2 | 2.0 |
| Saudi Arabia | 5.4 | 2.8 | 1.9 | 2.0 | 2.1 | 1.4 | ... |
| United Arab Emirates | 14.3 | 12.5 | 8.3 | 6.3 | 2.9 | 4.0 | 4.6 |
| <i>Provisions to NPLs</i> | | | | | | | |
| Bahrain | 67.7 | 68.0 | 67.7 | 68.5 | 74.0 | 84.0 | ... |
| Kuwait | 77.7 | 82.5 | 107.2 | 95.8 | 92.0 | 84.7 | ... |
| Oman | 78.3 | 87.1 | 97.4 | 109.6 | 111.8 | 127.3 | 113.8 |
| Qatar | 85.4 | 87.6 | 84.3 | 94.0 | 90.7 | 83.2 | ... |
| Saudi Arabia | 128.2 | 175.4 | 202.8 | 182.3 | 142.9 | 153.3 | ... |
| United Arab Emirates | 88.5 | 94.6 | 95.7 | 98.2 | 100.0 | 103.0 | 79.0 |
| <i>ROA</i> | | | | | | | |
| Bahrain | 1.9 | 2.2 | 2.1 | 2.1 | 1.2 | 1.3 | ... |
| Kuwait | 2.0 | 2.5 | 3.0 | 3.2 | 3.4 | 3.2 | ... |
| Oman | 0.2 | 1.7 | 2.3 | 2.3 | 2.1 | 1.7 | 2.2 |
| Qatar | 2.5 | 2.8 | 4.3 | 3.7 | 3.6 | 2.9 | 2.6 |
| Saudi Arabia | 2.2 | 2.4 | 3.4 | 4.0 | 2.8 | 2.3 | ... |
| United Arab Emirates | 2.3 | 2.1 | 2.7 | 2.3 | 2.0 | 2.3 | 1.5 |
| <i>ROE</i> | | | | | | | |
| Bahrain | 18.3 | 20.8 | 14.3 | 15.4 | 18.4 | 16.9 | ... |
| Kuwait | 18.6 | 20.9 | 22.9 | 27.1 | 28.1 | 27.8 | ... |
| Oman | 1.8 | 13.5 | 15.6 | 17.8 | 14.3 | 12.6 | 14.2 |
| Qatar | 20.8 | 20.8 | 28.5 | 27.2 | 30.4 | 21.5 | 20.7 |
| Saudi Arabia | 25.9 | 31.7 | 38.5 | 43.4 | 28.5 | 22.7 | ... |
| United Arab Emirates | 16.4 | 18.6 | 22.5 | 18.0 | 22.0 | 21.1 | 12.1 |

Note: * Data for Bahrain reflects the retail banking sector only. 2008 data for Kuwait is as of September 2008. 2009 data is as of June for Oman, September for Qatar (except for the provisioning rate, which is for end-2008), and November for the U.A.E.

Source: Country authorities.

5.2. Asset quality. The asset quality of GCC banks has improved significantly over the past five years. The ratio of nonperforming loans (NPLs) to total loans has been on a declining trend since 2003, when it was at double digits, although the underlying trend is masked by the high credit growth rate during this period. NPLs stood at low levels in 2008 by international comparisons despite the crisis. However, the supervisory authorities in the GCC have required banks to take substantial general loan

loss provisions in anticipation of rising amounts of NPLs in 2009, and possibly 2010. The coverage ratio of provisions to NPLs across the GCC is very high by international standards¹.

¹ As regard to the different categories of banks in Bahrain, conventional retail banks had the lowest NPL ratio at 2.3 percent, while the Islamic wholesale banks had the highest NPL ratio at 4.2 percent. Wholesale banks' NPL ratio increased in 2008 with a ratio of 3.2 for the wholesale conventional (versus 2.5 in 2007) and 4.2 for the Islamic (versus 3.5 in 2007) (Central Bank of Bahrain, *Financial Stability Report*).

