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United Arab Emirates: Selected Issues and Statistical Appendix

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UNITED ARAB EMIRATES

Selected Issues and Statistical Appendix

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Approved by the Middle Eastern Department

January 27, 2003

Statistical Appendix Tables

Overview

This Selected Issues Paper presents five essays examining issues in the United Arab Emirates related to the financial sector, long-term fiscal trends, fiscal sustainability, the competitiveness of the non-oil economy, and the labor market, as well as estimates of the real gross domestic income (RGDI). Chapter I presents trends of financial soundness indicators; recent developments in the nascent equity, bond, and insurance markets; as well as progress made in implementing legislation on anti-money laundering; and the combating of terrorism financing. Chapter II assesses long-term trends and cross-emirate variation in the fiscal structure, and the evolution of the United Arab Emirates' consolidated fiscal and non-hydrocarbon balances from 1980–2001. An effort was also made to address some of the important shortcomings in the country's fiscal statistics. The following chapter provides a practical framework to estimate the United Arab Emirates' permanent income available from its oil wealth to assess the sustainability of the current fiscal stance. Chapter IV examines the relationship between the labor market and non-oil real economic growth in the United Arab Emirates based on a growth accounting exercise. It also develops an analytical model to propose policies for increasing private sector job opportunities for U.A.E. nationals. The last chapter examines the relationship between RGDI and other key macroeconomic variables in the country from 1990–2002.

I. The Financial Sector[1]

A. Introduction

1. The United Arab Emirates has long played an important role as a regional financial center for the Middle East based on its location, the legacy of an open and liberal trade regime, and the proactive stance of the governments of the emirates to promote modern and technologically advanced infrastructure. The backbone of the financial system is the banking sector, which is one of the most developed in the region.

2. This section addresses issues relevant to the United Arab Emirates' financial sector. These include a background of the structure of the banking sector, the performance trends of financial soundness indicators, and the ongoing efforts by the Central Bank of United Arab Emirates (CBU) to enhance regulatory and supervisory changes in line with the rapid changes in the increasingly global banking environment. The chapter also discusses the developments, reforms, and challenges in other areas of the financial sector, including the nascent equity, bond, and insurance markets. The last section highlights the progress in implementing the Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) legislation. In fact, this area of reform has advanced the most over the past year, as a significant amount of CBU resources have been devoted not only to revise and issue new

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[1] This chapter was written by Mangal Goswami (MED).

legislation, but also to support and cooperate with several countries in international initiatives in this area.

B. Structure of the Financial System

3. The United Arab Emirates' well-developed banking system is the second largest in the GCC in terms of total assets. This is illustrated by the degree of banking presence in the U.A.E. economy, with bank lending to private nonbanks representing more than 50 percent of GDP (Table 1). The financial system primarily consists of commercial banks, money exchange houses, insurance companies, and securities firms. In comparison to Kuwait and Saudi Arabia, there are more commercial banks per capita in the United Arab Emirates, with 21 domestic commercial banks, 26 branches of foreign banks, and 105 head offices of money changing houses, as well as one restricted licensed bank. National commercial banks are geographically distributed among the emirates with each one, except for Ajman, having its own national bank, although most of the banks are headquartered in Abu Dhabi or Dubai. Among the 21 national banks, 14 have some federal or local government ownership. Only very few commercial banks are wholly operating as Islamic banks, but the demand for Islamic banking services is increasing, with some non-Islamic banks allowed to offer Islamic products.[2]

Table 1. Commercial Banking System of Selected GCC Countries, 2001

	Bahrain	Kuwait	Saudi Arabia	U.A.E.
Credit to the private sector (in percent of GDP)	46.6	68.1	26.8	52.3
Total assets (in millions of U.S. dollars)	10,218	52,056	126,150	77,288
Number of banks per 100,000 persons	2.37	0.43	0.05	1.82

Sources: IMF, *World Economic Outlook;* IMF, *International Financial Statistics;* and national authorities.

4. The structure of the banking sector has been stable for quite some time. Apart from one-off cases, there have been very few mergers among local banks, while a ban on new foreign entry has been in place since 1982. Some of the reasons for the dearth of mergers among the local banks are the following:

- Profitability has been good and capital ratios have been healthy.
- Large banks already have substantial market share and are generally not anxious to expand further, although they are aggressive in seizing opportunities to increase scale in certain products or areas, such as credit cards.

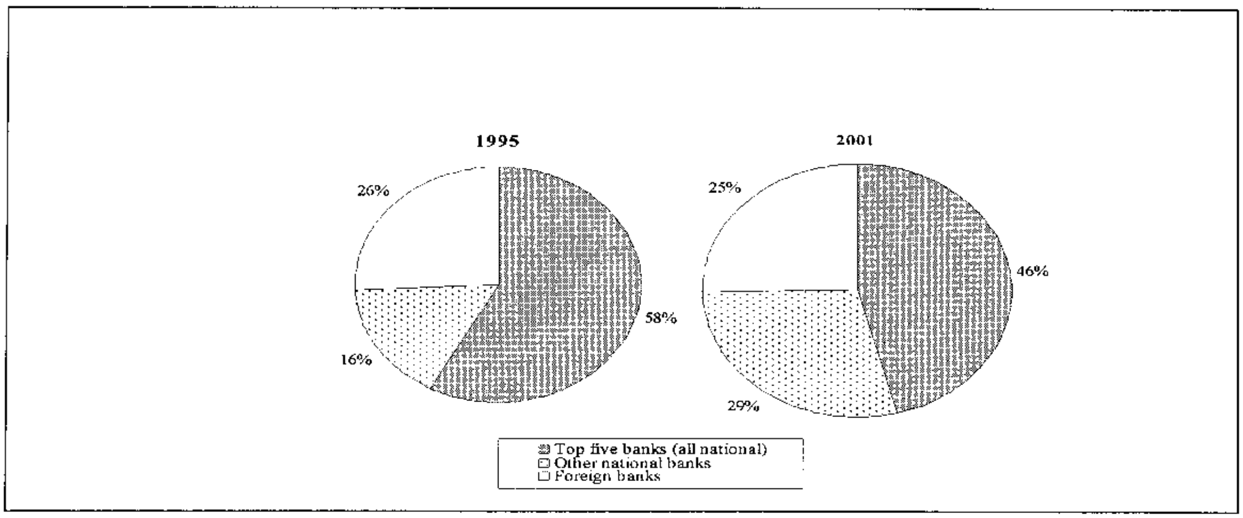
[2] The National Bank of Sharjah transformed itself into a full-fledged Islamic bank in July 2002. This is the third Islamic bank in the United Arab Emirates.

- Family ownership of a number of banks has resulted in reluctance to forge consolidation.

5. There are signs, however, that the financial sector landscape could be poised for change. This is driven in the near term, by the increased competition from smaller banks to gain market share within the domestic market; in the medium term, by further liberalization of the financial services sector as part of WTO commitments and the development of capital markets. While the top five national banks still represent about half of the banking system's total assets, along with deposits and loans and advances, their dominance has seen gradual erosion since the mid-1990s, with smaller national banks gaining share in all of these categories (Figure 1). Further competition is expected, since the United Arab Emirates will in all likelihood open up the banking sector to the GCC in the near-term. Alternative sources of financing, as the capital markets develop further, is also expected to put competitive pressure on the banking sector as corporations that have traditionally depended on bank borrowing diversify their funding profile.

Figure 1. Banking Structure in the United Arab Emirates

Share in Total Banking Sector Assets, Deposits, Loans, and Advances



Source: Central Bank of the United Arab Emirates.

C. The Banking Sector

Prudential regulations, bank supervision, and recent performance

6. Since the establishment of the United Arab Emirates as a federation of seven emirates in December 1971, there has been considerable progress in developing legislation supporting the development of the banking sector. The central bank supervises commercial banks, foreign branches, and money changers. One of the key elements of the current financial system is the strength of banking supervision, which has evolved in response to a series of

high profile failures in the early 1990s. In this regard, the main findings of the 2001 Financial Sector Assessment Program (FSAP) mission are highlighted in Box 1.

Box 1. Key FSAP Findings on Banking Supervision

- The banking sector is buttressed by strong banking supervision.
- Stress tests on banking sector vulnerability indicate that the system is well cushioned, with ample liquidity and a high risk-weighted capital adequacy ratio to withstand any significant shocks.
- Banks are well managed and the CBU is largely compliant with the Basel Core Principles (BCPs) with only a few exceptions.
- The CBU observes most good transparency practices in conducting monetary policy and banking supervision, but further improvement is needed in the area of transparency practices with regard to publishing more information on itself, its monetary operations, and financial sector developments.

7. Financial soundness indicators continue to point to a healthy banking sector, with all banks complying with prudential standards. Banks have shown strong performance in asset, deposit, lending growth, capitalization, profitability, and efficiency since the mid-1990s (Table 2). This trend continued in 2001, especially in the case of national banks, the leading ones posting double-digit growth in net profits, despite the downturn in global oil prices. Total assets and deposits of national banks also registered a sizable expansion, albeit at a slower pace relative to the previous year. Results reported for the first half of 2002 indicate that both national and foreign banks remained profitable with their asset quality registering further improvement.

Table 2. Banking Sector Soundness Indicators, 1996–2001 1/

(In percent, unless indicated otherwise)

Commercial Banks and One Restricted Licensed Bank	1996	1997	1998	1999	2000	2001
Risk-weighted capital to asset ratio 2/	20.8	19.4	20.0	20.5	20.2	20.0
Gross nonperforming loans/gross loans	15.2	14.4	13.5	13.6	12.7	11.2
Loan loss reserves/nonperforming loans	88.6	89.6	89.5	86.1	86.0	88.5
Return on assets (commercial banks)	1.9	2.0	2.0	1.5	1.8	1.7
Return on equity (commercial banks)	17.1	18.3	17.7	12.8	14.9	14.6
Total expenses to total revenues	35.0	36.3	35.4	38.3	37.5	38.3
Earnings per employee (in millions of U.A.E. dirhams)	0.25	0.27	0.28	0.23	0.27	0.31
Liquid assets to total assets	37.3	38.0	34.5	31.3	34.8	33.8
Deposits as a percent of M2	92.2	92.2	91.7	90.7	92.1	93.3
Foreign currency deposits as percent of M2	19.9	19.6	20.0	21.2	22.4	23.8
Loans to private sector as percent of total deposits	101.5	106.0	116.8	113.6	105.4	91.9
Number of commercial banks	46	46	47	47	47	47
Local	19	19	20	20	20	20
Foreign	27	27	27	27	27	27

Source: Central Bank of the United Arab Emirates.
1/ Includes commercial banks and one restricted licensed bank.
2/ Represents BIS Tier I plus Tier II capital.

8. The credit culture is gradually evolving from collateral-based lending toward the global trend of risk-based approach to assessing credit. The fact that counterparty credit risk from corporate lending by banks are secured almost fully by collateral—usually real estate—indicates that most corporate balance sheets are still not very transparent, with substandard accounting practices and poor corporate governance. However, banks are increasingly moving away from the traditional practice of "name lending" in favor of considering potential credits with proper credit risk assessment, thereby gradually making the use of collateral as a means only to mitigate risks.[3] To this end, the CBU is currently implementing a comprehensive risk management module for banks that encompasses market risk, operational risk, credit risk, and corporate governance.[4] In essence, full implementation of this risk review process of banks will result in enhanced banking supervision through an early warning system, while moving the operational underpinnings of the banking system to

[3] According to the BIS guidance note on Credit Risk Management (July 1999), banks need to be mindful that the value of collateral may well be impaired by the same factors that have led to the diminished recoverability of the credit.

[4] Implementation of comprehensive risk management was part of the FSAP recommendation.

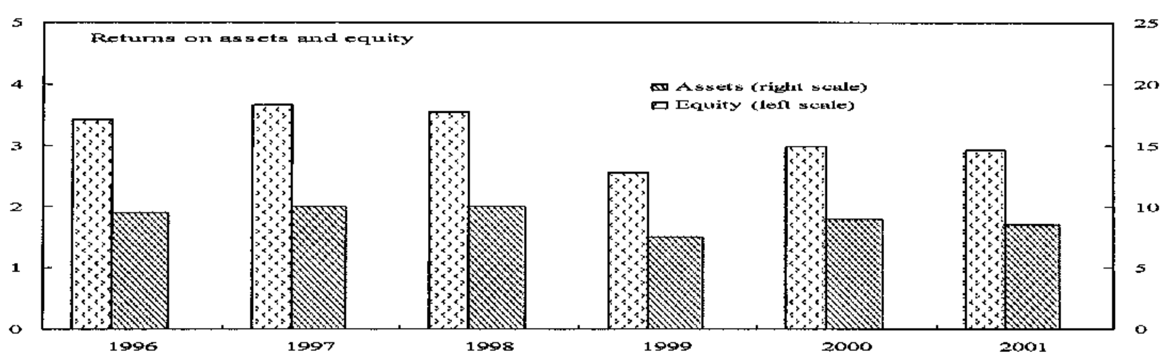
a relatively more risk-based platform. This program is expected to emerge from its current pilot stage to being fully operational by the first quarter of 2003.

9. Some of the other reforms in banking supervision that were part of the FSAP recommendations are ongoing. There is now a concerted effort to provide adequate lead time to banking and other supervisors as well as market participants, to ensure that significant structural changes can be safely and effectively implemented (e.g., the implementation of the AML/CFT legislation). However, reforms are lagging in the area of debt recovery through foreclosure of the underlying collateral in the case of loan default. With real estate being the most widely used collateral in the emirates except for Abu Dhabi,[5] there is a general reluctance to take land away from the debtor or even go to court to resolve such issues. Therefore, the modernization and enforcement of the bankruptcy law remains an important agenda of reform for the authorities.

Profitability

10. Indicators of profitability since the mid-1990s have compared very favorably to international standards. Net profits of the banking system have averaged about 12 percent since 1996, while the return-on-assets (ROA) of national banks has ranged between 1 percent to 3 percent, and return-on-equity (ROE) from 10 percent to greater than 20 percent (Figure 2). Foreign banks in the United Arab Emirates have also had high profits, averaging about 20 percent a year during the same period. Accumulated profits of banks over the past years have bolstered the capital positions of banks. Banking sector stocks, which form a significant part of the stock market capitalization, have performed strongly since their listing in the formal exchanges, rising by 14 percent in 2001.

Figure 2. Returns on Assets and Equity for Commercial Banks, 1996–2001



Source: Central Bank of the United Arab Emirates.

[5] All land in Abu Dhabi is government owned.

11. Net profits of commercial banks remained healthy in 2001. Aggregate data for national banks in the United Arab Emirates indicate that net profits grew by 8 percent in 2001, following a 12.5 percentage expansion in the previous year. Net profits of most foreign banks were also strong, although aggregate results showed a decline of 16.5 percent, driven mainly by the net losses of two large foreign banks, one of which increased its provisions for loan losses and wrote-off its bad loans from the Solo Industries debacle in 1999. The ROA for the banking sector as a whole registered 1.7 percent, while the ROE was 14.6 percent, a relatively good performance by international standards. Results from the first half of 2002 indicate that net profits grew by 11.5 percent and 40.9 percent on an annualized basis for national and foreign banks respectively.

12. The banking sector has been able to sustain relatively high profits, despite a large number of banks serving the domestic market.[6] Some of the factors that have helped U.A.E. banks to maintain their profitability are the following:

- Net interest margins at 2.5–3 percent over the past five years have been the primary reason for income. Margins for personal loans have risen as a result of increased loan demand, which has encouraged most banks to expand their business into retail banking (Figure 3).

- Revenue diversification is another new source of profits for the banking sector. Income from fee business has risen, indicating that sources of income other than interest margins are on the rise.

- Ample liquidity in the system from a stable deposit base has kept funding costs low, while banks have maintained their cost efficiency; the expatriate labor force still accounts for a significant portion of the total labor force in this sector.[7]

- Banks have taken advantage of new business opportunities in the area of consumer lending (credit cards and auto loans) where margins are attractive. The demand for consumer loans is supported by the high level of per capita GDP in the United Arab Emirates and the demographics of the maturing population. For example, foreign banks, such as Citibank, have aggressively expanded in the credit card business and several other local banks have followed suit.

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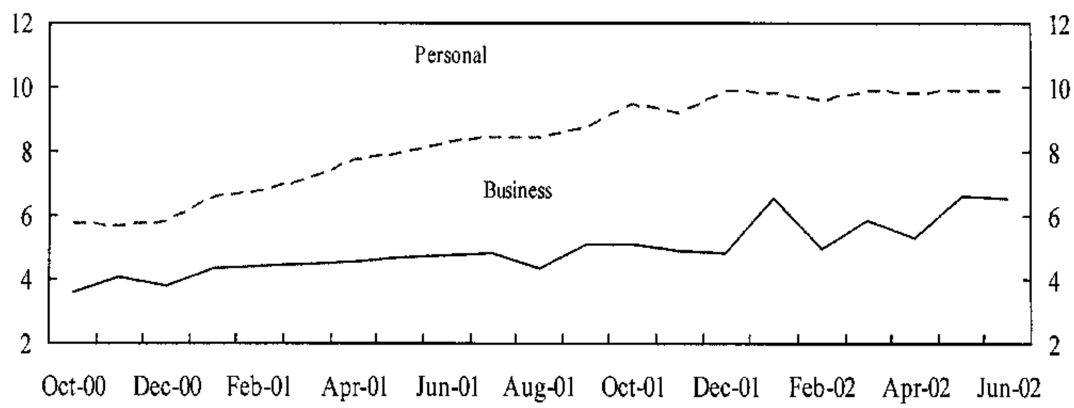
[6] Smaller banks are becoming more aggressive to gain market share, generating intense pressure on banks to make more efficient use of their capital.

[7] The banking sector is the only one in the United Arab Emirates subject to mandatory measures to increase the percentage of nationals in their workforce—albeit flexibly applied. The expected increase will be 4 percent a year.

Figure 3. Interest Rate Spread Between Lending and Deposit Rates, October 2000–June 2002

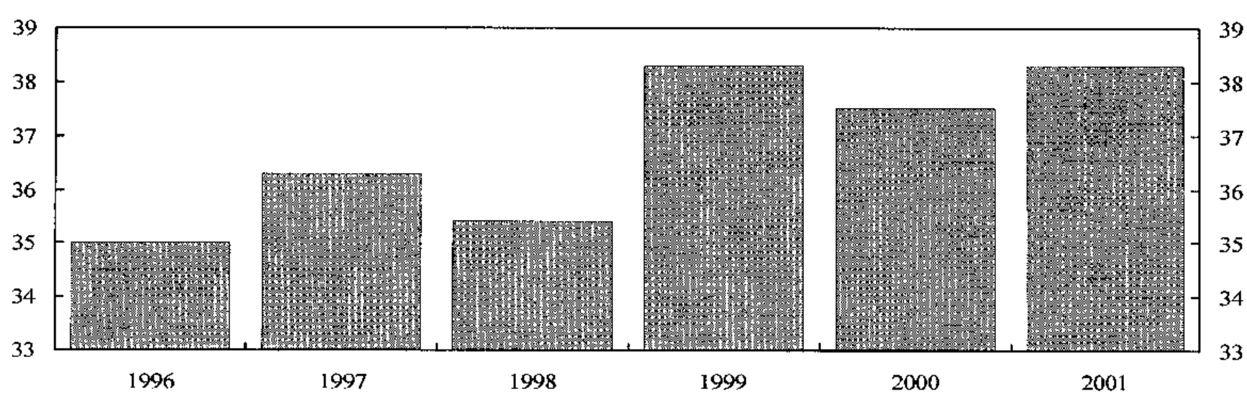


Source: Central Bank of the United Arab Emirates

13. Domestic loan demand has risen significantly in the past years. This rise reflects the opening up of the residential property sector to foreigners in Dubai, the rapid expansion of the free trade zones, the booming tourism industry, and several large private and public sector infrastructure project financing.

14. The flexible wage structure has delivered efficiency ratios that are among the lowest in the world. While total expenses to total revenues have been on the rise, primarily due to expenditures on new technology, the cost-to-income ratio is very competitive (Figure 4).

Figure 4. Total Expenses to Total Revenues, 1996–2001



Source: Central Bank of the United Arab Emirates.

15. U.A.E. banks have been quite successful so far in developing business from non-interest income business, in particular, commission income (Table 3; Figure 5). Owing to the competition in the domestic banking system, banks have increasingly diversified their

balance sheet into areas of investment banking, treasury and treasury-related services, wealth management through market-linked investment products to their retail customers and increased participation in syndicated lending. The U.A.E. banks are increasingly following their corporate clients in the area of investment banking by underwriting and providing advisory services on equity and debt financing, as well as providing facilities to trade securities. For example, the National Bank of Dubai and Emirates Bank International were co-managers in the Emirates Airlines local currency bond issue in 2001. Several banks are already offering wealth management products such as insurance, asset management, and mutual funds.

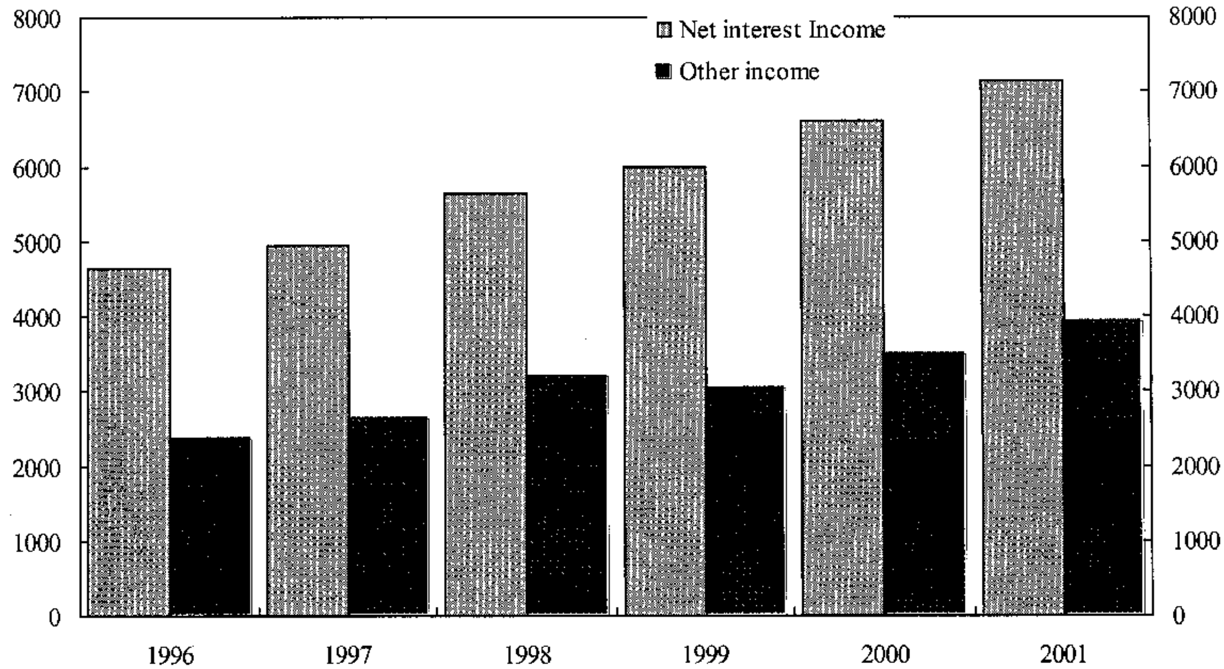
Table 3. Sectoral Loan Concentration Ratios, 1999–2002

(In percent of total loans)

	1999	2000	2001	June 2002
Agriculture	1.1	1.2	1.0	0.9
Mining and quarrying	2.4	2.1	1.8	1.5
Manufacturing	6.6	7.0	6.2	6.2
Electricity, gas, and water	0.1	0.3	0.9	1.0
Construction	15.5	15.7	16.5	16.1
Trade	29.7	30.4	30.4	29.5
Transportation, storage, and communication	2.8	3.0	3.1	3.1
Financial institutions (excluding banks)	1.4	1.4	1.3	1.6
Government	11.9	9.1	7.3	7.4
Personal loans for business and consumption	22.4	23.0	24.9	25.4
Business	11.5	12.4	14.2	14.6
Consumer	10.9	10.6	10.7	10.8
Others	6.1	6.7	10.7	7.2

Source: Central Bank of the United Arab Emirates.

Figure 5. Sources of Bank Profits, 1996–2001



Source: Central Bank of the United Arab Emirates.

16. U.A.E. banks also have a strong funding profile and manage excess liquidity quite efficiently to maximize returns. Most of the banks have ready access to a relatively stable deposit base, supplemented by a low cost of funds. In particular, the top five national banks get large deposits from government entities, such as Abu Dhabi National Oil Company, that have high cash flows. The big five banks that usually have a high level of excess liquidity, have also adopted a proactive stance in efficiently managing this liquidity through well-run treasury operations. The treasury operations of the National Bank of Dubai, for example, contributed significantly to its overall profits in 2001, and during the first half of 2002, by adequately hedging against a low interest rate environment and actively reducing the reliance on the interbank market in the portfolio mix.

Capital adequacy

17. U.A.E. banks continued to remain well capitalized during 2001 and the first-half of 2002. The risk-weighted capital adequacy ratio (CAR) of the overall banking sector remaining stable at 20 percent, significantly above the 8 percent minimum BIS capital adequacy ratio and the 10 percent requirement set by the CBU. The high CAR has been sustained partly by high profitability (profit retention) of commercial banks in the United Arab Emirates. Additional capital was also raised in the stock exchange by two banks via new issuance of stocks.

Asset quality

18. The improved trend in the asset quality of the banks' portfolio has been a key development since the mid-1990s. The ratio of gross nonperforming loans (NPLs) to gross loans declined to 10.7 percent as of June 2002 from 15.2 percent in 1996 (Table 1). Given the strength of the prudential indicators of the entire banking system, the relatively high level of NPLs is partly due to the enhanced reporting requirements of NPLs, which date back to the 1980s. While most of these loans have not been written off, they are well provisioned for at close to 90 percent as of end-2001, mitigating the concern over the high NPL level. On this point, U.A.E. bankers seem generally reluctant to write down NPLs, because according to common practice in the country, once loans are written off, the legal basis for recovering any of these assets weakens considerably. To this end, it is worth noting that some of the claims by Mashreq Bank from the Solo Industries debt default have reportedly been recently recovered.

Sectoral distribution of credit

19. Credit activity to the private sector has been underscored by a significant increase in consumer and construction loans since the late 1990s. Consumer lending has largely been driven by personal business borrowings to fund small- to medium-sized enterprises, while other consumer loans, such as credit card loans, are on the rise as well. Other sectors that also contributed to the credit expansion were wholesale and retail trade as well as transportation and communication. However, credit to the manufacturing sector has declined over the past few years.

20. The shift in the lending profile of banks since the mid-1990s, with increased concentration in construction and consumer loans, has raised some market concerns because of the possible risk of default owing to an economic downturn.[8] This concern, however, is mitigated by the strict implementation of existing regulations and their ongoing refinement by CBU's Banking Supervision Department. Under the current regulatory practice, most personal loans are secured or are backed by collateral in the form of securities, real estate, wages and deposits. Current regulations limit personal loans to Dh 250,000 and new personal loans are reported to the Risk Bureau, where a central database of individual loan portfolio is maintained on a consolidated basis. A mechanism to calibrate loan limits to certain parameters of repayment capabilities like salaries is currently under consideration. Also, regulations for lending to the construction sector have been recently tightened in that banks can now only lend up to 20 percent of customer deposits to the construction sector. Moreover, any potential large exposure, prior to advance, will have to be first submitted to the CBU for a detailed analysis of the underlying collateral and the project under

[8] For example, Standard & Poor's Report (July 2002) on *Bank Industry Risk Analysis: United Arab Emirates* stated that "lending concentrations in the personal and construction sectors accentuate banks' risk profiles."

consideration.[9] These ongoing refinements supplement already existing prudential regulations such as limits on large exposures and on-site inspections to verify that proper internal control systems are in place to identify and limit large exposures.

Liquidity

21. National banks in the United Arab Emirates are reasonably liquid, with a relatively stable deposit base and a high level of interbank placements in banks abroad. The fact that the United Arab Emirates is structurally a net creditor country with a fixed exchange rate has provided the banking system with a net accumulation of foreign assets, supporting its ample liquidity situation. Despite a decline in both oil prices and domestic interest rates, deposits of the banking system rose by 11 percent in 2001. This occurred while the net interbank placement of funds abroad as a proportion of total assets, which has steadily declined since mid-1990s, still constituted an important part of banks' liquidity cushion at 14 percent of total assets as of end-2001. The ratio of liquid assets to total assets remained high at about 34 percent in 2001, while the liquid asset to short-term liabilities increased to over 60 percent. Another indicator of liquidity, the loan to deposit ratio, also declined to about 75 in 2001 from 89 during the previous year.

