© 2007 International Monetary Fund

October 2007
IMF Country Report No. 07/357

United Arab Emirates: Financial System Stability Assessment

This Financial System Stability Assessment on the United Arab Emirates was prepared by a staff team of the International Monetary Fund and the World Bank as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on July 27, 2007. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the United Arab Emirates or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services
700 19th Street, N.W. ● Washington, D.C. 20431
Telephone: (202) 623 7430 ● Telefax: (202) 623 7201
E-mail: publications@imf.org ● Internet: http://www.imf.org

Price: $18.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

UNITED ARAB EMIRATES

Financial System Stability Assessment

Prepared by the Monetary and Capital Markets and Middle East and Central Asia Departments

Approved by Jaime Caruana and Mohsin Khan

July 27, 2007

A joint IMF-World Bank mission visited Abu Dhabi and Dubai from January 14 to 25, 2007 to conduct an update of the 2001 Financial Sector Assessment Program (FSAP) for the United Arab Emirates, including financial activity and supervision in the newly established Dubai International Financial Centre. The FSAP Update findings and recommendations were discussed with the authorities during the Article IV Consultation mission in April-May 2007. The FSAP Update team comprised Patricia Brenner (Mission Chief, MCM); Samir El Daher (Deputy Mission Chief, World Bank); Jennifer Elliott, Jérôme Vacher, and Claudia Pescetto (all MCM); Mohamed Jaber (MCD); Marcel Maes (BCP expert, formerly Belgian Banking Commission), and Richard Symonds (World Bank). The main findings of the FSAP Update are:

- In the context of high oil prices, sustained buoyant growth, and strong domestic demand, banks have provided ample credit, while helping finance major public and private urban construction projects. The banking sector as a whole shows comfortable levels of capitalization and profits and would be generally resilient to a variety of shocks, including to interest rates and the exchange rate.

- In the face of a severe correction in the real estate market, however, a few banks would find their capital seriously depleted. Therefore, additional prudential regulation and close oversight of real estate lending is recommended.

- U.A.E. equity markets lack depth and diversification and have been subject to high volatility. The market for debt instruments is also thin and there are no sovereign securities. To support safe and sound expansion of capital markets, staff recommends strengthening supervision, notably by transferring all of the federal responsibility for oversight of securities markets to ESCA and removing barriers to foreign participation in financial markets; and improving corporate governance and disclosure requirements.

- A new draft securities law has been issued for comment. The staff recommends enactment of this law and implementing major needed updating of the banking, insurance, and companies laws.

The main author of this report is Patricia Brenner, with contributions from the rest of the FSAP team.

FSAPS are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAPs do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud.

Contents Page

Glossary 4

Executive Summary—Main Findings...5

I. Macroeconomic and Financial Sector Developments 10
A. Macroeconomic Developments..10
B. Financial Sector Developments..11

II. Financial System Institutions and Markets 13
A. Banking System 13
B. Vulnerabilities and Stress Test Results 17
C. Capital Markets 20
D. The Insurance Industry...23

III. Need for Coordination and Collaboration of Financial Sector Supervisors 24

IV. Liquidity Management, Financial Safety Nets, and the Payments System 24
A. Liquidity Management and Financial Safety Nets..24
B. Payment Systems...26
C. AML/CFT..27

V. The Dubai International Financial Center (DIFC) 27

Tables
1. Selected Macroeconomic Indicators, 2003–06 11
2. Banking System Structure, 2002–06...14
3. Composition of Loans, 2002–06 17
4. Financial Soundness Indicators, 2003–06...19
5. Recommended Plan of Actions to Improve Implementation of the IOSCO Objectives and Principles of Securities Regulation 36
6. Recommended Plan of Actions to Improve Implementation of the IOSCO Objectives and Principles of Securities Regulation (DIFC) 42
7. Summary of Stress Test Results 54
8. Selected Bank Liquidity Indicators, September 2006..56

Figures
1. Cross-border Capital Flows 18
2. Stock Market Performance, 2001–07 22
3. Liquidity Indicators...25
4. Capital Adequacy Ratio Dispersion, 2001 vs. 2006 53
5 Oil Prices and Government Deposits, 1992–2006..57

Boxes

1. Main Recommendations 8
2. The Dubai International Financial Center....................................28
3. Public Offerings: Separating Policy Functions....................................50

Annex

I. Observance of Financial Sector Standards and Codes—Summary....................................31

Appendices

I. Basel Core Principles For Effective Banking Supervision-Factual Update....................................44
II. Initial Public Offerings (IPOs)....................................50
III. Stress Tests for the Banking System....................................52

GLOSSARY

ADSM	Abu Dhabi Securities Market
ADIA	Abu Dhabi Investment Authority
AML	Anti-Money Laundering
CBU	Central Bank of the United Arab Emirates
CCS	Check Clearing System
CFT	Combating the Financing of Terrorism
CPSIPS	Core Principles for Systemically Important Payment Systems
DCDF	Data Collection and Dissemination Framework
DFM	Dubai Financial Market
DFSA	Dubai Financial Services Authority
DGCX	Dubai Gold & Commodities Exchange
DIFC	Dubai International Financial Centre
DIFX	Dubai International Financial Exchange
DJA	Dubai Judicial Authority
EMTN	Euro Medium-Term Notes
ESCA	Emirates Securities and Commodities Authority
FATF	Financial Action Task Force
GATS	General Agreement on Trade in Services
GCC	Gulf Cooperation Council
IAIS	International Association of Insurance Supervisors
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards (formerly IAS)
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering
ISA	International Standards on Auditing
JSC	Joint Stock Company
LTV	Loan-To-Value
MENAFATF	Middle East & North Africa Financial Action Task Force
MOE	Ministry of Economy
MOFI	Ministry of Finance and Industry
MOU	Memorandum of Understanding
NPL	Non-Performing Loans
OTC	Over-the-Counter
ROSC	Report on Observance of Standards and Codes
RTGS	Real-Time Gross Settlement
SDDS	Special Data Dissemination Standard
SRO	Self-Regulatory Organization
WTO	World Trade Organization

EXECUTIVE SUMMARY—MAIN FINDINGS

The 2007 FSAP Update for the U.A.E. has taken place in the context of sustained buoyant growth and a positive outlook for the economy. Oil production has risen, while nonoil activity, including construction, trade and tourism have contributed to the strong growth performance, the highest among GCC countries. CPI inflation, however, is estimated to have increased to about 9.3 percent in 2006, and other signs of overheating have emerged, especially in the booming real estate and construction sectors. The main domestic risk to the ongoing expansion is the possibility of a sharp cyclical correction.

The banking sector, which dominates financial intermediation in the U.A.E., has enabled rapid credit expansion to households, corporations, and public and quasi-public enterprises. Major construction projects for hotels, apartments, commercial and entertainment properties and infrastructure dominate the landscape in Dubai and Abu Dhabi. Demand for credit is also driven by rapid population growth and interest rates in domestic currency that are negative in real terms.

The banking sector as a whole shows comfortable levels of capitalization and profits, having benefited from the rapid expansion of the economy and a steady decline in the ratio of NPLs to total loans. In this favorable environment, the authorities have begun to open up the banking sector to greater competition after a long moratorium on licensing new banks. Three foreign banks from GCC countries and two local Islamic banks were authorized in 2006, although they have yet to commence operations. In the context of the U.A.E.'s emergence as a regional and international player in financial markets, the team recommends that this liberalization be extended to non-GCC foreign banks as well.

Stress tests found that the banking system would be resilient to a variety of shocks. Banks have absorbed the 2006 decline in stock market prices with little effect on their balance sheets, and the rapid increase in overall lending has helped offset a drop in fees and commissions. However, some banks are vulnerable to a severe correction in the real estate market which would leave banks accounting for one quarter of total bank assets with their capital seriously impaired.

Although mortgages still account for a relatively small part of bank loan portfolios, the indirect exposure could be significant. In particular, the development of property markets in Abu Dhabi and Dubai has been very rapid, partly owing to new legislation that allows expatriates to own real estate. Thus, a turnaround in the real estate sector could affect the quality of consumer and other loans. Moreover, some financial institutions' lending standards also may be weakening as they compete for new business in mortgage lending. Therefore, staff recommends that the CBU issue prudential regulations to limit the risks associated with mortgages and other real estate lending by banks and finance companies.

The authorities have made good progress in strengthening financial sector supervision and regulation. ESCA has become fully operational as a regulator for the securities markets, and it issued a new Code of Corporate Governance in May 2007 that is expected to enhance the governance practices and disclosure of listed companies. Moreover, the responsibility for oversight of IPOs was transferred from the Ministry of Economy to ESCA in January 2007, and the pricing of IPOs is now being left to the private sector. The Central Bank of the U.A.E. (CBU) has introduced a comprehensive risk assessment approach and has been intensively preparing since late 2004 for the implementation of Basel II. Banks have been informed that they are expected to implement the standardized approach under Basel II by December 31, 2007. In addition, several key laws have been approved in the area of AML/CFT.

The Dubai International Financial Centre (DIFC) was established in 2004 as the first "Financial Free Zone" in the U.A.E. Best characterized as a future regional financial center rather than an offshore center, the DIFC is part of the Dubai Emirate's drive to diversify its economy by attracting international business, and providing opportunities to develop a wholesale banking center and an institutional investor base in the region. Actual banking activity in the center has been small, but the stock exchange, DIFX, has begun to compete successfully with other UAE and GCC stock markets. The physical and legal infrastructure of the DIFC is impressive, and the newly established Dubai Financial Services Authority (DFSA) is well staffed with experienced banking, insurance, and securities market supervisors.

Islamic banks have become an increasingly important part of the UAE system. However, the CBU lacks an instrument for providing short-term liquidity to Islamic banks, and its supervisory capacity in this area has also lagged. Therefore the mission recommends developing a market for government, or CBU-backed, shariah-compliant instruments that would provide Islamic banks with instruments for liquidity management; and further recommends that the CBU enhance its supervisory capacities in Islamic banking, notably by developing the necessary skills and a core set of specialized staff within the banking supervision department.

There remains a high degree of compliance with the Basel Core Principles for Banking Supervision (BCP) in the UAE. However, a number of weaknesses identified in 2001, as well as new challenges, need to be addressed. In particular, staff recommends expanding the enforcement powers of the CBU and introducing explicit legal protection of supervisors exercising their duties in good faith. Moreover, staff recommends that CBU implements MOUs with ESCA, DFSA, and the Insurance Commission for formal cooperation and exchange of supervisory information and oversight of financial institutions.

U.A.E. capital markets are underdeveloped relative to the banking sector, but gaining in depth and sophistication. To support the expansion and development of capital markets, staff recommends to open them more fully to foreign investors by removing restrictions on

stock ownership and board membership. In addition, the authorities should encourage public listing of large, quasi-public companies on the stock exchanges to help widen the market. Companies would need to improve corporate governance and reporting of their financial statements prior to listing. More generally, the legal framework for oversight of financial markets needs improvement including by the training of judiciary on overseeing financial issues and disputes.

Although growing rapidly, the U.A.E. insurance sector is not yet systemically important. To sustain the dynamism of this promising market segment and meet the challenge of foreign competition, domestic insurance companies will need to enhance their asset management capabilities, and insurance supervision will need to keep up with oversight of the management of risks. Staff recommends that the authorities establish a more independent insurance supervisory agency, possibly within the Central Bank.

Presently responsibility at the Federal level for securities market supervision in the U.A.E. is spread between the CBU, the Ministry of Economy (MOE), and ESCA, creating inefficiencies and overlap. (DFSA is the regulator for securities markets within the DIFC.) In line with the authorities' plans as contained in the draft ESCA legislation, the mission recommends that all of the responsibility for oversight of securities markets (other than in the DIFC) be transferred to ESCA. Greater urgency is needed to secure public and industry support for, and implementing, major updating of key financial sector legislation: The Banking Law, the Companies Law, the Insurance Law,[1] and the ESCA Law.

In summary, the authorities are in the midst of implementing an important agenda for strengthening the U.A.E. banking system and its prudential and regulatory oversight further; for improving the oversight of capital markets and the insurance sector; for opening the banking sector to greater competition; and for strengthening the legal framework for the financial sector.

These and other main FSAP Update recommendations are contained in Box 1.

[1] Following the mission, a new law on insurance was promulgated on February 28, 2007, which will come into force six months after its promulgation.

Box 1. Main Recommendations

Financial Sector Legislation	**Time Frame**
• Amend the ESCA legislation to strengthen supervision and transfer the responsibilities of the CBU and MOE for securities markets oversight to ESCA. Such legislation was in draft form as of May 2007.	Short Term
• Issue supporting regulations and implement the new Insurance Law, promulgated on February 28, 2007.	Short Term
• Update and implement major revisions to the Banking Law (1980); the Companies Law (1984).	Medium Term
• Enact an accounting law that would adopt international financial reporting standards (IFRS) for public companies and create a national accounting standard for other companies.	Medium Term
Banking Sector	
The Central Bank of the U.A.E. to:	
• Issue prudential measures to banks and finance companies to reduce the risks in their real estate lending.	Short Term
• Continue preparing for banks' implementation of Basel II, including by issuing guidelines and building supervisory capacity to assess the different approaches to measuring and monitoring risk.	Short Term
• Seek expanded enforcement powers for prompt corrective action.	Short Term
• Introduce explicit legal protection of bank supervisors exercising their official duties in good faith.	Short Term
• Enter into MOUs with ESCA, DFSA, and the Insurance Commission for formal cooperation and collaboration on oversight of financial institutions.	Short Term
• Consult more regularly with the banking profession ahead of regulatory changes and publish draft regulations for public comment.	Short Term/Continuous
• Introduce and enforce an aggregate limit for commercial bank lending intended for an IPO subscription.	Short Term
• Introduce more transparent procedures for the provision of emergency financial support to banks and consider introducing limited deposit insurance.	Medium Term

Liquidity Management and Capital Markets

• CBU to initiate a working group with relevant parties (Federal Government, Emirates, large state-owned enterprises) on the issuance of sovereign debt instruments (despite the fiscal surplus) to foster the development of the market for corporate bonds and short-term debt and form the basis for a yield curve.	Short Term
• CBU to develop a market for government—or CBU—backed, shari'a-compliant instruments that would provide deposit-taking Islamic financial institutions, with instruments for liquidity management.	Short Term
• CBU and ESCA to initiate a working group with other relevant public parties to encourage public listings of large, quasi-public companies to widen the market and help reduce market volatility.	Short Term
• Ministry of Justice to establish and fund an education program on financial issues for the training of the judiciary.	Medium Term
• Ministry of Economy to open capital markets to foreign investors by removing restrictions on stock ownership.	Medium Term

Short Term, within 12 months.

Medium Term, 1–3 years.