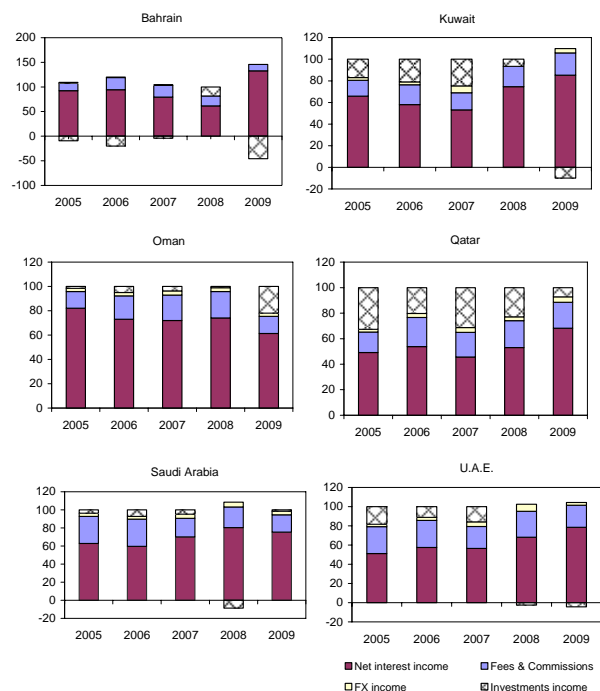
There are, however, continued risks of a possible worsening of asset quality as the fallout from the crisis continues to materialize on banks' balance sheets. This risk is heightened in countries with the highest credit growth rates prior to the crisis, and in systems that have significant concentration in construction and real estate, as these sectors have been hit hard throughout the GCC. The high concentration on lending to large business groups is also an issue as indicated by the recent default of two prominent Saudi conglomerates; in addition to Saudi banks' exposure to these two groups, a number of GCC banks also had significant exposures. Additionally, the recent announcement by Dubai World – one of the three major Government-related holding companies in Dubai – on seeking a debt standstill and restructuring could have an important impact on U.A.E. banks and other GCC banks that have exposure to this group¹. The impact, however, is still unclear pending the conclusion of the debt restructuring process.

5.3. Profitability. The banking sectors in the GCC have stable sources of earnings from traditional banking. Net interest margins represent the main source of income, ranging from 53 percent of gross operating income in Qatar in 2008 to 80 percent in Saudi Arabia (Figure 11). Notwithstanding, losses from investments in securities in addition to increasing provisions have weighed on banks' operating profits in 2008-2009 across the GCC (Figures 12-13). Investment losses mostly affected Saudi and Bahraini banks, while loan loss provisioning affected Kuwaiti banks most. Returns on equity (ROE) – hovering around 20 percent – and returns on assets (ROA) stood at comfortable levels by international comparisons, with Bahrain and Oman being the least profitable.

Together with Saudi Arabia, the banking sector in Kuwait has been one of the most profitable within the GCC in recent years, although the latter has been affected relatively more by the current crisis (Figure 13)^{2,3}. The retail banking sector in Bahrain has been the least profitable in the region in the last few years and returns have further suffered in 2008

and 2009⁴. On the other hand, Islamic retail banks in Bahrain continued to be very profitable (with an ROA of 5 percent, up from 4 percent in 2007).

In view of limited global linkages, the Oman banking sector has been little affected by the global crisis. While the Qatari economy is more open, the economy (and consequently banks) have been least affected by the global crisis due to the thriving gas sector. Banks have also had significant government support that helped reduce their losses; the government purchased equity and real estate assets of banks up to \$6 billion (6 percent of GDP) during the first half of 2009. It is also worthwhile noting that Qatari banks have the most diversified income within the GCC with net interest margins contributing with 50 percent, while banking fees and commissions, FX income, and investment income constitute the rest. In the U.A.E., more recent data indicate that while bank profitability increased in 2008, it was negatively affected by global and domestic developments in the first half of 2009. Profitability is likely to be further jeopardized by increasing provisions due to the continuing slowdown in economic activity and the bursting of the real estate bubble. Provisions could also potentially rise in relation to exposures to Dubai World.



Source: Banks' annual and quarterly reports from Zawya, and author's estimates.