Foreign exchange exposure and dealings

22. The share of foreign assets in the total assets of the banking sector has remained stable at about 35 percent since 1998. Commercial banks were able to build on their net foreign asset position in 2001, despite a lower balance of payments surplus and lower interest rates. The share of foreign currency-denominated private sector deposits in total private sector deposits largely remained stable in 2001. Most foreign exchange operations of U.A.E. national banks are in U.S. dollars, but these pose no imminent exchange rate risk given the United Arab Emirates' peg to the U.S. dollar exchange rate regime, which has lasted with only very minor adjustments since 1980, and is backed, by large official reserves and prudent macroeconomic policies. Exposure to foreign exchange risk in other currencies is limited, with the very low net foreign open foreign currency position in non-U.S. dollars.

Monetary policy, monetary instruments, and money markets

23. Given the fixed exchange rate arrangement, CBU conducts its monetary operations in an accommodative manner, whereby it stands ready to buy and sell any amount of U.S. dollars demanded at the announced official rate. Because of balance of payments surpluses, CBU has continued to build its net foreign assets by buying U.S. dollars mainly from the government and selling a large part of these funds primarily to commercial banks. The main

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[9] A large exposure is defined as lending of greater than 7 percent of a bank's capital to a single customer (defined as an individual, company, or group of companies under common ownership).

monetary instruments currently used by CBU to smooth out fluctuations are the certificates of deposits (CDs) to absorb liquidity and foreign exchange swaps to inject liquidity.

24. Although the domestic interbank market is very liquid, further measures to enhance the intermediation of the domestic money market are under way. The relatively short reserve compliance period has encouraged banks to actively participate in the interbank market to manage their liquidity positions. Nonetheless, to further improve the efficiency and effectiveness of the money market, the CBU is currently considering increasing the issuance of CDs at the longer end of the maturity spectrum of the yield curve. Further measures to facilitate the maturing process of money markets would hinge on developing more market-based instruments to complement the current use of deposits and loans in the domestic dirham interbank market. In this regard, the introduction of repos could potentially increase the liquidity in that market. Given that repos are short-maturity collateralized instruments, repo markets have a strong linkage with the securities market and other short-term money markets, thereby laying the foundation for the development of a domestic bond market.

25. The reserve requirement has not been actively used as a monetary instrument in recent years other than the adjustment made in January 2000, to encourage the repatriation of deposits held abroad by banks. The reserve ratio on time deposits was lowered from 2–5 percent to 1 percent, and the ratio for deposits (current, savings, and call accounts) was raised from 6–8 percent to 14 percent. In addition, banks were already required to hold 30 percent of net short-term dirham placements with the CBU. As a result of the change in reserve requirements, some repatriation of funds from overseas branches of U.A.E. banks has taken place. Nonetheless, authorities have chosen to consider all the deposits of U.A.E. residents booked in the overseas branches to be part of domestic liquidity. The rationale for this decision was based on their observation that almost all of the funds that were deposited in overseas branches, to circumvent the lower but still existing reserve requirement, found their way back to the domestic banking system.

D. Other Segments of the Financial Sector

Securities markets

26. The U.A.E. authorities have taken important steps to address the volatility and malpractices that plagued the local securities markets in 1997 and 1998. These include the enactment of Federal Law No. 4 of 2000 (Securities Law), the creation of the Emirate Securities and Commodities Authority (the Authority) for brokerage houses, investment funds and the stock exchanges in Dubai and Abu Dhabi. The Securities Law requires that all intermediaries, exchanges and clearance and settlement facilities be licensed by the Authority, in addition to all shares being listed on a licensed exchange.

27. There has been a marked increase in activity since the establishment of the Dubai Financial Market (DFM) and the Abu Dhabi Securities Market (ADSM) in March and November of 2000, respectively. While the formal exchanges have seen a significant rise in shares traded, trading volume, the number of trades made and market capitalization have

risen significantly, the activity in the non-listed companies that continue to be traded in the over the counter (OTC) market has seen a substantial decline during the same period. The number of listed companies in both stock exchanges has increased rapidly. Blue chip companies, such as Etisalat, have been listed to increase the depth and liquidity of the market. Out of the publicly traded companies, the banking sector has the largest contribution in terms of trading volume, followed by the insurance sector and the services sector in both the securities exchanges. The Emirates equity market index (Emnex) rose 25.6 percent in 2001 and a further 13.6 percent through end-October 2002, while total market capitalization of the DFM and the ADSM has risen from less than 20 percent of GDP in 2001 to over 35 percent of GDP as of end-September 2002 (Table 4).

Table 4. Securities Market Activity, 2000–02

(In millions of U.A.E. dirhams)

	Abu Dhabi Securities Market			Dubai Financial Market		
	2000	2001	Oct. 2002	2000	2001	Oct. 2002
Number of shares traded	0.5	18.6	50.9	24.0	58.7	129.0
Value of shares traded	8.1	534.1	1,086.7	436.6	981.0	2,471.3
Number of executed deals (In thousands of dirhams)	0.202	5.7	9.1	6.6	13.6	23.0
Market Capitalization	14,000	21,205	70,923	28,391	28,925	33,244

Source: National authorities.

28. Securities regulation in the United Arab Emirates is at the early stage of development, although the establishment of the ASDM and the DFM has strengthened the regulatory structure and its implementation. The Authority has already issued several sets of regulations covering its own structure and the operations; the licensing of securities exchanges; the structure and operation of clearance and settlement facilities; the membership of the securities exchanges; disclosure and transparency; and the use of alternative dispute resolution in securities and commodities transactions. Nevertheless, further amendments to the existing laws and regulations are needed, in order to bring them in line with current best practices. Strengthening corporate governance environment also remains crucial. In this regard, improvements in corporate transparency and accounting standards need to be addressed expeditiously. For example, the nonbank sector is yet to migrate their accounting practices to the IAS39, while most listed companies except for banks do not yet report quarterly results.

The development of the bond market

29. The local debt market in the United Arab Emirates is in its nascent stages, although recently it has been enhanced by several bond issues in the local market (Box 2). However, trading in the secondary market is not very active with only one of the bonds listed in the

securities exchange market. Nonetheless, with more issuance in the pipeline, including the one by the Dubai government to fund infrastructure projects in 2003, activity in the bond market is expected to pick up in the period ahead.

Box 2. Domestic Bond Market

Issuer	Issued	Maturity	Amount
BMW	1999	11/2002	Dh 350 million
Abbey National	2000	Called	Dh 400 million
Emirates	2001	06/2006	Dh 1,500 million

Source: Central Bank of the United Arab Emirates.

30. Notwithstanding the encouraging trend in the bond market, several factors have inhibited its development in the United Arab Emirates. Some of them are as follows:

- The use of deposits and loans as the only instruments in the domestic dirham liquidity market has prevented the development of a repo market that is the key building block for debt markets.[10]

- Inadequate issuance of government securities to provide a reliable benchmark yield curve and the collateral generally used for repos.[11]

- Lack of transparency in the balance sheet of various corporations to form adequate credit assessment.

[10] An active repo market facilitates increased market activity in the OTC markets where most debt is traded. Without such collateralized borrowing arrangements, trading and position taking would have to resort to more expensive uncollateralized bank credit lines.

[11] Owing to the United Arab Emirates' relatively large foreign asset holdings, there has been no need to issue government debt. However, cities like Singapore and Hong Kong, despite generally running budget surpluses, governments are developing the local bond markets to diversify risk.

- Financial legislation is not at par with international standards to discipline financial disclosures and high standards of corporate governance.

- A major institutional investor in the National Pension Fund is largely absent from investing in the domestic bond market.

31. The motivation for developing debt markets, in the case of United Arab Emirates, would mainly be to make the functioning of financial markets more effective and diversify the undue dependence on the banking system for financial intermediation. The bond market could also allow banks to raise funds to finance projects that require longer term financing, thereby mitigating the possible asset-liability mismatches. Similarly, corporations could have the flexibility to finance the acquisition of long-term assets and fixed investment projects that are expected to yield returns only in the long term.

32. Another reason for developing the local bond market is to diversify the risk of sterilizing large inflows from oil into a wider spectrum. Currently, the sterilization of the large inflows from oil-related receipts, in the absence of a developed bond market, take place by the issuance of short-term papers by the CBU and the sizeable placement of short-term interbank deposits abroad by commercial banks. A liquid bond market could provide another conduit for risk diversification across the maturity spectrum, making liquidity management more efficient.

33. The development of capital markets would also provide opportunities for the significant pool of savings to be deployed into resources other than bank deposits. Institutional investors, including the National Pension Fund, other private pension funds, insurance companies, and asset management, would benefit from the development of capital market products.

Insurance

34. The insurance sector penetration in United Arab Emirates is one of the highest in the GCC. The FSAP report indicated that the insurance industry is well capitalized at the aggregate level, and there seemed to have been no systemic risk arising from the insurance industry to the banking sector. However, in contrast to the banking sector, the insurance sector is relatively small (though there are more than 50 companies), less systemically important, less developed, and inadequately supervised.

35. Several initiatives along the lines of the FSAP recommendations are currently being pursued. To this end, the Emirates Insurance Association (EIA), an organization originally set up to promote cooperation between member insurance companies and agencies, as well

raise insurance awareness, has intensified its efforts recently.[12] The EIA, in its unique capacity as a technical extension of the Ministry of Economy and Commerce (MOEC), has identified the key deficiencies in the insurance market, which include the Insurance Act of 1984, supervision and examination of the insurance sector, and the organization structure of the insurance industry. The EIA intends to recommend a very fundamental approach to reforming the insurance sector and not take a piecemeal approach. For example, the EIA has recommended that a separate and independent supervisory body be set up rather than just extend the staff of the Insurance Division of the MOEC, which goes beyond the FSAP recommendations.

E. Anti-Money Laundering and Combating the Financing of Terrorism

36. Several important steps have been taken in the past few years to address money laundering and financing of terrorist activities. The authorities established a Financial Intelligence Unit (FIU) in July 1998 (which was changed to the Anti-Money Laundering and Suspicious Cases Unit in November 2000), formed a National Anti-Money Laundering Committee in July 2000, and issued a circular in November 2000 to all financial institutions operating in the country to report suspicious transactions, scrutinize Letters of Credit and related documents, and stressed customer identification. Also, the CBU is in the process of registering and supervising the "hawaladars," who are now required to provide details of remitters and beneficiaries as well as report suspicious transfers. In addition, authorities have extended full cooperation to other jurisdictions, including six investigation teams from the United States and other countries such as Germany, Pakistan, and the United Kingdom, some GCC countries, since September 11, to facilitate investigations relating to anti-money laundering and combating of terrorist financing.

37. The United Arab Emirates passed the Anti-Money Laundering Law (Federal Law No. 4) in January 2002, which criminalizes money laundering activity. This federal legislation fully incorporates the Financial Action Task Force's FATF 40 recommendations and its 8 special recommendations dealing with terrorist financing. The Federal Law No. 4 also covers terrorism and money related to terrorism. It states that money originating from terrorists acts or vice versa is criminal money and subject to prosecution. The Federal Law empowers the CBU to issue freeze orders relating to funds that may be used to facilitate terrorism.

38. The National Anti-Money Laundering Committee was established in July 2000 to undertake the overall responsibility of coordinating the AML policy in the United Arab Emirates. This committee, headed by the CBU governor, is represented by the Ministry of Interior, Ministry of Finance and Industry, Ministry of Justice, Ministry of

[12] The Emirates Insurance Association was established in 1988 after a decree passed by the MOEC, which is the regulatory and supervisory authority for insurance companies and pensions.

Economy and Commerce, Islamic Affairs and Endowments, the U.A.E. Customs Council, the Secretariat General of Municipalities, the Chambers of Commerce and Industry, in addition to as observers, a large number of banks and the three main moneychangers as observers. The authorities have also strengthened the Anti-Money Laundering and Suspicious Cases Unit by increasing its number of members, financial resources and its technological capabilities. The U.A.E. FIU also became the first full member of the Egmont Group out of the GCC in January 2002, which is expected to facilitate information exchange among the group members which are all implementing AML legislation.[13]

39. The U.A.E. compliance level on AML was assessed by the Financial Action Task Force Mutual Evaluation Team. It concluded that the United Arab Emirates has put in place a comprehensive regime of anti-money laundering law and regulations. Moreover, the country has fully implemented all UN Security Council Resolutions in this area since 1999. Moreover, based on the responses to the AML/CFT questionnaire, the IMF has also assessed that the U.A.E. authorities have a well-developed and comprehensive AML/CFT system. The law is not only meant for licensed financial institutions, but also covers other financial, commercial, and economic establishments in the United Arab Emirates, while the list of predicate crimes covers all offenses referred to in international conventions to which the United Arab Emirates is a party.

II. Long-Term Fiscal Developments, 1980–2001[14]

A. Introduction

40. Fiscal policy in the United Arab Emirates—a federation of seven emirates founded in 1971—is decentralized. This reflects the complexity of the country's political structure, with each emirate retaining considerable political, judicial, financial, and economic autonomy. In addition, sharp disparities in resource endowments among the emirates have resulted in variations in the scale, level, and composition of spending and revenue, as well as fiscal trends, with the fiscal activities of the Emirate of Abu Dhabi being by far the largest and most important in the country.[15] Moreover, over time, the emirates have transferred some

[13] Since 1995, a number of the FIUs began working together in an informal organization known as the Egmont Group to provide a forum for FIUs to improve support to their respective national anti-money laundering programs by systematizing the exchange of financial intelligence.

[14] This chapter was written by John Wilson, Hamid Davoodi, and Ugo Fasano (all MED).

[15] In the second-half of the 1990s, Abu Dhabi's own spending and revenue (i.e., spending net of intergovernmental grants) accounted for about 60 and 75 percent of consolidated government spending and revenues, respectively.

activities, such as defense, to the federal government. As a result, the budget of the federal government is now the second most important.[16]

41. U.A.E. fiscal statistics are beset with important shortcomings. Although these vary across emirates, the following ones can be highlighted: incomplete coverage of fiscal accounts such as investment income from government savings, off-budget activities (e.g., expenditures under control of the Rulers' Offices and municipalities, and debt), no information on financing of the budget, double counting of some government activities, and lack of full adherence to international standards for classification of government expenditures and revenues.

42. This chapter compiles fiscal data over a long period (1980–2001) at various levels of aggregation. It then assesses long-term trends and cross-emirate variation in the fiscal structure, as well as the evolution of the United Arab Emirates' overall fiscal and non-hydrocarbon balances over the period.[17] Data for this chapter were in part assembled from IMF documents extending back to the 1980s, and cover accounts of the federal government and the largest four emirates (Abu Dhabi, Dubai, Sharjah, and Ras Al Khaimah). The consolidated fiscal balance represents a combination of the federal government and these four emirates, including estimated investment income on official foreign assets of Abu Dhabi.

B. Quality of Fiscal Data

43. The fiscal data used in this chapter has been compiled with the intention of addressing some of the shortcomings mentioned above.[18] First, an effort was made to ensure continuity of the component fiscal series, as well as consistency in compilation, detail, and definitions. For instance, the prominence role of "Abu Dhabi federal services" has changed over time, and investment income, that is, income earned on government external assets, was missing for much of the 1980s. Second, the data on the consolidated accounts now net out intergovernmental grants. Until recently, however, the authorities' presentation of the consolidated accounts double-counted these grants—though intergovernmental grants need to

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[16] Dubai government activities are only about one-fifth the scale of Abu Dhabi's and one-half that of the federal government. Sharjah, in turn, is only a fraction of Dubai. Ras Al Khaimah and the other Northern Emirates rapidly diminish in fiscal scale toward *de minimus* levels. Fiscal statistics for the other three emirates are not available; but due to their relative small size, their exclusion does not significantly hamper the analysis.

[17] See Chapter III for a framework and a detailed discussion of the relevance of non-hydrocarbon fiscal balance for the United Arab Emirates.

[18] See the accompanying staff report on statistical issues regarding fiscal and other data.

be included for each level of government.[19] Third, an important issue for the United Arab Emirates is that investment income is missing from the official fiscal accounts. Excluding this income from official fiscal statistics provides a misleading picture of the fiscal stance and hampers macroeconomic assessment. In the absence of direct information on investment income, the data in this chapter therefore include Fund staff estimates. These estimates are derived in such a way that they are consistent with the level of official government external asset holdings as provided recently by the authorities to the IMF staff.[20]

C. Fiscal Structure

44. The differences in the revenue structure among the emirates and the federal government reflect the wide disparities in resource endowments and sources of revenue, including the ability to impose fees and charges. The federal government depends largely on grants from Abu Dhabi and Dubai for its budget, though fees and charges have increased rapidly in the past years—the federal government does not hold foreign assets and has no access to domestic or external financing. Oil revenue and investment income account for most of Abu Dhabi government receipts. Oil revenue remains the most importance source of Dubai government revenue, even though non-hydrocarbon activities account for more than 70 percent of the emirate's GDP. Despite efforts to broaden the revenue base in the 1990s, the United Arab Emirates' dependence on oil has increased from 54 percent of total consolidated revenues in the 1980s to 57 percent in the 1990s through 2001.

45. Some similarities exist in the expenditure structure across emirates. Current spending currently represents more than 60 percent of the total in the emirates and close to 95 percent in the federal government. The wage bill (excluding military personnel) and goods and services account for much of this spending in Dubai and Sharjah as well as the federal government. In contrast, the wage bill only represents about 4 percent of total spending in the emirate of Abu Dhabi, and grants to the federal government, 17 percent. Expenditures on subsidies and transfers as well as defense have become the largest spending items,

[19] Recorded "grants" in the U.A.E. fiscal accounts are in part cash contributions by Abu Dhabi and Dubai to the federal government. There are also some Abu Dhabi expenditures that are "attributed" to federal activities. To the extent such activities are acknowledged in the federal accounts, the income flow has been netted down in the consolidated totals. Abu Dhabi defense and internal security outlays—also regarded as "federal services" by the emirate—are not netted out, because they are not recorded in the federal accounts as "revenue."

[20] U.S. dollar short-term LIBOR rates were used from the early 1980s to approximate income flows that pertain to Abu Dhabi's fiscal accounts. The exercise was conducted so that asset stocks near the end of the period converged with the information provided by the authorities. However, the implicit path of assets derived for the 1980s and most of the 1990s may diverge from actual market values in each year.

accounting for close to 45 percent of total spending (including grants) in Abu Dhabi. In all emirates, following the completion of important infrastructure projects, development expenditures declined significantly during the 1980s. Although, they have recovered since the early 1990s, development outlays reached about 5 percent of GDP of consolidated spending in 2001. Among other long-term characteristics of the budgets, one can note that the current fiscal balance, which provides a measure of the government's contribution to national savings, in the federal government and emirates has always recorded a surplus over the past two decades.[21]

D. The Performance of the Consolidated Fiscal Accounts

46. Several broad trends are evident from 1980–2001 (Table 5). Reflecting diversification efforts, non-hydrocarbon receipts (excluding investment income) have increased over the years—albeit from a low base. Fees and charges are the main source of non-hydrocarbon revenue, followed by income taxes (on foreign banks and gas companies) and profit transfers. Customs revenue only accounts for about 10 percent of the total owing to low level of import tariffs. Although the share of non-oil revenues (excluding investment income) in the total has not changed much over the past two decades, these revenues have accompanied the rapid growth in non-oil GDP, averaging about 11 percent of non-oil GDP a year during much of the 1990s. Despite the rising importance of these revenues, total government revenue has fluctuated sharply over the years because of continued high dependence on oil. In fact, in the late 1990s, the level of total revenue was slightly higher than the level reached in the early 1980s, implying a sharp decline in real terms and in percent of GDP. Meanwhile, investment income has been a far more important source of revenue in the 1980s about 20 percent of GDP, as compared with 10 percent in the 1990s.

47. Consolidated expenditures have more than doubled in nominal terms over the past two decades.[22] Current expenditures have roughly tripled. The largest percent increase was Abu Dhabi "federal services," which mostly comprise defense spending (the latter reached about 11 percent of GDP in 2001). Also, subsidies and transfers have practically doubled since 1997. In contrast, development outlays have not presented a clear trend during much of the 1990s.

48. Reflecting these changes in revenues and expenditures, the consolidated fiscal balance deteriorated in the 1990s. While recording a surplus (including investment income) from 1980–92, in the following years through 2001, the consolidated fiscal balance switched to a deficit, except in 1997 and 2000 (Table 5). Despite this deterioration, the non-

[21] The current fiscal balance represents the difference between total revenue and current expenditures.

[22] After peaking at almost 48 percent of GDP in 1991, total spending averaged 39 percent of GDP in the 1990s.

hydrocarbon deficit (including investment income) shows that fiscal policy remained in line with international economic objectives through 2000.[23] With average global prices of almost $26 per barrel in the 1980s, the non-hydrocarbon deficit was relatively low, averaging Dh 15.3 billion a year (about 15 percent of GDP)—that is, government consumption could have been much higher than it actually was. Thus, with an average consolidated fiscal surplus equivalent to 11 percent of GDP a year in that decade, the United Arab Emirates was clearly able to accumulate sizable government assets. In the 1990s, with oil prices declining, on average, to about $19 per barrel, the non-hydrocarbon deficit more than doubled in nominal terms, though this deterioration compares to a period of relatively low government consumption.[24] The increase in expenditure in the 1990s was matched by rising revenue from fees and charges and rising investment income, leading, after an initial jump in 1990, to a relatively stable nominal non-hydrocarbon deficit (at about Dh 37 billion) through 2000. The consolidated fiscal deficit averaged 0.7 percent of GDP from 1990–2000. Nevertheless, in 2001, the non-hydrocarbon deficit surged to Dh 62 billion (equivalent to 24 percent of GDP), indicating that at that level, the current fiscal appears to be unsustainable, as well as out of line with international economic equity objectives (see Chapter III for further details).

E. Fiscal Performance of the Federal Government

49. The federal budget has become more important over time with the transfer of some fiscal activities. There are currently 16 federal ministries, among them defense; agriculture and fisheries; economy and commerce; planning; health; education; labor and social affairs; and foreign affairs. Federal spending currently accounts for about 22 percent of consolidated expenditures. Grants from Abu Dhabi and Dubai represent about 65 percent of total revenue, while fees and charges (largely from expatriates) make up almost 25 percent. Federal receipts from "enterprise profits" have risen in recent years—these mainly represent profits from the central bank and the telecommunications government monopoly, Etisalat (Table 6).

50. Over the years, the composition of spending has shifted toward wages and transfer and away from goods and services. The increase in the wage bill (which accounts for 35 percent of total spending) reflects the key role played by the federal government to provide employment to Emirati nationals, particularly from the northern poor emirates. It also reflects the hiring of teachers and health workers to keep up with the rapid increase in population. The federal authorities are currently engaged in increasing expenditure efficiency and reducing the overall wage costs. Recent steps taken include labor saving innovations such as "e-government" and "e-dirham" transactions (for fees, charges, and permits) and,

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[23] The non-oil fiscal balance is a better indicator of underlying fiscal trends in oil-dependent economies than the traditional overall fiscal balance because it abstracts from the volatility in oil prices and revenue.

[24] In percent of GDP, the non-hydrocarbon deficit (excluding investment income) remained relatively stable in the 1980s and 1990s (at about 34 percent).

beginning in 2001, the privatization of various services provided to the federal public sector. Since the federal government has no financing options, its expenditure trajectory must follow revenues rather closely. Thus, ex post, the federal fiscal balance has generally recorded a surplus or a very small deficit.

F. Fiscal Performance of Abu Dhabi

51. Endowed with most of the United Arab Emirates' natural resources, the Emirate of Abu Dhabi is the federation's fiscal heavyweight. Oil income dominates Abu Dhabi's revenue structure. Indeed, in the second-half of the 1990s, this source made up about 60 percent of total revenue, even higher than the 54 percent in the first-half of the 1980s (Table 7).[25] Investment income—the second most important source of revenue in the emirate—has proved to be as volatile as oil receipts, ranging, according to staff estimates, between Dh 9–25 billion over the past two decades. Non-hydrocarbon revenues (excluding investment income) has, however, increased over the years, though they continue to account for less than 10 percent of total revenue. This increase is mainly accounted for by a rise in income taxes, but it must be noted these taxes are derived exclusively from natural gas companies (e.g., ADGAS). Thus, almost all of Abu Dhabi's budget revenue is still associated with hydrocarbon activities.

52. Abu Dhabi's total expenditures have more than doubled, and current expenditures have risen almost seven-fold since the early 1980s. Indeed, current expenditures have expanded rapidly to about 60 percent of total outlays from only about 20 percent in earlier years. This has occurred mainly at the cost of grants both to the federal government and foreign grants. In terms of their role in Abu Dhabi's expenditures, federal grants (excluding defense services) have fallen from 50–60 percent of the emirate's outlays, though they still account for roughly 20 percent of the total.

53. Composition of recurrent spending has changed over the period. Apart from the grant element to the federal government for defense, discussed earlier, spending on goods and services and on wages and salaries has contracted while those on subsidies and transfers have increased sharply. The rise in Abu Dhabi's subsidies and transfers is noteworthy.[26] In recent years these outlays have been focused on power and utilities (even after creation of the Abu Dhabi Water and Electricity Authority–ADWEA). Considerable funds have also been

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[25] This income is a mixture arising from royalties, taxes (on ADNOC, as well as on foreign companies), and many individual concession agreements, so that responsiveness to spot hydrocarbon prices is somewhat complicated.

[26] These were, especially in the 1980s, termed "compensation and transfers," reflecting payments for land appropriated by the government for public projects. The surge of subsidies and transfers in 1996 was in connection with obligations arising from the liquidation of a bank (BCCI).

spent in support of agriculture. Subsidies and transfers from Abu Dhabi reached almost 6 percent of GDP in 2001. The diminished shares of wages and salaries and goods and services in total current expenditures mask the fact that in nominal terms, the former doubled and the latter roughly tripled over the past two decades. Development expenditures almost doubled over these years, with both water and electricity and other infrastructure sharing in the increase. They accounted for 14 percent of total spending in 2001, significantly below the importance of subsidies and transfers. The emirate's overall balance has switched from a surplus from 1980–90 to a deficit through 2001 (except in 1997 and 2000), ranging from 2-5.5 percent of GDP.

G. Fiscal Performance of Dubai and Sharjah

54. At the outset, two observations should be noted. First, the smaller emirates seem to face fiscal constraints similar to the federal government. Some kind of budget equilibrium is required on a high frequency basis because they do not hold external assets that could be drawn down—though at times, they have borrowed from local banks to finance fiscal deficits.[27] Second, fiscal data from Dubai and Sharjah suffer from various classification problems that hinders a full assessment of their fiscal developments.[28]

55. More than half of Dubai's revenues are classified as oil and gas. Another important portion is trade-related, owing to Dubai's prominent international commercial activities, especially through its various free zones (Table 8). Similar to other levels of government, current expenditures account for about two-thirds of total outlays —having risen from less than a third in the early 1980s—and the wage bill represents approximately half of these outlays. Dubai also makes significant development expenditures, including the municipality and water and electricity sector.[29] In addition, it also makes regular cash contributions to the federal government. Fiscal accounts show overall balances close to zero, or in recent years, relatively small deficits that have averaged 0.3 percent of GDP from 1995–2001.

56. Further analysis of the Dubai fiscal accounts is problematic, in part because of significant classification problems. Financial activities in the emirate interact with activities of the Ruler's Court, and the lines defining and separating various revenues and expenditures, and operations from financing, are not very clear. As examples, "oil and gas" income booked by the Dubai Finance Department are those revenues passed along to the department by the Ruler's Court under that rubric, and the exact connection to oil and gas

[27] Government debt to the local banking system remains small, at less than 5 percent of GDP by end of 2001.

[28] However, the assessment of consolidated fiscal developments is not much affected because of these data issues in the smaller emirates.

[29] Unlike Abu Dhabi, Dubai has not moved to privatize its Electricity and Water Authority (DEWA). Development expenditures have fluctuated close to Dh 2 billion for many years.

operations is not specified. Customs revenue may include income received from Jebel Ali and other free zones. Various loans and amortizations with the banking system appear to be mixed in with "other revenues and expenditures." Finally, many utilities-related transactions with the Dubai Water and Electricity Authority (DEWA) are missing, because according to officials, these are settled in an off-budget account.