I. MACROECONOMIC AND FINANCIAL SECTOR DEVELOPMENTS

1. **At the time of the 2001 FSAP, the U.A.E. financial sector and its regulation and supervision were developing unevenly.** The financial sector was dominated by strong and well-supervised banks, which posed minimal near-term systemic risk. The insurance and securities industries were found vulnerable, less developed, and in need of strengthened supervision. The legal and judicial infrastructure for the financial system was also in need of reform. The results of the detailed assessments of banking supervision (BCP), transparency of monetary and financial policies, and payments systems were also mixed. There was a high degree of observance of the BCP, although several important changes in the banking law were recommended by the FSAP team. Transparency practices in conducting monetary policy and banking supervision were well observed, while some practices were found in need of improvement. The payment systems, although simple and far from state-of-the-art, were found to be well managed and systemic risks well contained.

2. **Since the 2001 FSAP, the authorities have made progress in implementing financial sector reforms.** In the banking sector, the Central Bank of the United Arab Emirates (CBU) is in the third year of its risk-based supervisory program, which involves supervisors examining a bank's credit, operational, and market risks, and how the bank implements policies to address them. The CBU has engaged, since late 2004, in intense preparations for the implementation of Basel II. In the area of AML/CFT, several key laws have been approved including Federal Law No. 4 of 2002 on anti-money laundering, Federal Law No. 1 of 2004, which addresses combating the financing of terrorism, and Federal Law No. 8 of 2004, which addresses AML/CFT in the DIFC. Also the authorities have established and staffed the Emirates Securities and Commodities Authority (ESCA), which has become fully operational in overseeing the securities markets. They have also established the legal and regulatory framework governing the DIFC and the institutions and markets it supervises. Finally, the payment system has been fully automated and computerized and an RTGS system for large value payments has been functioning smoothly since 2002.

A. Macroeconomic Developments

3. **An outward-oriented development strategy and prudent financial policies have resulted in impressive economic growth over the past few years and led to a large accumulation of external financial assets**. This success had been underpinned by Abu Dhabi's skillful management of the country's oil wealth and Dubai's strong push for economic diversification. Oil export revenues have pushed the current account surplus to about US$36 billion in 2006, equivalent to 22 percent of GDP, the fiscal surplus to almost 29 percent of GDP and gross official reserves to US$28 billion (Table 1).[2] The dirham was

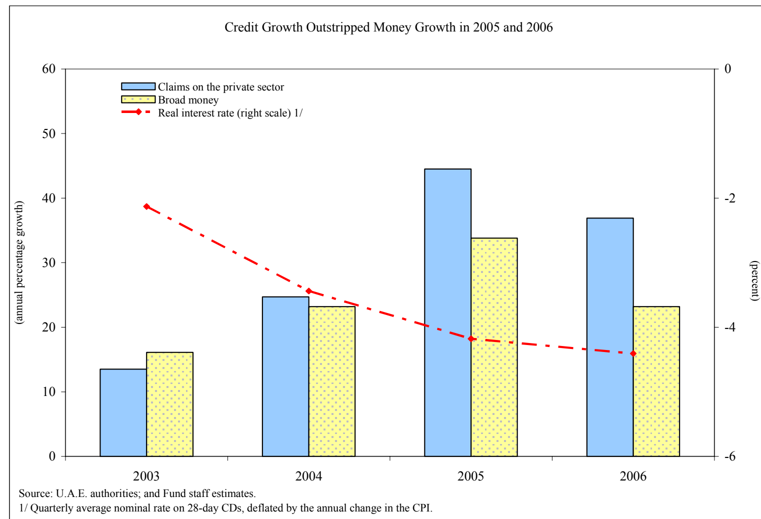
[2] In addition, the Abu Dhabi Investment Authority (ADIA) and other government agencies hold large foreign assets. ADIA does not disclose the amount of its assets, while occasional press reports point to wide ranging estimates.

officially pegged to the SDR from November 1980 to February 2002. Since then it has been pegged to the U.S. dollar.[3]

4. **Growth was brisk in 2006 and inflation accelerated**. Real GDP grew by 9.4 percent, the highest rate among GCC countries, and up from an 8.2 percent rate in 2005. Oil production rose and nonoil activities—including construction, trade, and tourism—contributed to the strong growth performance. However, in response, inflation accelerated to 9.3 percent in 2006,[4] with rapid increases in rents, and transportation and food prices.

B. Financial Sector Developments

5. **The monetary aggregates and credit to the private sector continued to grow at a double-digit pace in 2006.** Given the pegged exchange rate, domestic interest rates closely tracked the increase in U.S. dollar rates, but were negative in real terms given the acceleration in inflation. Partly as result, growth of credit to the private sector was 37 percent for the year as a whole, down from 44.5 percent in 2005. Money growth showed a similar pattern, decelerating to 23.2 percent in 2006 from 33.8 percent in 2005.



Source: U.A.E. authorities; and Fund staff estimates.
1/ Quarterly average nominal rate on 28-day CDs, deflated by the annual change in the CPI.

6. **After an extended run-up, stock markets in the U.A.E., as in the rest of the GCC generally, suffered a sharp correction starting in late 2005**. While markets and corporate earnings initially rose in line with oil prices, from 2005 onwards, price gains seemed to be spurred by unrealistic expectations of continued earnings growth and easy credit conditions. Volatility was exacerbated by investors' liquidation of existing positions to fund speculative subscriptions to initial public offerings (IPOs).

[3] In line with commitments agreed with other GCC countries toward the adoption of a common currency in 2010.

[4] Officially reported inflation, which is likely to be underestimated.

Table 1. Selected Macroeconomic Indicators , 2003-06

(Quota: SDR 611.7 million)
(Population-2006: 4.23 million)
(Per capita GDP-2006: $38,600)

	2003	2004	2005	2006
Oil and gas sector				
Total exports of oil and gas (in billions of U.S. dollars)	29.6	38.0	55.0	70.2
Average crude oil export price (in U.S. dollar per barrel)	28.1	36.3	53.6	63.5
Crude oil production (in millions of barrels per day)	2.26	2.33	2.38	2.57
	(Annual percent change; unless otherwise indicated)			
Output and prices				
Nominal GDP (in billions of AED)	325.3	381.1	488.4	599.7
Nominal GDP (in billions of U.S. dollars)	88.6	103.8	133.0	163.3
Real GDP (at factor cost)	11.9	9.7	8.2	9.4
Real oil and gas GDP	13.6	2.9	1.6	6.5
Real nonoil GDP	11.2	12.6	10.8	10.4
Domestic demand	12.1	16.8	17.7	18.9
CPI inflation (average)	3.2	5.0	6.2	9.3
	(In percent of GDP)			
Investment and saving				
Gross domestic investment	23.4	22.5	20.4	21.3
Gross national saving	31.9	32.5	38.7	43.3
Public	7.9	14.0	24.5	33.4
Private	24.1	18.4	14.2	9.9
	(In percent of GDP)			
Public finances				
Revenue	30.7	35.4	41.7	50.5
Oil	23.2	26.1	31.3	38.4
Nonoil	7.5	9.3	10.4	12.1
Expenditure and net lending	28.2	24.9	21.4	21.7
Current	22.8	21.4	17.2	17.1
Capital	4.9	3.3	3.9	4.5
Budget balance	2.6	10.5	20.3	28.8
Non-hydrocarbon balance 1/	-29.3	-22.6	-17.1	-15.3
Non-hydrocarbon balance (excluding investment income) 1/	-32.4	-27.9	-25.0	-24.3
	(Annual percent change; unless otherwise indicated)			
Monetary sector				
Net foreign assets	2.5	10.2	14.8	-6.7
Net domestic assets	59.4	49.8	62.2	54.9
Credit to private sector	13.5	24.7	44.5	36.9
Broad money	16.1	23.2	33.8	23.2
	(In billions of U.S. dollars; unless otherwise indicated)			
External sector				
Exports of goods and services	67.2	90.2	117.2	142.6
Oil and gas	29.6	38.0	55.0	70.2
Nonoil exports of goods	14.1	18.3	22.4	26.4
Imports of goods	-45.8	-63.4	-74.5	-86.1
Current account balance	7.6	10.3	24.3	35.9
Current account balance (in percent of GDP)	8.6	10.0	18.3	22.0
Gross official reserves	15.1	18.7	21.3	27.9
In months of next year imports of goods and services	2.3	2.4	2.3	2.8
Memorandum items:				
Nominal effective exchange rate (1990=100)	120.5	115.4	115.1	114.6
Real effective exchange rate (1990=100)	122.4	118.1	121.4	127.7
Average exchange rate (AED per U.S. dollar)	3.6725	3.6725	3.6725	3.6725

Sources: U.A.E. authorities; and Fund staff estimates.

1/ In percent of non-hydrocarbon GDP.

7. **In 2002, the Emirate of Dubai announced the creation of the Dubai International Financial Centre (DIFC) as a regional financial hub**. In June 2004, the authorities established the DIFC as a Federal Financial Free Zone, a 110-acre complex within Dubai, as well as the Dubai Financial Services Authority (DFSA), responsible for regulation and supervision of entities licensed to carry out banking, securities market and reinsurance activity in the DIFC.

8. **Although their exact size is not published, the external assets of the Abu Dhabi Investment Authority (ADIA), are believed to be substantially larger than CBU holdings**. ADIA is owned by the Government of Abu Dhabi, and is charged with managing the emirate's financial assets. While ADIA's investments are mainly outside the country, it is the largest shareholder in National Bank of Abu Dhabi (73 percent) and Abu Dhabi Commercial Bank (65 percent), the two largest banks, and also has shares in two smaller banks.

II. Financial System Institutions and Markets

A. Banking System

9. **The U.A.E. banking sector is well developed and gaining in sophistication**. The sector is the second largest among GCC countries after Saudi Arabia's, with assets equivalent to 130 percent of GDP in 2005. The banking sector is not highly concentrated, with the five largest banks accounting for about 44 percent of system assets. Although there are 25 foreign banks compared with 21 local banks, the share of foreign banks in total banking assets declined from 25 percent in 2001 to 22 percent in 2006 (Table 2). The number of banks has been quite stable for a number of years, because of a ban on new foreign entrants and the government's desire to avoid mergers. This policy appears to be changing with the announcement in April 2007 of the planned merger of two Dubai banks, which when completed would result in the largest bank in the U.A.E. (and among the largest in the GCC).

10. **Welcome steps are being taken to lift the moratorium (since 1981) on the licensing of new foreign banks, but further steps in this direction would be appropriate**. The CBU authorized three new GCC banks (from Qatar, Kuwait, and Saudi Arabia) in 2006, with the understanding that U.A.E. banks will be given reciprocal treatment. Foreign banks are present as branches and each can have a maximum of eight branches in the country.[5] Moreover, they are subject to a 20 percent tax on profits, which is not applied to domestic

[5] However, foreign banks have also been permitted to open 55 representative offices, and they have developed their presence by establishing ATMs and sales points.

Table 2. United Arab Emirates: Banking System Structure, 2002–06

	2002	2003	2004	2005	2006
Number of:					
Banks 1/	47	46	46	46	46
Private 1/	32	31	31	31	31
Local	6	6	6	6	6
Foreign	26	25	25	25	25
State-owned	15	15	15	15	15
Banks 2/					
Islamic	2	2	4	4	4
Non-Islamic	45	44	42	42	42
Branches of foreign banks	111	111	111	111	111
Concentration					
Banks 3/	12	12	13	11	11
			(in percent)		
Assets share					
Banks	100.0	100.0	100.0	100.0	100.0
Private commercial	35.2	35.9	36.1	35.8	36.4
Local	11.4	11.8	12.6	14.1	14.5
Foreign	23.8	24.1	23.5	21.8	21.9
State-owned	64.8	64.1	63.9	64.2	63.6
Banks	100.0	100.0	100.0	100.0	100.0
Islamic	8.8	9.0	9.9	11.9	12.6
Non-Islamic	91.2	91.0	90.1	88.1	87.4
Deposits share					
Banks	100.0	100.0	100.0	100.0	100.0
Private commercial	39.3	39.7	38.8	38.5	40.1
Local	13.0	13.6	13.8	14.9	15.6
Foreign	26.3	26.1	25.0	23.7	24.5
State-owned	60.7	60.3	61.2	61.5	59.9
Banks	100.0	100.0	100.0	100.0	100.0
Islamic	11.1	11.2	13.3	13.8	14.2
Non-Islamic	88.9	88.8	86.7	86.2	61.2

Source: Central Bank of the United Arab Emirates and Fund staff estimates.
1/ Dubai Bank PJSC was established in 2002.
2/ In 2003, Grindlays merged with Standard Chartered Bank.
3/ Number of institutions with 75 percent of total assets.

banks. Looking forward, it would be helpful to relax these constraints and open up the banking sector to non-GCC banks.[6]

11. **The bank ownership structure reflects the prevalent role of the state and of government related entities, complemented by an active private sector**. State owned institutions are run on a purely commercial basis and listed on local stock markets, and they account for 63 percent of total bank assets. Among the five largest domestic banks, only one has no government or ruling family ownership. Large family-owned conglomerates are also shareholders of banks.

12. **The Islamic banking sector is developing rapidly alongside the conventional system**. Islamic banks have increased their share of total bank assets, from 8.8 percent at end-2002 to 12.6 percent at end-2006 (14.2 percent of deposits). Dubai hosts the oldest Islamic bank, while two conventional banks became Islamic banks in 2004. There are also several Islamic finance companies, and a number of commercial banks have opened Islamic windows. As their activities are rapidly growing, Islamic banks are exposed to risks similar to those of conventional banks. However, Islamic banks do not benefit from the availability of hedging instruments, money market instruments, and funding facilities at longer maturities. Islamic banks also tend to be smaller and less diversified than conventional banks.

13. **The impact of the sharp correction in the equity market on the banking sector has been limited.** The strength of retail banking and credit growth, as well as diversification (including outside the U.A.E. for some of the largest banks), have mitigated the impact on bank profits of the sharp decline in equity markets and the drying up of IPO operations, on which the banks had made substantial fees and margin interest income in 2005.

14. **The sheer size of real estate development, notably in Dubai, raises concerns about the exposure of the financial sector but the exposure including to construction and mortgage loans is estimated conservatively at 15 percent of loans, and is concentrated in some institutions and geographical areas**. The loan portfolio of finance companies is also growing rapidly. In terms of residential property, several analysts have indicated that a large number of residential units is to come to the market during 2007–2008, and have expressed some concerns regarding speculative activity in the market. Anecdotal evidence suggests that excess demand for commercial property and retail space will continue over the medium term. It is notable that a significant number of projects are undertaken by large property developers owned by the state or ruling families.

---

[6] The UAE has been a member of the WTO since 1996 and a Trade Policy Review was conducted in 2006. In its specific commitments under the GATS, the UAE has, with limitations, made commitments on all banking and other financial services. The UAE has bound measures on all these services for cross-border supply and consumption abroad without limitation but measures affecting commercial presence remain unbound for new licenses to operate banking branches, and to expand activities of existing financial entities.