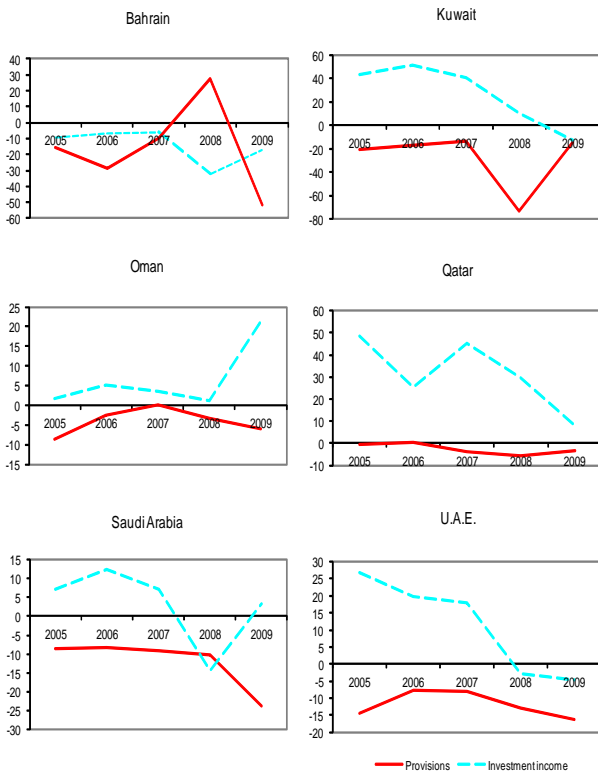
Fig. 11. GCC: income analysis of GCC banks, 2005-Q1 2009 (in percent of gross income)

¹ Dubai World is a Government-related holding company and is fully owned by the Dubai Government. In addition to profitable subsidiaries such as Dubai Ports, Dubai World owns two subsidiaries, Nakheel and Limitless, which are engaged in mega real estate projects. These have been affected significantly by the tightening of global financial conditions and the bursting of the real estate bubble in Dubai in late 2008. Dubai World announced on November 25, 2009 that it will seek a debt standstill and restructuring on debt related to parts of its business, mainly real estate.

² ROA and ROE data for Kuwait is for Q32008 and therefore does not reflect higher provisions incurred in Q4 2008.

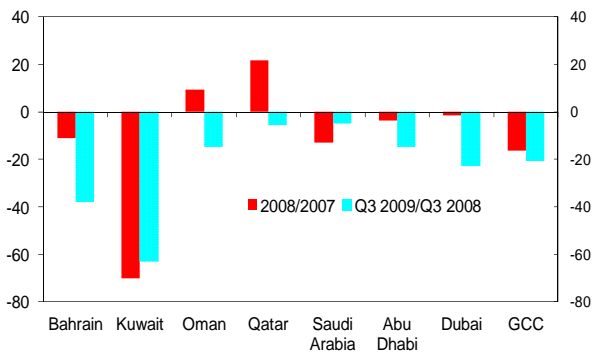
³ Gulf Bank, the third largest bank in Kuwait, suffered significant losses in 2008 on account of customer-related foreign exchange derivatives transactions. The bank was recapitalized through a combination of capital injections by shareholders (68 percent) and the government (32 percent) via the Kuwait Investment Authority (KIA).

⁴ The wholesale banking sector in Bahrain was also hit significantly as a result of the crisis. Gulf International Bank and Arab Banking Corporation derived massive losses (\$1.1 billion and \$0.9 billion, respectively) as a result of impairments to their investment portfolios in advanced economies. Wholesale banks suffered an overall net loss in 2008 with an ROA at -0.1 percent compared to an ROA of 0.6 percent in 2007 (Central Bank of Bahrain, *Financial Stability Report*).



Source: Banks' annual and quarterly reports from Zawya; and Fund staff estimates.

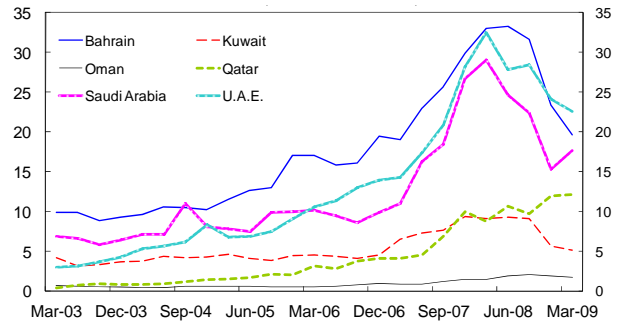
Fig. 12. GCC: banks' provisions and investment income, 2005-Q1 2009 (as percent of gross operating income, excluding investment income)



Source: Kam co Research, and author's estimates.