57. Similar problems hamper a full analysis of the Sharjah Finance Department accounts (Table 9). Here, too, ad hoc operations with and support from the Ruler's Court appear to be included in some line items; current and development outlays are somewhat entangled; support for water and electricity operations is not included in the statements; and Sharjah Municipality accounts are off-budget. In addition, debt service is also off-budget.[30]

H. Conclusion

58. Long-term trends appear to indicate that the U.A.E. authorities have adopted until recently a fiscal policy in line with intergenerational economic objectives. This policy has resulted in fiscal savings over the past two decades. However, the consolidated and non-hydrocarbon balances have deteriorated significantly since 2001, owing mainly to higher expenditures. The authorities cannot rely with confidence on upturns in world oil prices and on a turnaround in returns on financial assets to improve the fiscal position in the years ahead. Cuts in spending and a broadening of the revenue base—in the long run, the adoption of a federal tax system could be an important step towards broadening the revenue—are in order to restore fiscal discipline. Abu Dhabi (and to some extent the federal government because of importance of grants from Abu Dhabi in its revenue), as the largest and richest emirate, will have to bear responsibility for many of the initiatives needed to address the recent deterioration in the fiscal accounts. Without adjustment measures, in particular cuts in subsidies, the authorities might need to liquidate foreign assets and/or incur debt. Finally, the U.A.E. fiscal statistics could benefit from greater transparency, consistency, as well as adoption of internationally accepted classification of fiscal revenues and expenditures.

[30] Dubai Municipality is included in the emirate's fiscal accounts.

Table 5. United Arab Emirates: Consolidated Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total revenue	62,114	70,945	58,358	45,328	47,292	41,486	34,367	38,582	38,820	47,843	58,605
Hydrocarbon	44,597	45,913	34,709	26,475	24,531	22,557	15,368	17,769	16,650	22,913	34,034
Non-hydrocarbon	17,517	25,032	23,649	18,853	22,761	18,929	18,999	20,813	22,170	24,930	24,571
Customs	319	405	254	225	438	378	318	201	174	178	200
Profit transfers	0	0	0	0	0	0	1,931	1,790	679	34	389
Income tax	234	244	188	146	141	131	0	0	0	0	0
Fees and charges	0	0	0	0	0	0	0	0	0	0	0
Investment income 1/	16,965	24,383	23,207	18,482	22,182	18,420	15,284	16,288	18,296	21,259	20,113
Other	0	0	0	0	0	0	1,466	2,534	3,021	3,459	3,869
Total expenditure and grants	36,887	46,138	43,576	35,118	31,146	32,417	34,354	35,920	34,321	36,647	50,537
Current expenditure	18,527	22,270	22,793	21,490	20,841	22,797	24,766	28,911	28,654	30,452	32,202
Wages and salaries	4,539	5,149	5,960	6,272	6,417	6,974	6,993	7,267	7,513	8,852	8,989
Goods and services	10,921	12,397	13,444	13,107	12,595	14,293	10,992	11,083	10,679	11,805	14,211
Abu Dhabi federal services 2/	348	59	718	426	555	264	2,616	3,279	3,194	4,010	3,562
Subsidies and transfers	2,719	4,665	2,671	1,685	1,274	1,266	1,573	1,574	1,500	1,590	4,143
Other	0	0	0	0	0	0	2,592	5,708	5,768	4,195	1,297
Development expenditure	8,294	9,509	10,227	8,499	6,452	6,907	6,115	5,370	4,523	4,913	5,374
Loans and equity (net)	3,915	7,634	5,549	3,864	1,696	1,434	1,813	90	575	-27	5,622
Domestic	2,585	2,203	2,348	1,152	1,813	254	1,114	111	436	64	517
Foreign	1,330	5,431	3,201	2,712	-117	1,180	699	-21	139	-91	5,105
Foreign grants 3/	6,151	6,725	5,007	1,265	2,157	1,279	1,660	1,549	569	1,309	7,339
Abu Dhabi	6,151	3,878	2,385	939	1,275	900	1,445	1,249	341	975	6,950
Federal	0	2,847	2,622	326	882	379	215	300	228	334	389
Overall balance	25,227	24,807	14,782	10,210	16,146	9,069	13	2,662	4,499	11,196	8,068
(In percent of GDP)	23.0	20.5	13.1	9.9	15.8	9.0	0.0	3.0	5.1	10.9	6.5
Memorandum items:											
Current balance	43,587	48,675	35,565	23,838	26,451	18,689	9,601	9,671	10,166	17,391	26,403
(In percent of GDP)	39.7	40.2	31.6	23.1	25.9	18.6	12.1	11.1	11.4	17.0	21.4
Non-hydrocarbon balance	-19,370	-21,106	-19,927	-16,265	-8,385	-13,488	-15,355	-15,107	-12,151	-11,717	-25,966
(In percent of GDP)	-17.6	-17.4	-17.7	-15.8	-8.2	-13.4	-19.3	-17.3	-13.7	-11.4	-21.0
Hydrocarbon revenue/total revenue (In percent)	71.8	64.7	59.5	58.4	51.9	54.4	44.7	46.1	42.9	47.9	58.1
Current expenditure/total expenditure (In percent)	50.2	48.3	52.3	61.2	66.9	70.3	72.1	80.5	83.5	83.1	63.7
Total expenditure/GDP (In percent)	33.6	38.1	38.7	34.0	30.4	32.3	43.2	41.1	38.6	35.8	40.9

Table 5. United Arab Emirates: Consolidated Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001
Total revenue	61,766	56,214	48,826	50,036	57,434	65,091	70,493	61,425	64,200	99,991	82,480
Hydrocarbon	38,715	37,212	32,044	28,694	32,033	37,007	41,140	25,500	28,054	56,020	48,526
Non-hydrocarbon	23,051	19,002	16,782	21,342	25,401	28,084	29,353	35,925	36,146	43,971	33,954
Customs	245	310	323	606	1,335	1,427	1,676	1,821	1,886	1,779	1,846
Profit transfers	720	4,241	1,453	1,723	1,411	2,189	2,652	3,051	3,462	3,936	3,384
Income tax	1,737	1,428	1,688	1,121	1,955	3,302	2,925	1,679	2,179	4,124	3,329
Fees and charges	1,128	1,592	2,280	2,980	3,872	4,669	5,039	5,554	4,581	4,173	5,120
Investment income 1/	15,186	9,849	8,867	12,632	14,817	13,442	13,580	18,489	19,234	25,373	15,625
Other	4,035	1,582	2,171	2,280	2,011	3,055	3,481	5,331	4,804	4,586	4,650
Total expenditure and grants	59,438	51,396	55,068	57,946	60,756	74,080	64,101	71,730	75,538	84,348	96,083
Current expenditure	33,034	38,012	40,732	41,251	42,102	58,995	47,420	51,487	57,930	71,247	77,372
Wages and salaries	9,853	10,010	10,449	10,779	11,823	12,655	13,138	12,533	13,224	13,962	14,360
Goods and services	13,735	14,265	16,007	15,833	17,594	18,259	18,993	19,657	22,616	23,385	23,582
Abu Dhabi federal services 2/	3,360	5,870	9,696	10,108	7,190	8,584	7,774	10,876	11,899	19,440	19,082
Subsidies and transfers	3,041	6,984	4,187	4,122	5,399	19,343	7,098	8,017	9,849	13,945	19,716
Other	3,045	882	393	409	95	154	418	404	342	516	632
Development expenditure	7,170	9,584	11,362	11,745	12,017	10,261	10,912	13,987	13,765	11,230	13,280
Loans and equity (net)	1,791	1,532	1,657	3,997	5,663	4,035	4,566	5,047	2,435	652	4,507
Domestic	1,505	1,294	1,725	4,067	5,713	4,141	4,587	2,867	2,564	714	903
Foreign	286	238	-68	-70	-50	-106	-21	2,180	-129	-62	3,604
Foreign grants 3/	17,443	2,268	1,316	953	974	789	1,203	1,209	1,408	1,219	924
Abu Dhabi	17,213	2,233	1,278	665	700	751	983	1,045	1,361	1,071	664
Federal	230	35	38	288	274	38	220	164	47	148	260
Overall balance	2,329	4,819	-6,242	-7,910	-3,322	-8,989	6,392	-10,305	-11,338	15,643	-13,603
(In percent of GDP)	1.9	3.7	-4.8	-5.6	-2.1	-5.1	3.4	-5.8	-5.6	6.0	-5.3
Memorandum items:											
Current balance	28,733	18,203	8,093	8,785	15,332	6,095	23,073	9,938	6,270	28,744	5,108
(In percent of GDP)	23.1	14.0	6.2	6.3	9.8	3.5	12.2	5.6	3.1	11.1	2.0
Non-hydrocarbon balance	-36,386	-32,393	-38,286	-36,604	-35,355	-45,996	-34,748	-35,805	-39,392	-40,377	-62,129
(In percent of GDP)	-29.2	-24.9	-29.2	-26.1	-22.5	-26.1	-18.3	-20.3	-19.4	-15.6	-24.2
Hydrocarbon revenue/total revenue (In percent)	62.7	66.2	65.6	57.3	55.8	56.9	58.4	41.5	43.7	56.0	58.8
Current expenditure/total expenditure (In percent)	55.6	74.0	74.0	71.2	69.3	79.6	74.0	71.8	76.7	84.5	80.5
Total expenditure/GDP (In percent)	47.7	39.5	42.0	41.2	38.7	42.0	33.8	40.7	37.2	32.6	37.4

Sources: National authorities; and IMF staff estimates.

1/ IMF staff estimates.

2/ Mainly defense and internal security outlays.

3/ Intergovernmental grants are excluded in the consolidated accounts.

Table 6. United Arab Emirates: Federal Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total revenue and grants	22,033	23,469	15,721	14,351	14,263	15,524	12,777	13,257	12,590	12,738	15,282
Revenues	298	579	493	727	1,313	1,062	1,931	2,752	1,792	1,396	2,334
Enterprise profits	0	0	9	31	563	342	1,231	2,052	1,012	506	1,294
Electricity and water	0	0	0	0	0	0	0	0	75	78	91
Other fees and charges	298	579	484	696	750	720	700	700	705	812	949
Grants from Emirates	21,735	22,890	15,228	13,624	12,950	14,462	10,846	10,505	10,798	11,342	12,948
Abu Dhabi	18,735	18,890	12,661	10,887	10,100	11,912	9,361	9,605	9,753	10,262	11,748
Cash contributions	8,381	7,326	2,617	2,289	2,053	2,734	2,286	2,288	3,336	3,585	4,970
Federal services 1/	6,991	8,718	7,827	7,726	7,374	8,799	6,409	6,377	6,341	6,362	6,402
Foreign grants on fed account	3,363	2,846	2,217	872	673	379	666	940	76	315	376
Dubai	3,000	4,000	2,567	2,737	2,850	2,550	1,485	900	1,045	1,080	1,200
Total expenditure and grants	15,725	20,740	20,092	15,880	14,992	15,940	13,285	13,502	12,667	13,632	14,425
Current expenditures	12,711	14,942	15,109	13,989	13,224	15,011	12,771	12,975	12,292	13,157	13,848
Wages and salaries	2,624	3,019	3,435	3,458	3,480	3,885	3,959	4,000	4,280	4,486	4,695
Goods and services	8,715	10,169	10,031	9,359	8,939	10,389	7,843	8,075	7,248	7,741	8,009
Subsidies and transfers	1,372	1,754	1,643	1,172	805	737	969	900	764	930	1,144
Development expenditures	1,026	1,345	1,660	1,278	740	405	233	175	130	141	186
Equity positions	1,988	1,606	701	287	146	145	66	52	17	0	2
Domestic	1,358	1,052	625	4	72	48	63	52	16	0	0
Foreign	630	554	76	283	74	97	3	0	1	0	2
Foreign grants	0	2,847	2,622	326	882	379	215	300	228	334	389
Overall balance	6,308	2,729	-4,371	-1,529	-729	-416	-508	-245	-77	-894	857
(In percent of GDP)	5.7	2.3	-3.9	-1.5	-0.7	-0.4	-0.6	-0.3	-0.1	-0.9	0.7
Memorandum items:											
Current balance	9,322.0	8,527.0	612.0	362.0	1,039.0	513.0	6.0	282.0	298.0	-419.0	1,434.0
(In percent of GDP)	8.5	7.0	0.5	0.4	1.0	0.5	0.0	0.3	0.3	-0.4	1.2
Current expenditure/total expenditure (In percent)	80.8	72.0	75.2	88.1	88.2	94.2	96.1	96.1	97.0	96.5	96.0
Total expenditure/GDP (In percent)	14.3	17.1	17.8	15.4	14.7	15.9	16.7	15.5	14.3	13.3	11.7

Table 6. United Arab Emirates: Federal Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001
Total revenue and grants	14,642	17,706	15,621	16,487	16,916	18,072	19,532	19,258	20,268	20,276	21,009
Revenues	1,627	5,126	2,974	3,716	4,150	5,517	6,108	5,938	6,886	6,965	7,422
Enterprise profits	499	3,997	1,202	1,422	1,311	1,989	2,302	1,801	2,351	2,827	2,350
Electricity and water	153	166	182	230	309	322	323	400	508	0	0
Other fees and charges	975	963	1,590	2,064	2,530	3,206	3,483	3,737	4,027	4,138	5,072
	0	0	0	0	0	0	0	0	0	0	0
Grants from Emirates	13,015	12,580	12,647	12,771	12,766	12,555	13,424	13,320	13,382	13,311	13,587
Abu Dhabi	11,715	11,380	11,447	11,571	11,566	11,355	12,224	12,120	12,182	12,111	12,387
Cash contributions	5,200	4,915	5,004	5,000	4,965	5,074	5,600	5,600	5,600	5,600	5,600
Federal services 1/	6,289	6,398	6,330	6,298	6,308	6,281	6,550	6,517	6,571	6,364	6,343
Foreign grants on fed account	226	67	113	273	293	0	74	3	11	147	444
Dubai	1,300	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Total expenditure and grants	15,249	15,554	15,571	15,975	16,187	16,953	18,187	19,788	20,205	20,702	21,018
Current expenditures	14,698	14,812	14,935	14,948	15,370	16,418	17,371	18,036	19,067	19,680	20,135
Wages and salaries	5,505	5,580	5,650	5,720	5,774	6,129	6,458	6,695	6,922	7,278	7,448
Goods and services	8,279	8,086	7,983	8,088	8,241	8,273	8,760	8,851	8,788	8,668	8,820
Subsidies and transfers	914	1,146	1,302	1,140	1,355	2,016	2,153	2,490	3,357	3,734	3,867
Development expenditures	313	699	595	738	543	497	529	970	823	518	418
Equity positions	8	8	3	1	0	0	67	618	268	356	205
Domestic	0	0	0	0	0	0	48	613	252	356	205
Foreign	8	8	3	1	0	0	19	5	16	0	0
Foreign grants	230	35	38	288	274	38	220	164	47	148	260
Overall balance	-607	2,152	50	512	728	1,120	1,345	-530	63	-426	-9
(In percent of GDP)	-0.5	1.7	0.0	0.4	0.5	0.6	0.7	-0.3	0.0	-0.2	0.0
Memorandum items:											
Current balance	-55.5	2,893.7	685.7	1,538.9	1,545.7	1,654.3	2,161.0	1,222.0	1,201.0	596.0	874.0
(In percent of GDP)	0.0	2.2	0.5	1.1	1.0	0.9	1.1	0.7	0.6	0.2	0.3
Current expenditure/Total expenditure (In percent)	96.4	95.2	95.9	93.6	95.0	96.8	95.5	91.1	94.4	95.1	95.8
Total expenditure/GDP (In percent)	12.2	12.0	11.9	11.4	10.3	9.6	9.6	11.2	10.0	8.0	8.2

Sources: National authorities; and IMF staff estimates.

1/ Not including Abu Dhabi defense and security expenditures.

Table 7. United Arab Emirates: Abu Dhabi Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total revenue	56,947	63,961	53,371	40,651	41,872	38,866	24,943	28,895	30,020	39,621	49,525
Crude oil royalties and taxes	38,699	37,885	27,495	19,523	17,951	16,892	8,849	11,666	10,972	16,891	27,642
Non-hydrocarbon	18,248	26,076	25,876	21,128	23,921	21,974	16,094	17,229	19,048	22,730	21,883
Customs	61	67	65	65	65	65	68	51	34	40	46
Water and electricity	0	0	0	0	0	0	0	0	0	0	0
Income tax	0	0	0	0	0	0	0	0	0	0	0
Investment income 1/	16,965	24,383	23,207	18,482	22,182	18,420	15,284	16,288	18,296	21,259	20,113
Other	1,222	1,626	2,604	2,581	1,674	3,489	742	890	718	1,431	1,724
Total expenditure and grants	33,031	37,201	28,811	24,613	21,181	23,023	22,986	24,683	24,939	26,563	40,879
Current expenditures	4,351	5,616	5,695	5,371	5,086	5,232	7,474	11,604	11,512	12,413	13,386
Wages and salaries	1,044	1,229	1,446	1,619	1,641	1,758	1,829	1,917	2,033	2,152	2,223
Goods and services	1,684	1,508	2,654	2,840	2,674	2,866	2,095	1,958	2,905	3,996	3,600
Federal services 2/	348	59	718	426	555	264	2,616	3,279	3,194	4,010	3,562
Water and electricity	0	0	0	0	0	0	0	0	0	0	0
Subsidies and transfers	1,275	2,820	877	486	216	236	623	3,100	1,944	387	1,768
Interest payments	0	0	0	0	0	108	311	1,350	1,436	1,868	2,233
Development expenditures	4,600	5,081	5,362	4,428	3,770	3,972	3,622	3,127	2,850	3,255	3,549
Water and electricity	1,231	1,111	1,343	1,098	1,015	1,105	902	1,084	752	658	617
Other	3,369	3,970	4,019	3,330	2,755	2,867	2,720	2,043	2,098	2,597	2,932
Loans and equity (net)	2,557	6,582	4,925	3,860	1,623	1,386	1,750	38	559	-27	5,622
Domestic	1,227	1,151	1,724	1,148	1,740	206	1,051	59	420	64	517
Foreign loans	1,330	5,431	3,201	2,712	-117	1,180	699	-21	139	-91	5,105
Grants	21,523	19,922	12,829	10,954	10,702	12,433	10,140	9,914	10,018	10,922	18,322
Cash contributions to federal government 3/	8,381	7,326	2,617	2,289	2,053	2,734	2,286	2,288	3,336	3,585	4,970
"Fed services" included in federal accounts 3/	6,991	8,718	7,827	7,726	7,374	8,799	6,409	6,377	6,341	6,362	6,402
Foreign grants on federal account 3/	3,363	2,846	2,217	872	673	379	666	940	76	315	376
Foreign grants	2,788	1,032	168	67	602	521	779	309	265	660	6,574
Overall balance	23,915	26,760	24,560	16,038	20,691	15,843	1,957	4,212	5,081	13,058	8,646
(In percent of GDP)	21.8	22.1	21.8	15.5	20.2	15.8	2.5	4.8	5.7	12.7	7.0
Memorandum items:											
Current balance	52,595	58,345	47,676	35,280	36,786	33,634	17,469	17,291	18,508	27,208	36,139
(In percent of GDP)	47.9	48.2	42.3	34.2	36.0	33.5	22.0	19.8	20.8	26.5	29.3
Non-hydrocarbon balance	-14,784	-11,125	-2,935	-3,485	2,740	-1,049	-6,892	-7,454	-5,891	-3,833	-18,996
(In percent of GDP)	-13.5	-9.2	-2.6	-3.4	2.7	-1.0	-8.7	-8.5	-6.6	-3.7	-15.4
Hydrocarbon revenue/Total revenue (In percent)	68.0	59.2	51.5	48.0	42.9	43.5	35.5	40.4	36.5	42.6	55.8
Current expenditure/Total expenditure (In percent)	13.2	15.1	19.8	21.8	24.0	22.7	32.5	47.0	46.2	46.7	32.7
Total expenditure/GDP (In percent)	30.1	30.7	25.6	23.9	20.7	22.9	28.9	28.3	28.1	25.9	33.1

Table 7. United Arab Emirates: Abu Dhabi Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001
Total revenue	52,189	41,959	36,738	38,170	44,226	49,778	53,337	44,587	46,634	79,846	62,972
Crude oil royalties and taxes	32,297	29,392	24,519	22,651	25,532	30,714	34,349	21,428	23,232	48,633	42,366
Non-hydrocarbon	19,892	12,567	12,219	15,519	18,694	19,064	18,988	23,159	23,402	31,213	20,606
Customs	54	65	72	128	257	285	293	318	319	262	276
Water and electricity	0	463	508	686	1,016	1,127	1,216	1,380	12	0	0
Income tax	1,737	1,428	1,688	1,121	1,895	3,212	2,797	1,517	1,996	3,958	3,122
Investment income 1/	15,186	9,849	8,867	12,632	14,817	13,442	13,580	18,489	19,234	25,373	15,625
Other	2,915	762	1,084	952	709	998	1,102	1,455	1,841	1,620	1,583
Total expenditure and grants	53,701	43,417	47,559	51,106	46,402	59,700	48,244	54,450	56,761	63,784	76,279
Current expenditures	13,817	18,421	20,262	20,788	20,364	36,108	23,037	26,922	32,111	43,107	48,852
Wages and salaries	2,306	2,384	2,478	2,641	2,237	2,545	2,642	2,730	2,993	3,135	3,215
Goods and services	3,456	4,079	5,424	5,357	5,077	5,346	5,551	6,642	8,918	8,987	10,323
Federal services 2/	3,360	5,870	9,696	10,108	7,190	8,584	7,774	10,876	11,899	19,440	19,082
Water and electricity	0	0	0	0	2,209	2,690	2,486	2,357	2,153	1,962	1,251
Subsidies and transfers	1,877	5,588	2,635	2,682	3,644	16,926	4,584	4,317	6,148	9,583	14,981
Interest payments	2,818	500	29	...	7	17	...	...	...	...	...
Development expenditures	3,747	4,877	7,801	8,813	8,109	7,451	7,608	9,980	8,944	7,452	10,424
Water and electricity	0	0	0	0	3,286	2,052	1,511	2,387	2,121	1,335	3,259
Other	0	0	0	0	4,823	5,399	6,097	7,593	6,823	6,117	7,165
Loans and equity (net)	1,783	1,524	1,654	3,996	5,663	4,035	4,392	4,383	2,163	43	3,952
Domestic	1,505	1,294	1,725	4,067	5,713	4,141	4,439	2,208	2,308	105	348
Foreign loans	278	230	-71	-71	-50	-106	-47	2,175	-145	-62	3,604
Grants	34,354	18,595	17,842	17,509	12,266	12,106	13,207	13,165	13,543	13,182	13,051
Cash contributions to federal government. 3/	5,200	4,915	5,004	5,000	4,965	5,074	5,600	5,600	5,600	5,600	5,600
"Fed services" included in federal accounts 3/	11,715	11,380	11,447	11,571	6,308	6,281	6,550	6,517	6,571	6,364	6,343
Foreign grants on federal account 3/	226	67	113	273	293	0	74	3	11	147	444
Foreign grants	17,213	2,233	1,278	665	700	751	983	1,045	1,361	1,071	664
Overall balance	-1,512	-1,458	-10,821	-12,936	-2,176	-9,922	5,093	-9,863	-10,127	16,062	-13,307
(In percent of GDP)	-1.2	-1.1	-8.2	-9.2	-1.4	-5.6	2.7	-5.6	-5.0	6.2	-5.2
Memorandum items:											
Current balance	38,372	23,538	16,476	17,382	23,862	13,670	30,300	17,665	14,523	36,739	14,120
(In percent of GDP)	30.8	18.1	12.6	12.4	15.2	7.8	16.0	10.0	7.2	14.2	5.5
Non-hydrocarbon balance	-33,809	-30,850	-35,340	-35,587	-27,708	-40,636	-29,256	-31,291	-33,359	-32,571	-55,673
(In percent of GDP)	-27.2	-23.7	-26.9	-25.3	-17.6	-23.1	-15.4	-17.7	-16.4	-12.6	-21.7
Hydrocarbon revenue/Total revenue (In percent)	61.9	70.0	66.7	59.3	57.7	61.7	64.4	48.1	49.8	60.9	67.3
Current expenditure/Total expenditure (In percent)	25.7	42.4	42.6	40.7	43.9	60.5	47.8	49.4	56.6	67.6	64.0
Total expenditure/GDP (In percent)	43.1	33.4	36.2	36.4	29.5	33.9	25.5	30.9	28.0	24.6	29.7

Sources: National authorities; and IMF staff estimates.

1/ IMF staff estimates.
2/ Defense and security expenditures not included in federal accounts.
3/ Contributions and grants included in federal accounts.

Table 8. United Arab Emirates: Dubai Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total revenue	6,443	8,628	7,761	7,660	7,323	7,114	6,054	5,614	5,763	6,140	6,541
Nontax revenue	6,098	8,280	7,577	7,503	6,971	6,817	5,756	5,464	5,623	6,002	6,386
Oil and gas	5,898	8,028	7,214	6,952	6,580	6,381	5,289	4,992	4,928	5,272	5,594
Enterprise profits	0	0	0	0	0	0	0	0	0	0	0
Other	200	252	363	551	391	436	467	472	695	730	792
Tax revenue	345	348	184	157	352	297	298	150	140	138	155
Customs	345	349	184	157	351	297	298	150	140	138	155
Income tax 1/	0	0	0	0	0	0	0	0	0	0	0
Total expenditure and grants	6,443	8,627	7,761	7,660	7,323	7,114	6,053	5,614	5,763	6,139	6,541
Current expenditure	1,465	1,712	1,989	2,131	2,531	2,884	2,509	2,804	3,296	3,668	3,765
Wages and salaries	871	901	1,079	1,193	1,296	1,332	1,205	1,350	1,200	2,200	1,978
Goods and services	522	720	759	908	982	1,038	1,054	1,050	1,000	1,000	1,720
Subsidies and transfers	72	91	151	28	253	293	250	314	300	300	300
Other	0	0	0	2	0	221	0	90	796	168	-233
Development expenditure	1,978	2,915	3,205	2,792	1,942	1,680	2,059	1,910	1,422	1,391	1,576
Municipalities	223	169	483	264	257	312	773	772	454	477	529
Electricity and water	456	1,604	1,529	2,006	1,424	981	935	876	770	717	663
Loans and equity (net)	0	0	0	0	0	0	0	0	0	0	0
Contributions to federal budget	3,000	4,000	2,567	2,737	2,850	2,550	1,485	900	1,045	1,080	1,200
Overall balance	0	1	0	0	0	0	1	0	0	1	0
(In percent of GDP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:											
Current balance	4,978	6,916	5,772	5,529	4,792	4,230	3,545	2,810	2,467	2,472	2,776
(In percent of GDP)	4.5	5.7	5.1	5.4	4.7	4.2	4.5	3.2	2.8	2.4	2.2
Non-hydrocarbon balance	-5,898	-8,027	-7,214	-6,952	-6,580	-6,381	-5,288	-4,992	-4,928	-5,271	-5,594
(In percent of GDP)	-5.4	-6.6	-6.4	-6.7	-6.4	-6.4	-6.6	-5.7	-5.5	-5.1	-4.5
Hydrocarbon revenue/total revenue (In percent)	91.5	93.0	93.0	90.8	89.9	89.7	87.4	88.9	85.5	85.9	85.5
Current expenditure/total expenditure (In percent)	22.7	19.8	25.6	27.8	34.6	40.5	41.5	49.9	57.2	59.7	57.6
Total expenditure/GDP (In percent)	5.9	7.1	6.9	7.4	7.2	7.1	7.6	6.4	6.5	6.0	5.3

Table 8. United Arab Emirates: Dubai Fiscal Accounts, 1980–2001

(In millions of U.A.E. dirhams)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001
Total revenue	6,876	7,866	7,650	6,682	7,536	8,122	9,285	9,077	8,724	11,071	10,201
Nontax revenue	6,685	7,621	7,399	6,204	6,511	7,026	7,919	7,562	7,163	9,540	8,579
Oil and gas	5,804	7,025	6,806	5,472	5,556	5,369	5,663	3,266	3,670	5,875	4,949
Enterprise profits	221	244	251	301	100	200	350	1,250	1,111	1,109	1,034
Other	660	352	342	431	855	1,457	1,906	3,046	2,382	2,556	2,596
Tax revenue	191	245	251	478	1,025	1,096	1,366	1,515	1,561	1,531	1,622
Customs	191	245	251	478	965	1,006	1,238	1,353	1,378	1,365	1,415
Income tax 1/	0	0	0	0	60	90	128	162	183	166	207
Total expenditure and grants	8,035	9,127	8,784	7,815	9,532	8,434	9,489	8,839	9,850	11,147	10,559
Current expenditure	4,292	4,396	5,171	5,106	5,849	5,839	6,333	5,601	5,665	7,329	7,246
Wages and salaries	2,042	2,046	2,321	2,418	3,037	3,054	3,125	2,154	2,328	2,568	2,882
Goods and services	2,000	2,100	2,600	2,388	2,462	2,435	2,620	2,066	2,895	3,838	3,080
Subsidies and transfers	250	250	250	300	350	350	309	1,124	254	558	789
Other	0	0	0	0	0	0	279	257	188	365	495
Development expenditure	2,543	3,531	2,413	1,510	2,483	1,395	1,849	1,992	2,981	2,365	1,763
Municipalities	535	850	949	788	1,264	1,044	1,100	...	...	...	...
Electricity and water	1,694	2,524	1,346	518	862	0	199	...	...	...	...
Loans and equity (net)	0	0	0	0	0	0	107	46	4	253	350
Contributions to federal budget	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Overall balance	-1,159	-1,261	-1,134	-1,133	-1,997	-312	-204	238	-1,126	-76	-358
(In percent of GDP)	-0.9	-1.0	-0.9	-0.8	-1.3	-0.2	-0.1	0.1	-0.6	0.0	-0.1
Memorandum items:											
Current balance	2,584	3,470	2,479	1,576	1,687	2,283	2,952	3,476	3,059	3,742	2,955
(In percent of GDP)	2.1	2.7	1.9	1.1	1.1	1.3	1.6	2.0	1.5	1.4	1.2
Non-hydrocarbon balance	-6,963	-8,286	-7,940	-6,605	-7,553	-5,681	-5,867	-3,028	-4,796	-5,951	-5,307
(In percent of GDP)	-5.6	-6.4	-6.1	-4.7	-4.8	-3.2	-3.1	-1.7	-2.4	-2.3	-2.1
Hydrocarbon revenue/total revenue (In percent)	84.4	89.3	89.0	81.9	73.7	66.1	61.0	36.0	42.1	53.1	48.5
Current expenditure/total expenditure (In percent)	53.4	48.2	58.9	65.3	61.4	69.2	66.7	63.4	57.5	65.7	68.6
Total expenditure/GDP (In percent)	6.5	7.0	6.7	5.6	6.1	4.8	5.0	5.0	4.9	4.3	4.1

Sources: National authorities; and IMF staff estimates.