15. **Some financial institutions appear to be vulnerable to risks emerging in the small but rapidly developing mortgage market.** The U.A.E. property market is significantly less bank dependent than other regions, and bank mortgages are only 6.6 percent of bank loans (Table 3), since both locals and expatriates purchase property largely with other assets.[7] Mortgage loans were initially developed by Islamic finance companies, and are provided at floating rates. Most lenders operate with loan-to-value ratios (LTVs) of 70 to 80 percent, but with increased competition and the need to sell some units, a relaxation of lending standards has also been observed, with LTVs approaching 90 or 100 percent in some segments.[8] Demand for credit is also being fueled by high population growth and low interest rates—both in real terms and compared to rental yields—contributing in turn to speculative behavior and increasing asset prices.[9] Beyond traditional mortgages, household real estate exposure is deemed to be higher than the single stock of mortgage loans, as the final use of personal loans for business purposes is not well apprehended in the data.

16. **Staff recommends enhancing the prudential regulation and monitoring of banks' exposure to the real estate sector.** Although the CBU has undertaken to revise its classification of the exposure of banks to the real estate sector, significant uncertainties remain on the extent of real estate exposure.[10] More appropriate prudential oversight of banks' exposure to real estate is also under consideration by the CBU. The current CBU regulation limits a bank's real estate exposure to 20 percent of its customer deposits. However, this is not adequately linked to the expansion of the market and the evolving funding structure of commercial banks. Staff recommends continued improvements in the sectoral classification of loans, enhanced oversight of nonbank financial institutions involved in real estate financing, and the introduction of more adequate prudential regulations, such as maximum LTV and debt-to-income ratios.

[7] In the UAE, mortgage loans represent about a fifth of household debt—compared to three fourths of household debt in mature economies—and close to the share found in the most rapidly growing emerging markets.

[8] Some of the biggest nonbank financial institutions active in mortgages are directly owned by or closely related to the largest property developers. Their assets are small relative to banking system assets (total assets of the two largest institutions were AED 6.6 billion at end-2006) but growing rapidly. The CBU has proposed to introduce a framework for the creation of real estate finance subsidiaries by banks.

[9] Real estate prices have increased sharply, especially in Dubai, but comprehensive statistical information is lacking. Anecdotal evidence indicate that Dubai property prices have increased by about 200 percent in the period 2002–06.

[10] The CBU is aiming at creating a credit bureau at the federal level to enhance the credit information infrastructure.

Table 3.United Arab Emirates: Composition of Loans, 2002–06[1/]

	2002	2003	2004	2005	2006
Agriculture	0.7	0.4	0.3	0.3	0.3
Mining and quarrying	1.3	1.1	1.2	1.1	1.2
Manufacturing	6.0	5.6	5.5	5.0	5.1
Electricity, gas, and water	1.9	5.6	3.7	3.0	2.3
Construction (excluding mortgages)	16.3	8.3	8.5	6.9	4.8
Trade	22.3	29.0	28.1	24.1	19.6
Transportation, storage, and communication	3.1	3.2	2.8	3.0	4.4
Financial institutions (excluding banks) 2/	1.1	1.2	1.4	2.1	3.9
Government	9.2	10.0	11.8	11.1	10.1
Services	6.6	6.4	7.3	9.0	11.8
Real estate mortgage loans	7.2	5.3	4.4	5.0	6.6
Personal loans					
Business	12.5	12.2	14.8	19.9	18.6
Consumption	10.7	10.9	9.3	7.7	6.6
Others	0.9	0.8	1.0	1.8	5.0
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: Central Bank of the United Arab Emirates.
1/ Excludes overseas branches.
2/ Includes Abu Dhabi Investment Council (ADIC) and Abu Dhabi Investment Authority (ADIA).

Regional and international financial intermediation

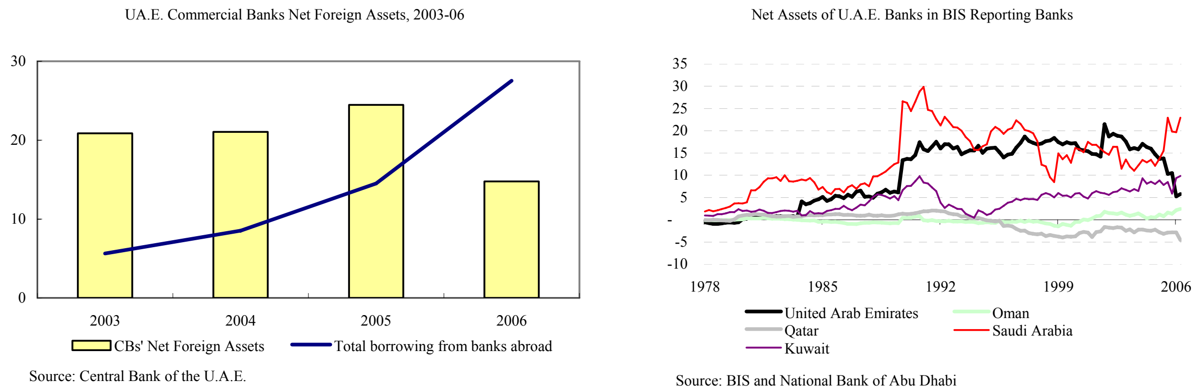
17. **Over the past three years, U.A.E. banks have been steadily increasing their borrowing from abroad (Figure 1).** In addition to bank loans, several U.A.E. banks have begun to issue Euro Medium-Term Notes (EMTNs). Since the domestic banks' favorable ratings have allowed them to borrow at relatively low rates, EMTNs have generally been issued with five-year tenor and at an interest rate in the range of 30 to 50 basis points over LIBOR. Although potentially increasing their exposure to exchange rate risk, these instruments have allowed banks to better match the duration of their liabilities and assets, thereby reducing their sensitivity to interest rate risk.

B. Vulnerabilities and Stress Test Results

Financial soundness indicators

18. **The banking sector's balance sheet has strengthened considerably.** The regulatory capital-assets ratio (CAR) rose to 17.4 percent at end-2005 but growth of risk-weighted assets led to a slight decline of the CAR to 16.6 percent at end-2006 (Table 4). The ratio of NPLs to total loans fell steadily from 12.5 percent at end-2004 to 6.3 percent at end-2006; the stock of gross NPLs grew modestly.

Figure 1. United Arab Emirates: Cross-border Capital Flows
(In billions of U.S. dollars)



19. **The banking sector remains profitable.** After exceptional gains in brokerage, fee, and trading income in 2005, and with some institutions experiencing a slowdown in profit growth, returns on asset and equity declined somewhat in 2006, while still remaining at comfortable levels. Continued growth in retail banking activities have contributed to alleviate the effects of the slowdown in noninterest income while margins have narrowed in some market segments. However, personnel expenses are on the rise because of the increased cost of living and the need to attract highly qualified professionals.

Stress test results

20. **Stress tests of all 46 U.A.E. commercial banks were conducted based on data for end-September 2006.**[11] The analysis focused on credit risk, with particular attention to developments in the real estate market. Liquidity, exchange and interest rate risks were also assessed. Shocks to oil prices were tested indirectly through their effects on government deposits (oil price effects on asset quality are difficult to estimate because banks have little direct credit exposure to the oil and gas sector).

---

[11] Appendix I contains a more complete description of the stress test methodology and results, including results for subgroupings of large, foreign, domestic, and Islamic banks.

Table 4. United Arab Emirates: Financial Soundness Indicators, 2003–06
(In percent, unless otherwise indicated)

	2003	2004	2005	2006
Core indicators				
Deposit-taking institutions				
Total regulatory capital to risk-weighted assets 1/	18.6	16.9	17.4	16.6
Regulatory Tier I capital to risk-weighted assets	18.2	16.3	16.9	15.0
Nonperforming loans net of provisions to capital	7.7	3.5	1.8	0.6
Nonperforming loans to total gross loans	14.3	12.5	8.3	6.3
Return on assets	2.3	2.1	2.7	2.3
Return on equity	16.4	18.6	22.5	18.0
Interest margin to gross income	59.5	64.6	49.3	29.3
Noninterest expenses to gross income	43.6	40.3	26.9	20.9
Liquid assets to total assets	22.7	23.2	26.9	16.4
Encouraged indicators				
Deposit-taking institutions				
Capital to assets	11.4	11.1	11.9	12.6
Personnel expenses to noninterest expenses	29.5	38.6	41.8	54.6
Customer deposits to total (non-interbank) loans	125.0	113.6	112.4	96.5
Households				
Household debt to GDP	6.6	6.1	6.9	5.2
Real estate loans to total loans	5.4	4.7	5.0	5.9
Other indicators				
Loan loss reserves/non-performing loans	88.5	94.6	95.7	98.2
Deposits as percent of M2	92.7	93.2	94.1	94.1
Commercial banks loans to private sector as percent of total deposits	69.9	69.5	69.1	66.6
Number of commercial banks (end-of-period)	46	46	46	46
Number of banks with C.A.R. above 10 percent	46	46	46	46
Spread between 3-month interest rate on local currency deposits and loans (percentage points)	5.1	6.2	6.2	5.1
Maximum spread between 3-month local currency interbank rates for different banks (percentage points)	6.2	6.2	6.2	6.1
Foreign currency deposits as percent of M2	24.4	25.8	22.8	24.1
Foreign currency denominated lending/total lending	23.9	20.7	19.7	22.8
Earning per employee (in millions of AED)	0.40	0.50	0.70	0.71

Source: Central Bank of the United Arab Emirates.
1/ BIS Tier I plus Tier II Capital (net of deductions).

21. **Stress tests suggest that the banking system as a whole would be generally resilient to an across the board and significant deterioration of asset quality**. In a situation of a doubling of the level of substandard, doubtful, and loss loans the overall capital adequacy ratio would drop from 16.3 percent to 11.5 percent (Appendix III, Table 7). The banking system would also weather relatively well a shock consisting of a deterioration of loan quality arising from external factors (for example uncertainties created by turmoil in a neighboring country) affecting the financing of trade and transportation in the U.A.E. Exposures to interest rate and foreign exchange risks also appear modest.

22. **The banking system as a whole also appears well positioned to cope with a severe decline in the real estate market, but a few banks would see their capital seriously depleted.** A strong shock affecting corporate borrowers and contractors as well as mortgage loans would still leave the capital adequacy ratio of the banking system at 14.6 percent. The same real estate shock with a deterioration of personal loans quality would drive the capital adequacy ratio down to 11.6 percent. In this latter scenario, five locally incorporated banks, accounting for one-quarter of bank assets, would see their capital adequacy ratios reduced to less than the regulatory minimum 10 percent, with two of them becoming insolvent.

23. **U.A.E. banks are generally quite liquid, with significant assets held abroad, and therefore resilient to liquidity shocks.** In the face of a 16 percent withdrawal of customer deposits (the decline experienced in the U.A.E. during the 1990 Gulf War), the liquidity ratio would decline from 50 percent to just over 30 percent, with a disproportionate effect on medium-size and Islamic banks.[12] A 35 percent decline in government deposits (as occurred when oil prices fell during 1995–96) would have the greatest effect on publicly owned banks without threatening the liquidity position of the system. To test sensitivity to the increasing reliance of commercial banks on external funding, a shock on foreign interbank funding was also simulated (a 30-percent decline). The results confirmed the less favorable liquidity buffer of small and medium-sized banks and Islamic banks. Although the vulnerability to exchange rate risk appears well contained, significant assets held abroad and large net foreign exchange positions in U.S. dollars still expose banks to the effects of an appreciation of the domestic currency (Appendix III).

C. Capital Markets

Market structure

24. **The U.A.E. capital markets are served by a number of exchanges varying in size and focus.** Equity and bond exchanges comprise the Abu Dhabi Securities Market

[12] The ratio of liquid assets to liquid liabilities, both with maturities of less than 3 months.

(ADSM), the Dubai Financial Market (DFM), and the new Dubai International Financial Exchange (DIFX). Financial derivatives are traded on the Dubai Gold and Commodities Exchange (DCGX) established in November 2005. Moreover, a new energy and commodities futures exchange, the Dubai Mercantile Exchange (DME), will soon be launched, following a joint venture with the New York Mercantile Exchange (NYMEX).

25. **Despite relatively high trading volumes, U.A.E. equity markets lack depth and diversification.** The country's exchange markets have only recently been established, with ADSM and DFM starting operations in 2000 and DIFX in 2004. The number of exchange-listed companies (110), is small relative to an overall market capitalization of about US$170 billion. Accordingly, the exchanges are generally dominated by a few leading stocks.

26. **The market for debt instruments is also thin and there are no debt securities listed by the federal government.** The value of fixed-income securities traded on ADSM and DFM is less than 2 percent of the exchanges' overall market capitalization. The market mainly consists of a few listings in traditional corporate bonds and a sizeable amount of sukuk (shari'a compliant) bonds, with sukuk listings on DIFX exceeding US$7 billion in market value. Issuing government securities, notwithstanding the fiscal surplus, would help catalyze the development of money and interbank markets, and encourage the formation of a yield curve for fixed income products, thus fostering the growth of a market for corporate bonds. Revisions to the Companies Law are also needed to help enable development of corporate debt instruments.