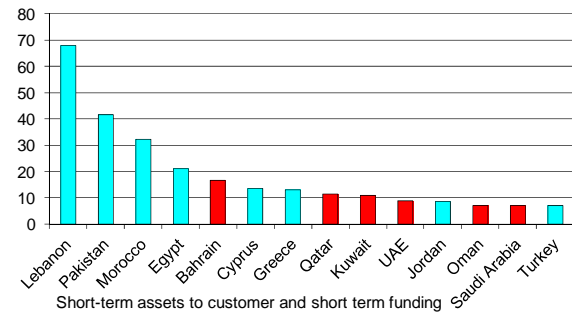
Fig. 13. GCC: change in bank profitability 2007-2009 (in percent)

Liquidity in the GCC banking sector has been severely squeezed in 2008 with the reversal of speculative foreign deposits and tight liquidity in international capital markets. GCC banks had become increasingly reliant on external financing, which increased fourfold since 2003 peaking to \$103 billion in September 2008 (Figure 14). The majority of the issuances were by Bahrain, Saudi Arabia, and U.A.E. entities. Liquidity ratios for all countries ranked on the low side by international comparisons, reflecting the relatively high asset/liability maturity mismatches in GCC banks (Figure 15).



Note: *Includes foreign currency interbank lending extended by foreign bank branches in GCC countries.
Source: BIS Consolidated Banking Statistics.

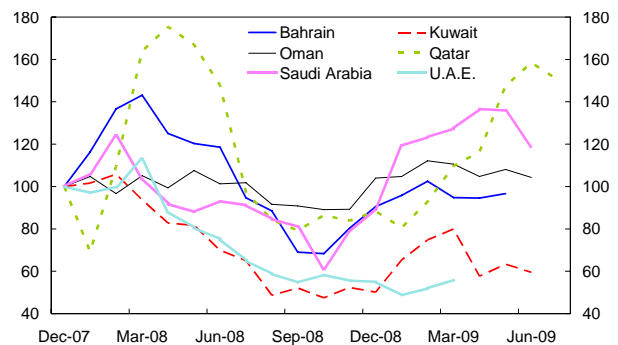
Fig. 14. GCC: Banks' external financing * (in U.S. dollar billions)



Source: Bankscope.

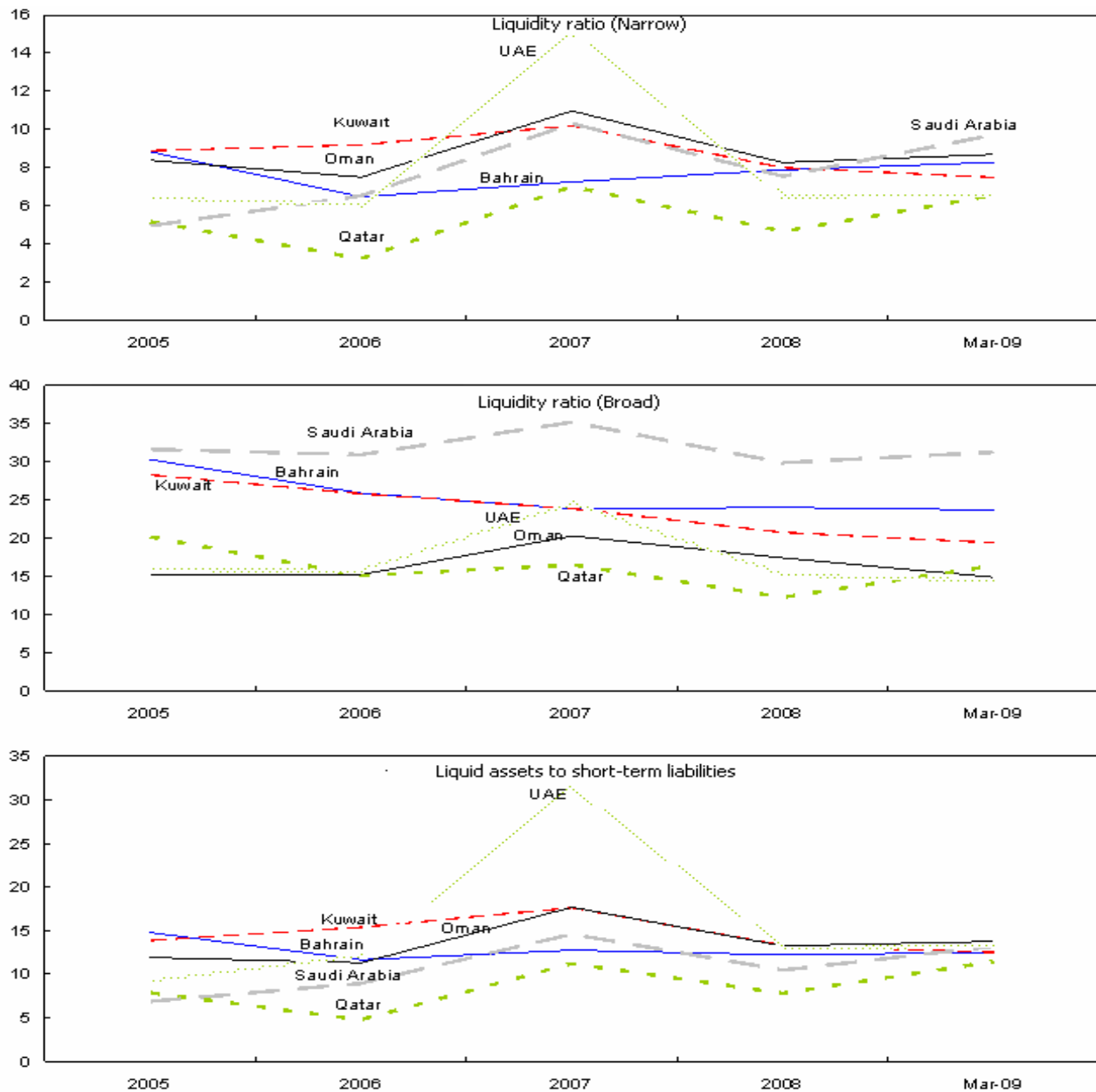
Fig. 15. Banking sector liquidity in selected countries, 2007 (in percent)