1/ Tax on profits of foreign banks.

Table 9. United Arab Emirates: Sharjah Fiscal Accounts, 1991–2001

(In millions of U.A.E. dirhams)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001
Total revenue	1,074	1,263	1,464	1,468	1,292	1,456	1,541	1,600	1,728	1,877	1,653
Oil and gas	614	795	719	571	945	924	1,128	806	1,152	1,512	1,211
Non-oil	460	468	745	897	347	532	413	794	576	365	442
Departmental receipts	310	352	403	487	201	279	293	369	376	340	397
Port authority	...	...	...	...	57	62	65	79	80	60	75
Customs	...	...	...	...	113	136	145	150	189	152	155
Fees and charges	...	...	...	...	9	11	12	32	28	28	41
Others	...	...	...	...	22	70	71	108	79	100	126
Land sales and profit transfers	150	116	342	410	146	253	120	425	200	25	45
Total expenditure	794	859	918	1,094	1,230	1,294	1,345	1,710	1,832	1,744	1,532
Current	227	382	364	409	380	444	489	735	887	924	932
Wages and salaries	...	...	...	...	187	216	249	320	395	439	451
Goods and services	...	...	...	...	158	187	197	330	400	420	421
Subsidies and transfers 2/	...	...	...	...	15	16	16	50	52	30	39
Other	...	...	...	...	20	25	27	35	40	35	21
Development	567	477	554	685	850	850	856	975	945	820	600
Overall balance	280	404	546	374	62	162	196	-110	-104	133	121
(In percent of GDP)	0.2	0.3	0.4	0.3	0.0	0.1	0.1	-0.1	-0.1	0.1	0.0
Memorandum items:											
Current balance	847	881	1,100	1,059	912	1,012	1,052	865	841	953	721
(In percent of GDP)	0.7	0.7	0.8	0.8	0.6	0.6	0.6	0.5	0.4	0.4	0.3
Non-hydrocarbon balance	-334	-391	-173	-197	-883	-762	-932	-916	-1,256	-1,379	-1,090
(In percent of GDP)	-0.3	-0.3	-0.1	-0.1	-0.6	-0.4	-0.5	-0.5	-0.6	-0.5	-0.4
Hydrocarbon revenue/Total revenue (In percent)	57.2	62.9	49.1	38.9	73.1	63.5	73.2	50.4	66.7	80.6	73.3
Current expenditure/Total expenditure (In percent)	28.6	44.5	39.7	37.4	30.9	34.3	36.4	43.0	48.4	53.0	60.8
Total expenditure/GDP (In percent)	0.6	0.7	0.7	0.8	0.8	0.7	0.7	1.0	0.9	0.7	0.6

Sources: National authorities; and IMF staff estimates.

III. Fiscal Sustainability with Oil Resources[31]

A. Introduction

59. The sustainability of a fiscal stance is traditionally assessed in terms of a country's explicit public debt burden (both its size and debt service) and its likely dynamics over the medium and long term. However, in countries where wealth is derived from a nonrenewable resource, such as oil (and natural resource wealth represents a significant source of government revenue), this assessment must also take into account the depletion of this wealth to ensure intergenerational economic equity. The reason for this is that a fiscal stance that could lead to a stable or declining government debt to GDP ratio may rely on higher oil production and revenue (for countries that are price-takers), and thus also lead to a rapid depletion of the country's oil wealth. By ensuring intergenerational equity, the government avoids the use of the country's oil wealth to finance the welfare of the present generation at the expense of the welfare of future generations.[32] This position also imposes fiscal discipline on the government by requiring that the government's total net wealth be the basis for its fiscal policy rather than current resources available.

60. Policymakers in oil-dependent economies must, therefore, decide how much oil income to spend on the present generation and how much to save for future generations.[33] One way to determine a sustainable level of public consumption out of oil resources is to derive a notional income stream from the stock of government net wealth, determined by the present value of expected future government oil revenue and the existing amount of net financial assets owned by the government net of debt. This notional income represents the "permanent income" that can be consumed indefinitely while preserving the stock of wealth for future generations.

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[31] This chapter was written by Ugo Fasano (MED).

[32] See Barnett, S. and R. Ossowski, 2002, "Operational Aspects of Fiscal Policy in Oil-Producing Countries," paper presented at the IMF Conference on Fiscal Policy Formulation and Implementation in Oil-Producing Countries, June 5–6, 2002 (Washington: International Monetary Fund); and E. Engel and R. Valdés, 2000, "Optimal Fiscal Strategy for Oil Exporting Countries," IMF Working Paper 00/118, (Washington, D.C.: International Monetary Fund).

[33] Policymakers are also confronted with the issue of how to cushion the domestic non-oil economy from the sharp and unpredictable variations in oil prices and revenue, as well as avoid the Dutch disease phenomenon of real exchange rate appreciation and loss of competitiveness in the non-oil tradable sector.

61. This chapter provides a practical framework to estimate the United Arab Emirates' permanent income available from its oil wealth resources to assess the sustainability of the current fiscal stance.

B. The Framework

The criteria

62. Several criteria may be applied to determine an oil-rich country's permanent income. Two reasonable ones are to maintain the same oil wealth in (a) per capita terms, or (b) real terms.[34] The first alternative implies that the government provides a time invariant level of public goods to all citizens over time, which means that the level of government consumption must be restricted today to provide the same benefits across generations in the future. Thus, the country's total wealth (oil plus net financial assets) will have to increase over time to keep up with the population growth, restraining the amount that can be consumed every year.

63. The second criterion is less restrictive, since it implies that the government could consume relatively more today based on the (real) return of its wealth, favoring the current generation at the expense of future generations. This puts the onus on future generations to maintain their per capita income through investments in human capital, and on the government to enhance growth prospects by developing infrastructure and human capital. The choice of criteria would therefore depend on the government's preferences between present and future generations. The stronger the preference toward the present generation, the higher would be the desire to consume more today than in the future, thus choosing the second criterion.

64. The government's consumption out of oil resources can be proxied by the non-oil fiscal balance.[35] This balance could be defined as (current) expenditure (including the depreciation of the government's capital stock) minus non-oil revenue (including investment income).[36] This definition is, however, debatable because some categories of current spending, such as health and education, can be considered as investment in human capital, while some capital spending items can be considered as a form of consumption. In this context, a sustainable fiscal policy over the long run would be one in which the (consolidated) government's non-oil (current) fiscal deficit would be less than or equal to the country's permanent income out of the oil wealth. Nevertheless, given the uncertainty in oil

[34] Alternative criteria are to maintain the same net wealth in percent of (non-oil) GDP or in nominal terms.

[35] The non-oil fiscal balance is also a better indicator of underlying fiscal trends in oil-dependent economies than the traditional overall fiscal balance, because it abstracts from the volatility in oil prices and revenue.

[36] See Barnett and Ossowski (2002) for a detailed analysis of operational aspects of fiscal policy in oil-producing countries.

prices, there may be a need for precautionary savings over and above the level implied by the permanent income.

C. The Case of the United Arab Emirates[37]

65. Estimates of the permanent income are based on several factors—one of the most significant being long-term oil prices. The higher the expected future oil prices, the higher is the share of oil income which can be spent today without reducing the welfare of future generations relative to the current generation. Other important factors are the discount rate, population growth, proven oil reserves, and the extraction rate. Given the uncertainty in estimating these factors, in particular the oil reserves, which may vary over time as a result of technological changes, estimates of the permanent income can be subject to variations and must be revisited in light of new information. As a result, revisions in wealth should also lead to revisions to fiscal stance.

66. Indicative values of the United Arab Emirates' permanent income over the medium term were estimated below. The estimates were based on several parameters and assumptions summarized in Table 10. Given the oil-proven reserves and current annual extraction rate, it would take about 120 years for the oil reserves to be exhausted. Under a conservative crude oil price assumption of $18 per barrel, the present value of the United Arab Emirates' crude oil reserves was estimated at $245 billion, equivalent to about 345 percent of GDP.[38]

67. Under criterion (a), maintaining the same oil wealth in per capita terms, the annual usable amount of oil reserves for fiscal purposes was estimated at about Dh 25.3 billion ($6.8 billion) on average over the medium term through 2007. Under criterion (b), maintaining the same oil wealth in absolute terms, the permanent income was estimated at Dh 42.5 billion ($11.5 billion). Rules of thumb could also be used to estimate the permanent income. For criterion (a), every year the government can consume the projected return on the wealth (5 percent) minus the expected population growth (2.5 percent), that is, 2.5 percent out of $245 billion, or $6.1 billion. For criterion (b), the government can consume the full return on the wealth, that is, 5 percent, or about $12.2 billion a year.

68. Although the average non-oil fiscal deficit during much of the 1990s has been within the long-run sustainable path indicated by permanent income estimates, the United Arab Emirates' current fiscal policy stance is unsustainable under a conservative crude oil price assumption of $18 per barrel for the long term.[39] This is so because the

[37] The framework was adopted from work done by FAD staff on Venezuela.

[38] The budgeted crude oil price usually ranges between 15–20 percent below the projected global price. The assumption of $18 per barrel is about 18 percent below the Fund's *World Economic Outlook* (WEO) medium-term oil price projections.

[39] The non-oil fiscal deficit averaged Dh 37.5 billion a year in the period 1991–2000, which is compatible with an estimated permanent income based on a long-run oil price of $16.3 per

(continued)

estimated permanent income under either the first or second criterion is significantly lower than the estimated non-hydrocarbon fiscal deficit in 2002 (Dh 68.5 billion).[40] Thus, under this scenario the U.A.E. authorities would need to increase non-hydrocarbon revenue and/or cut expenditures over the medium term to make government consumption compatible with intergenerational equity objectives in line with the country's estimated permanent income.

Table 10. Summary of Main Assumptions and Parameters

Proven oil reserves (in billions of barrels)	97.80
Daily crude oil extraction (in millions of barrels)	2.21
Expected rate of growth of oil production (in percent)	0.0
Long-term annual (real) discount rate (annual rate in percent)	5.0
Long-term world crude oil price (in U.S. dollars per barrel)	18.0
Average long-term production cost (in U.S. dollars per barrel)	3.5
Expected average annual rate of population growth (in percent)	2.5
Expected average annual rate of non-hydrocarbon real GDP growth (in percent)	5.0
Government debt (in percent of GDP)	4.5
Inflation (in percent)	0.0

Source: Fund staff.

IV. Non-Oil Growth, Competitiveness, and the Labor Market[41]

A. Introduction

69. The labor market in the United Arab Emirates is segmented in terms of sectors of employment, skills, and wages. It is estimated that Emirati nationals comprise about 10 percent of the overall labor force of 1.9 million, excluding military personnel. They are employed primarily in the public sector in mostly skilled jobs, and earn relatively high wages

barrel and 2.21 million barrels a day of crude oil output. During the same period, actual oil prices averaged $18.04 per barrel, oil output, 2.29 million barrels a day, and the overall consolidated fiscal balance (including estimated investment income), about -1 percent of GDP.

[40] The long-run oil price should be assumed at close to $27 per barrel (higher end of OPEC range price target of $22–28 per barrel) for the permanent income to be estimated at about Dh 68.5 billion.

[41] This chapter was written by Rishi Goyal (MED).

and social benefits. In contrast, expatriates make up most of the labor force, and are mainly employed in the private sector in mostly low- or semi-skilled jobs.

70. The abundant supply of expatriate workers at internationally competitive wages has been an important source of growth and competitiveness for the non-oil economy in the United Arab Emirates.[42,43] In fact, real non-oil growth has averaged more than 7 percent per year from 1997-2002, and about 100,000 net new private sector jobs have been created on average each year over the same period. Most of these jobs have been low- and semi-skilled positions in sectors such as wholesale and retail trade, construction, manufacturing, and domestic household services. Only about 3,000 have been in skilled positions, in sectors such as banking and communications. At the same time, nearly 10,000 national workers have been entering the labor force each year in the last few years.

71. Given demographic dynamics, an increasing number of nationals are expected to enter the labor force over the medium term. Most of them are likely to seek employment in the private sector because the government is unlikely to remain the employer of first and last resort, except for professions such as teaching or in the health sector. In this context, the policy challenge facing the authorities is to expand private sector employment opportunities for nationals, while maintaining competitiveness and strong non-oil economic growth prospects.

72. This chapter, therefore, examines the relationship between the labor market and non-oil economic real growth in the United Arab Emirates, and studies policies to expand employment opportunities for nationals in the private sector. Section B analyzes the performance of non-hydrocarbon growth as well as the contribution of labor to non-oil growth over the last two decades. Section C focuses on the role of the labor market in maintaining competitiveness of non-oil exports despite an exogenous and rapid appreciation of the CPI-based real effective exchange rate in the second half of the 1990s. The last section develops an analytical model to propose policies for increasing private sector job opportunities for U.A.E. nationals.

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[42] Oil or hydrocarbons refer to crude oil and associated natural gas. Refined products are included in the non-oil or non-hydrocarbon sector.

[43] Bangladesh, India, and Pakistan supply the majority of expatriate workers, though large numbers also come from Indonesia and the Philippines.

B. Non-Oil Growth Performance

An overview of non-oil growth performance

73. The development of physical infrastructure in the 1970s and early 1980s set the base for rapid growth in services and manufacturing in the following years. Average annual growth of real non-oil GDP was about 7 percent in the 1990s through 2002, up from 3.6 percent in the previous decade. It was particularly strong in finance and insurance, wholesale and retail trade, and manufacturing, including petrochemicals. Tourism growth was also robust, especially in Dubai. As a result, the economy moved from being primarily oil-based to non-oil service based, with the non-oil share of GDP rising from close to 35 percent in 1980 to more than 70 percent in 2002 (Figure 6).[44]

74. From the demand side, non-oil growth was mostly private consumption-led. This reflected the rise in income and population, particularly since the mid-1980s (Figure 7). In fact, per capita GDP in purchasing power parity terms increased by almost 66 percent, and the population grew by 150 percent from 1986 through 2002. However, non-oil investment also remained relatively high throughout this period, equivalent to more than 20 percent of GDP, reflecting in part the establishment and maturing of free trade zones.

Contribution of labor to non-oil growth

75. As a result of the open border foreign labor policy, employment growth contributed significantly to non-oil growth in the United Arab Emirates. This is confirmed by a growth accounting exercise, which decomposes non-oil output growth into the contributions of its constituent factor inputs, that is, labor, capital, and a residual, usually interpreted as total factor productivity (TFP). The exercise shows that, for plausible parameter assumptions, labor growth accounted for nearly one-third of non-oil growth in the 1980s, and more than one-half in the 1990s.[45]

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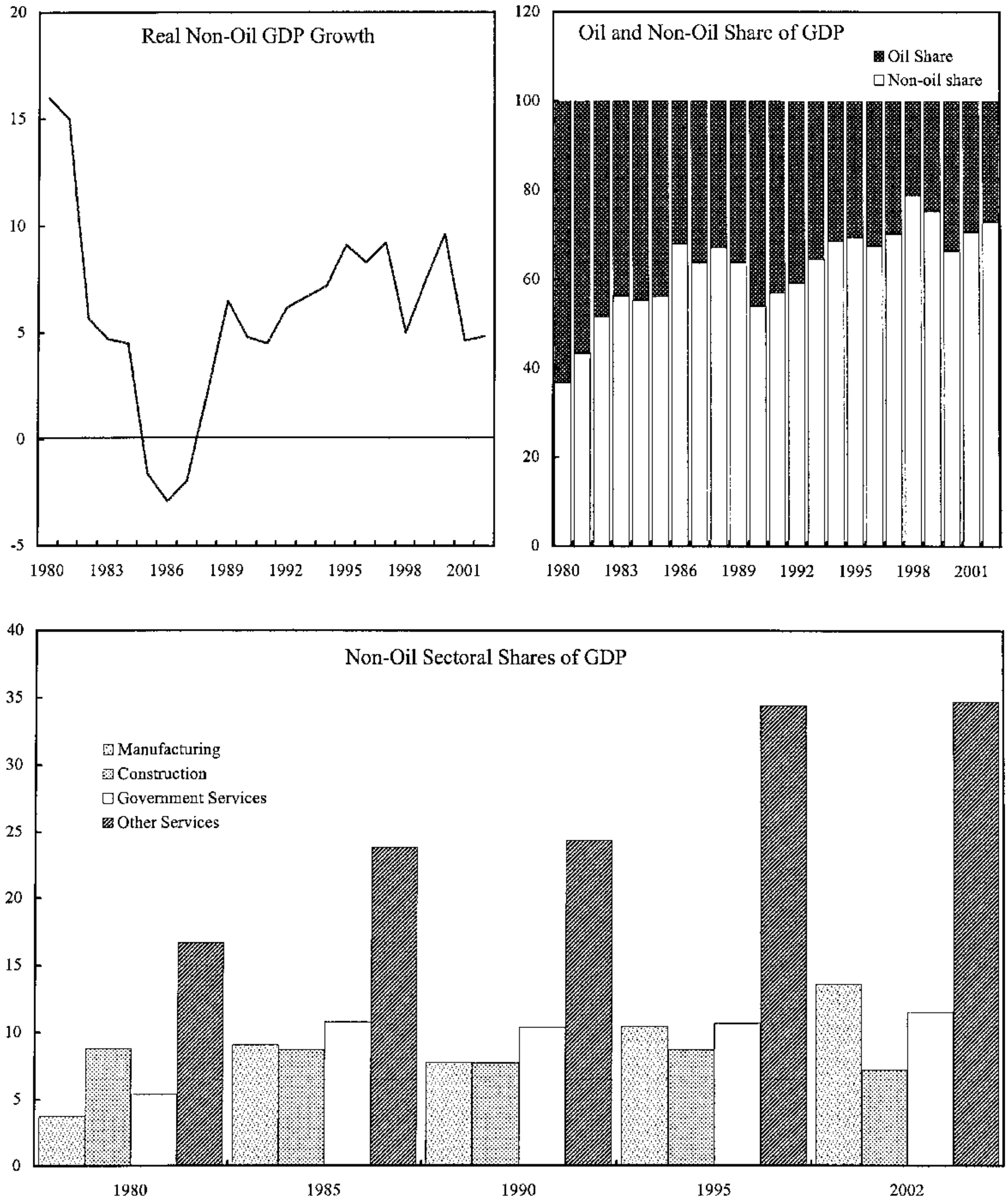
[44] Oil output growth has varied significantly over the years in line with OPEC-mandated changes in quota.

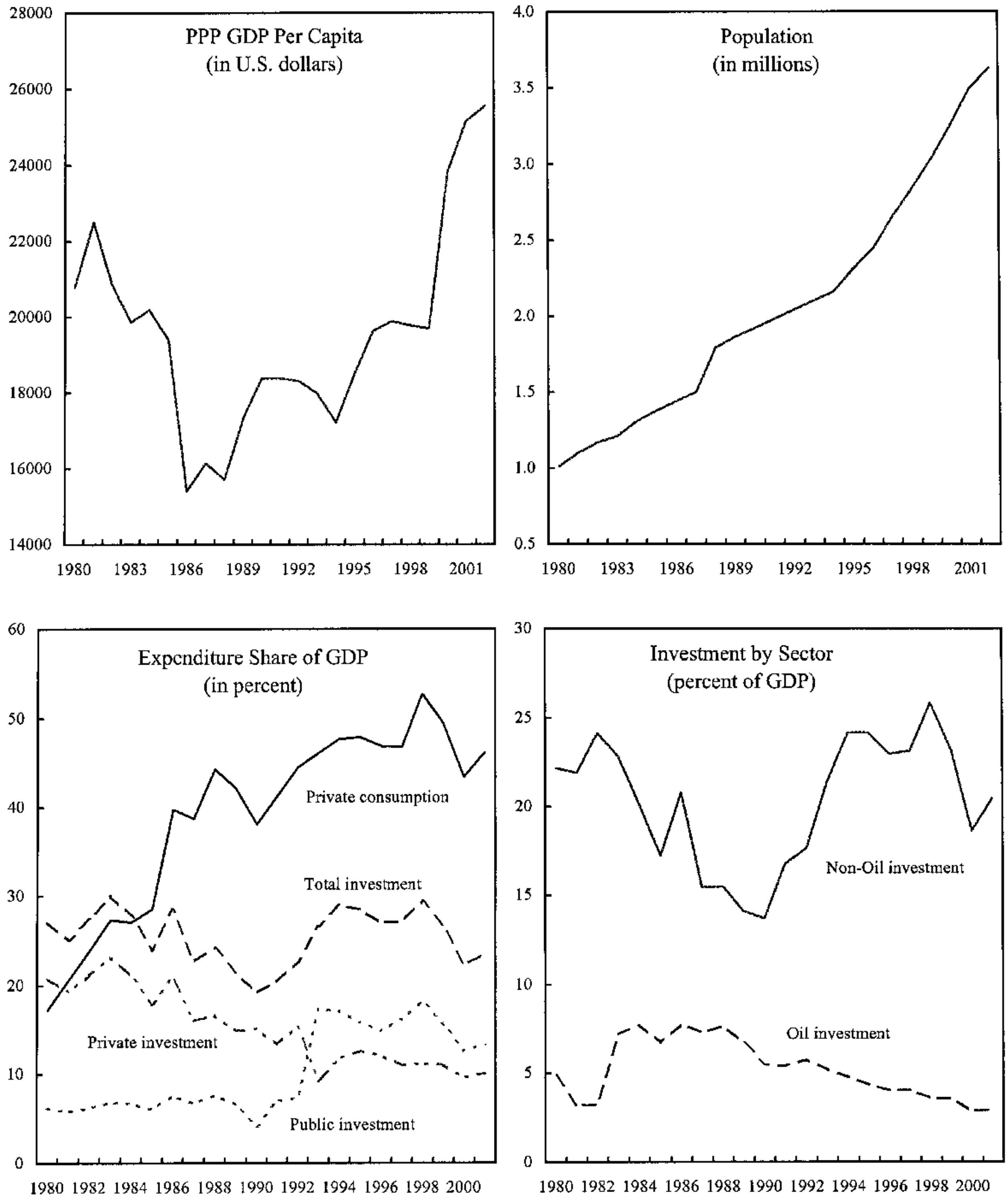
[45] Capital accumulation accounted for the remainder. The contribution of TFP growth was negligible, similar to the experience of other developing countries. Details are provided in Appendix I.

Figure 6. United Arab Emirates: Non-Oil Growth and the Changing Structure of GDP, 1980–2002
(In percent)



Sources: National authorities; and Fund staff estimates.

Figure 7. United Arab Emirates: GDP Per Capita, Population, Consumption, and Investment, 1980–2002



Sources: National authorities; and IMF, *World Economic Outlook*

76. Access to expatriate workers at internationally competitive wages also contributed to avoiding the consequences of a "Dutch disease" usually observed in oil (or other natural resource) rich economies like the United Arab Emirates.[46] In most of these economies, the formal or organized labor market comprises mainly nationals. Thus, when the world price of oil rises, the wages of these nationals increase, making the non-oil export sector less competitive, and encouraging the adoption of import substitution policies. In contrast, the U.A.E. economy has been able to avoid "this disease" because it faces a highly elastic supply of foreign labor at competitive international wages and flexible contracts. In fact, the exogenous decline in real and relative wages of low-skilled expatriate workers over the 1990s contributed to boosting employment and output growth by lowering relative labor costs. As a result, employment of low-skilled workers was especially strong in that period, as was the growth of sectors such as trade and construction that use low-skilled workers more intensively (Figure 8).[47]

C. Non-Oil Exports and Competitiveness

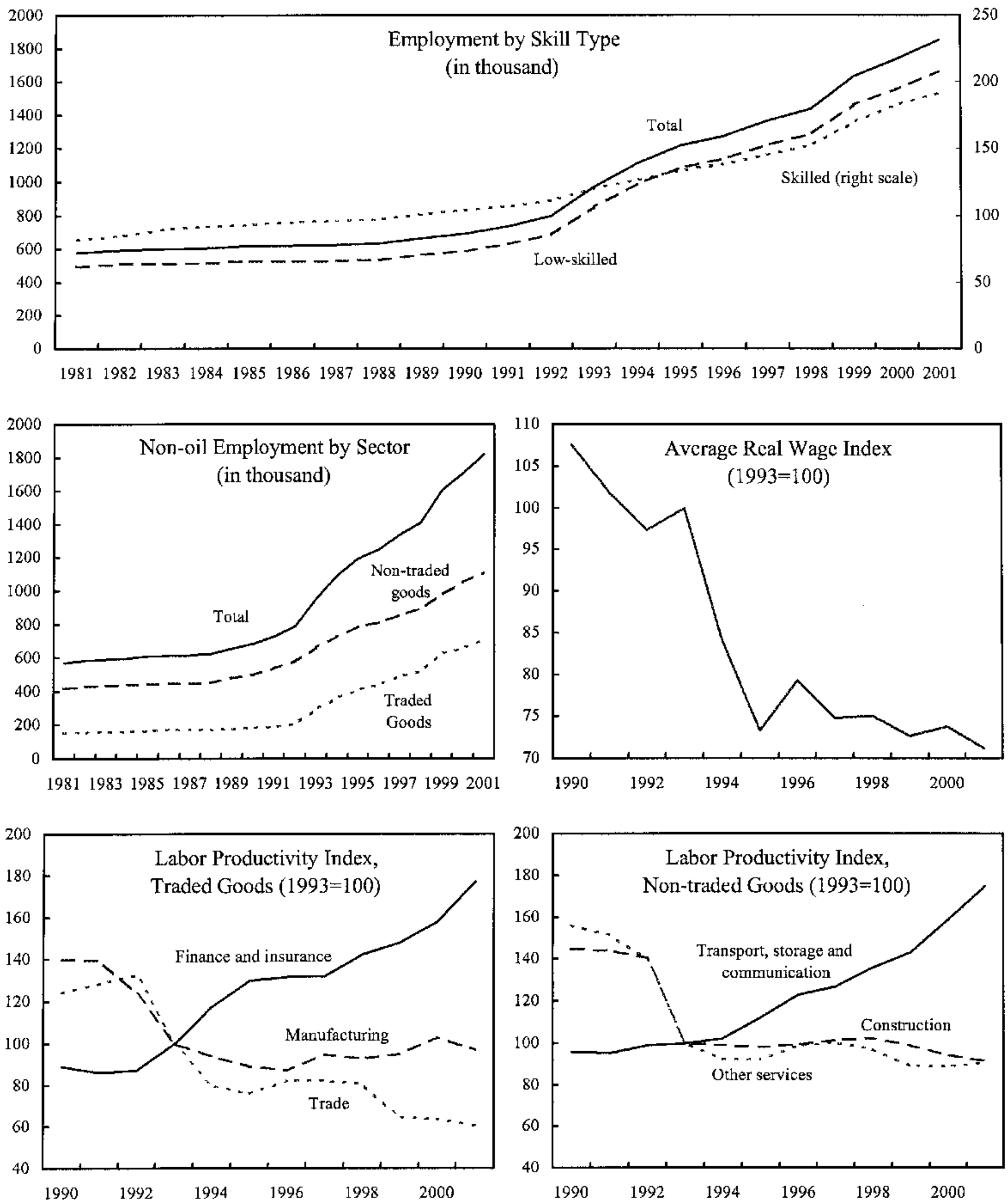
77. Despite a sharp appreciation of the consumer price index (CPI)-based real effective exchange rate (REER) from the mid 1990s through 2002, non-oil exports and re-exports experienced rapid growth. The CPI-based REER appreciated by more than 30 percent owing to the nominal appreciation of the U.S. dollar in international markets, to which the U.A.E. dirham is pegged.[48] At the same time, non-oil export volume grew at over 16 percent per year, and re-exports at about 6 percent per year. Consequently, the United Arab Emirates' share of the non-oil import market of its main trading partners doubled, and non-hydrocarbon and re-exports have become as large in value terms as hydrocarbon exports (Figure 9).