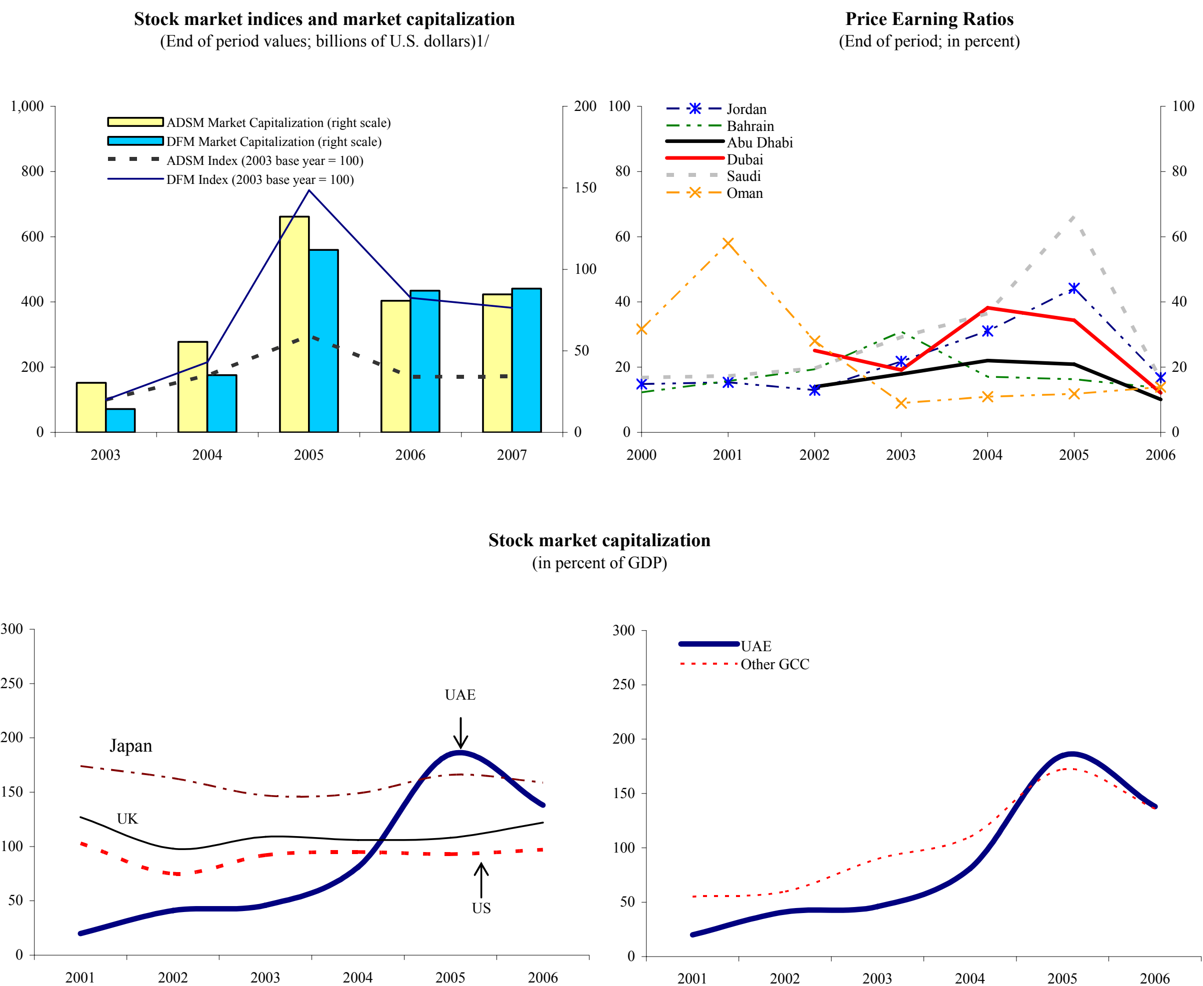
Performance of equity markets

27. **Following the 2003-05 bull market, U.A.E. equity markets experienced sharp corrections**. As of December 2006, the ADSM and DFM market indices had dropped by 52 percent and 68 percent, respectively, from their peaks in 2005 (Figure 2). Speculative demand, abundant regional liquidity and narrow market leadership were among the factors that contributed to the surge in stock prices. The concentration of trading in a few stocks impeded portfolio diversification, while weak participation by non-GCC investors and the absence of international institutional investors also contributed to greater market volatility. Speculative trading, mainly by retail investors contributed to stock prices advancing much faster than earnings.

28. **More stringent disclosure requirements and corporate governance laws would foster greater international confidence in U.A.E. capital markets and increase the appetite of large institutional players for local securities**. Moreover, by encouraging listings of large, quasi-public enterprises, the authorities could increase the depth of the market and stimulate the development of mutual funds. ESCA's recent issuance (May 2, 2007) of a code of corporate governance for listed companies is a welcome development in this regard.

29. **The correction in the stock market was also exacerbated by the mispricing of Initial Public Offerings (IPOs).** IPOs are priced through a process validated by the Ministry of Economy (MOE) that sets a nominal value based on an assessment of a firm's acceptable market value. During the boom, some of these IPOs were undervalued and the rush to subscribe to IPOs often encouraged investors to unwind existing positions in established companies, thereby increasing market volatility. Policy issues in determining the fair value and other aspects of arranging and pricing IPOs are discussed in Box 3, Appendix 2. By cabinet decree, responsibility for oversight of IPOs was transferred from the MOE to ESCA as of January 7, 2007. However, the Companies Law will need to be revised to validate the transfer, given that the present law gives this role to the MOE.

Figure 2. United Arab Emirates: Stock Market Performance, 2001–07[1/]



Sources: Arab Monetary Fund; DFM; KIPCO (Kuwait Projects Company) Asset Management Company (KAMCO); Global Investment House; and IMF staff estimates.
1/ 2007 values are as of March 21 (for indices) and February 28 (for market capitalization).

30. **The U.A.E. Companies Law and securities regulation unduly limits foreign ownership of companies.** Notably, foreigners may not own more than 49 percent of the voting shares of a company, and the Chairman of the Board and the majority of the Board of Directors must be U.A.E. nationals. If a shareholder wishes to increase its holdings to as much as twenty percent of a company's shares, it must notify the exchange where the shares are listed. The exchange can prevent such an acquisition on grounds that it would be prejudicial to the national economy. Moreover, many companies restrict ownership to U.A.E. nationals. Relaxation and eventual removal of these restrictions is recommended.

31. **Shareholder protection as governed by the Companies Law is in need of improvement.** Although ESCA regulations require public companies to file quarterly and annual financial statements, the UAE does not have an accounting law that establishes mandatory accounting standards for public companies. (ADSM does require that companies listed on its exchange use IFRS.) The Companies Law provides for basic shareholder protection and sanctions for officers and directors for misuse of powers, violations of laws, and fraud. However, some shareholder protection provisions are missing, such as a prohibition against related-party transactions, except under full disclosure and approval by the shareholders.

D. The Insurance Industry

32. **The U.A.E insurance sector is small and not yet systemically important.** Total premium revenue for insurance was about US$2.2 billion in 2005 (about 1.7 percent of GDP), below the average in emerging market economies (3.5 percent of GDP), and significantly below that of OECD countries (9 percent of GDP).

33. **There is considerable potential for further development and growth in the insurance industry.** The demand for health insurance is expected to grow following a recent law mandating health coverage for expatriate workers. Moreover, the rapidly growing private sector and the opening of real estate markets are expected to increase demand for property insurance. Rising income levels and a growing population of expatriates should also widen the market for life insurance policies with a savings component. To capture potential growth in this promising market segment and withstand foreign competition, insurance companies would need to enhance their asset management and risk underwriting capacities, and raise their level of risk retention.

34. **Since enactment of the 1984 Insurance Law, insurance supervision has been carried out on a limited basis by a small section in the Ministry of Economy**. Only about fifteen professional staff are assigned to supervise insurance companies and with limited personnel and other resources, supervision has focused on regulation and compliance rather than on risk.

35. **A new insurance law was promulgated on February 28, 2007 (a month after the FSAP Update mission) and is scheduled to take effect August 31, 2007**. The law

establishes a more independent Insurance Commission, albeit remaining under the Minister of Economy as Chairman of the Board of Directors. Staff recommends prompt development and issuance of the regulations needed to implement the law and recruitment of additional specialized supervisory personnel. It also recommends to consider placing the responsibility for insurance supervision under the central bank, as is presently under consideration. Over time, it would be important to grant greater autonomy to the Insurance Commission and its Director.

III. Need for Coordination and Collaboration of Financial Sector Supervisors

36. **Recognizing the increasingly global nature of financial services and transactions, U.A.E. regulatory authorities cooperate and share information with international regulators**. The CBU and ESCA have in place a number of MOUs with home country supervisors. Moreover, ESCA is an original signator of a regional organization of securities market regulators, which will work toward harmonization of regulation in line with best practice. The DFSA has also developed a series of memoranda of understanding with key home country regulatory authorities and has actively coordinated with them on licensing, supervisory, and enforcement matters.

37. **There is a need for greater information sharing and cooperation among regulatory authorities within the U.A.E**. ESCA and the DFSA have a formal MOU under which they have exchanged information on enforcement matters. There are, however, no formal MOUs between CBU and ESCA, the Insurance Commission, or the DFSA. The lack of such agreements has not prevented occasional exchange of information on an operational and staff level. However, to ensure more systematic coordination, information sharing, and consolidated supervision of financial conglomerates, formal arrangements such as MOUs should be put in place.

IV. Liquidity Management, Financial Safety Nets, and the Payments System

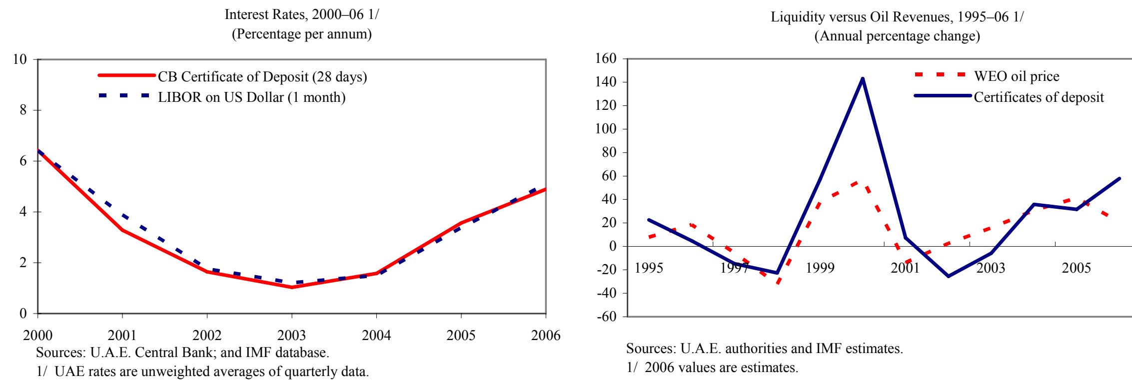
A. Liquidity Management and Financial Safety Nets

38. **Banks are required to maintain (in dirham) reserves equivalent to 14 percent of demand deposits and 1 percent of time deposits, regardless of the currency of denomination**.[13] Deposits with a maturity of more than one week are considered time deposits. The average reserve requirement at end-December 2006 was about 7.2 percent. At the same time, aggregate commercial bank reserves were equivalent to 8.1 percent of M2 and 4 percent of total bank assets.

[13] There has been no change in reserve requirements since 2001.

39. **Conventional banks with excess liquidity may invest in Certificates of Deposit (CDs) issued by the CBU.** These certificates have a maturity of one week to 18 months and a rate of return that closely tracks LIBOR. The CBU issues CDs on demand and sets the rates based on prevailing market conditions. As of December 2006, the aggregate value of outstanding CDs was about US$8.8 billion, or about 4 percent of total bank assets. In the absence of sovereign debt securities, CDs are the only available government-backed financial instruments. Despite the CBU's efforts however, a secondary market in CDs has not materialized. The volume of CDs held by U.A.E. banks appears to be highly correlated with excess liquidity derived from the oil sector (Figure 3). However, as an interest bearing instrument, CDs are not available for Islamic banks to manage their liquidity. Staff recommends that CBU develop a market for government or CBU backed shariah compliant instruments.

Figure 3. United Arab Emirates: Liquidity Indicators



40. **A financial institution facing temporary liquidity problems can access an overdraft facility at the CBU.** The borrowing institution pays a penalty proportional to the size and duration of the overdraft. To determine the fee, the overdraft is first deducted from the reserves held by the institution at the CBU. An interest fee—equivalent to the three-month inter-bank rate plus 5 percentage points—is levied on any shortage in the institution's minimum reserve requirements over a six-day moving average. Use of overdraft facilities has been infrequent in the past year.

41. **A bank facing a liquidity shortage can turn to the CBU for help as a lender of last resort (LOLR).** The CBU may provide the troubled bank with a special overdraft with maturity of one week to six months. The terms of an LOLR overdraft— maturity, interest rate, and collateralization—are decided on a case-by-case basis. The collateral criteria are fixed by the CBU Board based on its evaluation of the borrowing institution's circumstances. The interest rate is also determined by the CBU Board and is usually set around market rates. Special LOLR overdrafts are rarely accessed and none were outstanding in January 2007.

42. **Over the past 25 years, the U.A.E. has sustained a number of shocks to its financial system, mainly stemming from bank failures**. The reasons for failures have included poor lending practices and fraud, as well as the effects of geopolitical events. In all cases however, the government has intervened to limit the systemic fall-out and to preserve the soundness of the banking system. Remedies have included forced consolidations, direct cash injections, and extension of overdraft facilities.

43. **The U.A.E. does not have an explicit deposit insurance system.** The authorities have not been in favor of imposing such a system on moral hazard grounds. However, the government's interventions on behalf of depositors and creditors during past bank failures has limited their systemic effects. Staff recommends that CBU make its bank intervention strategy and emergency financial support more transparent. Within this strategy, a limited deposit insurance arrangement to be funded by premia from banks should be considered.

B. Payment Systems

44. **Under the Banking Law, the CBU operates and oversees the payment system.** Chapter Two, Article (5), paragraph (4) specifies that the CBU shall "…organize and promote banking and supervise over the effectiveness of the banking system according to the provisions of this Law." Moreover, Article (18), paragraph (9) states that the Board of Directors of the CBU shall "establish clearing houses…." These two provisions, permit the CBU to run a fully centralized accounting system, through which all interbank payments are settled.

45. **Licensed commercial bank are required to maintain three separate accounts with the CBU.** A dirham current account is used for settling the bank's financial transactions, while two additional accounts, one in dirham and another in U.S. dollars, are used to hold the bank's reserves at the CBU. Recently, banks and moneychangers have also been allowed to open euro and U.S. dollar current accounts, benefiting from the new Fund Transfer System's ability to handle settlements in multiple currencies and to utilize cash deposits and withdrawals for local trade settlements.

46. **In 2001, the CBU replaced its older Testkey Telex Transfer System (TTTS) with the Fund Transfer System (FTS)**. FTS is a Real-Time Gross Settlement (RTGS) system based on a secure intranet network. It allows member banks to view their statements in real time. All U.A.E banks have been part of the new system since 2002. The labor intensive Check Clearing System (CCS) is scheduled for a comprehensive upgrade during 2007. The authorities are aiming to introduce a new Image CCS that will allow for the settlement of checking transactions within 2 to 4 hours, improving significantly on the current paper-based system that clears in T+1. A SWITCH system continues to be used to settle ATM transactions. A project is currently under way to create a GCC-wide SWITCH network that would facilitate transactions between member countries.

C. AML/CFT

47. **An anti-money laundering and combating the financing of terrorism (AML/CFT) assessment was initiated by the Fund's Legal Department during a mission to the U.A.E. in March 2007**. A draft mutual evaluation report is expected to be considered for adoption by the MENAFATF and FATF Plenaries in November 2007 and February 2008, respectively. Once the report is adopted, a ROSC will be circulated to the Board for information.

48. **Preliminary findings of the assessment suggest that the basic framework is in place, but that the legal framework for combating money laundering and terrorist financing needs further strengthening in some areas**. The AML law needs to be amended to bring it more closely in line with the 2003 FATF Recommendations by providing more powers for the Financial Intelligence Unit (FIU) and expanding the number of predicate offences for money laundering. The FIU should also increase its staff to conduct the analysis of suspicious transaction reports within the FIU rather than relying on the resources of the CBU Supervision Department. The regulatory structure for AML/CFT compliance is varied, with the CBU and the DFSA having significantly more developed procedures and resources than other regulatory agencies. Overall the legal framework for the financial sector preventive measures needs strengthening. Coordination at the national level could be improved, particularly as the AML/CFT system expands to other parts of the financial and nonfinancial sectors.