Liquidity peaked in GCC countries in 2007 reflecting the inflow of capital in speculation of an appreciation of GCC currencies (Figures 16–17). The U.A.E. received the bulk of these inflows as indicated by the significant rise in its liquidity ratios in 2007. Liquidity conditions started to tighten in early 2008 as speculative capital inflows reversed. Liquidity was squeezed further following Lehman's collapse in September 2008. The injection of liquidity by the GCC authorities via central bank repos and direct placements of government deposits restored liquidity conditions quickly. Narrow and broad liquidity indicators show that liquidity conditions have returned to their 2006 levels or even above by March 2009.



Source: GCC central banks, and authors' estimates.

Fig. 16. GCC: commercial bank's reserves with central bank, December 2007 - 10



Source: Banks' annual and quarterly reports and authors' estimates. Narrow liquidity ratio is calculated as cash and reserves at the central bank to total liabilities. The board liquidity ratio is calculated as cash, reserves at the central bank, and securities holdings as a share of total liabilities.

Fig. 17. Liquidity indicators of GCC banking sectors

Conclusions and policy implications

The moderate impact of the global financial crisis on the GCC banking sectors has generally demonstrated the soundness of these systems. The banking sectors in the GCC countries continue to be well capitalized across the board with capital adequacy ratios well above minimum standards and comfortable leverage ratios by international comparisons. There are, however, risks of a possible worsening of asset quality as the fallout from the crisis continues to materialize on banks' balance sheets. This risk is heightened in countries with the highest credit growth rates prior to the crisis, and in systems that have significant concentration in construction and real estate, as these sectors have been hit hard throughout the GCC.

Notwithstanding the general soundness of GCC banks, our analysis indicates some weaknesses associated with the operational aspects of GCC banks and the characteristics of the GCC economies. These would need to be evaluated and addressed by GCC policy makers.

First, some GCC countries witnessed rapid credit growth in the oil boom period preceding the financial crisis. As indicated above, this rise in available bank liquidity and the consequent increase in lending rates have been indirectly associated with higher oil prices. This linkage presents risks and introduces significant liquidity volatility for banks. International experience indicates that rapid credit growth in periods of high real economic growth is likely to

result in high levels of asset impairment once economic conditions reverse. As observed in the current crisis, sharp declines in oil prices have brought about a slowdown in economic activity, along with a worsening of banks' asset quality and strains on their liquidity. Policy makers are encouraged to evaluate policy measures that could dampen the impact of oil prices on economic activity and the financial sector.