[46] The Dutch disease refers to the negative output and employment effects of an oil (or natural resource) boom on non-oil exports; thus, leading to a contraction in the country's tradable sector.

[47] Evidence for declining real and relative wages for low-skilled workers comes from labor productivity data, since wage data by skill type are not available for the United Arab Emirates. Labor productivity in the non-oil sector is defined as the ratio of real value-added in the non-oil sector to the number of workers employed. Labor productivity declined in sectors such as construction and trade that employ low-skilled workers more intensively, and rose in sectors such as finance, insurance, and communications that employ skilled workers more intensively. This mirrors a similar phenomenon in several other countries over the last two decades.

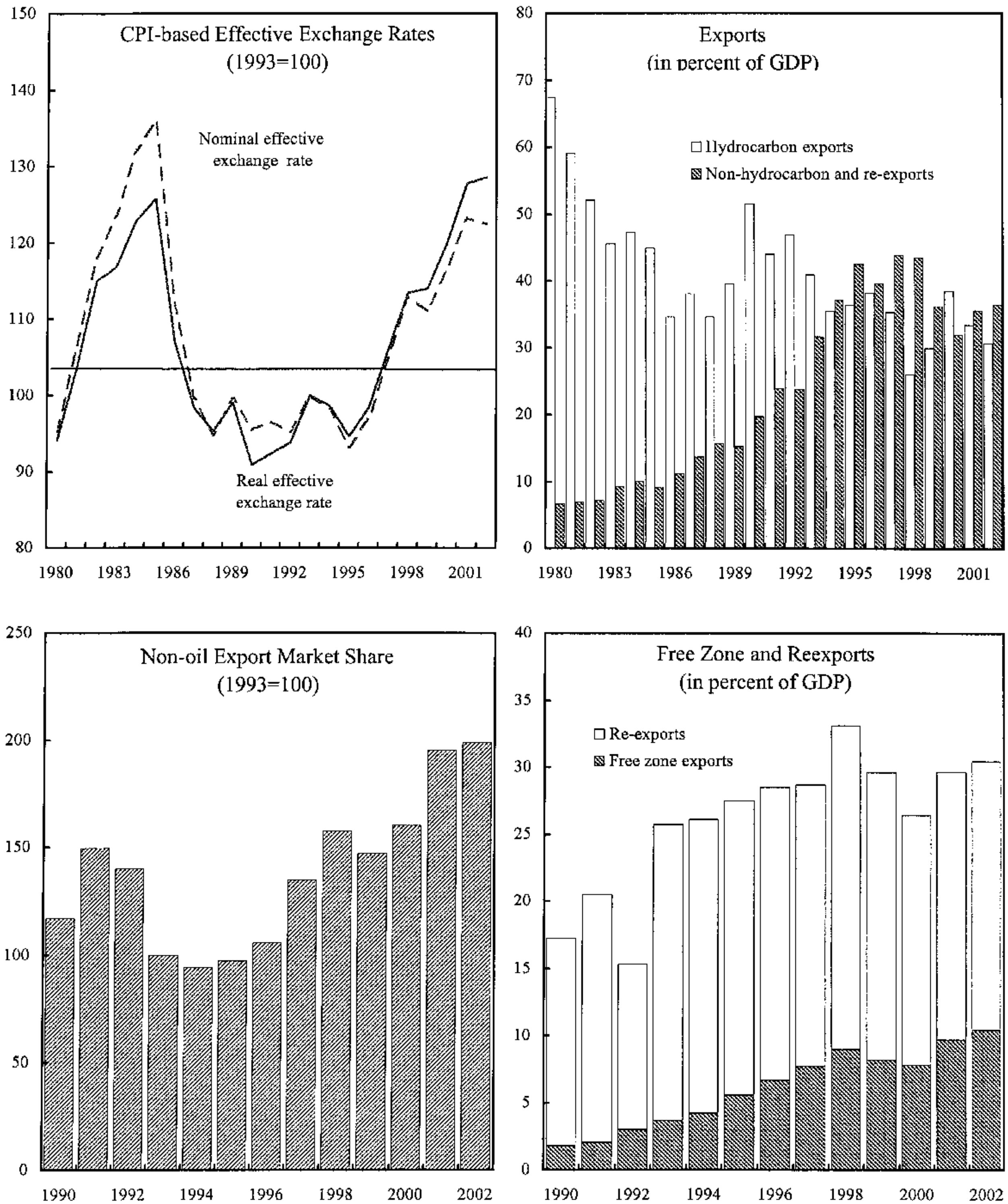
[48] Computed by the Information Notice System (INS), the weights used in the standard CPI-based REER calculations are based on trade in oil, manufactured goods, and others vis-à-vis developed and developing countries.

Figure 8. United Arab Emirates: Employment, Wages, and Labor Productivity, 1981–2001



Sources: National authorities; and IMF staff estimates.

Figure 9. United Arab Emirates: CPI-based Effective Exchange Rates and Export Performance, 1980–2002



Sources: National authorities; and IMF staff estimates.

78. Competitiveness of non-oil exports derives partly from access to expatriate workers at international wages. Estimates of the unit labor cost-based REER, computed on the basis of trade with advanced country partners showed no appreciation or loss of competitiveness over the period (Figure 10).[49] Two other factors were important to maintain competitiveness. First, U.S. dollar appreciation did not hinder competitiveness vis-à-vis other partner countries in the region that also peg their currencies to the U.S. dollar. In fact, about 30 percent of non-oil and re-exports go to other GCC countries and Iran. In fact, using non-oil and re-export weights, the CPI-based REER has appreciated by less than 10 percent since the mid-1990s (Figure 10).

79. The business-friendly environment and good infrastructure have also been key sources to maintain competitiveness and growth in the non-oil sectors. These factors have made the United Arab Emirates an attractive place to invest in, particularly in the free zones, for companies seeking to serve the growing markets of the Middle East, North Africa, India, and Pakistan.

D. Policies for the Employment of Nationals

80. With nearly 50 percent of the national Emirati population currently below the age of 15, a growing number of nationals will certainly enter the labor force in the period ahead. They will most probably seek employment in the private sector because the government is unlikely to remain the employer of first and last resort. In this regard, increasing private sector employment opportunities for nationals may come from two sources.[50] A larger number of skilled jobs should be created in the coming years as the United Arab Emirates seeks to become a technology and service hub within the region, and as investment increases in knowledge-intensive sectors, such as in the news media, electronics, and internet free trade zones in Dubai. Nevertheless, most job opportunities are likely to come from replacing expatriates in existing skilled positions. So, what policies can the authorities implement to increase employment opportunities for nationals while maintaining competitiveness and strong non-oil growth prospects? To answer this question, consider the following model.

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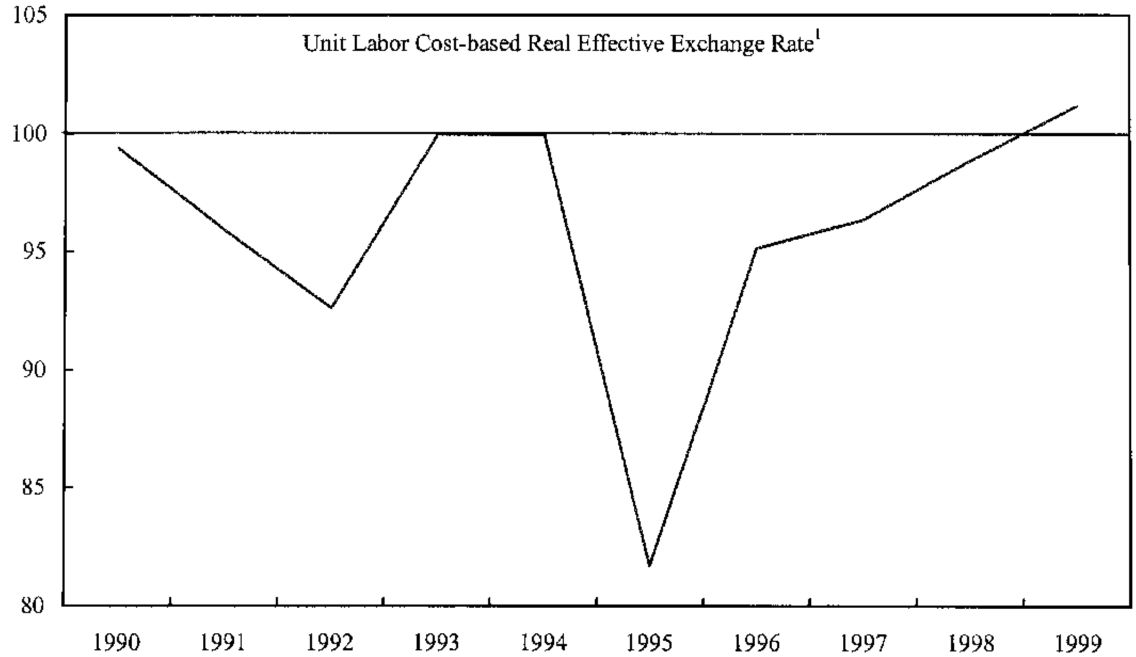
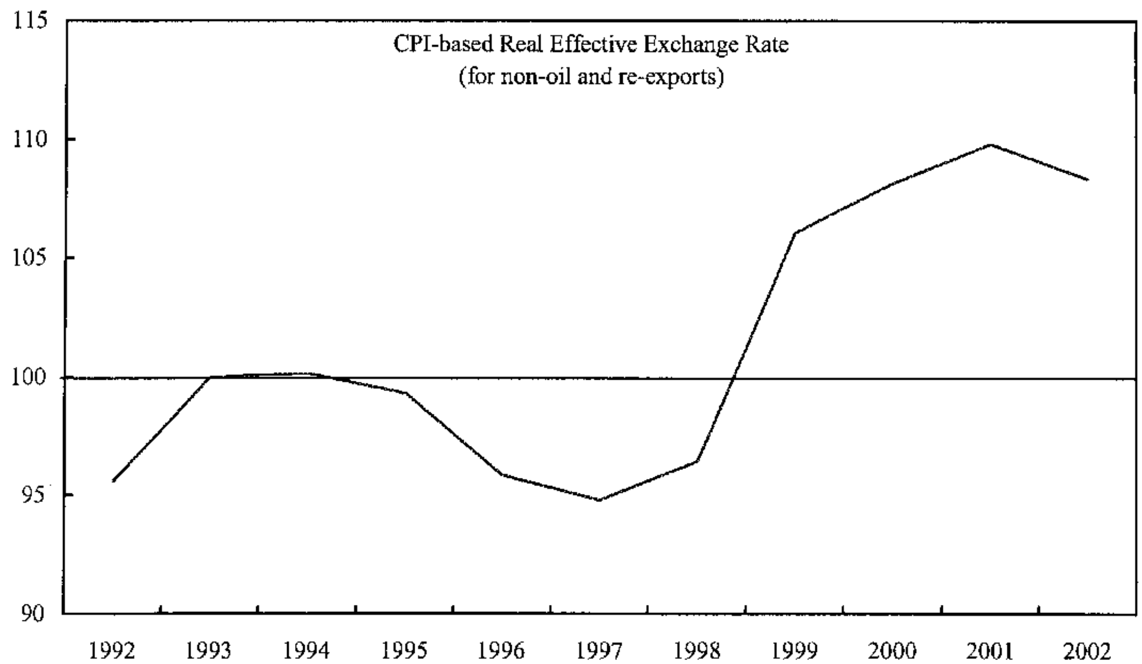
[49] Unit labor cost (ULC), or the labor cost to produce one unit of output, is obtained by dividing nominal compensation by average real labor productivity. The ULC-based REER is estimated for the business sector, defined as the non-oil sector, excluding government services, and is computed vis-à-vis advanced country partners for which ULC data is available. These countries account for over 70 percent of total exports.

[50] The unemployment rate among nationals was officially estimated at less than 3 percent in 1995, the year of the last population census.

Figure 10. United Arab Emirates: Alternative Measures of Non-Oil Competitiveness, 1990–2002

(Index 1993 = 100)





Source: IMF staff estimates.

1/ Computed vis-à-vis advanced country partners.

A model of employment and labor substitution

81. A composite non-oil output good is produced in the private sector using three types of labor—nationals, skilled expatriates, and low-skilled expatriates. Nationals and skilled expatriates are assumed to be substitutes in production, which is given by:

$$Y = AK^{\gamma} L^{\alpha-\gamma} \left[H^{\frac{\sigma-1}{\sigma}} + (hN)^{\frac{\sigma-1}{\sigma}} \right]^{\frac{\sigma}{\sigma-1}(1-\alpha)} \tag{1}$$

where A is the level of technology or total factor productivity (TFP), K is the capital stock, L is the number of low-skilled expatriate workers, H is the number of skilled expatriate workers, N is the number of nationals, h is the human capital or efficiency of national workers, and σ is the elasticity of substitution between skilled expatriate workers and nationals. A high value of σ indicates a high degree of substitutability.

82. Private sector demand for national labor, N^d, depends on the costs of employing the different types of workers, the human capital or efficiency of national workers, the level of technology, and the stock of capital, in the following manner:[51]

$$N^d = \mu A^{\frac{1}{\gamma}} K \frac{h^{\frac{1-\alpha}{\gamma}}}{w_L^{\frac{\alpha-\gamma}{\gamma}} (w+\beta+c)^{\frac{1-\alpha+\gamma}{\gamma}}} \left[1 + \left(\frac{w+\beta+c}{hw_H} \right)^{\sigma-1} \right]^{\left(\frac{\sigma-1}{\sigma}\right)\left(\frac{1-\alpha}{\gamma}\right) - \frac{1-\alpha+\gamma}{\gamma}} \tag{2a}$$

where w and β are, respectively, the private sector wages and benefits paid to nationals, c is the relative cost of firing them, w_L is the compensation of low-skilled expatriates, w_H is the compensation of skilled expatriates, and μ is a constant. As the different factors change, demand changes:

$$N^d = \underset{-}{f(w+\beta}, \underset{-}{c}, \underset{-}{w_L}, \underset{+}{w_H}, \underset{+}{h}, \underset{+}{K}, \underset{+}{A}) \tag{2b}$$

(i) As expected, demand is inversely related to the cost of hiring and firing national workers.

(ii) It is also inversely related to the cost of employing low-skilled expatriate workers. Since a reduction in the number of low-skilled employees reduces the marginal productivity of national workers, an increase in the cost of employing low-skilled workers reduces demand not only for these workers but also for national workers.

[51] See Appendix II for the derivation.

(iii) If skilled expatriate workers are sufficiently substitutable with nationals, then demand is positively related to the cost of employing skilled expatriates because increases in these costs lead firms to reduce their demand for skilled expatriate workers and to substitute them with national workers.[52]

(iv) It is also positively related to the level of human capital or efficiency of national workers, the stock of capital, and technology, because increases in these factors raises the return to employing an additional national worker.

83. The supply of national workers to the private sector depends on the compensation relative to their reservation wages. Reservation wages in turn are determined by the wage, social benefit, and employment policies of the government. If the public sector provides relatively high wages, social benefits, and job security to nationals, then the reservation wage and benefits, $w^*+\beta^*$, will be relatively high. For simplicity, assume an elastic supply of nationals at the reservation wage:

$$w+\beta \quad = \quad w^*+\beta^* \tag{3}$$

Equilibrium private sector employment for national workers, N, is given by equating labor supply and labor demand. Substituting equation (3) in equation (2a) yields:

$$N = \mu A^{\frac{1}{\gamma}} K \frac{h^{\frac{1-\alpha}{\gamma}}}{w_L^{\frac{\alpha-\gamma}{\gamma}} (w^*+\beta^*+c)^{\frac{1-\alpha+\gamma}{\gamma}}} \left[1+\left(\frac{w^*+\beta^*+c}{hw_H}\right)^{\sigma-1}\right]^{\left(\frac{\sigma-1}{\sigma}\right)\left(\frac{1-\alpha}{\gamma}\right)-\frac{1-\alpha+\gamma}{\gamma}} \tag{4a}$$

$$N \;=\; f(\underset{-}{w^*+\beta^*},\; \underset{-}{c},\; \underset{-}{w_L},\; \underset{+}{w_H},\; \underset{+}{h},\; \underset{+}{K},\; \underset{+}{A}) \tag{4b}$$

84. Based on equation (4), several policies can be adopted to increase job opportunities for nationals in the private sector. These may be grouped into three broad categories depending on whether they directly affect wages and employment costs, acquisition of human capital, and investment in capital and technology. These policies are structural and market-based, in contrast to quantitative measures, such as job quotas for nationals in the private sector, which may adversely affect competitiveness and non-oil growth by raising costs and limiting employment flexibility.[53]

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[52] That is, if $\sigma > 1+(1-\alpha)/\gamma > 1$, then demand for nationals rises with increases in w_H. For the United Arab Emirates, the upper bound for $1+(1-\alpha)/\gamma$ is estimated to be 1.5.

[53] The U.A.E. government has thus far adopted quotas only in the banking sector, albeit applied flexibly.

Employment costs

85. Reducing the relatively high wages in the public sector is likely to lower the reservation wage and increase the willingness of nationals to acquire skills or human capital valuable to private sector employers. Announcing and enforcing strict limits on public sector hiring is likely to further lower the reservation wage by decreasing the likelihood that the public sector will act as the employer of first and last resort for nationals.

86. Separating wages and social benefits in the public sector and providing benefits to all working nationals—not just to those employed in the public sector—is likely to reduce the incentive for nationals to seek public sector employment and lower the reservation wage. Moreover, giving time-specific subsidies for the employment of nationals will likely increase private sector demand for them by lowering their employment costs. However, the fiscal cost will need to be less than the employment benefit for the policy to be welfare improving.[54]

87. Relatively higher firing costs for nationals, including lengthy appeal and investigation of dismissals, raises their relative cost of employment, thus reducing demand. Therefore, establishing a clear set of rules for the appeal of dismissals, including fines or penalties associated with wrongful dismissals, and a mechanism for the rapid resolution of appeals is likely to lower the relative cost of employing nationals, and reduce the disparity in labor mobility between nationals and expatriate workers across sectors.

88. If skilled expatriate workers are sufficiently substitutable with national workers, then increasing the relative cost of hiring skilled expatriate workers, such as by imposing income taxes or fees on the employment of skilled expatriates, is likely to result in substitution away from skilled expatriates and towards nationals.[55] Such taxes or fees should only be applied to skilled expatriates and not to low-skilled expatriates because the latter complement the productivity of nationals. If taxes or fees are applied to low-skilled expatriate workers, then the cost of hiring them will increase, and the demand for national workers is likely to decrease.

Skill development

89. Enhancing the human capital of nationals and the acquisition of skills that are valuable to the private sector is likely to increase demand and employment. To this end, providing education, including vocational training, reforming school curricula, encouraging firms to establish internships, awarding scholarships as well as targeted training vouchers,

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[54] These subsidies could be financed, for instance, by fees or income taxes on skilled expatriate workers.

[55] Assuming that the employer in the United Arab Emirates will cover the cost of paying the income tax of his expatriate workers.

and fostering self employment will likely build necessary skills and expertise among prospective national workers.

Investment in capital and knowledge

90. Facilitating the adoption of new technologies and the accumulation of capital is also likely to increase private sector demand and employment by raising the productivity of nationals. In this regard, the establishment of knowledge- and technology-intensive free trade zones in Dubai is likely to help. Moreover, continued out-sourcing of government services and extending 100 percent foreign ownership into non-free trade zone areas will likely promote competition and improve resource allocation, leading to higher productivity and investment.

E. Summary and Conclusions

91. The non-oil output and employment performance of the United Arab Emirates have been very strong, particularly in the last decade, with the abundant supply of expatriate workers at internationally competitive wages being a key source of non-oil growth and competitiveness. In fact, the number of net new jobs created by the private sector has been about 10 times the number of nationals entering the work force each year. However, most of these jobs have been in low- and semi-skilled positions, which have not attracted skilled nationals. As a result, the majority of nationals have continued to find employment in the government.

92. With nearly 50 percent of the national population below the age of 15, a rapidly growing number of nationals are expected to enter the labor force in the period ahead. Since the public sector is not likely to remain the employer of first and last resort, nationals will increasingly need to seek employment in the private sector. The policy challenge therefore is to expand job opportunities for nationals while maintaining non-oil growth and competitiveness.

An effective employment strategy for nationals may include:

- *Increasing the relative attractiveness of working in the private sector* by lowering the wage differential between the public and private sectors; making social benefits available to all working nationals, irrespective of sector of employment; and announcing strict limits on public sector employment.

- *Reducing disparities in labor mobility* by creating a level playing field between hiring and firing national workers vis-à-vis expatriate workers.

- *Encouraging skill acquisition among nationals* by strengthening educational and vocational training, providing time-specific incentives, such as subsidies and scholarships, and promoting self-employment.

- *Facilitating improvements in productivity and investment in capital* by out-sourcing government services, and extending majority foreign ownership in non-free trade zone areas.

- *Using price-based rather than quantity-based market interventions* by charging, for instance, fees for employing or income taxes on skilled expatriate workers.

93. In sum, adopting structural and market-based policies to increase private sector employability and job opportunities for nationals will also maintain the labor market flexibility that is key for sustaining strong non-oil growth and competitiveness.

Non-Oil Growth Accounting for the United Arab Emirates

94. A growth accounting exercise decomposes non-oil output growth into the contributions of its constituent factor inputs, that is, labor, capital, and a residual factor, usually interpreted as total factor productivity (TFP). For the United Arab Emirates, growth in labor employment and capital account for nearly all non-oil output growth.

95. Consider the standard Cobb-Douglas production function for non-oil output, $Y = K^{\alpha} (AL)^{1-\alpha}$, where Y is output, K is the capital stock of the non-oil sector, L is labor input into the non-oil sector, A is the level of TFP or technology, and α is the capital share of income. Taking logarithms and differentiating with respect to time yields the decomposition of output growth: $g_Y = \alpha g_K + (1-\alpha)g_L + (1-\alpha)g_A$, where g_x is the growth rate of variable x, αg_K is the contribution of capital to non-oil output growth, $(1-\alpha)g_L$ is labor's contribution, $(1-\alpha)g_A$ is the residual or the contribution of TFP growth, and $(1-\alpha)$ is labor's share of income.

96. Data available suggest that worker compensation is about 40 percent of income. The number is low by international standards, but given that the vast majority of workers are expatriates and that employers or owners earn large markups, it is reasonable to assume a value of 0.6 for capital's share, α.

97. Labor is proxied for by the number of employees since the number of hours worked is not available. The stock of capital is constructed using the perpetual inventory method. In other words, capital accumulation is given by $K_{t+1} = (1-\delta_t) K_t + I_t$, where K_t is capital at time t, I_t is investment, and δ_t is the depreciation rate. Given the high replacement rate of structures in the United Arab Emirates and the increasing share of equipment in the stock of capital, δ_t is assumed to be 10 percent for the 1980s and 12 percent for the 1990s.[56] Finally, an initial capital-output ratio of 2.1 is assumed for 1980.[57] These assumptions yield the following results:

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[56] These depreciation rates imply replacement within two decades, which correspond to the rapid replacement rate of structures and equipment in the United Arab Emirates.

[57] The steady state capital output ratio is usually 3. Basic infrastructure investments were ongoing in 1980 and, given that infrastructure investment precedes investment in other sectors, an initial value of 2.1 was assumed.

Table 1. Non-Oil Output Growth and Input Growth, 1981–2000

(Average in the period, in percent)

Period	Non-Oil Output Growth	Labor Growth	Capital Growth	TFP Growth
1981–1990	3.6	2.5	4.0	0.3
1991–2000	7.3	9.6	5.3	0.6

Sources: National authorities; and Fund staff estimates.

98. Growth in labor and capital account for almost all non-oil output growth. Labor's contribution, given by $(1-\alpha)g_L$, was about 30 percent for the 1980s and over 50 percent for the 1990s, confirming that the abundant supply of expatriate labor has been a major engine of output growth. Capital accumulation accounted for most of the rest. TFP's contribution was about 3 percent, which is similar to numbers in other developing countries.[58]

[58] The qualitative result of labor and capital accounting for almost all non-oil output growth is robust to the initial capital stock. The quantitative results for the 1980s are sensitive to the initial value, given the short available time series of investment data. The quantitative results for the 1990s are more robust, especially given the assumption of high depreciation rates.

A Model of Demand for National Labor

99. Let private sector non-oil output, Y, be given by:

$$Y = AK^{\gamma} L^{\alpha-\gamma}\left[H^{\frac{\sigma-1}{\sigma}} + (hN)^{\frac{\sigma-1}{\sigma}}\right]^{\frac{\sigma}{\sigma-1}(1-\alpha)} \tag{1}$$

where A is the level of technology or TFP, K is the capital stock, L is the number of low-skilled expatriate workers, H is the number of skilled expatriate workers, N is the number of nationals, h is the quality or efficiency of national workers, and σ is the elasticity of substitution between skilled expatriate workers and nationals. A high value of σ indicates a high degree of substitutability; $\sigma = \infty$ corresponds to perfect substitutability, while $\sigma = 0$ corresponds to zero or lack of substitutability between skilled expatriate workers and nationals. Since nationals are better substitutes for skilled expatriates than for low-skilled expatriates, the elasticity of substitution between nationals and skilled expatriates is higher than between nationals and low-skilled expatriates. From the Cobb-Douglas production function, the elasticity of between nationals (or skilled expatriates) and low-skilled expatriates is 1. Therefore, σ is greater than 1.

Each period, a firm chooses different types of labor to maximize profits, given wages, technology, and capital. Workers are hired on a period-by-period basis.

$$\begin{aligned} &\max_{N,L,H} \quad Y - (w+\beta)N - w_L L - w_H H - cN \\ &s.t. \qquad Y = AK^{\gamma} L^{\alpha-\gamma}\left[H^{\frac{\sigma-1}{\sigma}} + (hN)^{\frac{\sigma-1}{\sigma}}\right]^{\frac{\sigma}{\sigma-1}(1-\alpha)} \end{aligned} \tag{5}$$

where w and β are respectively the real wage and benefits paid to a national worker, w_L is the real wage of a low-skilled expatriate worker, w_H is the real wage of a skilled expatriate worker, and c is the cost associated with firing or separating from a national worker. Note that w_L and w_H are the international wages for low-skilled and skilled workers respectively, and hence are exogenously given.