V. The Dubai International Financial Center (DIFC)

49. **The level of banking activity in the DIFC is small compared with the domestic market.** As of January 2007, seven banks were authorized to accept deposits or provide credit in the DIFC, and three of them were operational. In addition, 20 firms regulated as banks in other jurisdictions are authorized to provide investment banking services. As of December 2006, DIFC banks held total assets of around $518 million, a tiny fraction of the US$200 billion in total U.A.E. banking assets. U.A.E. banks establishing a presence the DIFC are required to obtain approval from the Central Bank (the structure of the DIFC is presented in Box 2).

50. **DIFX has succeeded in attracting a sizeable number of listings and competes effectively with other exchanges in the U.A.E.** As of January 2007, the total market capitalization of DIFX was about US$21 billion, 45 percent of which originated from bond instruments (including sukuk). Seven equity securities are listed on the exchange (3 of which are ordinary shares) with a market capitalization of about US$6.7 billion.

Box 2. The Dubai International Financial Center

The Dubai International Financial Centre (DIFC) was established in 2004 as the first Federal Financial Free Zone in the U.A.E. Activities permitted within the center include banking services, capital markets, asset management, reinsurance, Islamic finance, ancillary services, and business processing operations. Under the Free Zone legislation, financial institutions licensed to operate in a free zone may conduct business with residents and nonresidents but when conducting "financial banking activities," they are prohibited from transacting in the U.A.E. Dirham and from taking deposits (regardless of currency of denomination). DIFC is constituted of three independent authorities under the Office of the President of the DIFC:

- Dubai International Financial Centre Authority (DIFCA) is primarily responsible for setting the center's overall development strategy. It also acts as the registrar of securities and companies. Its subsidiary, DIFC Investments is home to the Dubai International Financial Exchange (DIFX) and Hawkamah, an institute dedicated to the promotion of corporate governance in the region.

- Dubai Financial Services Authority (DFSA) is the financial services regulatory body of the DIFC. As an independent regulator, its activities include: (i) rule-making and policy development; (ii) licensing and registration; (iii) supervision of DIFC participants; and (iv) enforcement of legislation.

- Dubai Judicial Authority (DJA) is an independent judicial system that deals with civil and commercial matters arising from or within the DIFC. The legal system, including property and contract law in the DIFC is based on common law.

The mission statement of the DIFC is to be "a catalyst for regional economic growth, development and diversification." In pursuit of this goal, the founders have attracted an international team of highly qualified professionals and established rules and regulations based on industry best-practices. Moreover, the facilities have been equipped with world-class infrastructure and state-of-the-art technology.

The establishment of DIFC has been well received at regional and international levels. As of end-January 2007 it had attracted more than 330 companies that have benefited from 0 percent taxation and no restrictions on the level of foreign ownership. Close to half of the institutions registered by DIFC are financial and ancillary service companies. Twenty-three securities have been listed on DIFX, which has been growing steadily and specializing in Islamic finance.

51. **There are no generally accepted criteria that clearly differentiate between onshore and offshore financial centers.** A Fund study argued that "offshore finance is, at its simplest, the provision of financial services by banks and other agents to nonresidents. These services include the borrowing of money from nonresidents and lending to nonresidents."[14] A more detailed definition focuses on attributes that are commonly associated with OFCs including:

- Offshore activities at the center, on both sides of the balance sheet, constitute the bulk of financial services offered.
- The aggregate size of external assets and liabilities held at the center is out of proportion to financial intermediation activities designed to service the domestic economy.
- Financial services firms established at the center benefit from: (i) lower taxation; (ii) moderate or light financial regulation; and (iii) banking secrecy and anonymity.

52. **Based on this benchmark, the DIFC would not be characterized as an offshore center.** First, companies established within the DIFC are legally able to lend to the domestic market in foreign currency. Second, residents still account for 44 percent of the small amount of bank assets at the DIFC at end-2006 and the bulk of individual loans. Third, the DIFC does not offer financial service firms any benefits with regard to less demanding supervisory oversight or bank secrecy laws. In fact, the legal framework governing commercial activity in the Center is well developed, with highly-skilled supervisors and a strong monitoring system in place.[15] (Foreign banks operating in the DIFC do receive a tax advantage because they are not subject to the 20 percent profits tax applied to foreign banks operating elsewhere in the U.A.E.).

53. **Staff notes that while Federal Law No. 8 provides that "Competent authorities in the Federal Government may conduct inspections of a Financial Free Zone to ascertain its compliance with the provisions of this Law…**" (for example the restriction on conducting banking business in dirham), the Law is silent on identifying or defining who are the "Competent Authorities." Staff recommends clarifying who are the "Competent Authorities" and the nature of their remit to help avoid regulatory overlap or gaps.

54. **The DIFC might best be described as a future regional financial center.** The Center has well defined regulatory and supervisory systems that are on par with other regional financial centers (such as Singapore and Hong Kong). It is supported by a thriving private sector and a growing economy that has established itself as a regional hub for

---

[14] IMF, "Offshore Financial Centers—Background Paper," June 23, 2000 (SM/00/136), p. 3.

[15] The IOSCO assessment for DIFC securities market supervision shows a higher degree of observance of the principles than does the assessment for the U.A.E.

international and regional companies. Ultimately, financial intermediation at the DIFC will probably be a mix of business with domestic and regional investors

55. **The establishment of the DIFC contributes to competition in U.A.E. financial markets.** With the concept of best-practices integral to its business model, the Center is likely to have positive spill-over effects on the rest of the U.A.E. financial sector. It may be part of the impetus for a new U.A.E. securities law currently in the making. It may also have contributed to ESCA's initiatives for greater transparency and better corporate governance among U.A.E. companies. The DIFC's Hawkamah Corporate Governance Institute is promoting better corporate governance standards and practices across the region. Ultimately, this should contribute to greater efficiency and competitiveness among established regional financial exchanges and institutions.

ANNEX I. OBSERVANCE OF FINANCIAL SECTOR STANDARDS AND CODES—SUMMARY ASSESSMENTS

This annex contains summary assessments of implementation of the IOSCO Objectives and Principles for Securities Regulation. The regulatory and supervisory regime for the Dubai International Financial Centre (DIFC) is entirely separate and independent from that for the U.A.E. as a whole. For this reason, separate assessments were carried out for the regulation of securities market activity in the U.A.E. and for the DIFC, respectively**.**

Financial Sector ROSC Module

Summary Assessment of Implementation of the IOSCO Objectives and Principles of Securities Regulation and Transparency of Securities Regulation

United Arab Emirates

General

56. **This assessment was conducted by Richard Symonds, a Senior Counsel in the Legal Department of the World Bank in January 2007 as part of an IMF/World Bank Financial Stability Assessment Program (FSAP) update review of the UAE financial system**. The organizations that were part of the assessment were the Central Bank of the Emirates (CBU), the Emirates Securities and Commodities Authority (ESCA), the Abu Dhabi Securities Market (ADSM), the Dubai Financial Market (DFM), the Dubai Gold & Commodity Exchange (DGCX) and the Ministry of Economy (MOE).

Information and methodology used for assessment

57. **This assessment was based on the IOSCO Methodology for Assessment of the IOSCO Principles (2003).** The methodology was the result of a collaborative effort of over one year by IOSCO members in developing a standardized, detailed methodology which could be used in the wide range of circumstances that are found among IOSCO members.

58. **The main information sources used in making this assessment were the comprehensive and valuable self-assessment conducted by ESCA in December 2006, the websites of the regulatory and market entities named above, the information provided by them and other persons and entities interviewed during the course of this assessment, and the relevant statutes, as amended, and regulations thereunder which govern the capital markets in UAE**:

- UAE Federal Law No. 4 of 2000 concerning the Emirates Securities and Commodities Authority and Market (ESCA Law);
- UAE Federal Law No. 8 of 1984 Regarding Commercial Companies;

- UAE Federal Law No. 22 of 1995 Regarding Organization of the Auditing Profession;
- Federal Law No. 18 of 1993 the Commercial Code;
- Federal Law No. 5 of 1985, the Civil Code;
- The Union Law No. 10 of 1980 concerning the Central Bank; and
- CBU Board of Directors Resolution No. 164/8/94 Regarding the Regulation for Investment Companies and Banking, Financial and Investment Consultation Establishments or Companies.

59. **The assessor met with market institutions, including ESCA, the ADSM, DFM, DGCX, CBU, MOE, and Ministry of Justice.** In addition, market participants and professional organizations involved in the securities markets were also consulted, such as the National Bank of Abu Dhabi, Price Waterhouse Coopers, Al Tamimi & Associates law firm, and Emirates International Law Firm.

60. **The assessor received full cooperation from the institutional and private participants in the UAE capital market**.

Institutional and macroprudential setting market structure

61. **The securities markets in the U.A.E. consist of the Dubai Financial Market (DFM), the Abu Dhabi Securities Market (ADSM), and the Dubai Gold & Commodities Exchange (DGCX), all regulated by the Emirates Securities and Commodities Authority (ESCA)**. There are 43 companies with shares listed on the DFM, largely concentrated in property holdings, and five listings of bonds or sukkuk (Islamic compliant) bonds. Only about one-third of these listings trade frequently. The DFM recently announced its status as an "Islamic financial market," with operations that are sharia-compliant in parallel with other products.[16] In addition, it went partially public by floating twenty per cent of its shares. Sixty-one companies are listed on the ADSM, also with a low level of trading. The DGCX has only one active derivatives contract being traded—gold futures. Investment advisers, independent brokers and banks also participate in the securities markets. Asset management products, such as mutual funds, are growing in popularity.

Description of regulatory structure and practices

62. **The regulatory body of the securities markets is ESCA. It has the responsibility to authorize and supervise the exchanges in UAE**. It licenses brokers, establishes the requirements for disclosure by issuers on the exchange, oversees the surveillance of the exchanges, engages in cooperative regulation and enforcement, conducts

[16] An IPO for DFM preparatory to listing its shares for trading was issued in November 2006 for Dh 1.6 billion (US$435 million). The IPO was vastly oversubscribed.

investigations of violations, brings administrative enforcement actions and refers matters to criminal authorities as necessary. Although not officially designated as self-regulatory organizations (SROs), the ADSM and DFM act as *de facto* SROs and authorize brokers to trade on the exchange, monitor the trading of securities and material event notifications to the market and bring regulatory and disciplinary acts as needed to maintain the integrity of the markets. The DGCX also acts as an SRO in the operation and regulation of the commodities exchange.

63. **By cabinet decree, the responsibility for regulating public issues, both for initial public offerings (IPOs) and secondary offerings, was transferred from MOE to ESCA with effect from January 7, 2007**. However, the Companies Law will need to be revised to validate the transfer, given that the present law gives this role to the MOE. After the public offering is completed, ESCA and the relevant exchange admit the company to listing on the exchange.

64. **The responsibility for the regulation of investment funds and investment advisors is not contained in any financial sector laws**. The CBU, however, has issued resolutions giving itself the responsibility to authorize and supervise investment funds and investment advisors. The CBU and ESCA have apparently agreed that regulation of the investment fund industry will be transferred to ESCA when a new securities law is passed, which will give the responsibility and authority to ESCA. It is not clear if the regulation and supervision of financial advisers will also be transferred to ESCA.

General preconditions for effective securities regulation

65. **The IOSCO Principles list a number of pre-conditions to effective securities regulation**. These include the appropriateness of the legal, tax, and accounting frameworks within which the securities markets operate; the effectiveness of procedures for the efficient resolution of problems in the securities market; and the soundness of macroeconomic policies (those aspects that could affect the operations of the securities market). In general, UAE has the preconditions for effective regulation. However, several areas need significant improvement to facilitate the effectiveness of regulation. UAE has no accounting law or legally mandated accounting standards. A vague requirement that financial statements must meet highest standards is all that the law provides. Listed companies on the ADSM are required to apply IFRS in their reporting, but without specific guidance or an oversight body. Listed companies on DFM are not required to use specific accounting standards. The second problem is the relative inexperience of the judiciary in the adjudication of financial disputes, which results in extensive litigation and delays. Although these weaknesses have not prevented the development of a regulatory structure applicable to a relatively simple securities market, they will impede the safe development and expansion of a more sophisticated market.

Summary of principle-by-principle assessment

Regulator (Principles 1–5)

66. **Regulation of the securities markets is primarily the responsibility of ESCA. The agency generally has the capacity and resources to perform its functions and exercise its powers. It is well funded, but needs additional, qualified staff to meet its increasing responsibilities**. Although ESCA has considerable operational freedom, it is not independent from the executive branch because the chairman of the board is the Minister of Economy and the directors are drawn primarily from government institutions. Operational independence of ESCA would be improved if the chairman were not a minister, senior executive or employee of the government. Also, the law should specify that the majority of the board must be private citizens with financial sector expertise. Although generally sufficient, the processes of ESCA will need improvement, particularly in the area of judicial appeals for adverse decisions. Finally, the overall regulation of the markets is somewhat fragmented between several different governmental agencies: ESCA regulates IPOs and secondary stock issues and the CBU regulates investment funds and investment advisers. It is recommended to consolidate securities market supervision in one agency, such as ESCA, as is currently proposed in draft legislation.

Self-regulatory organizations (Principles 6–7)

67. **The stock exchanges in the UAE function as de facto self regulatory organizations for activity on the exchanges**. The existing law gives some responsibilities directly to the exchanges and some to ESCA. In some instances, such as broker conduct, the exchange takes the lead, while in others, such as listing of securities, ESCA takes the lead. These relationships should be clarified in the new securities law, establishing ESCA as the overall regulator of the capital markets and the exchanges as formally designated SROs that operate under delegated authority from ESCA.

Enforcement (Principles 8–10)

68. **The ESCA law gives ESCA extensive enforcement powers which it uses regularly in examining registrants and conducting surveillance of the marke**t. In addition, all suspected criminal activity related to the securities markets must go to ESCA for evaluation before it will be accepted by the prosecutor's office for criminal prosecution. ESCA and the CBU have filled in gaps in the legislation with regulations regarding certain activity. The CBU has issued regulations for the investment funds industry and ESCA has issued regulations giving itself the power to fine registered entities and issuers for violations of the securities laws. It is recommended that the new securities law provide statutory authority for regulation of investment funds and advisors over investment and provide ESCA with statutory authority to issue warnings and fines against registrants and issuers. In the medium term, a new separate Collective Investment Law should be considered to provide a

more robust framework for the development of collective investments asset management, and custodial activity in securities markets.