Second, there are issues that need to be addressed in relation to banks' asset management practices. GCC banks generally have significant concentration risk, both in the context of lending to a few obligors and large exposures to sectors that are highly subject to market price fluctuations and asset bubbles (such as real estate and equities). Additionally, some GCC banking systems have high exposures to households. While household lending in the GCC is generally

secured by borrowers' salaries, household defaults could pause risks. These would typically be associated with a slowdown in economic activity and massive layoffs of expatriate workers.

Third, liquidity management practices in GCC banks in general would need to be evaluated. GCC banks appear to maintain low liquidity levels by international comparison. While the banking sector in the GCC still relies on relatively stable deposits as the main source of funds, the fact that banks continue to have a very small share in bond financing complicates banks' ability to manage the maturity mismatches between assets and liabilities. Furthermore, the increasing dependence of banks on external financing in some GCC countries in recent years has increased banks' vulnerability to external credit conditions. This was demonstrated in the current crisis as banks' liquidity was squeezed with the tightening in global liquidity conditions.

References

1. Bahrain (2008). Financial Stability Report. Central Bank of Bahrain.
2. Kuwait (2008). Annual Report. Central Bank of Kuwait.
3. Oman (2008). Annual Report. Central Bank of Oman.
4. Qatar (2008). Annual Report. Central Bank of Qatar.
5. United Arab Emirates (2007). Annual Report. Central Bank of U.A.E.
6. Crowley, J. (2008). Credit growth in the Middle East, North Africa, and Central Asia Region. *Working Paper/08/184*, International Monetary Fund.
7. Grigorian, D. & Manole, V. (2005). A Cross-Country Nonparametric Analysis of Bahrain's Banking System, *Working Paper/05/117*, International Monetary Fund.
8. Delgado, F. & Mansur, A. (2008). Stock market Developments in the Countries of the Gulf Cooperation Council, *Finance and Capital Markets Series*, International Monetary Fund.
9. Fitch Ratings (January 2008). Qatar Banking System and Prudential Regulations.
10. Bahraini Banks (May 2008). *Annual Review and Outlook*.
11. Impact of the Global Economic Crisis on GCC Bank Ratings (December 2008).
12. How the GCC is Dealing with Lower Oil Prices and the Credit Crunch (January 2009).
13. GCC Banks: Risks from Retail Lending (April 2009).
14. Kuwaiti Banks. *Annual Review and Outlook* (July 2009).
15. Hesse, H. & Poghosyan, T. (2009). Oil Prices and Bank Performance: Evidence from Major Oil-Exporting Countries in the Middle East and North Africa, *Working Paper 09/227*, International Monetary Fund.
16. International Monetary Fund (2006). Kingdom of Bahrain-Financial Stability Assessment, *Country Report No. 06/91*.
17. Kuwait-Financial Stability Assessment (2004). *Country Report No. 04/151*.
18. Saudi Arabia-Financial Stability Assessment (2004). *Country Report No. 06/199*.
19. United Arab Emirates-Financial Stability Assessment (2004). *Country Report No. 07/357*.
20. Regional Economic Outlook: Middle East and Central Asia (2009).
21. Impact of the Global Financial Crisis on the GCC Region and the Challenges Ahead (2010). IMF: Middle East and Central Asia Departmental Paper.
22. Moody's Global Banking (April 2008). Kuwait Banking System Profile.
23. Oman Banking System Outlook (May 2008).
24. Kuwait Banking System Outlook (October 2008).
25. Impact of Global Crisis on Liquidity of UAE Banks (November 2008).
26. United Arab Emirates Banking System Outlook (January 2009).
27. Qatar Banking Sector Outlook (February 2009).
28. Kuwaiti Banking Sector: Implications of Equity and Property Market Declines (April 2009).
29. Oman Banking System Outlook (August 2009).
30. Bahrain Banking System Profile (August 2009).
31. Saudi Arabia (2008). Annual Report. Saudi Arabian Monetary Agency.
32. Sy, A. (2005). Managing the Interest Rate Risk of Indian Banks' Government Securities Holdings, *Working Paper WP/05/78*, International Monetary Fund.
33. Wajid, K. et al. (2007). Financial Integration in the Nordic Baltic Region: Challenges for Financial Policies, International Monetary Fund.