Private sector demand for national labor is obtained by solving the first order conditions and re-writing in terms of the exogenous variables:

$$N^d = \mu A^{\frac{1}{\gamma}} K \frac{h^{\frac{1-\alpha}{\gamma}}}{w_L^{\frac{\alpha-\gamma}{\gamma}} (w+\beta+c)^{\frac{1-\alpha+\gamma}{\gamma}}}\left[1 + \left(\frac{w+\beta+c}{hw_H}\right)^{\sigma-1}\right]^{\left(\frac{\sigma-1}{\sigma}\right)\left(\frac{1-\alpha}{\gamma}\right) - \frac{1-\alpha+\gamma}{\gamma}} \tag{2a}$$

where $\mu = (1-\alpha)^{\frac{1-\alpha+\gamma}{\gamma}} (\alpha-\gamma)^{\frac{\alpha-\gamma}{\gamma}} > 0$ is a constant.

V. Real Gross Domestic Product and Real Gross Domestic Income[59]

A. Introduction

100. In an oil-based economy, the real gross domestic income (RGDI) could be a relevant complementary indicator to real gross domestic product (RGDP) to assess economic developments, particularly in periods of sharp changes in oil prices. While RGDP only measures changes in the volume of production, RGDI captures the changes in the real purchasing power of domestic income generated by the change in both output and the terms of trade. A number of key macroeconomic variables, such as consumption, investment, and imports, might be closely associated with changes in RGDI. This chapter provides a theoretical framework for the calculation of RGDI and examines the relationship between RGDI and other key macroeconomic variables in the United Arab Emirates from 1990–2002.

B. The Theoretical Framework

101. RGDI can be represented as follows:

$$RGDI = RGDP + ToT$$

where

$$ToT = \left[\frac{X-M}{P}\right] - \left[\frac{X}{Px} - \frac{M}{Pm}\right]$$

X = exports at current prices;
M = imports at current prices;
Px = the price index for exports, a weighted average of oil export and non-oil export deflators.
Pm = the price index for imports;
P = a price index used to deflate the current price trade balance to derive the purchasing power of net exports (CPI is used as a proxy)

102. While there is generally no ambiguity regarding the definition of most of these variables, considerable debate exists as to the appropriate choice of the price index, P. In this exercise, the CPI was chosen as the deflator, with 1995 as the base year, rather than, for instance, the GDP deflator, which would distort the results given its wide variability owing to the sharp changes in crude oil prices over the past decade.

C. Empirical Results

103. As expected, the movements in RGDP and RGDI in the United Arab Emirates have diverged significantly in the past years. While annual RGDP growth has been usually

[59] This chapter was written by Saeed Mahyoub (MED).

positive from 1990–2002, RGDI growth has ranged from 36.6 percent (2000) to -11.4 percent (1998), reflecting the volatile movements in the terms of trade dictated by the vagaries of world oil prices (Table 11 and Figure 11). A strong positive correlation seems to exist between RGDI and other key macroeconomic variables (Figures 12–14), particularly between RGDI and consumption.

104. To examine more closely this relationship, a statistical correlation for the period 1990–2002 was run on the log of RGDI and the logs of the following economic variables: private consumption, public consumption, total consumption, private investment, public investment, total investment, and imports. The results show correlation coefficients ranging between 0.78 and 0.90 (Table 12).[60] In addition, a Johansen cointegration test was run on RGDI and the other variables. All the results, except for private and total investment, show a strong cointegration at the 5 percent confidence level (Table 13). The outcome of total investment was the result of poor cointegration of private investment, a major component of total investment. In this model, each of the economic variable co-varies with RGDI according to the following cointegration relation:

$$\text{Log (economic variable)} = \underset{(t_{\text{stats.}})}{\alpha} \log (\text{RGDI}) + \underset{(t_{\text{stats.}})}{C}$$

105. The t statistics in parenthesis in Table 3 are significant for consumption (private, public, and total) and for public investment, and not significant for private investment, and total investment. This is to be expected since an increase in income, owing to a rise in oil prices, increases the wealth of the government directly, which filter down to a rise in consumption. Private investment decisions, however, do not seem to be influenced directly by variations in RGDI.

[60] Note that RGDP also yielded significant correlation with these economic variables (results not shown).

Table 11. Real Gross Domestic Product and Income, and Oil Prices, 1990–2002

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001	Est. 2002
	(In millions of U.S. dollars at constant 1995 prices; unless otherwise specified)												
Real GDP	34,123	34,948	36,165	36,973	39,956	42,741	45,368	49,121	49,806	51,977	57,180	59,365	60,260
Oil GDP 1/	15,699	15,699	15,699	12,710	12,761	13,062	13,218	14,002	12,939	12,351	13,727	13,898	12,591
RGDI	42,877	39,587	40,396	38,955	40,330	42,741	49,522	53,179	47,091	54,627	74,602	72,097	73,509
Average U.A.E. oil prices (U.S. dollars per barrel)	21.0	18.0	18.2	16.0	15.6	16.7	19.9	18.8	12.6	17.5	27.2	23.8	24.3
	(Percent change)												
Real GDP	...	2.4	3.5	2.2	8.1	7.0	6.1	8.3	1.4	4.4	10.0	3.8	1.5
Oil GDP 1/	...	0.0	0.0	-19.0	0.4	2.4	1.2	5.9	-7.6	-4.5	11.1	1.2	-9.4
RGDI	...	-7.7	2.0	-3.6	3.5	6.0	15.9	7.4	-11.4	16.0	36.6	-3.4	2.0
Average U.A.E. oil prices (U.S. dollars per barrel)	...	-14.3	1.2	-12.2	-2.6	6.9	19.3	-5.4	-33.1	39.1	55.7	-12.6	2.2

Sources: National authorities; and Fund staff estimates.

1/ Includes crude oil, petroleum products, and gas.

Table 12. Correlation Matrix

	RGDI
Imports	0.82
Private consumption	0.90
Private investment	0.84
Public consumption	0.86
Public investment	0.78
Total consumption	0.89
Total investment	0.83

Source: Fund staff estimates.

Table 13. Summary of the Cointegration Relations 1/

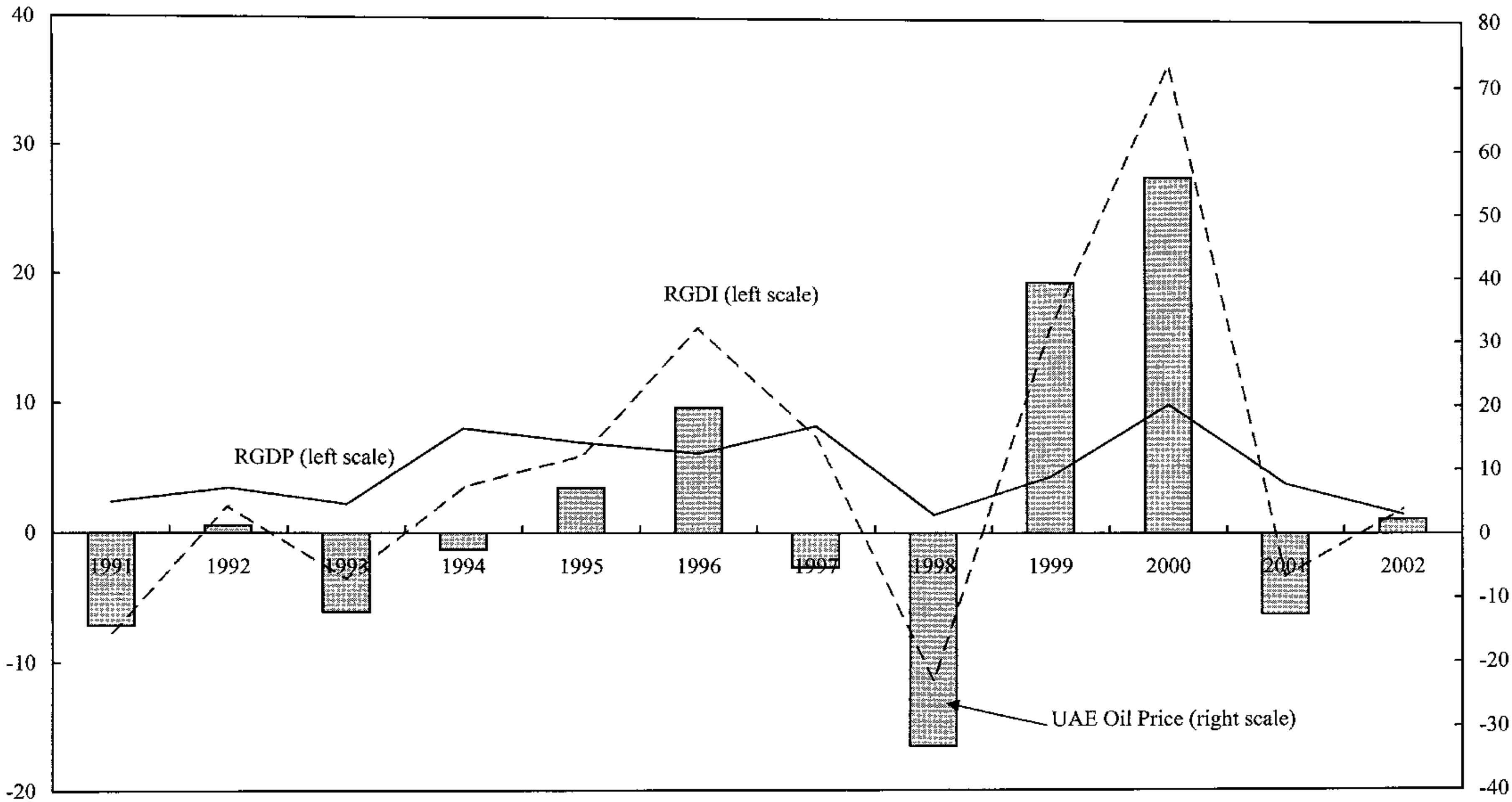
Hypothesized number of cointegration equation = none

Cointegrating Equation	Trace Statistics
LPRIVCONS = 2.076 LRGDI – 12.923 (17.75) (-10.03)	35.598
LPUBCONS = 0.724 LRGDI + 1.296 (4.29) (0.712)	29.113
LTOTCONS = 3.046 LRGDI – 23.691 (6.28) (-4.46)	26.215
LIMPORTS = 0.397 LRGDI + 6.924 (0.538) (0.861)	24.118
LTOTINV = 0.470 LRGDI + 4.809 (0.964) (0.901)	16.64
LPUBINV = 0.921 LRGDI – 1.369 (4.819) (0.663)	28.783
LPRIVINV = 0.772 LRGDI + 0.339 (1.484) (0.061)	8.613

Source: Fund staff estimates.

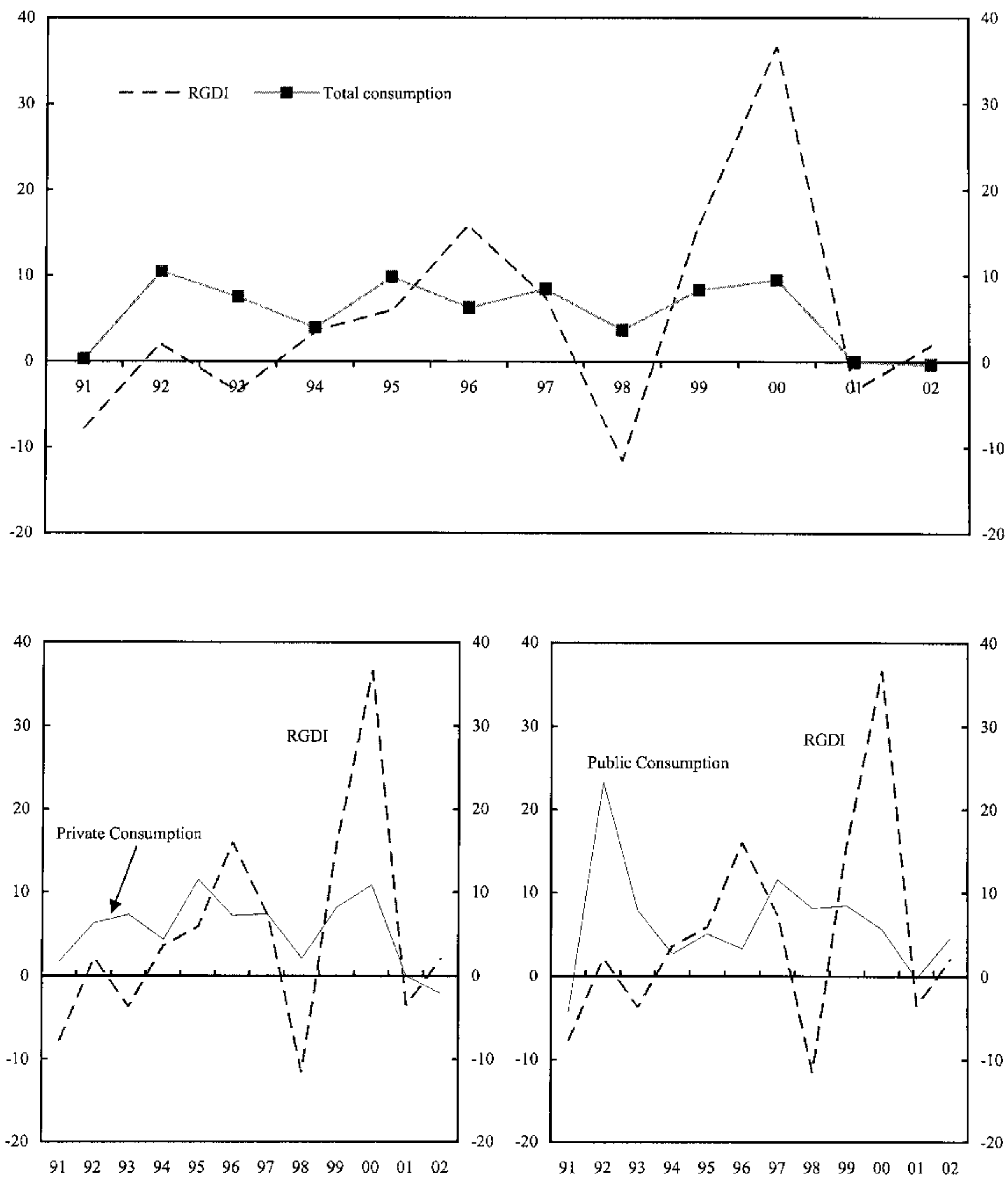
1/ Five percent critical value 19.96.

Figure 11. United Arab Emirates: Real GDP, Real GDI, and Crude Oil Prices, 1991–2002
(Percent change)



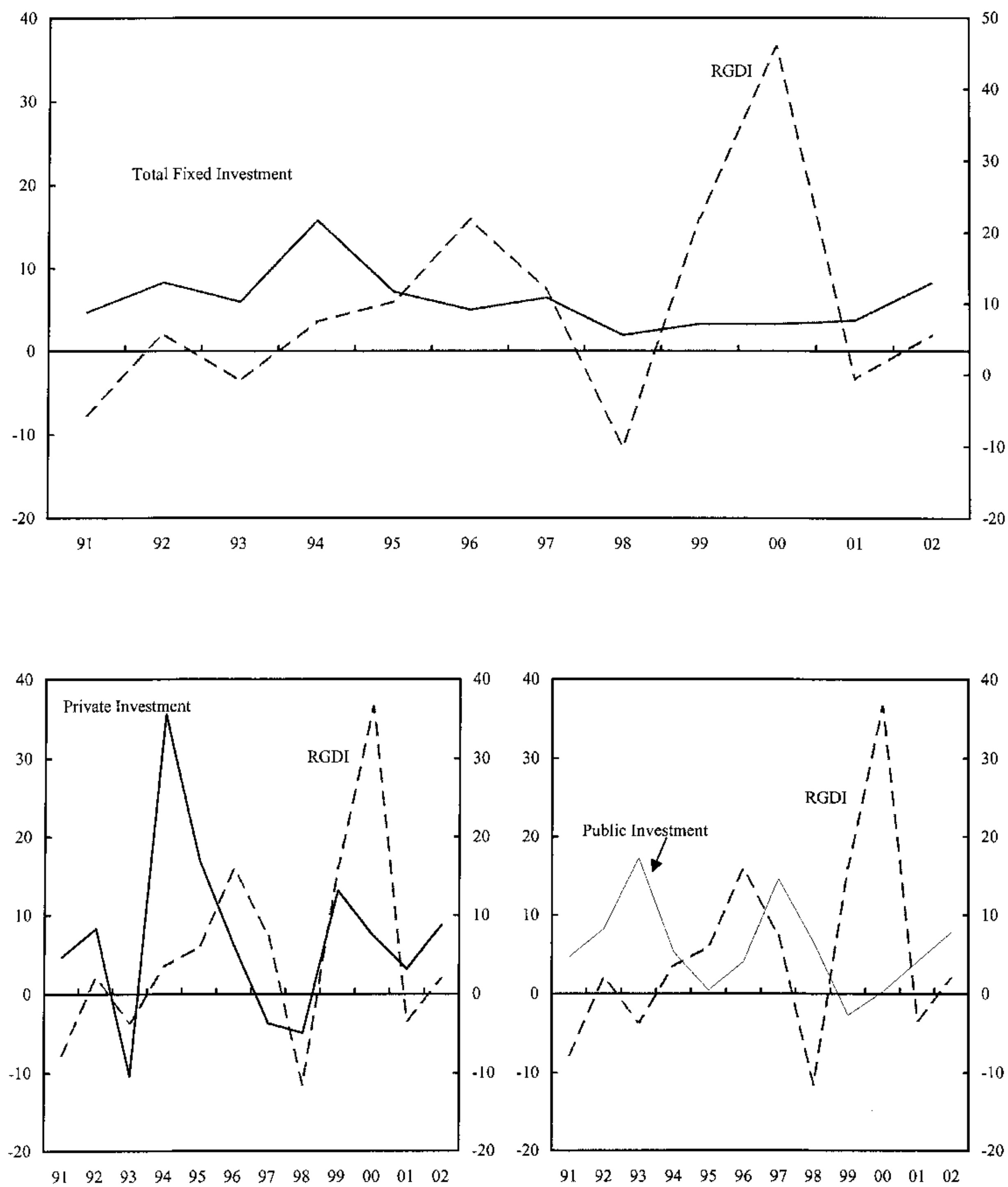
Sources: National authorities; and Fund staff estimates.

Figure 12. United Arab Emirates: Change in RGDI and Consumption, 1991–2002
(In percent)



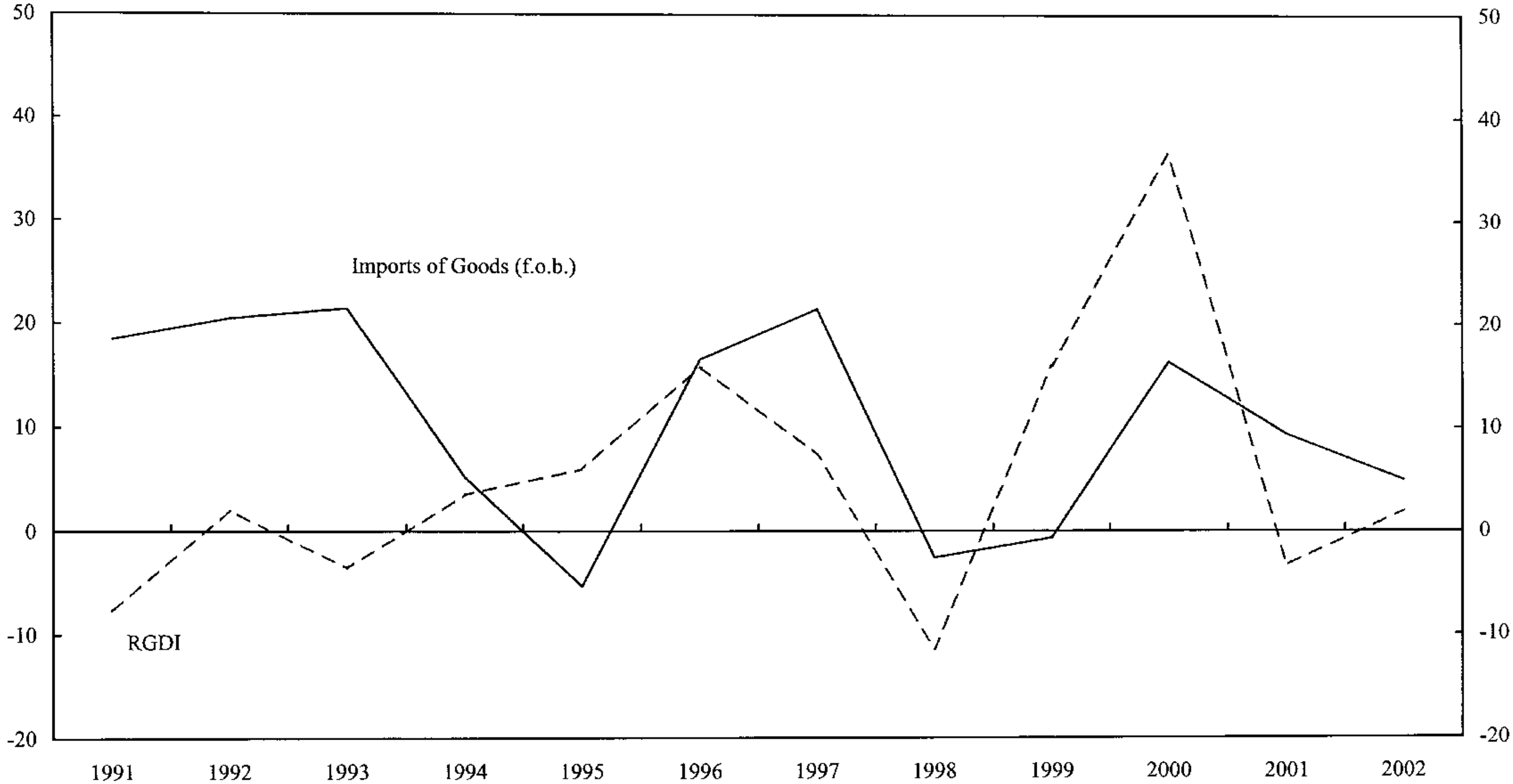
Sources: National authorities; and Fund staff estimates.

Figure 13. United Arab Emirates: Change in RGDI and Investemt, 1991–2002
(In percent)



Source: National authorities; and Fund staff estimates.

Figure 14. United Arab Emirates: RGDI and Imports, 1991–2002
(Percent change)



Sources: National authorities; and Fund staff estimates.

United Arab Emirates: Basic Data

I. Social and Demographic Indicators (1999, except as indicated)

Population characteristics			
Total population (in millions, 2001) 1/	3.49	Age distribution (in thousands)	
Population growth (in percent) 1/	7.40	14 and under	751.7
Density (per sq km)	33.67	15–64	1,930.3
Life expectancy at birth (years)	75.25	Over 64	60.5
Crude birth rate (per thousand)	17.54	Percentage	
Crude death rate (per thousand)	3.30	Urban	85.5
Infant mortality (per thousand)	7.64	Rural	14.5
Access to safe water (most recent)		Nutrition (most recent)	
Percentage of population	100.0	Per capita calories per day	3,309
Health		Education (1996), percent	
Physicians per 1,000 people	1.8	Primary school enrollment percentage	
Access to health care		Male	90.7
(percentage of population)	99.0	Female	87.4
		Adult literacy rate (1995)	84

Sources: Ministry of Planning; and World Bank, *World Development Indicators*.

1/ Including expatriates.

II. Selected Economic Indicators, 1997–2001

	1997	1998	1999	2000	Prel. 2001
	(In billions of U.A.E. dirhams)				
GDP at market prices	188.4	178.1	202.7	259.0	256.6
	(In millions of barrels per day)				
Hydrocarbon production					
Crude oil production (in millions of bbl./day) 1/	2.43	2.43	2.26	2.41	2.44
Average price (US$ per barrel)	18.80	12.57	17.48	27.21	23.78
Natural gas production (In bcm per year)	32.7	33.4	34.6	35.9	41.3
	(Annual percentage changes)				
National income and prices					
Real GDP (at factor cost)	8.3	1.4	4.4	10.0	3.8
Oil and natural gas	5.9	-7.6	-4.5	11.1	1.2
Non-oil sectors 2/	9.2	5.0	7.5	9.7	4.6
Consumer prices	2.9	2.0	2.1	1.4	2.2
	(In percent of GDP)				
Investment and saving					
Gross domestic investment	28.1	30.6	27.8	23.2	24.4
Government	5.8	7.9	6.8	4.3	5.2
Nongovernment	22.3	23.0	21.0	18.9	19.2
National saving	41.1	35.1	38.8	49.1	40.0
Government	12.2	5.6	3.1	11.1	2.0
Nongovernment	28.9	29.8	35.7	38.0	38.0

II. Selected Economic Indicators, 1997–2001

	1997	1998	1999	2000	Prel. 2001
	(In percent of GDP)				
Consolidated government finances					
Revenue	37.5	34.5	31.7	38.6	32.1
Oil	21.9	14.3	13.8	21.6	18.9
Non-oil	15.5	20.2	17.8	17.0	13.2
Of which: investment income	7.2	10.5	9.5	9.8	6.1
Expenditure, *of which*	33.8	40.3	37.3	32.6	37.4
Current	25.2	28.9	28.6	27.5	30.2
Overall balance	3.4	-5.8	-5.6	6.0	-5.3
Government debt 3/	4.3	6.6	7.2	4.6	4.0
	(Changes in percent of beginning M2 stock)				
Money and credit 4/					
Broad money (M2)	9.0	4.2	11.4	11.1	10.6
Foreign assets (net)	-1.2	0.4	4.3	10.9	4.0
Domestic assets, *of which*:	10.3	3.8	7.1	0.3	6.6
Claims on government (net)	0.7	-1.3	1.1	-4.7	1.7
Claims on private sector	13.0	13.9	7.6	7.8	7.6
	(In percent per annum, end of period)				
Interest rates					
Dirham (three month interbank)	5.58	5.45	5.53	6.53	3.50
Lending rate	9.54	9.02	10.59	9.60	7.82
	(In billions of U.S. dollars)				
External sector					
Exports, *of which*:	40.8	33.4	36.5	49.6	48.2
Crude oil	14.6	10.0	13.6	21.7	17.7
Gas	2.9	2.1	2.3	3.7	3.4
Non-hydrocarbon exports	11.8	9.3	8.2	9.4	10.9
Reexports	10.8	11.6	11.8	13.1	13.9
Imports, f.o.b.	-30.0	-28.7	-27.9	-30.8	-32.8
Services (net)	-6.1	-5.9	-5.9	-6.2	-6.4
Income (net)	6.4	7.1	7.3	9.6	6.1
Transfers (net)	-3.6	-3.7	-3.9	-4.0	-4.6
Current account balance	6.7	2.2	6.0	18.3	10.4
(In percent of GDP)	13.1	4.5	10.9	25.9	14.9
Central bank reserves	8.6	9.3	10.9	13.8	14.3
In months of imports	3.6	4.0	4.3	5.1	4.9
As percent of reserve money	209.5	210.4	199.8	250.2	242.8
As percent of short-term debt 5/	276.2	147.6	218.7	251.3	336.0
Total external debt 6/	16.9	18.1	18.5	18.2	14.1
Exchange rate					
Dirham/US$ (end of period)	3.6725	3.6725	3.6725	3.6725	3.6725
REER (average, 1990=100)	116.5	124.6	125.2	132.0	140.5

Sources: National authorities; Bank for International Settlements (BIS); and Fund staff estimates.

1/ Includes condensates, which are not subject to OPEC quotas.

2/ Includes refined products and liquid gas, which account for about 7.5 percent of non-hydrocarbon GDP.

3/ Gross due to domestic banks. No official external debt is acknowledged.

4/ Beginning 2000 results adjusted for change in compilation procedure.

5/ Debt due within one year, from BIS/OECD statistics.

6/ Central Bank and commercial bank foreign liabilities, plus private nonbanks (BIS source).

Table 1. United Arab Emirates: Sectoral Origin of GDP at Constant 1995 Prices, 1997–2001

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Gross domestic product	180,322	182,913	190,884	209,992	218,016
Crude oil production	51,401	47,517	45,360	50,414	51,040
Other sectors	128,921	135,396	145,524	159,578	166,976
Agriculture	5,982	6,231	7,346	8,733	8,500
Industry	41,951	43,680	46,297	51,000	51,663
Mining and quarrying	589	612	637	662	672
Manufacturing 1/	22,229	23,311	25,390	29,681	29,753
Electricity and water	3,887	4,011	4,244	4,487	4,748
Construction	15,246	15,746	16,026	16,170	16,490
Services	80,988	85,485	91,881	99,845	106,813
Trade	22,635	23,553	24,485	25,321	26,376
Wholesale and retail trade	19,207	19,732	20,032	20,676	21,146
Restaurants and hotels	3,428	3,821	4,453	4,645	5,230
Transportation, storage, and communication	11,726	12,896	14,177	16,211	18,113
Finance and insurance	10,815	12,546	13,201	14,207	16,144
Real estate	17,187	17,772	18,454	18,618	18,906
Government services	18,103	19,296	21,430	24,296	25,990
Other services	4,432	4,617	4,892	5,242	5,717
Less:					
Imputed bank service charges	3,910	5,195	4,758	4,050	4,433

Source: Ministry of Planning.