Cooperation (Principles 11–13)

69. **The ESCA law allows ESCA to communicate with foreign regulators and authorities. ESCA has used this authority to enter into MOUs for cooperative enforcement and exchange of information**. The disclosure of information by ESCA to a foreign authority must be approved by the Ministry of Justice or the Department of International Cooperation. More explicit authority for this cooperation is needed to clearly set out the procedures for collecting, safeguarding and distributing cooperative enforcement information.

Issuers (Principles 14–16)

70. **Under a general regime for disclosure of periodic financial information about listed companies, companies must prepare and distribute annual and interim reports**. The required disclosure of information for IPOs is limited and should be replaced with a comprehensive prospectus. The disclosure system is weakened by the absence of a legally mandated regime for accounting standards in the UAE. The law and regulations do not provide for specific accounting standards to be used in preparing company financial reports. IFRS is used by default according to people in the industry, but, except for an ADSM exchange requirement, there is no obligation to do so. An accounting standard-setting regime should be adopted as quickly as possible.

Collective Investment Schemes (Principles 17–20)

71. **The capital markets laws do not contain any provisions related to collective investment schemes**. A resolution of the Central Bank has attempted to fill in the regulatory gap, but does not contain the depth and specificity that is normally associated with the regulation of mutual funds. Specific provisions in law applying to collective investment schemes need to be adopted to support growth of the industry.

Market intermediaries (Principles 21–24)

72. **The ESCA Law and regulations provide for extensive regulation of brokers**. In addition, the exchanges also approve brokers for membership on the exchange and closely monitor their activity. The permitted activity of brokers is limited to taking and transmitting orders and should be expanded so that they can participate more fully in market activity and development, such as investment banking, underwriting and providing investment advice.

Secondary market (Principles 25–30)

73. **The three exchanges in UAE are well organized and managed. ESCA, as their supervisor, has a good working relationship with them**. They have good infrastructure and technology systems to carry out their activity which are constantly being reevaluated and upgraded. Up-to-date surveillance programs in use by the exchanges and ESCA provide for good market surveillance practices.

Recommended actions

Table 5. Recommended Plan of Actions to Improve Implementation of the IOSCO Objectives and Principles of Securities Regulation

Reference Principle	Recommended Action
Principles Relating to the Regulator (P 1–5)	P1. The regulation of the securities markets needs to be centralized in one regulatory body with a clear legislative mandate to regulate the securities markets in their entirety. P2. Improve operational independence of ESCA by providing: (a) that the Chairman may not be a minister, senior executive or employee of the government; and (b) a majority of the Board should be experienced persons who are not government employees. P4. ESCA should have a formal procedure for taking the costs of compliance into account in formulating its regulatory policy. P5. ESCA should implement a formal Code of Conduct for its staff, setting forth rules for conflicts of interest
Principles for the Enforcement of Securities Regulation (P 8–10)	P9. Authority to fine and suspend brokers should be in the law giving ESCA its powers.
Principles for Cooperation in Regulation (P 11–13)	P11 The new securities law should provide for more specific provision setting out the procedures for establishing MOUs and their specific characteristics.

Principles for Issuers (P 14–16)	P14 The IPO process and requisite disclosures should be formally transferred from MOE to ESCA (by revision of the Companies Law) and should follow international best practice. P15 The proposed new law on Commercial Companies should be passed and the new Code of Corporate Governance should be adopted. P16 A new law regarding the regime for accounting in the UAE should be adopted P16 The existing law on the auditing profession should be modified to improve regulation of the auditing profession.
Principles for Collective Investment Schemes (P 17–20)	Ps 18, 19 and 20. Promulgate comprehensive regulations for the structure and operation of collective investment schemes. (This is not adequately covered in the new draft ESCA legislation.)
Principles for the Secondary Market (P 25-30)	P26 ESCA under the existing law does not have the authority to require amendments to the rules of the exchange or impose a range of conditions on the operator of the exchange. The new securities law should address the relationship between ESCA as the regulator and the exchanges as SROs to clarify their relationship. The law should give ESCA the complete authority to regulate the securities markets and should delegate that power as needed to the exchanges.

Authorities' response

74. **ESCA broadly agrees with the assessment done by the FSAP Update team observers and appreciates the tremendous efforts and hard work of the team members in achieving this in a short span of time**. While we agree with the assessment of implementation of the IOSCO principles of securities regulation, we believe, after taking into account the new laws which will be passed shortly, our compliance with IOSCO principles would further improve.

75. **The regulation of securities market is an ever evolving process, especially so for a developing country under transformation into a market driven economy**. It is pertinent to mention here that changes in the supervisory and legal regime in the UAE are happening at a fast pace. As emphasized in the meetings with the team members, the government and the authorities in UAE fully realize the importance of its markets being considered by the global business community as evolving towards the standards practiced by

developed securities markets. Therefore, observations of multilateral agencies and experts are given prioritized consideration and requisite changes are brought in immediately to fill in any gaps brought out in such assessments while simultaneously harmonizing the changes with local business culture and ethics.

76. **Towards this goal, the authorities have immediately shifted the regulation of IPOs to ESCA which will work out globally best regulatory practices to supervise this area**. The Code of Corporate Governance for listed companies was promulgated in May 2007. The process of cross border information sharing is being formalized while a new Staff Code is being implemented for ESCA's staff members to avoid any potential conflicts of interest. The process of consultation for setting up a suitable body for implementation of accounting and auditing standards has been put in place and human resources are continuously upgraded.

77. **We are sure that these changes, when fully implemented, would make us fully compliant with IOSCO's principles of securities regulation**. We shall always remember the contribution of the FSAP Mission in achieving this important milestone for our Economy.

Summary Assessment of Implementation of the IOSCO Objectives and Principles of Securities Regulation

Dubai International Financial Centre

General

78. **This assessment was completed by Jennifer Elliott, Monetary and Capital Markets Department, in January 2007 as part of an IMF-World Bank FSAP update mission to the UAE.**

79. **The assessment was made using the IOSCO Methodology for Assessment of the IOSCO Principles (2003).** The assessment relied on an extensive self-assessment prepared by the Dubai Financial Services Authority (DFSA) using the IOSCO Methodology, background papers and summaries prepared by the DFSA, background papers provided by the Middle East and Central Asia Department (MCD) of the Fund, and a review of relevant DIFC laws and regulations and DFSA rules. The assessment also benefited from interviews with staff of DFSA, the Dubai International Financial Exchange (DIFX), and regulated entities within the Dubai International Financial Centre (DIFC).

Background

80. **The DIFC is a geographic and legal jurisdiction within the emirate of Dubai (part of the federation of the United Arab Emirates)**. In 2004 the UAE constitution was amended to allow an emirate to establish a "financial free zone," a separate legal, geographic

and judicial jurisdiction. Federal Law No. 8 of the UAE allows a free zone to be established by Federal Decree and specifies that banking services cannot be carried out in local currency (Dirham) nor can a DIFC company provide services in the UAE without separate licensing in the UAE. Federal Decree No. 35 in 2004 established the DIFC, with an accompanying resolution delineating the 110 acre area of Dubai within which the DIFC is located. The President of the DIFC is His Highness Sheikh Mohammed bin Rashid al Maktoum, the ruler of Dubai. He is represented at the DIFC by a governor. All laws are approved by the Ruler of Dubai.

81. **All activity within the DIFC is governed by the laws of the DIFC, with the exception that federal criminal law (including anti-money laundering law) applies within the center**. The DIFC has adopted a full set of laws including an insolvency law, trust law, personal property law, and employment law. These have been based largely on UK common law. The DIFC also established a separate court, with both a trial and appeal level, to hear all matters in the DIFC (others than those related to criminal law). The members of the DIFC court are generally nonresident senior members of the judiciary from the UK and other British common law jurisdictions.

82. **The DFSA is a separate and independent regulatory agency established in 2004 under Dubai Law No. 9 (the Dubai Law).** The DFSA is directly accountable to the President of the DIFC and has supervisory authority over all financial services activities that take place within the geographic DIFC. This includes regulation of banks, insurance companies, asset managers, and investment firms. The DFSA also registers service providers such as lawyers and accountants who provide services to licensed firms. As of January 2007, there were 104 firms registered with the DFSA. Forty percent of these are financial institution primarily regulated by home supervisors; the majority are subsidiaries of large financial institutions and only a few operate solely within the DIFC.

83. **Financial service firms in the DIFC are restricted by Federal Law No. 8 from taking deposits or making loans in local currency (Dirham)**. However, there are no such restrictions on securities related activities. Most such activity, however, takes place in foreign currency. For example, all clearing and settlement on the DIFX takes place in U.S. dollars.

84. **The Dubai International Financial Center Authority (DIFCA) is a separately constituted agency within the DIFC (also reporting to the President) that is responsible for, among other things, economic development and planning, registry of companies and administration of companies law, and data protection law**. The DIFCA Group is also the owner of the Dubai International Financial Exchange (DIFX). The DIFX began operating as an exchange in September 2005; it has 9 equity listings all dual listed on another exchange. There are also 4 listings of sukuk (Shari'a compliant) bonds. In December 2006, Nakheel Development Ltd., a property development subsidiary of Dubai World, listed US$3.52 billion dollars worth of sukuk bonds on the exchange, making the DIFX the world leader in sukuk bond listings. A number of index-linked instruments are also listed on the

exchange. Trading volume on the exchange is low, particularly for bonds, which tend to be bought and held. The DIFX also hosts a clearing and settlement system, securities depository, and registry.

85. **The operation of collective investment schemes is very recent in the DIFC, as a framework law was put in place in April 2006. Seven fund operators have been licensed by the DFSA, and seven private funds are domiciled in the DIFC.**

86. **The DIFC has also created the Hawkamah Corporate Governance Institute, which is active in promoting corporate governance codes and guidelines in the UAE and throughout the region**.

General preconditions for effective securities regulation

87. **IOSCO has identified a number of preconditions to effective securities regulation, including absence of undue barriers to entry and exit from markets and products; appropriate legal, tax and accounting framework within which the securities markets operate, and effective procedures for the resolution of problems in the securities market**. The preconditions appear to be in place in the DIFC.

Principle-by-principle assessment

Principles related to the regulator

88. **The DFSA is an independent regulator with a clear legal mandate to regulate all securities related activity within the DIFC**. The DFSA has full authority to license and supervise regulated persons and the authority to make rules, form policy and issue interpretations. It is funded by the Government of Dubai, which has an obligation in law to provide sufficient funding. The DFSA is accountable directly to the President of the DIFC. It must make an annual report, complete with audited financial statements. It is also subject to transparency requirements and requirements for administrative fairness.

Principles related to enforcement and cooperation

89. **The DFSA has authority to inspect and investigate regulated persons. It can require production of documents and records and compel testimony**. It has a range of enforcement powers including the power to give direction to regulated persons, to issue stop orders to investment funds, and to halt trading on the DIFX. The DFSA can withdraw or refuse licenses. Enforcement processes are in place and although the center is new, there has been some activity. The DFSA has emphasized international cooperation and information sharing as part of its enforcement and supervision activities. It has signed a number of MOUs and is a signatory to the IOSCO Multilateral MOU.

Principles related to issuers

90. **Issuers making offerings in the DIFC are subject to prospectus and continuous disclosure requirements, including timely and material event disclosure**. Shareholder voting rights, take-over bid requirements and reporting requirements for insiders are set out in the law and rules. Firms are subject to international accounting and auditing standards. There have been, thus far, no initial public offerings made in the DIFC. Issuers listing on the DIFX are subject to the DIFX listing rules and are required to be subject to a regulatory regime acceptable to the DFSA. The DFSA can object to a listing. Listed companies become reporting entities in the DFSA and are therefore subject to ongoing requirements (disclosure, financial statements, etc.).

Principles related to collective investment schemes

91. **The framework for collective investment schemes has recently been put in place**. Fund operators must be licensed by the DFSA and are subject to a comprehensive framework including disclosure obligations, valuation standards, and internal control and risk management requirements. Funds, which can only be distributed to investors with liquid capital of at least US$1 million, must be in the form of an investment company, limited partnership or trust. Operators of private funds, which have a limited distribution, are subject to fewer requirements but are still licensed and supervised. In addition to other enforcement powers, the DFSA has powers to issue a stop order and wind up a fund.

Principles related to market intermediaries

92. **The DFSA has full power to license and supervise market intermediaries**. Intermediaries are subject to capital requirements related to the risks in their particular business and activities. DFSA rules contain a full set of internal control, risk management and business conduct standards. The licensing and supervision process for intermediaries at the DFSA has been designed in line with international best practice.

Principles related to secondary markets and self-regulatory organizations

93. **Exchanges and clearing and settlement systems are subject to licensing requirements in the DIFC**. The DIFX licensing process was extensive and supervision of all DIFX functions is ongoing. There is pre-trade and post-trade transparency on the DIFX. There are no transparency rules in place for over-the-counter trading but there does not appear to be an OTC market at this time. There is a full set of market abuse rules and effective market surveillance systems in place.

Comments

94. **The DFSA has established a comprehensive set of laws, regulations and rules and policies and procedures for regulation**. Its staff are well qualified and work to international best practice standards. It has demonstrated a willingness and capacity to vigorously enforce its authority and carry out its regulatory mandate. Because the DIFC and DFSA were established very recently and because activity within the DIFC is still new and somewhat limited, it was difficult to assess in-depth the effect of the new regulatory structure in practice. The DFSA has shown a commitment to bring action against those in violation of the law and its rules and has established robust licensing processes. It has established systems of information sharing and supervisory cooperation necessary to supervise international financial services. Given the limited amount of activity in the center, the DFSA has been very active in its supervision of firms. However, the robustness of the system remains to be tested as activity within the center increases. Similarly, the strength of the DIFC court system and judicial framework for the DFSA's work will be tested as challenges to the law and regulation arise in future. It is noted that the Court recently issued injunctive orders on the application of the DFSA.

Recommended actions

Table 6. Recommended Plan of Actions to Improve Implementation of the IOSCO Objectives and Principles of Securities Regulation

Reference Principle	Recommended Action
Principles Relating to the Regulator (P 1–5)	Complete Memorandum of Understanding with the Central Bank of the UAE Consider lengthening the comment period for new rules
Principles for Issuers (P 14–16)	Consider stipulating audit standards in DIFX rules
Principles for Collective Investment Schemes (P 17–20)	Consider more detailed rules for valuation and redemption should the regulatory regime be extended to retail products

Authorities' response

95. **The DFSA considers the document to be a fair and well articulated assessment of the DFSA's conformity with IOSCO's Objectives and Principles of Securities Regulation and has no additional comments**.

Appendix I. Basel Core Principles for Effective Banking Supervision-Factual Update

A full BCP assessment was undertaken as part of the 2001 FSAP for the UAE. A factual update to this assessment is presented below, including a summary of the 2001 recommendations and progress in addressing them. (Banking supervision in the DIFC is not assessed in this update, owing to the very small volume of activity so far.)

Progress on recommended actions from the 2001 Assessment

96. **The 2001 BCP assessment gave the U.A.E. a high compliance level but also made some recommendations.**[17] The CBU has addressed a number of the "Recommended Actions to Improve Compliance with the BCP" from the 2001 FSAP and the team commends the CBU for its efforts. This section summarizes the measures that have been adopted and addresses each of the recommendations from the 2001 FSAP. It is based solely on the laws, supervisory requirements and practices that were in place at the time of the assessment January 2007). However, the team noted regulatory initiatives that have yet to be fully implemented or are not final, such as the revised capital adequacy regulation.

Core Principle 1(5) Legal protection

97. **Explicit legal protection of banking supervisors' good faith actions in exercising their duties should be introduced in the medium term *(2001 FSAP)***. The team has noted that no legal steps have been taken to protect the CBU or the staff against lawsuits for actions taken while discharging their duties in good faith. The team has been informed that should any lawsuit against the staff be filed for actions taken while carrying out their duties, the CBU would provide legal aid for the defense of the staff. This will however require a board decision. It is noted that a lawsuit against the CBU was filed in relation to its supervisory work in 1983. The court rejected this lawsuit. No lawsuit has been filed against CBU staff.

Recommendation

98. **To comply with this core principle the team confirms the 2001 recommendations to provide for the establishment of legal protection to the supervisory authority and its staff against lawsuits for actions taken while discharging their duties in good faith.** Adequate protection should also include financial support to cover the legal expenses of banking supervisors who have to defend themselves against such lawsuits.

[17] The U.A.E. were assessed as compliant or largely compliant with 27 principles and materially noncompliant with 3 principles (CP 1.6, CP 4 and CP 13).

Core Principle 1(6). Cooperation

99. **There is no regular contact with other supervisors of financial companies, such as insurance companies, and no exchange of prudential returns *(2001 FSAP)*.** There are no formal arrangements in place for cooperation and information sharing between the insurance supervisor, the securities markets' supervisor or the banking supervisors. However, the team has been informed of an existing working relationship between the CBU and ESCA. This relation is reinforced by the fact that the Governor of the CBU is also a member of the board of ESCA. It is noted e.g. that the start-up of the operations of ESCA has been greatly facilitated by seconding CBU investment examiners to ESCA. However, contacts take place rarely and no prudential information is exchanged. It is also noted that a working arrangement between the CBU and ESCA has been set up transferring operational supervision of brokers licensed to deal in local shares to ESCA. On a date still to be determined ESCA will also assume supervision of brokers dealing in foreign shares. However, these arrangements do not result from an amendment to the legal statutes of the CBU or ESCA.

100. **Concerning the absence of formal relations of the banking supervisor with the insurance supervisory section of the MOE, the team has been informed that the U.A.E**. insurance industry is not well developed at present and that only two banks are part of a group containing an insurance company.

Recommendation

101. **The CBU is commended for its ongoing efforts to install and improve relations between and among the supervisory authorities**. However, to improve compliance it is recommended to formalize the contacts between the different supervisors and enhance the process of information exchange. ESCA should take full supervisory responsibility of brokers and the relevant laws should be amended accordingly.

Core Principle 4. Transfer of significant ownership

102. **Pre-approval procedures for significant holdings should be extended to all banks and internal procedures within the CBU for pre-approval should be put in place in the near future *(2001 FSAP)*.** The securities legislation (Article 19 of Cabinet Resolution 12/2000) requires the CBU to pre-approve holdings exceeding five per cent in stock listed banks. However, no procedures have been established to examine the fit and proper character of the shareholders. The team has been informed that the draft banking law intends to extend the pre-approval requirement of holdings exceeding five per cent to nonlisted shares. (Only three of the 21 local banks are not listed on the stock exchange).

103. **Holdings in excess of one percent are to be reported annually to the CBU (Letter BSD 64/84 of 16/1/85) and additional information is gathered during on site supervision**.

Recommendation

104. **The CBU should be informed of proposed changes of significant ownership, including beneficial ownership of all banks, and explicit review and approval procedures should be established**. The supervisor should also be given the power to take action to modify, reverse or otherwise address a change of control that has taken place without the approval of the supervisor.

Core Principle 9. Problem assets, provisions and reserves.

105. **The classification of advances as substandard at 180 days in arrears is too long and there is no explicit restriction that would prevent an advance from being declassified because it has been rescheduled (but otherwise its recoverability was unchanged).** Circular 313/84 requires banks to establish and maintain a regular procedure for classifying advances to identify accounts as impaired (based on adverse credit features). The classification of advances (into sub-standard, doubtful, and loss) is based primarily on subjective criteria, although advances in default for 180 days would normally be classified as at least sub-standard. Provisions for sub-standard and doubtful advances are based on a subjective assessment of expected losses. Provisions for advances classified as loss should be for 100 percent of exposure (net of realizable value of collateral).

106. **The assessor has been informed that the definition of 'default' and the matter relating to the period being reduced to 90 days is being studied and a decision will be taken in the light of the projected introduction of Basel II**. It has also been verified that banks in general already apply a more detailed system of categorizing credits.

Recommendation

107. **The assessor recommends that the CBU tighten the present classification of impaired credits in light of the more demanding practice of banks in the U.A.E** Specifically, the CBU should classify loans when payments have fallen 90 days in arrears. The assessor acknowledges that there is no universally valid standard provisioning for the different types of impaired loans. However, personal professional judgment also argues for introducing a required minimum percentage of provisions for each category. Consideration should also be given to the introduction of a general loan-loss reserves.

Core Principle 10. Large exposures

108. **Off-balance sheet items and inter-bank exposures to U.A.E. banks with maturities of less than 12 months should be included in the definition of large exposures *(2001 FSAP)*.** The large exposure limit for a single borrower or a group of related borrowers is 7 percent of the bank's capital. Aggregate large exposures are subject to a limit of 800 percent. The large exposure limit is 20 percent for each parents, subsidiaries, and affiliates (which in aggregate should not exceed 60 percent). The limit is 30 percent for

interbank exposures. However, exposures to banks within the U.A.E. for maturities of less than 12 months and off-balance exposures with maturities of less than 12 months are not yet included in the definition of large exposures.

Recommendation

109. **Off-balance sheet items and inter-bank exposures to U.A.E. banks with maturities of less than 12 months should be included in the definition of large exposures**.

110. **The CBU should issue guidelines or circulars requiring banks to have adequate policies and procedures for the identification, measurement and control of market risk (CP 13) and should introduce explicit requirements for banks to have a comprehensive risk management process to identify, measure and control material risks *(CP 15) (2001 FSAP)***. CBU Circular 13/93 section 3 sets a minimum solvency ratio (Basel 1) of 10 percent for banks. However, this ratio is only calculated for credit risk and certain off–balance sheet items. Credit risk is perceived to be by far the largest risk; CBU estimates that solvency ratios would only fall about 1 percentage point if market risks were covered by a capital requirement. The present regulatory capital requirements also differ from Basel I for all exposures on GCC countries are weighted at a zero rate whereas, with the exception of Saudi-Arabia a 100 per cent weighting ratio should have been applied. Applying the 100 per cent weighting increases the required minimum capital ratio for a number of banks thus substantially reducing their existing capital margin. On a total of seven banks having a capital ratio lower than 16,5 per cent at the end of 2005 four banks would suffer from this change. It is noted that CBU intends to use the discretionary powers given by Basel II to maintain the zero weighting for GCC exposure.

111. **In 2005 the CBU formed a working group to prepare the implementation of the Basel II Accord (CP6)**. A detailed analysis and a diagnostic review of each bank was completed by the CBU and external consultants in February 2006. The CBU has announced to the banking industry its intention to implement Basel II by December 31, 2007. (Circular 3735/2006 of August 27, 2006) Regarding Pillar 1, the standardized approach will be mandatory for credit risk, while for market risk banks are expected to adopt the 1996 amendment to Basel I. Regarding their operational risk, banks will have the flexibility to adopt the approach they themselves determine as the most appropriate. All banks will be expected to be Internal Ratings Based compliant by January 1, 2011. As the three pillars of Basel II are intended to be mutually reinforcing and are interlinked, Pillar 2 and Pillar 3 will also have be observed by December 2007.

112. **In view of these developments the assessor has been informed that the CBU is presently conducting an impact study for selective Basel II criteria and is in the process of drafting guidelines covering the three pillars**. Banks will have to file formal implementation plans and to obtain supervisory approval for their approach. A parallel run of

the present capital adequacy system and the standardized approach for credit risk is planned from June 30, 2007.

113. **Basel II is very demanding on the supervisors as well as on the supervised financial institutions**. Accordingly, CBU will have to continue intensive efforts to prepare itself, and to assist banks in preparing for implementation of the three pillars.

114. **Regarding Pillar 1, the CBU has developed a risk-based framework to evaluate and rate individual bank processes to identify and address credit, market and operational risk**. They will also have to develop guidelines to address corporate governance.

115. **As to Pillar 2, the CBU will have to refine its supervisory review process and issue guidelines to help banks introduce a robust capital adequacy assessment process**.

116. **As to Pillar 3, the CBU will have to prepare the minimum disclosure requirements necessary for market participants to assess the bank's activities and the inherent risks**.

117. **The assessor shares the supervisor's view that across the banking industry in general there is a shortage of skilled and qualified personnel with respect to Basel II requirements**. An additional difficulty is due to the presence of contracts, operations, and transactions which are in accordance with the rules and principles of Islamic shariah. Because this activity differs in many aspects from the conventional banking activity, it requires special expertise to correctly map the risk factors. This expertise may even be less available than Basel II expertise in general. However, while recognizing the considerable efforts undertaken in preparing for Basel II implementation, the assessor is therefore concerned about the supervisory capacity and resources needed to organize and maintain adequate control of the operating modus of Basel II by each and every bank.

Recommendation

118. **Pursue and finalize the planned implementation of Basel II, including the issuance of the necessary guidelines**. Continue training of staff to prepare for the introduction of the IRB approach and put in place a salary package allowing to attract and maintain the required specialized staff.

Core Principle 18. Abuse of financial services

119. **Bank staff members and money changers who report suspicious transactions in good faith to the compliance officer of the CBU should be protected from being held liable *(2001 FSAP)*.** Article 20 of Federal Law No(4) of 2002 ensures that bank staff and money changers who report suspicious transactions in good faith to the compliance officer or to the CBU cannot be held liable.

Core Principle 23. Corrective and remedial powers of the supervisor

120. **According to this core principle supervisors must have at their disposal an adequate range of supervisory tools to bring about timely corrective actions**. The existing administrative penalties under Article 112 of the Union Law No 10 should be amended to include the power:

- To impose fines;[18]
- To suspend an individual bank manager;
- To appoint managers;
- To apply to the U.A.E. Court for injunctions, freeze orders, compulsory winding up orders;
- To initiate civil procedures to obtain damages against wrongdoers and obtain compensation from them for their victims;
- To refer the matter to the appropriate authorities in the U.A.E. responsible for enforcing the U.A.E. penal laws;
- To bar the distribution of dividends;
- To give orders to the bank;
- To order the bank to implement a regularization program within a certain period; and
- To appoint an official administrator.

[18] The only fine the CBU is presently allowed to impose is for delays in submitting prudential reports and data to the Credit Risk Bureau. The fine amounts to AED 200 per day of delay (Article 107 of the Banking Law).

APPENDIX II. INITIAL PUBLIC OFFERINGS (IPOS)

Box 3. Public Offerings: Separating Policy Functions

Privatization (Government as Issuer): Decisions involved in privatization should be taken separately for each issue. In the case of public or quasi-public enterprises the government (Ministry of Economy) as issuer would specify the terms of the offering, just as would a private issuer. These terms would include the nature, timing, and choice of market and venue for the offering as well as the designation of an underwriter. The government as issuer should seek advice from a skilled neutral third party, such as an investment adviser in these decisions.

Pricing: Market mechanisms should be used for the pricing of new offerings in the market. An underwriter or adviser would normally carry out a process of "book building," that is, gathering information on the interest in the offering, and use this information to help determine the price of the offering. For private companies, the goal is to maximize interest in the offering and achieve the best price. For privatization of state companies, there may be additional objectives, such as a desire to redistribute state assets widely. These additional objectives would ideally be separated from pricing and instead form part of the privatization or allocation policy. For example, if the government wishes to subsidize small investors to make the issuance accessible to them, it should do this through means other than adjusting the offering price (for example, through tax incentives or grants).

Allocation of shares

The allocation of shares in the event of an oversubscription is a complex process. If pricing is done effectively, oversubscription will be smaller. Allocation for privatizations is often conducted by the government/issuer with the aim of ensuring that stakeholders and a wide range of investors have a chance to subscribe. For private companies, the underwriter would normally influence allocation substantially. For example, the underwriter may choose to allocate shares to financial institutions that express a firm interest in the offering. Securities regulation in many countries requires that at least part of an offering be made available to small investors, but it is unclear how effective such rules are in practice.

Regulation

An independent regulator (in this case, ESCA), should be charged with the regulation and oversight of offerings. The regulator's role is to ensure that appropriate and complete disclosures, including audited financial statements, are made to subscribers prior to the offering. The regulator should also have rules in place to prevent insider trading prior to the offering and to monitor trading following the offering to ensure there

is no market abuse. The regulator's role should be separate from issuance and pricing of the offering.

Subscriptions

Subscriptions to IPOs in the U.A.E. have been partly financed by large bank loans extended to investors at substantial cost. In many instances interest charged to participants during the 21-day holding period greatly exceeded the actual value of the investment. Leverage was also excessive, with some IPOs being more than 800 times oversubscribed. Although the CBU responded by imposing more stringent restrictions on bank exposure to equity market-related lending, additional actions are needed to curtail price distortions caused by excessive market liquidity. In particular, the CBU needs to restrict the aggregate level of credit that a bank is allowed to extend for the financing of an individual IPO.