1/ Includes natural gas and petroleum-processing industries.

Table 2. United Arab Emirates: Real Growth by Economic Sector, 1997–2001

(Change in percent)

	1997	1998	1999	2000	Prel. 2001
Gross domestic product	8.3	1.4	4.4	10.0	3.8
Crude oil production	5.9	-7.6	-4.5	11.1	1.2
Other sectors	9.2	5.0	7.5	9.7	4.6
Agriculture	18.9	4.2	17.9	18.9	-2.7
Industry	15.6	4.1	6.0	10.2	1.5
Mining and quarrying	2.4	3.9	4.1	3.9	1.5
Manufacturing 1/	24.3	4.9	8.9	16.9	0.7
Electricity and water	13.4	3.2	5.8	5.7	5.8
Construction	5.9	3.3	1.8	0.9	2.0
Services	5.6	5.6	7.5	8.7	7.0
Trade	8.9	4.1	4.0	3.4	4.2
Wholesale and retail trade	7.1	2.7	1.5	3.2	2.3
Restaurants and hotels	20.4	11.5	16.5	4.3	12.6
Transportation, storage, and communication	5.9	10.0	9.9	14.3	11.7
Finance and insurance	10.0	16.0	5.2	7.6	13.6
Real estate	0.8	3.4	3.8	0.9	1.5
Government services	3.6	6.6	11.1	13.4	7.0
Other services	7.9	4.2	6.0	7.2	9.1
Less:					
Imputed bank service charges	7.9	32.9	-8.4	-14.9	9.5

Source: Ministry of Planning.

1/ Includes natural gas and petroleum proccssing industries.

Table 3. United Arab Emirates: Sectoral Origin of GDP at Current Prices, 1997–2001

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Gross domestic product	187,550	177,360	201,797	257,979	255,303
Crude oil production	55,799	37,402	49,794	86,690	74,892
Other sectors	131,751	139,958	152,003	171,289	180,411
Agriculture	6,052	6,325	7,551	9,047	8,862
Industry	43,026	45,125	48,232	56,916	58,120
Mining and quarrying	594	619	656	682	697
Manufacturing 1/	22,851	23,987	26,539	34,762	35,087
Electricity and water	3,969	4,127	4,416	4,615	4,890
Construction	15,612	16,392	16,621	16,857	17,446
Services	82,673	88,508	96,220	105,326	113,429
Trade	23,563	25,005	26,255	27,294	28,538
Wholesale and retail trade	19,994	20,955	21,535	22,268	22,838
Restaurants and hotels	3,569	4,050	4,720	5,026	5,700
Transportation, storage, and communication	11,972	13,347	15,247	17,247	19,381
Finance and insurance	11,042	13,023	13,663	14,862	16,903
Real estate	17,102	17,664	18,384	19,068	19,662
Government services	18,465	20,010	22,458	25,561	27,504
Other services	4,514	4,758	5,071	5,465	6,007
Less:					
Imputed bank service charges	3,985	5,299	4,858	4,171	4,566

Source: Ministry of Planning.

1/ Includes natural gas and petroleum processing industries.

Table 4. United Arab Emirates: Sectoral Distribution of Nominal GDP, 1993–2001

(In millions of dirhams)

	1993	1994	1995	1996	1997	1998	1999	2000	Prel. 2001
Oil sector 1/	53,211	50,188	54,945	65,330	64,565	46,036	59,280	102,636	86,713
Government sector	22,200	23,935	26,620	28,128	29,611	32,054	36,051	40,866	44,779
Private sector	57,795	67,786	75,337	82,320	93,374	99,270	106,466	114,477	123,811
GDP	133,206	141,909	156,902	175,778	187,550	177,360	201,797	257,979	255,303

Source: Ministry of Planning.

1/ Includes crude oil, condensates, liquid gas, and refined products.

Table 5. United Arab Emirates: Use of Resources at Current Prices, 1997–2001

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Consumption	118,069	128,253	136,482	152,559	160,763
Public	29,387	35,226	36,117	39,885	42,131
Private	88,682	93,027	100,365	112,674	118,632
Fixed investment	50,951	52,195	53,916	57,398	59,823
Public	30,295	32,402	31,564	32,643	34,157
Private	20,656	19,793	22,352	24,755	25,666
Change in inventories	1,800	2,320	2,500	2,680	2,792
Domestic expenditure	170,820	182,768	192,898	212,637	223,378
Net exports of goods and services	17,170	-4,650	9,800	46,610	33,186
Exports	156,150	129,600	141,710	190,070	185,466
Imports	138,980	134,250	131,910	143,460	152,280
GDP at market prices	187,990	178,118	202,698	258,991	256,564
Plus: Subsidies, less indirect taxes	-440	-758	-901	-1,012	-1,261
Subsidies	1,902	1,814	1,780	1,794	1,725
Indirect taxes	2,342	2,572	2,681	2,806	2,986
Equals: GDP at factor cost	187,550	177,360	201,797	257,979	255,303

Source: Ministry of Planning.

Table 6. United Arab Emirates: Per Capita GDP and Distribution of GDP at Factor Cost by Emirate, 1997–2001

Emirate	1997	1998	1999	2000	Prel. 2001
	(In millions of U.A.E. dirhams)				
Gross domestic product (GDP)	187,550	177,360	201,797	257,979	255,303
Abu Dhabi	110,302	96,772	112,194	159,624	152,975
Dubai	47,879	49,876	55,810	62,335	64,590
Sharjah	17,627	17,885	19,866	21,380	22,450
Ajman	3,262	3,545	3,888	4,006	4,166
Umm al-Qaiwan	1,066	1,197	1,306	1,405	1,471
Ras al-Khaimah	4,838	5,218	5,636	5,940	6,225
Fujairah	2,576	2,867	3,097	3,289	3,427
	(In U.A.E. dirhams)				
Per capita GDP	70,720	62,583	66,534	79,451	73,195
Abu Dhabi	106,675	87,656	94,999	126,085	112,316
Dubai	62,587	60,676	63,062	65,478	62,769
Sharjah	40,061	38,298	39,892	40,416	39,946
Ajman	23,468	23,477	23,564	22,380	21,255
Umm al-Qaiwan	27,333	28,500	29,022	28,673	28,288
Ras al-Khaimah	31,829	32,818	34,158	34,535	34,392
Fujairah	31,036	32,213	32,947	32,890	32,330

Source: Ministry of Planning.

Table 7. United Arab Emirates: Gross Fixed Capital Formation by Sector at Current Prices, 1997–2001

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Total fixed investment	50,951	52,195	53,916	57,398	59,823
Oil sector	7,575	6,385	7,180	7,280	7,530
Other sectors	43,376	45,810	46,736	50,118	52,293
Agriculture	1,058	1,554	1,413	1,534	1,644
Industry	13,647	14,108	14,497	17,374	18,859
Mining and quarrying	114	120	123	154	164
Manufacturing 1/	7,585	6,793	7,740	9,570	10,283
Electricity and water	3,348	4,470	3,764	4,600	5,359
Construction	2,600	2,725	2,870	3,050	3,053
Services	28,671	30,148	30,826	31,210	31,790
Trade	4,131	4,320	4,717	5,492	5,844
Wholesale and retail trade	1,900	2,039	2,267	2,505	2,557
Restaurants and hotels	2,231	2,281	2,450	2,987	3,287
Transportation, storage, and communications	8,806	10,310	10,852	9,722	9,956
Finance and insurance	220	236	279	289	295
Real estate	9,810	9,617	10,478	11,096	10,099
Other services 2/	5,704	5,665	4,500	4,611	5,596

Source: Ministry of Planning.

1/ Includes investment in natural gas and petroleum-processing industries.
2/ Includes repair services.

Table 8. United Arab Emirates: Oil and Gas Production, Exports, and Prices, 1997–2001

	1997	1998	1999	2000	Prel. 2001
	(In millions of barrels per day)				
Crude oil and condensates	2.43	2.43	2.26	2.41	2.44
Crude oil	2.24	2.26	2.08	2.19	2.12
Abu Dhabi	1.99	2.02	1.85	1.99	1.94
Dubai and others 1/	0.25	0.24	0.23	0.20	0.18
Condensates	0.19	0.17	0.18	0.22	0.32
Refinery output	0.23	0.23	0.23	0.30	0.52
Oil and product exports	2.18	2.28	2.17	2.33	2.28
Crude oil	1.98	2.03	1.90	2.05	1.94
Abu Dhabi	1.74	1.83	1.70	1.85	1.80
Dubai and others 1/	0.24	0.20	0.20	0.20	0.14
Condensates	0.11	0.17	0.18	0.13	0.10
Refined products	0.09	0.08	0.09	0.15	0.24
	(In billions of cubic meters)				
Natural gas production 2/	32.70	33.40	34.60	35.90	41.30
LNG exports	7.73	7.41	7.22	7.11	7.46
NGL exports	11.00	11.87	11.11	12.30	11.50
	(In millions of U.S. dollars)				
Oil and product exports	15,300	10,400	14,200	23,400	19,900
Crude oil	13,800	9,200	12,400	20,400	16,800
Abu Dhabi	12,100	8,200	11,000	18,500	15,600
Dubai and others	1,700	1,000	1,400	1,900	1,200
Condensates	800	800	1,200	1,300	900
Refined products	700	400	600	1,700	2,200
LNG and NGL exports	2,900	2,100	2,300	3,700	3,400
Total oil and gas exports	18,200	12,500	16,500	27,100	23,300
Memorandum item:					
Average oil export price (in U.S. dollars per barrel)	18.80	12.57	17.48	27.21	23.78

Source: Abu Dhabi National Oil Company.

1/ Sharjah and Ras Al-Khaimah.
2/ Net after re-injection into wells.

Table 9. United Arab Emirates: NGLs, LNG, and Refined Product Exports, 1997–2001

(In thousands of metric tons)

	1997	1998	1999	2000	Prel. 2001
Total NGL exports	7,973	8,601	7,950	8,916	8,349
LPG	5,966	6,291	6,002	6,451	6,000
Abu Dhabi	5,156	5,541	5,252	5,701	5,200
Dubai	450	300	300	300	300
Sharjah	360	450	450	450	500
Pentane plus	2,007	2,310	1,948	2,465	2,349
Abu Dhabi	1,507	1,810	1,548	1,915	1,799
Of which					
ADNOC	650	833	685	946	920
ADGAS	500	477	500	530	479
Other emirates	500	500	400	550	550
LNG exports (ADGAS)	5,604	5,372	5,229	5,149	5,406
Refined products exports	4,034	3,688	4,031	6,789	10,095

Source: Abu Dhabi National Oil Company.

Table 10. United Arab Emirates: Average Crude Oil Prices, 1997–2001

(In U.S. dollars per barrel)

	1997	1998	1999	2000	2001
Murban	19.49	12.61	17.97	27.73	24.15
Lower Zakum	19.51	12.61	17.99	27.78	24.19
Umm-Shaif	19.24	12.37	17.74	27.53	23.91
Upper Zakum	18.17	11.78	17.10	26.40	22.98
Dubai platts	18.13	12.17	17.21	26.15	22.81

Source: Abu Dhabi National Oil Company.

Table 11. United Arab Emirates: Agricultural Production, 1997–2001

(In thousands of metric tons)

	1997	1998	1999	2000	Prel. 2001
Plant products					
Dates and fruits	300	333	535	798	1,018
Vegetables	1,411	1,554	1,662	2,622	681
Other crops	486	507	525	1,495	3,532
Animal products					
Meat	20	22	23	25	29
Poultry	30	26	29	27	28
Eggs (in millions)	256	252	236	262	310
Milk and dairy products	117	118	142	163	179
Fish products	109	119	115	117	124

Sources: Ministry of Planning and Ministry of Agriculture and Fisheries.

Table 12. United Arab Emirates: Population by Emirate, 1997–2001

(In thousands)

Emirate	1997	1998	1999	2000	Prel. 2001
Abu Dhabi	1,034	1,104	1,181	1,266	1,362
Dubai	765	822	885	952	1,029
Sharjah	440	467	498	529	562
Ajman	139	151	165	179	196
Umm al-Qaiwan	39	42	45	49	52
Ras al-Khaimah	152	159	165	172	181
Fujairah	83	89	94	100	106
Total	2,652	2,834	3,033	3,247	3,488

Source: Ministry of Planning.

Table 13. United Arab Emirates: Sectoral Distribution of Civilian Employment, 1997–2001 1/

(In thousands)

	1997	1998	1999	2000	Prel. 2001
Civilian employment	1,366	1,437	1,632	1,737	1,853
Oil sector	21	21	22	23	26
Other sectors	1,346	1,417	1,610	1,713	1,827
Agriculture	107	113	120	120	128
Industry	462	482	513	547	578
Mining and quarrying	4	4	4	4	4
Manufacturing 2/	184	197	210	226	241
Electricity, gas, and water	23	24	28	30	31
Construction	252	257	271	287	302
Services	777	822	981	1,046	1,121
Trade	283	300	392	409	448
Wholesale and retail trade	227	236	322	336	371
Restaurants and hotels	57	63	70	72	77
Transport and communications	97	100	105	108	109
Finance and insurance	21	23	23	23	23
Real estate	33	35	37	42	48
Government services	147	155	182	204	214
Social and personal services	62	66	71	81	87
Domestic household services	133	144	170	179	191

Source: Ministry of Planning.

1/ Excludes defense personnel.
2/ Includes natural gas and petroleum-processing industries.

Table 14. United Arab Emirates: Labor Market Indicators, 1995

	Abu Dhabi	Dubai	Sharjah	Ajman	Umm al-Qaiwan	Ras al-Khaimah	Fujairah	Total
Population (in thousands)								
Male	650.7	478.2	254.3	72.8	20.9	84.0	45.8	1,606.8
Female	291.7	211.2	148.5	48.7	14.4	59.3	30.4	804.2
Total	942.5	689.4	403.0	121.5	35.4	143.3	76.2	2,411.0
Labor force participation rate (in percent)								
Male	74.4	79.8	69.5	65.6	62.3	59.9	57.9	73.4
Female	16.7	23.5	20.0	22.2	20.0	16.7	15.6	19.4
Total	56.5	62.6	51.2	48.3	45.1	42.0	40.2	55.4
Labor force (in thousands) 1/								
Male	484.1	381.7	176.6	47.8	13.1	50.3	26.5	1,180.1
Female	48.9	49.6	29.7	10.8	2.9	9.9	4.1	155.8
Total	532.9	431.3	206.3	58.6	15.9	60.2	30.6	1,335.9
Female share in labor force (in percent)								
1995	9.2	11.5	14.4	18.5	18.1	16.5	13.5	11.7
1985	8.5	9.4	11.3	9.9	12.3	12.8	10.8	9.6
Unemployment (in percent of labor force)								
Male	1.3	1.4	2.3	3.1	6.4	3.5	2.6	1.7
Female	2.4	2.0	2.8	1.7	3.4	3.3	1.8	2.4
Total	1.4	1.5	2.4	2.8	5.8	3.5	2.5	1.8

Source: Ministry of Planning, 1995 census.

1/ Economically active population aged 15 years and older.

Table 15. United Arab Emirates: Average Annual Compensation by Economic Sector, 1997–2001 1/ 2/

(In thousands of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Crude oil	88.3	88.1	86.5	86.6	81.1
Agriculture	15.9	16.0	16.0	15.8	15.2
Mining and quarrying	26.4	27.0	26.8	26.9	27.0
Manufacturing 3/	23.6	23.6	23.0	23.0	22.9
Electricity, gas, and water	48.6	45.6	43.5	42.2	42.5
Construction	32.4	33.5	33.3	32.5	32.0
Wholesale and retail trade 4/	27.1	27.2	26.4	26.1	25.0
Restaurants and hotels	21.3	21.9	22.0	22.2	21.8
Transport, storage, and communications	38.9	40.8	45.1	56.0	57.4
Finance and insurance	98.3	97.6	100.6	102.5	103.5
Real estate	27.7	27.9	27.4	27.2	26.0
Government services	76.3	82.0	80.2	83.3	84.7
Social and personal services	28.6	28.6	28.2	27.1	27.0
Household services	10.3	10.1	9.4	9.2	9.0
Weighted average	36.9	34.2	33.7	34.9	34.4

Source: Ministry of Planning.

1/ Calculated on the basis of wages and allowances and the number of workers in each sector.
2/ Excludes defense personnel.
3/ Includes natural gas and petroleum processing industries.
4/ Includes repair services.

Table 16. United Arab Emirates: Selected Price Indices, 1997–2001

(Annual averages, 1995 = 100)

	1997	1998	1999	2000	Prel. 2001
GDP deflator	104.0	97.0	105.7	122.9	117.1
Crude oil deflator	108.6	78.7	109.8	172.0	146.7
Non-oil deflator	102.2	103.4	104.5	107.3	108.0
Consumer price index	104.8	106.9	109.2	110.7	113.1

Source: Ministry of Planning.

Table 17. United Arab Emirates: Consumer Price Index by Major Components, 1998–2001

(Annual averages, 1995 = 100)

	Weights 1/	1998	1999	2000	Prel. 2001
Consumer price index	100.00	106.9	109.2	110.7	113.1
Foodstuffs, beverages, and tobacco	14.43	110.0	112.8	113.4	113.6
Ready-made clothes and footwear	6.74	109.1	113.5	114.2	114.6
House rent and related housing items	36.14	96.0	96.2	96.1	98.1
Furniture and furnishings	7.39	110.1	112.0	116.4	116.7
Medical care and health services	1.85	123.1	125.7	132.5	137.0
Transportation and communication	14.93	118.0	126.2	130.3	133.0
Recreational, educational, and cultural services	10.29	115.0	114.6	115.2	125.0
Other goods and services	8.23	111.1	113.0	116.2	116.9

Source: Ministry of Planning.

1/ Weights are derived from 1996 Abu Dhabi household expenditure survey.

Table 18. United Arab Emirates: Consolidated Government Finances, 1997–2001

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Total revenue	70,493	61,425	64,200	99,991	82,480
Hydrocarbons	41,140	25,500	28,054	56,020	48,526
Non-hydrocarbon, *of which*:	29,353	35,925	36,146	43,971	33,954
Customs	1,676	1,821	1,886	1,779	1,846
Profit transfers	2,652	3,051	3,462	3,936	3,384
Income tax 1/	2,925	1,679	2,179	4,124	3,329
Fees and charges	5,039	5,554	4,581	4,173	5,120
Investment income 2/	13,580	18,489	19,234	25,373	15,625
Other	3,481	5,331	4,804	4,586	4,650
Total expenditure and grants	64,101	71,730	75,538	84,348	96,083
Current expenditure	47,420	51,487	57,930	71,247	77,372
Wages and salaries 3/ 4/	13,138	12,533	13,224	13,962	14,360
Goods and services 4/	18,993	19,657	22,616	23,385	23,582
Abu Dhabi federal services 5/	7,774	10,876	11,899	19,440	19,082
Subsidies and transfers	7,098	8,017	9,849	13,945	19,716
Other	418	404	342	516	632
Development expenditure	10,912	13,987	13,765	11,230	13,280
Loans and equity (net) 6/	4,566	5,047	2,435	652	4,507
Domestic	4,587	2,867	2,564	714	903
Foreign	-21	2,180	-129	-62	3,604
Foreign grants 7/	1,203	1,209	1,408	1,219	924
Abu Dhabi	983	1,045	1,361	1,071	664
Federal	220	164	47	148	260
Overall balance	6,392	-10,305	-11,338	15,643	-13,603
(In percent of GDP)	3.4	-5.8	-5.6	6.0	-5.3
Financing	-6,392	10,305	11,338	-15,643	13,603
Resident banks, net	597	-1,248	1,109	-10,530	2,348
Loans to government	-1,215	3,469	3,086	-2,854	-1,595
Deposits from government	-1,812	4,717	1,977	7,676	-3,943
Privatization receipts (Abu Dhabi)	...	...	...	...	2,000
Change in foreign assets (- = increase)	-6,989	11,553	10,229	-5,113	9,255
Memorandum items:					
Overall balance excluding hydrocarbon revenue	-34,748	-35,805	-39,392	-40,377	-62,129
(In percent of GDP)	-18.5	-20.1	-19.4	-15.6	-24.2
Non-hydrocarbon revenue excluding investment income	15,773	17,436	16,912	18,598	18,329

Sources: Federal government; Emirate finance departments; and Fund staff estimates.

1/ Mainly income taxes on gas firms in Abu Dhabi.

2/ Fund staff estimates, based on fiscal accounts and other sources.

3/ Excludes military wages and salaries, which are in goods and services.

4/ ADWEA expenditure is allocated 25 percent to wages and salaries, 75 percent goods and services.

5/ Mainly military and internal security outlays.

6/ Should be classified as financing, but treated as expenditures in Abu Dhabi accounts.

7/ Intergovernmental grants are netted out in the consolidated accounts.

Table 19. United Arab Emirates: Government Current Expenditures by Economic Category and Emirate, 1997–2001

	1997	1998	1999	2000	Prel. 2001
Wages and salaries 1/	13,138	12,533	13,224	13,962	14,360
Federal	6,458	6,695	6,922	7,278	7,448
Abu Dhabi 2/	3,264	3,319	3,531	3,626	3,528
Dubai 3/	3,125	2,154	2,328	2,568	2,882
Sharjah	249	320	395	439	451
Ras al Khaimah 4/	42	45	48	51	51
Goods and services	18,993	19,657	22,616	23,385	23,582
Federal	8,760	8,851	8,788	8,668	8,820
Abu Dhabi 2/	7,416	8,410	10,533	10,459	11,261
Dubai	2,620	2,066	2,895	3,838	3,080
Sharjah	197	330	400	420	421
Subsidies and transfers	7,098	8,017	9,849	13,945	19,716
Federal	2,153	2,490	3,357	3,734	3,867
Abu Dhabi	4,584	4,317	6,148	9,583	14,981
Dubai	309	1,124	254	558	789
Sharjah	16	50	52	30	39
Ras al Khaimah 4/	36	36	38	40	40
Other	8,192	11,280	12,241	19,956	19,714
Federal	...	...	...	...	...
Abu Dhabi 5/	7,774	10,876	11,899	19,440	19,082
Dubai	279	257	188	365	495
Sharjah	27	35	40	35	21
Ras al Khaimah 4/	112	112	114	116	116
Total current expenditure	47,420	51,487	57,930	71,247	77,372
Federal	17,371	18,036	19,067	19,680	20,135
Abu Dhabi	23,037	26,922	32,111	43,107	48,852
Dubai	6,333	5,601	5,665	7,329	7,246
Sharjah	489	735	887	924	932
Ras al Khaimah 4/	190	193	200	207	207

Sources: Federal and Emirate governments.

1/ Excludes military wages and salaries.

2/ Includes pro-rated water and electricity outlays for ADWEA expenditures.

3/ Includes military wages and salaries through 1997.

4/ Data for 2000–01 estimated.

5/ Mainly federal services consisting of military and internal security outlays.

Table 20. United Arab Emirates: Federal Government Financial Operations, 1997–2002

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Budget 2001	Prel. 2001	Budget 2002
Total revenue and grants	19,532	19,258	20,268	20,277	20,425	20,825	20,987
Revenues	6,108	5,938	6,886	6,965	6,736	7,422	7,298
Enterprise profits 1/	2,302	1,801	2,351	2,827	2,278	2,350	2,177
Electricity and water	323	400	508	0	0	0	0
Other fees and charges	3,483	3,737	4,027	4,138	4,458	5,072	5,121
Grants from Emirates	13,424	13,320	13,382	13,312	13,689	13,403	13,689
Abu Dhabi	12,224	12,120	12,182	12,112	12,489	12,203	12,489
Cash contributions	5,600	5,600	5,600	5,600	5,600	5,600	5,600
Federal services 2/	6,550	6,517	6,571	6,364	6,629	6,343	6,629
Foreign grants on federal account 2/	74	3	11	148	260	260	260
Dubai	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Total expenditure and grants	18,187	19,788	20,205	20,702	23,033	21,018	23,156
Current expenditures	17,371	18,036	19,067	19,680	21,431	20,135	21,531
Wages and salaries 3/	6,458	6,695	6,922	7,278	7,816	7,448	8,188
Goods and services	8,760	8,851	8,788	8,668	8,945	8,820	9,428
(By ministries)							
(Interior and defense) 4/	8,466	8,878	8,953	8,688	8,811	8,796	9,381
(Education and health)	4,535	4,685	4,771	5,079	5,446	5,243	5,654
(Other ministries)	2,217	1,983	1,986	2,179	2,504	2,230	2,582
Subsidies and transfers 3/	2,153	2,490	3,357	3,734	4,500	3,867	3,915
Development expenditures	529	970	823	518	862	418	873
Equity positions	67	618	268	356	370	205	376
Domestic	48	613	252	356	370	205	376
Foreign	19	5	16	0	0	0	0
Foreign grants	220	164	47	148	370	260	376
Overall balance	1,345	-530	63	-425	-2,608	-193	-2,169
Memorandum items:							
Abu Dhabi federal services 5/	7,774	10,876	11,899	19,440	...	19,082	18,796
Balance on pension fund operations 6/	n.a.	n.a.	...	1,970	...	1,274	...

Sources: Ministry of Finance and Industry; Abu Dhabi Finance Department; and Fund staff estimates.

1/ Dividends and payouts by Etisalat and other enterprises, including the Central Bank.
2/ Amount budgeted by federal government, but outlays are made by Abu Dhabi.
3/ Beginning 2002, military pension payments of Interior Ministry are classified as wages and salaries.
4/ Partly financed by grants from Abu Dhabi.
5/ Mainly military and internal security expenditures not included in the federal accounts.
6/ Pension fund established in 1999; not included in federal accounts.

Table 21. United Arab Emirates: Pension Fund Operations, 2000–01 1/

(In millions of U.A.E. dirhams)

	2000	Prel. 2001
Revenue	2,131	1,467
Employer contributions	742	552
Employee contributions	246	184
Investment income	110	95
Other government receipts 2/	500	0
Other receipts 3/	533	636
Expenditures	161	193
Pensions paid	89	139
Other employee benefits	59	35
Operating expenses	13	19
Other outlays	0	0
Balance on operations	1,970	1,274
Memorandum item:		
Assets at year-end	1,970	3,244

Source: General Pension and Social Security Authority (GPSSA).

1/ The GPSSA was established in January 1999.
2/ Initial endowment/capital from federal authorities.
3/ Transfers from Ministry of Finance and Industry, Etisalat, and others to fund pensions.

Table 22. United Arab Emirates: Federal Subsidies and Transfers, 1997–2002

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Budget 2001	Prel. 2001	Budget 2002
Subsidies	1,268	1,453	1,400	2,083	2,190	2,070	2,085
Zayed University	0	0	0	420	190	190	210
U.A.E. University	607	700	675	686	716	658	757
Higher College of Technology	299	360	409	405	520	520	545
Electricity and water 1/		3	3	4	100	2	103
Emirates Media, Inc.	169	214	203	188	200	180	200
Accumulated settlements 2/	102	4	0	0	3	0	0
Other	91	172	110	380	461	260	270
Transfers	885	1,037	1,957	1,651	2,310	2,057	1,830
Pension Fund 3/	675	787	904	774	820	809	340
Marriage Fund	210	250	237	227	250	216	250
Zayed Housing Program 4/	...	...	500	354	640	562	640
General Pension and Social Security Authority 5/	...	...	316	296	600	470	600
Total	2,153	2,490	3,357	3,734	4,500	3,867	3,915
(In percent of GDP)	1.1	1.4	1.7	1.4	...	1.5	...

Source: Ministry of Finance and Industry.

1/ For federal water and power fund in northern emirates.
2/ To clear prior year budget shortfalls in universities.
3/ Beginning 2002, military pension payments are classified as wages and salaries.
4/ Law requires budget projection of Dh 640 million..
5/ Transfers to fund pension payments for federal workers retiring in current year.