APPENDIX III. STRESS TESTS FOR THE BANKING SYSTEM

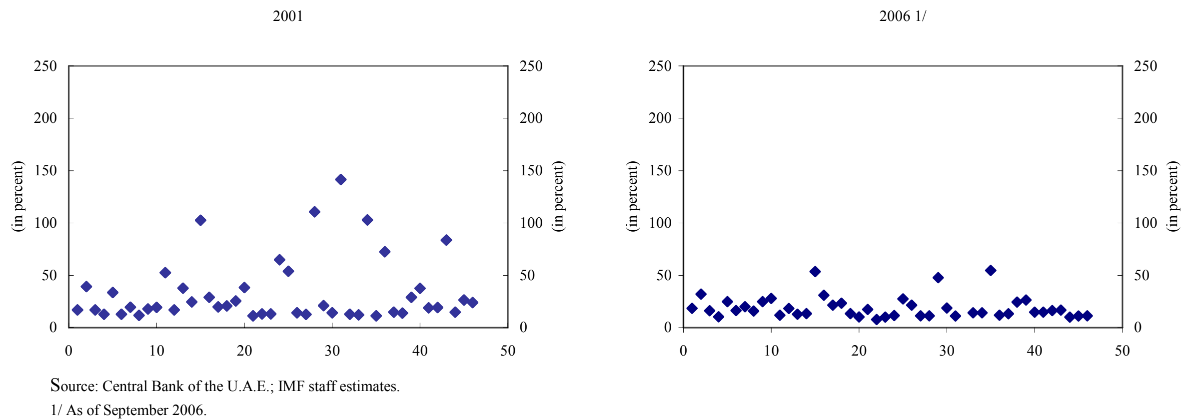
121. **Stress tests of the aggregate banking system and of individual banks were conducted based on data provided by the authorities.** The focus was on credit risk, with particular attention to developments in the real estate market. Interest and liquidity risk was also quantified. Foreign exchange risk was also reviewed, although this risk has been limited by the commitment of the authorities to the exchange-rate peg. Stress tests were conducted based on data for end-September 2006 on the 46 U.A.E. commercial banks, and were based on the current loan classification system for nonperforming loans.[19] Staff noted that the set of data available would need to be enhanced to conduct a comprehensive assessment of risks in the banking system by including: (i) household and corporate balance sheet data; (ii) data on large exposures in the banking system; and (iii) a more precise breakdown of personal loans and estimate of real estate exposure.

122. **Stress tests suggest that the banking system would be generally resilient to an across the board and significant deterioration of asset quality**. A situation of a doubling of the current level of substandard, doubtful and loss loans would be withstood relatively well by banking sector capital, with overall capital adequacy declining from 16.3 percent to 11.5 percent (Table 7). Large banks and foreign banks would be the most affected. A replication of one of the tests performed in the initial FSAP was also conducted to test how many banks under extreme conditions would exhaust their Tier 1 capital. Because of the higher leverage of the banking system (Figure 4) and of some banks in particular, 11 of the 21 locally incorporated banks instead of 6 in the initial FSAP stress tests would exhaust their Tier 1 capital.

[19] Seven scenarios under different assumptions were used to test credit risk. An assessment of the impact of a move to the 90-day norm for NPLs was not possible due to data limitations.

Figure 4. United Arab Emirates: Capital Adequacy Ratio Dispersion, 2001 vs. 2006

(In percent)



Source: Central Bank of the U.A.E.; IMF staff estimates.
1/ As of September 2006.

123. **The banking system as a whole also appears resilient to a severe decline in the real estate market, mainly because of its relatively small exposure to the sector**. Stress tests on the real estate market were based on CBU's sectoral classification of real estate loans to obtain a finer decomposition of real estate lending. Based on the latter and on the current high provisioning ratios, a strong shock affecting first and foremost, property developers and corporate borrowers, as well as mortgage loans and contractors, would drive the capital adequacy ratio of the banking system from 16.3 percent to 14.6 percent. A combination of a real estate shock associated with a further indirect deterioration of credit risk through personal loans for business and consumption purposes would drive the capital adequacy ratio of the system down to 11.6 percent.

Table 7. United Arab Emirates: Summary of Stress Test Results

(In percent)

	Domestic banks	Foreign banks	Large banks	Medium Sized banks	Small banks	State owned	Islamic banks	**All banks**
Capital adequacy ratio	17.3	12.7	16.0	15.7	18.2	18.3	15.8	**16.3**
Capital adequacy ratio after shocks								
A. Credit risk								
Sectoral Shock								
Real estate (shock on mortgages, construction loans and personal loans; 20% and 15% NPLs)	12.6	10.2	10.1	12.3	15.2	13.1	10.8	**12.1**
Real estate (property developers, corporates, contractors, mortgages)	15.4	11.4	14.4	13.5	16.9	17.0	11.1	**14.6**
Real estate + indirect credit risk (deterioration of personal loans for business and consumption purposes)	12.2	9.7	10.1	11.4	14.8	13.0	8.7	**11.6**
External shock								
Trade finance and transportation (20% and 15% NPLs)	14.5	8.4	13.3	12.4	14.3	15.8	11.8	**13.2**
General shock								
Increase of NPLs by 100 percent	12.2	9.1	7.8	14.5	12.1	11.1	13.2	**11.5**
Increase of NPLs by 50 percent	14.9	10.9	12.1	15.1	15.3	14.9	14.5	**14.0**
Increase of NPLs by 20 percent	16.4	12.0	14.5	15.4	17.0	17.0	15.3	**15.4**
B. Foreign exchange risk								
Appreciation of the AED/USD by 10 percent	16.8	12.6	16.3	14.5	17.8	18.7	12.9	**15.9**
Depreciation of the AED/USD by 10 percent	17.9	12.8	15.7	16.9	18.5	18.0	18.6	**16.8**
Appreciation of the Euro/USD by 30 percent	17.5	12.8	16.5	15.5	18.5	18.1	15.9	**16.1**
Depreciation of the Euro/USD by 30 percent	17.1	12.5	15.5	15.9	17.9	18.5	15.7	**16.5**
C. Interest rate risk								
Increase of interest rates along the yield curve by 300 basis points	17.1	12.8	15.8	16.5	18.0	18.2	15.2	**16.1**
Increase of short term interest rates by 400 basis points	17.2	12.3	16.0	16.5	18.2	18.3	14.2	**16.2**
D. Combined credit and interest rate risks								
External shock + increase of interest rates along the yield curve by 300 basis points	14.3	8.5	13.2	12.3	14.2	15.7	11.2	**13.0**
Increase of NPLs by 50 percent + increase of interest rates along the yield curve	14.7	11.0	11.9	15.0	15.1	14.7	14.0	**13.9**
D. Liquidity risk								
Liquidity ratio 1/	44.3	76.7	74.8	35.7	46.3	58.5	36.5	**49.9**
Liquidity ratio after shock								
Customer deposit withdrawal (16%)	25.4	61.4	63.9	12.4	26.0	44.0	3.7	**30.6**
Decrease in government deposits (35%)	36.1	76.0	69.3	29.1	43.1	50.7	25.3	**43.6**
Decrease in non resident deposits (30%)	35.9	67.9	66.2	28.5	37.7	48.6	31.6	**40.7**
Decrease in foreign interbank funding (30%)	39.0	74.4	69.7	32.3	43.0	52.5	33.3	**45.1**

1/ Defined as assets of maturities of less than 3 months in domestic and foreign currency on liabilities of less than 3 months in domestic and foreign currency. 4 other liquidity ratios were used.

124. **Because of the uneven development of the exposure to the real estate sector, banks would be diversely affected**. In the most exceptional scenario, five locally incorporated banks would see their capital adequacy ratios reduced to less than the regulatory minimum 10 percent, with two of them in negative territory. Large banks show the largest deterioration but their capital adequacy ratio stays within prudential requirements while Islamic banks and foreign banks appear the most vulnerable.[20] However, foreign banks traditionally work with less capital in the U.A.E., and most of them have recourse to their head offices for additional capital. Because of the prominent role of Islamic financing mechanisms in real estate purchases, Islamic banks tend to be more exposed to the real estate sector. The extent to which Islamic financing mechanisms such as Ijara (leasing) would protect the lenders and mitigate those risks has not been significantly tested. One conventional bank also appears more vulnerable under the test as it is particularly exposed to personal loans for both business and consumption purposes.

125. **Overall, the banking system would be resilient to a deterioration of credit quality caused by external shocks**. Fluctuations in world oil prices have a bearing on the banking sector predominantly through banks' liquidity, while their effects on asset quality are difficult to estimate because banks have little direct credit exposure to the oil and gas sector. Nonetheless, a deterioration of loan quality which might result from external factors (e.g., significant uncertainties created by turmoil in a neighboring country or indirect effects of strong international sanctions), affecting significantly the financing of trade and related services (transportation) in the U.A.E. was simulated. The banking system would weather the shock relatively well (capital adequacy would decline to 13.2 percent). Four locally incorporated banks would see their capital drop below the minimum required 10 percent while foreign banks and Islamic banks would be most affected—the former because of an active involvement in trade finance.

126. **U.A.E. banks are generally liquid, with significant assets held abroad**. Foreign banks tend to be the most liquid both in domestic and foreign currency, while large domestic banks are more involved in intermediation and hence exhibit relatively high loan to deposit ratios. Publicly owned banks and Islamic banks tend to be the least liquid, on average (Table 8).

---

[20] Based on individual bank data, seven groupings were used: domestic banks (77 percent of total bank assets), foreign banks (23 percent) large banks (37 percent, each representing at least 8 percent of total bank assets), medium-sized banks (42 percent), small banks (21 percent, each with less than 2 percent of assets), publicly owned banks (43 percent), Islamic banks (14 percent).

Table 8. United Arab Emirates: Selected Bank Liquidity Indicators, September 2006

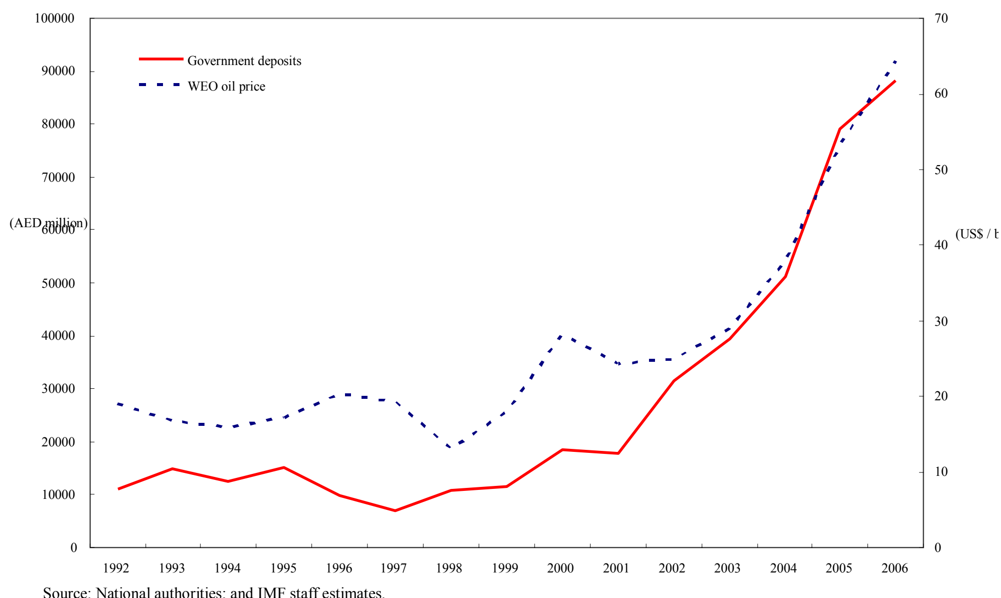
	Selected Liquidity Ratios 1/				
	L/D	LR	LA/A	LA/LL	FCLA/FCLL
Domestic banks	118.1	30.1	14.4	44.3	29.9
Foreign banks	88.1	54.1	31.3	76.7	70.4
Large banks	138.5	42.6	14.4	74.8	47.4
Medium sized banks	93.7	30.2	18.7	35.7	32.0
Small banks	104.0	43.7	24.4	46.3	33.1
Publicly owned domestic banks	140.3	42.0	15.4	58.5	37.2
Islamic banks	102.5	21.1	14.1	36.8	24.0
All banks	110.7	36.5	18.3	49.9	36.9

1/ L/D: net loans to total deposits, LR: cash, assets with the CBU and due from banks on sum of customer deposits and due to banks; LA/A: cash, assets with the CBU and due from banks on total assets; LA/LL: assets with a maturity of less than 3 months on liability of less than 3 months; FCLA/FCLL: assets with a maturity of less than 3 months on liability of less than 3 months (foreign currency only)

127. **Domestic liquidity shocks to customer and government deposits were simulated**. The effect of deposit withdrawals was assessed using a 16-percent shock to customer deposits. (The magnitude of this shock is similar to the one assumed in the 2001 FSAP and is the largest deposit shock the U.A.E. has faced, when deposits fell 16 percent from July to end-August 1990.) A general run on deposits would disproportionately affect medium-sized and Islamic banks.[21] Government deposits are correlated with oil price developments and tend to be quite volatile (Figure 5). A 30-percent decline in government deposits was simulated (between 1995 and 1996 government deposits dropped by 34 percent). Publicly owned banks would be most affected but without threatening significantly the liquidity position of the system, while foreign banks would be the least affected.

[21] For Islamic banks, no distinction was made on the types of Islamic deposits affected due to data limitations.

Figure 5. United Arab Emirates: Oil Prices and Government Deposits, 1992–2006



Source: National authorities; and IMF staff estimates.

128. **External liquidity shocks were also simulated to assess the resilience of the banking system to adverse external developments**. Although a significant share of non resident deposits is stable and the U.A.E. now appears to be a "safe haven" in situations of regional instability, large withdrawals of non resident deposits cannot be ruled out. Given the increasing reliance of commercial banks on external funding, a shock on foreign interbank funding was also simulated (a 30-percent decrease in both cases). The results confirm the less favorable liquidity buffer of some institutions (small and medium sized banks and Islamic banks).

129. **Banks seem to be relatively protected against interest rate risk**. Internal stress tests on interest rate risk are conducted regularly in most banks, and large maturity gaps appear to be well managed with a matching of interest sensitive assets and liabilities. Islamic banks (and finance companies) have the possibility of repricing frequently. Most lending is based on floating interest rates, including for mortgages—borrowers bearing most of the risk of rising interest rates. Simulated interest rate shocks of 300 basis points along the yield curve, and of 400 basis points of short-term interest rates (with an inversion of the yield curve due to the temporary nature of the shock) appear to have a relatively limited impact on banks' capital. However, banks may be taking on additional credit risk. To test for this, combined shocks were also simulated for a simultaneous rise in interest rates and NPLs.

130. **Exposure to foreign exchange risk appears well contained**. Most foreign exchange operations by U.A.E. banks are in U.S. dollars, and the peg to the U.S. dollar has been maintained successfully since 1980. Net foreign exchange positions in U.S. dollars at end-September 2006 were equivalent to 28 percent of bank capital, with most banks holding

significant positive foreign exchange positions.[22] Consequently, an appreciation of the domestic currency against the US dollar would affect negatively the capital ratios of most banks. For all banks, a 10-percent appreciation of the dirham with respect to the US dollar would result in a decline in the CAR from 16.3 percent to 15.9 percent. Banks' net foreign exchange positions in other foreign currencies are relatively small (equivalent to 6.5 percent of capital), with negative positions in euros and positive positions in other currencies.

[22] Net foreign exchange positions in U.S. dollars are declining and represented 44 percent of capital in December 2005. Medium sized and Islamic banks hold the largest positive foreign exchange positions in U.S. dollars as of September 2006 (equivalent to 78 percent and 182 percent of their capital, respectively), and would therefore be most affected by an appreciation of the dirham.