Table 23. United Arab Emirates: Federal Development Expenditures, 1997–2002

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Budget 2001	Prel. 2001	Budget 2002
Agriculture	13	26	18	3	7	2	5
Electricity and water	30	455	305	0	0	0	0
Transport and communications	23	25	3	47	253	113	291
Public works and housing	74	178	274	169	136	101	84
Education	196	106	104	143	152	69	166
Health	40	55	48	10	63	24	64
Interior and justice	34	23	28	32	105	74	137
Foreign affairs	107	85	37	97	100	21	85
Other	12	17	6	17	46	14	41
Total	529	970	823	518	862	418	873

Source: Ministry of Finance and Industry.

Table 24. United Arab Emirates: Abu Dhabi Fiscal Operations, 1997–2002

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001	Budget 2002
Total revenue	53,337	44,587	46,634	79,846	62,972	32,220
Crude oil royalties and taxes	34,349	21,428	23,232	48,633	42,366	21,870
Nonhydrocarbon	18,988	23,159	23,402	31,213	20,606	10,350
Customs	293	318	319	262	276	256
Water and electricity	1,216	1,380	12	0	0	0
Income tax 1/	2,797	1,517	1,996	3,958	3,122	1,638
Investment income 2/	13,580	18,489	19,234	25,373	15,625	7,128
Other	1,102	1,455	1,841	1,620	1,583	1,328
Total expenditure and grants	48,244	54,450	56,761	63,784	76,279	60,171
Current expenditures	23,037	26,922	32,111	43,107	48,852	39,734
Wages and salaries	2,642	2,730	2,993	3,135	3,215	3,440
Goods and services	5,551	6,642	8,918	8,987	10,323	9,077
Federal services 3/	7,774	10,876	11,899	19,440	19,082	17,743
Water and electricity	2,486	2,357	2,153	1,962	1,251	0
Subsidies and transfers	4,584	4,317	6,148	9,583	14,981	9,474
Development expenditures	7,608	9,980	8,944	7,452	10,424	7,291
Water and electricity	1,511	2,387	2,121	1,335	3,259	16
Other	6,097	7,593	6,823	6,117	7,165	7,275
Loans and equity (net) 4/	4,392	4,383	2,163	43	3,952	-437
Domestic	4,439	2,208	2,308	105	348	-382
Building and housing loans	3,057	1,757	891	-118	-1,094	-390
Equity	1,382	451	1,417	223	1,442	8
Foreign loans	-47	2,175	-145	-62	3,604	-55
Grants	13,207	13,165	13,543	13,182	13,051	13,583
Cash contributions to federal government	5,600	5,600	5,600	5,600	5,600	5,600
Federal services 5/	6,550	6,517	6,571	6,364	6,343	6,629
Foreign grants on federal account 5/	74	3	11	147	444	496
Foreign grants 6/	983	1,045	1,361	1,071	664	858
Overall balance	5,093	-9,863	-10,127	16,062	-13,307	-27,951
Memorandum items:						
Overall balance excluding loans and equity	9,438	-3,305	-8,109	16,043	-5,751	-28,443
Balance net of investment income	-8,487	-28,352	-29,361	-9,311	-28,932	-35,079
Privatization receipts from ADWEA 7/	...	...	...	...	2,000	...

Source: Department of Finance of Abu Dhabi.

1/ Income taxes are entirely from ADGAS and GASCO.
2/ Fund staff estimates; not included in Finance Department accounts.
3/ Mainly defense and security outlays; not included in the federal accounts.
4/ Financing items under international standards, but treated as expenditure in AD accounts.
5/ Outlays made by Abu Dhabi, but included in the federal accounts.
6/ Foreign grants on Abu Dhabi account.
7/ Sale of electricity and water assets; shown as receipts in Abu Dhabi fiscal accounts.

Table 25. United Arab Emirates: Abu Dhabi Development Expenditures, 1997–2002

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001	Budget 2002
Agriculture	445	706	688	907	845	968
Electricity and water 1/	1,511	2,387	2,121	1,336	3,259	16
Industry and commerce	124	200	93	93	192	253
Transport and communications	956	1,383	2,869	2,272	2,664	2,484
Housing	829	971	1,004	807	693	370
Urban development	2,509	3,063	1,122	840	1,102	1,102
Sewerage	756	848	565	590	729	865
Sports and recreation	457	403	419	464	694	599
General administration	21	19	63	143	246	634
Total	7,608	9,980	8,944	7,452	10,424	7,291

Source: Department of Finance of Abu Dhabi.

1/ Certain expenditures were reclassified as from 1999.

Table 26. United Arab Emirates: Dubai Government Fiscal Operations, 1997–2002

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001	Budget 2002
Total revenue	9,285	9,077	8,724	11,071	10,201	10,366
Nontax revenue	7,919	7,562	7,163	9,540	8,579	8,887
Oil and gas	5,663	3,266	3,670	5,875	4,949	4,998
Enterprise profits 1/	350	1,250	1,111	1,109	1,034	1,000
Other 2/	1,906	3,046	2,382	2,556	2,596	2,889
Tax revenue	1,366	1,515	1,561	1,531	1,622	1,479
Customs 3/	1,238	1,353	1,378	1,365	1,415	1,269
Income tax 4/	128	162	183	166	207	210
Total expenditure	9,489	8,839	9,850	11,147	10,559	11,599
Current	6,333	5,601	5,665	7,329	7,246	8,437
Wages and salaries	3,125	2,154	2,328	2,568	2,882	3,245
Goods and services 2/ 5/	2,620	2,066	2,895	3,838	3,080	3,891
Subsidies and transfers 6/	309	1,124	254	558	789	709
Other	279	257	188	365	495	592
Development	1,849	1,992	2,981	2,365	1,763	1,957
Loans and equity (net)	107	46	4	253	350	5
Domestic	100	46	4	253	350	5
Foreign	7	0	0	0	0	0
Grants:						
Contribution to federal government	1,200	1,200	1,200	1,200	1,200	1,200
Overall balance	-204	238	-1,126	-76	-358	-1,233

Source: Department of Finance of Dubai.

1/ Includes DUBAL, DUGAS, Emirates Airlines, Jebel Ali, and other public enterprises.
2/ Some years affected by timing irregularities.
3/ All revenues associated with trade and port operations; more than customs duties.
4/ Taxes on foreign banks.
5/ Includes interest and amortization on some bank loans.
6/ Excludes Water and Electricity, which is settled in an off-budget account.

Table 27. United Arab Emirates: Sharjah Government Fiscal Operations, 1997–2002 1/

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Budget 2001	Prel. 2001	Budget 2002
Total revenue	1,541	1,600	1,728	1,877	1,537	1,653	1,404
Oil and gas	1,128	806	1,152	1,512	1,140	1,211	1,010
Non-oil	413	794	576	365	397	442	394
Departmental receipts	293	369	376	340	362	397	364
Port authority	65	79	80	60	62	75	70
Customs	145	150	189	152	150	155	145
Fees and charges	12	32	28	28	32	41	35
Other, *of which:*	71	108	79	100	118	126	114
Airport	...	...	67	90	...	99	...
Land sales and profit transfers	120	425	200	25	35	45	30
Total expenditure	1,345	1,710	1,832	1,744	1,455	1,532	1,455
Current	489	735	887	924	955	932	955
Wages and salaries	249	320	395	439	460	451	465
Goods and services	197	330	400	420	425	421	427
Subsidies and transfers 2/	16	50	52	30	45	39	40
Other	27	35	40	35	25	21	23
Development	856	975	945	820	500	600	500
Overall balance	196	-110	-104	133	82	121	-51

Source: Sharjah Department of Finance.

1/ Excludes operations of Sharjah Municipality.
2/ Mainly universities; does not include support for water and electricity operations.

Table 28. United Arab Emirates: Monetary Survey, 1997–2002

(In millions of U.A.E. dirhams)

End of Period Stock	1997	1998	1999	2000	New Compilation 1/ 2000	New Compilation 1/ 2001	August 2002
Net foreign assets	62,365	62,737	67,000	88,111	115,045	120,685	125,482
Foreign assets	108,151	116,080	121,971	141,112	142,217	151,879	153,838
Central bank	31,431	34,148	40,163	50,759	50,759	52,471	50,971
Commercial banks 2/	76,720	81,932	81,808	90,353	91,459	99,408	102,867
Foreign liabilities	45,786	53,343	54,971	53,001	27,172	31,194	28,356
Central bank	52	11	403	587	587	516	223
Commercial banks 2/	45,734	53,332	54,568	52,414	26,585	30,678	28,133
Domestic assets	32,488	36,087	43,128	38,889	26,496	35,795	40,752
Claims on government (net)	-7,559	-8,807	-7,698	-18,228	-30,625	-28,277	-27,700
Claims	8,099	11,568	14,654	11,800	11,800	10,205	11,403
Deposits	15,658	20,375	22,352	30,028	42,425	38,482	39,103
Claims on public sector enterprises	5,511	5,236	5,581	5,780	5,780	5,258	6,027
Claims on private nonbanks	92,735	105,895	113,430	123,313	123,313	134,132	141,631
Capital and reserves	-26,981	-31,430	-33,517	-35,833	-35,834	-38,377	-40,774
Other items (net)	-31,218	-34,807	-34,668	-36,143	-36,138	-36,941	-38,432
Central bank	-12,906	-13,933	-16,261	-26,292	-26,292	-27,994	-27,503
Commercial banks 2/	-18,312	-20,874	-18,407	-9,851	-9,846	-8,947	-10,929
Domestic liquidity	94,854	98,824	110,128	127,000	141,540	156,476	166,234
Money	25,368	27,783	30,250	34,067	34,067	39,464	45,053
Currency outside banks	7,366	8,194	10,270	10,017	10,017	10,537	10,803
Dirham demand deposits	18,002	19,589	19,980	24,050	24,050	28,927	34,250
Quasi-money	69,486	71,041	79,878	92,933	107,473	117,012	121,181
Foreign currency deposits	18,570	19,731	23,354	28,428	35,754	37,189	40,107
Dirham time and savings deposits	50,916	51,310	56,524	64,505	71,719	79,823	81,074
Memorandum items:							
Dirham-denominated liquidity	76,284	79,093	86,774	98,572	105,786	119,287	126,127
Change in percent	9.5	3.7	9.7	13.6	...	21.0	5.7
Foreign currency deposits of residents	18,570	19,731	23,354	28,428	35,754	37,189	40,107
Change in percent	8.1	6.3	18.4	21.7	...	30.8	7.8
Ratio of foreign currency deposits to total deposits (in percent)	21.2	21.8	23.4	24.3	27.0	25.5	25.8

Source: Central Bank of the United Arab Emirates.

1/ Data reflect 2001 change in compilation, which now treats offshore affiliates of local banks as if they were resident entities.

2/ Including the restricted license bank.

Table 29. United Arab Emirates: Factors Affecting Domestic Liquidity, 1997–2002 1/

(Annual changes in millions of U.A.E. dirhams)

End of Period	1997	1998	1999	2000	New Compilation 2/ 2000	New Compilation 2/ 2001	Nov. 3/ 2002
Net foreign assets	-1,065	372	4,263	21,111	13,822	5,640	12,659
Foreign assets	7,326	7,929	5,891	19,141	18,587	9,662	10,272
Central bank	1,168	2,717	6,015	10,596	10,596	1,712	3,894
Commercial banks	6,158	5,212	-124	8,545	9,651	7,949	6,378
Foreign liabilities	-8,391	-7,557	-1,628	1,970	4,765	4,022	-2,387
Central bank	23	41	-392	-184	184	-71	-247
Commercial banks 2/	-8,414	-7,598	-1,236	2,154	4,581	4,093	-2,140
Domestic assets	8,935	3,599	7,041	-4,239	340	9,299	3,989
Claims on government (net)	597	-1,248	1,109	-10,530	-5,953	2,348	1,529
Claims	-1,215	3,469	3,086	-2,854	-2,854	-1,595	3,165
Deposits /2	1,812	-4,717	-1,977	-7,676	3,099	-3,943	1,636
Claims on public sector enterprises	442	-275	345	199	199	-522	1,940
Claims on private nonbanks	11,349	13,160	7,535	9,882	9,883	10,819	12,858
Capital and reserves	-2,162	-4,449	-2,087	-2,316	-2,317	-2,543	-3,256
Other items (net)	-1,280	-3,589	139	-1,475	-1,472	-803	-9,082
Central bank	549	-1,027	-2,328	-10,031	-10,031	-1,702	-3,461
Commercial banks	-1,829	-2,562	2,467	8,556	8,559	899	-5,621
Domestic liquidity	7,871	3,970	11,304	16,872	14,161	14,936	16,652
Money	3,102	2,415	2,467	3,817	3,815	5,397	7,285
Currency outside banks	599	828	2,076	-253	-255	520	1,801
Dirham demand deposits	2,503	1,587	391	4,070	4,070	4,877	5,484
Quasi-money	4,769	1,555	8,837	13,055	10,346	9,539	9,367
Foreign currency deposits	1,259	1,161	3,623	5,074	2,783	1,435	5,654
Dirham time and savings deposits	3,510	394	5,214	7,981	7,563	8,104	3,713

Source: Central Bank of the United Arab Emirates.

1/ Data reflect 2001 change in compilation, which now treats offshore affiliates of local banks as if they were resident entities.

2/ Including the restricted license bank.

3/ Change vis-à-vis end-December 2001.

Table 30. United Arab Emirates: Summary Accounts of the Central Bank, 1997–2002 1/

(In millions of U.A.E. dirhams)

End of Period	1997	1998	1999	2000	2001	November 2002
Foreign assets	31,431	34,148	40,163	50,759	52,471	56,365
Claims on banks	28,314	23,086	21,218	28,662	31,108	49,334
Loans and investments	1,148	8,724	16,885	20,190	20,000	5,509
Other 2/	963	1,187	989	1,126	533	356
IMF reserve position	1,006	1,151	1,071	781	830	1,166
Net claims on government	-1,006	-1,151	-1,071	-781	-830	-1,166
Claims	0	0	0	0	0	0
Less: IMF reserve position	1,006	1,151	1,071	781	830	1,166
Claims on public sector enterprises	0	0	0	0	0	0
Claims on private nonbanks 3/	17	19	21	24	29	40
Claims on commercial banks	50	50	50	50	50	50
Unclassified assets	73	72	70	84	118	482
Total assets/liabilities	30,565	33,138	39,233	50,136	51,838	55,771
Foreign liabilities	52	11	403	587	516	269
Reserve money	15,006	16,233	20,099	20,288	21,608	25,840
Currency outside banks	7,366	8,194	10,270	10,017	10,537	12,338
Cash held by banks	1,282	1,426	2,624	2,228	1,783	2,325
Banks' deposits	6,358	6,613	7,205	8,043	9,288	11,177
Certificates of deposit	5,288	4,092	6,429	15,624	16,779	12,278
Government deposits 4/	8,618	9,378	10,619	11,546	11,063	9,617
Capital and reserves	1,500	1,500	1,560	1,560	1,560	1,560
Unclassified liabilities 5/	101	1,924	123	531	312	6,207

Source: Central Bank of the United Arab Emirates.

1/ 2001 change in compilation does not affect central bank accounts.
2/ Mainly gold, valued at cost.
3/ Staff loans.
4/ Mainly foreign currency deposits.
5/ Includes undistributed profits.

Table 31. United Arab Emirates: Balance Sheets of Commercial Banks, 1996–2002 1/ 2/

(In millions of U.A.E. dirhams)

					New Compilation 2/		November
End of Period	1997	1998	1999	2000	2000	2001	2002
Reserves	7,635	8,035	9,827	10,271	10,271	11,070	13,501
Cash	1,282	1,426	2,624	2,228	2,228	1,783	2,325
Deposits with central bank	6,353	6,609	7,203	8,043	8,043	9,288	11,176
Foreign assets	76,152	81,195	80,833	89,810	90,916	98,506	105,677
Notes and coins	41	41	42	39	39	47	48
Due from head offices and branches	1,828	2,660	4,424	5,097	6,203	9,478	12,364
Money at call and short notice	5,163	3,345	1,750	2,117	2,117	1,803	2,270
Demand and time deposits	45,813	48,799	45,374	48,582	48,582	47,127	37,063
Investments	10,413	11,204	12,616	14,761	14,761	20,404	27,980
Loans and advances	11,504	13,532	14,972	16,990	16,990	18,223	24,451
Other	1,390	1,614	1,655	2,224	2,224	1,424	1,501
Claims on government	9,105	12,719	15,725	12,581	12,581	11,035	14,536
Claims on public sector enterprises 3/	5,511	5,236	5,581	5,780	5,780	5,258	7,198
Claims on private nonbanks	89,925	102,416	110,276	119,828	119,828	130,549	143,573
Claims on nonbank financial institutions	2,689	3,443	3,075	3,317	3,317	3,415	3,365
Central bank certificates of deposit	5,288	4,092	6,429	15,624	15,624	16,779	12,278
Unclassified assets 4/	5,657	6,499	6,632	7,111	7,111	7,230	7,284
Total assets/liabilities	201,962	223,635	238,378	264,322	265,428	283,842	307,412
Monetary deposits	18,002	19,589	19,980	24,050	24,050	28,927	34,411
Quasi monetary deposits	69,437	71,001	79,847	92,902	107,442	116,981	126,370
Foreign currency	18,521	19,691	23,323	28,397	35,723	37,154	42,834
Local currency	50,916	51,310	56,524	64,505	71,719	79,823	83,536
Foreign liabilities	45,362	53,055	53,537	51,905	26,075	29,883	28,531
Due to head offices and branches	31,301	36,396	33,571	26,630	2,377	2,869	1,536
Borrowing from banks abroad	619	822	1,047	1,692	1,692	1,506	1,409
Deposits of banks abroad	7,489	9,202	10,925	13,524	11,947	13,844	12,997
Nonbank deposits	4,404	5,085	6,378	8,194	8,194	9,817	10,829
Other 5/	1,549	1,550	1,616	1,865	9,817	1,847	1,760
Government deposits	6,948	10,920	11,671	18,441	30,837	27,382	30,473
Government lending funds	92	77	62	41	41	37	28
Credit from central bank	50	51	54	52	52	55	448
Capital and reserves	25,435	29,883	31,910	34,226	34,226	36,769	40,025
Unclassified liabilities	36,637	39,059	41,317	42,705	42,705	43,808	47,126

Source: Central Bank of the United Arab Emirates.

1/ Excluding accounts of the restricted license bank.

2/ Data reflect 2001 change in compilation, which now treats offshore affiliates of local banks as if they were resident entities.

3/ Commercial enterprises with significant government ownership, including Dubai Aluminum Company, Dubai Gas Company, Abu Dhabi National Oil Company, other oil and gas companies owned by Abu Dhabi, and cement companies established by several Emirate governments.

4/ Includes net lending to restricted license bank.

5/ Includes commercial prepayments.

Table 32. United Arab Emirates: Balance Sheet of Restricted License Bank, 1997–2002 1/

(In millions of U.A.E. dirhams)

End of Period	1997	1998	1999	2000	2001 2/	November 2002 2/
Reserves	4	4	3	3	5	3
Cash	0	0	0	0	0	0
Deposits with central bank	4	4	3	3	5	3
Foreign assets	568	737	975	543	902	109
Claims on government	0	0	0	0	0	0
Claims on public sector enterprises	0	0	0	0	0	0
Claims on private nonbanks	104	17	58	144	139	12
Claims on banks	102	136	249	113	110	1
Other assets	2	2	1	1	1	10
Total assets/liabilities	780	896	1,286	804	1157	135
Foreign liabilities	372	277	1,031	509	795	9
Quasi monetary deposits 3/	49	40	31	31	35	7
Government deposits	0	0	0	0	0	0
Liabilities to banks	302	523	167	207	269	56
Capital and reserves	46	47	47	47	48	48
Other liabilities	11	9	10	10	10	15

Source: Central Bank of the United Arab Emirates.

1/ Banca Comerciale Italiana; not affected by 2001 change in compilation.
2/ Based on new compilation methodology.
3/ Foreign currency deposits.

Table 33. United Arab Emirates: Licensed Commercial Banks, June 2002

(In millions of U.A.E. dirhams)

	Head Office and Branches	Year Established	Balance Sheet (Dh millions)
Abu Dhabi Commercial Bank	35	1985	31,206
Abu Dhabi Islamic Bank	8	1997	7,184
Arbift	4	1976	4,392
Bank of Sharjah	3	1973	2,011
Commercial Bank International	6	1991	2,671
Commercial Bank of Dubai	15	1969	6,679
Dubai Islamic Bank	13	1975	18,728
Emirates Bank International	20	1977	36,328
Emirates Industrial Bank	...	...	...
First Gulf Bank	5	1979	4,669
InvestBank	5	1975	3,123
Mashreq Bank	30	1967	20,019
Middle East Bank (sub of EBI)	13	...	2,914
National Bank of Abu Dhabi	42	1968	27,715
National Bank of Dubai	23	1963	32,695
National Bank of Fujairah	5	1982	3,030
National Bank of Ras Al Khaimah	11	1978	2,881
National Bank of Sharjah	9	1976	2,678
National Bank of Umm Al Qaiwain	10	1982	1,696
Union National Bank	27	1982	13,887
United Arab Bank	9	1975	1,942
Total U.A.E. banks	293	...	226,475
Branches of foreign banks 2/	109	...	75,461

Sources: Central Bank of the United Arab Emirates.

Table 34. United Arab Emirates: Balance of Payments, 1997–2001

(In billions of U.S. dollars)

	1997	1998	1999	2000	Prel. 2001
Trade balance	10.8	4.7	8.6	18.8	15.3
Exports	40.8	33.4	36.5	49.6	48.2
Crude oil and products	15.3	10.4	14.2	23.4	19.9
Crude oil	14.6	10.0	13.6	21.7	17.7
Petroleum products 1/	0.7	0.4	0.6	1.7	2.2
Natural gas	2.9	2.1	2.3	3.7	3.4
Nonhydrocarbon	11.8	9.3	8.2	9.4	10.9
Free zone exports	4.0	4.3	4.5	5.5	6.8
Nonmonetary gold	6.0	3.1	1.8	1.9	2.1
Reexports 2/	10.8	11.6	11.8	13.1	13.9
Imports (f.o.b.)	-30.0	-28.7	-27.9	-30.8	-32.8
Imports by Emirates	-20.7	-22.3	-22.8	-23.9	-24.8
Free zone imports	-3.1	-3.2	-3.2	-4.9	-5.9
Nonmonetary gold	-6.2	-3.2	-1.9	-2.0	-2.2
Investment income	5.7	7.1	7.3	9.6	6.1
Banking system and private nonbanks	2.1	2.1	2.1	2.8	2.0
Government 3/	3.6	5.0	5.1	6.8	4.1
Services (net)	-6.1	-5.9	-5.9	-6.2	-6.4
Transfers (net)	-3.6	-3.7	-3.9	-4.0	-4.6
Private	-3.4	-3.4	-3.6	-3.7	-4.0
Official	-0.2	-0.2	-0.3	-0.3	-0.6
Current account balance	6.7	2.2	6.0	18.3	10.4
Financial account balance 4/	-1.1	2.4	4.2	-7.4	-2.2
Private capital (net)	0.8	-0.8	1.7	-3.6	-3.0
Commercial banks	0.6	0.6	0.4	-2.9	-2.9
Private nonbanks	0.2	-1.4	1.3	-0.7	-0.1
Official capital 5/	-1.7	3.1	2.6	-3.7	0.8
Errors and omissions	-5.3	-3.8	-8.7	-8.1	-8.1
Overall balance	0.3	0.8	1.5	2.8	0.5
Change in central bank net foreign assets (-=increase)	-0.3	-0.8	-1.5	-2.8	-0.5

Sources: National authorities; and Fund staff estimates.

1/ Including fertilizers and lubricants.

2/ Authorities estimates.

3/ Fund staff estimates.

4/ No data are collected on the capital account.

5/ Mainly changes in official external assets, including estimates for ADNOC profit transfers.

Table 35. United Arab Emirates: Balance of Payments, 1997–2001

(In billions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Trade balance	39.6	17.2	31.6	69.0	56.3
Exports	149.8	122.5	134.1	182.1	176.9
Crude oil and products	56.2	38.2	52.1	85.9	73.1
Crude oil	53.6	36.7	49.9	79.7	65.0
Petroleum products 1/	2.6	1.5	2.2	6.2	8.1
Natural gas	10.6	7.7	8.4	13.6	12.5
Non hydrocarbon	43.3	34.0	30.0	34.4	40.1
Exports by Emirates	6.6	6.9	6.7	7.2	7.5
Free zone exports	14.6	15.8	16.6	20.2	24.9
Nonmonetary gold exports	22.1	11.3	6.7	7.0	7.7
Reexports 2/	39.7	42.6	43.5	48.2	51.2
Imports (f.o.b.)	-110.2	-105.3	-102.5	-113.1	-120.6
Imports by emirates	-76.0	-82.0	-83.8	-87.9	-91.0
Free zone imports	-2.5	-2.5	-5.9	-5.9	-7.0
Nonmonetary gold	-11.3	-11.6	-11.9	-18.0	-21.7
Investment income	20.8	26.1	26.7	35.3	22.3
Banking system and private nonbanks	7.6	7.9	7.9	10.2	7.4
Government 3/	13.3	18.2	18.9	25.1	14.9
Services (net)	-22.4	-21.9	-21.8	-22.6	-23.4
Credits	6.4	7.1	7.6	8.0	8.3
Debits	-28.8	-29.0	-29.4	-30.6	-31.7
Transfers (net)	-13.3	-13.5	-14.4	-14.6	-15.5
Private	-12.5	-12.6	-13.4	-13.5	-14.4
Official	-0.8	-0.9	-1.0	-1.1	-1.1
Current account balance	24.7	7.9	22.1	67.1	39.7
Financial account balance	-4.0	8.8	15.6	-27.0	-8.2
Private capital (net)	3.0	-2.8	6.1	-13.3	-11.0
Commercial banks	2.3	2.4	1.4	-10.7	-10.8
Private nonbanks	0.7	-5.1	4.8	-2.6	-0.2
Official capital 4/	-7.0	11.6	9.5	-13.7	2.8
Errors and omissions	-19.5	-13.9	-32.1	-29.7	-29.7
Overall balance	1.2	2.8	5.6	10.4	1.8
Change in central bank net foreign assets (-=increase)	-1.2	-2.8	-5.6	-10.4	-1.8

Sources: National authorities; and Fund staff estimates.

1/ Including fertilizers and lubricants.
2/ Authorities' estimates.
3/ IMF staff estimates.
4/ Mainly changes in official external assets, including estimates for ADNOC profit transfers.

Table 36. United Arab Emirates: Merchandise Imports by Harmonized System Sections, 1997–2001 1/

(In millions of U.A.E. dirhams)

	1997	1998	1999	2000	Prel. 2001
Live animals, animal products	2,511	2,774	2,834	2,900	3,314
Vegetable products	4,462	4,854	4,815	5,135	5,831
Fats, oil and waxes	411	415	413	451	461
Foodstuffs, beverages, spirits, and tobacco	2,522	2,554	2,578	2,540	3,387
Mineral products	1,267	1,549	1,605	1,922	2,209
Chemicals and related materials	5,466	5,897	5,750	5,998	6,914
Plastics and rubber	3,589	3,790	3,668	3,760	4,810
Raw hides, leather, and articles thereof	617	566	550	509	737
Wood, cork, and articles thereof	1,006	1,027	1,009	959	1,525
Wood pulp, paper, and paperboard	1,271	1,386	1,302	1,330	1,714
Textiles and textile articles	11,703	11,126	10,914	10,642	15,322
Footwear and other accessories	1,360	1,183	1,238	1,017	1,813
Stone, plaster, cement, ceramic, and glassware	1,878	2,035	2,036	2,103	2,620
Pearls, precious stones, and precious metals	2,649	2,673	2,925	3,499	2,481
Base metals and related products	7,473	8,306	8,263	8,587	9,267
Machinery and electrical equipment	19,806	22,691	22,845	24,871	26,067
Vehicles and other transport equipment	10,209	11,720	13,069	15,880	15,464
Optical and medical equipment	2,598	2,765	2,852	2,867	3,070
Arms and ammunition	14	224	9	23	24
Miscellaneous manufactured goods	3,261	3,178	2,944	3,007	3,302
Works of art and antiques	107	109	92	119	122
Total imports	84,180	90,822	91,711	98,119	110,454

Source: Central Bank of the United Arab Emirates.

1/ Imports of the Emirates of Abu Dhabi, Dubai, and Sharjah.

Table 37. United Arab Emirates: Merchandise Exports by Harmonized System Sections, 1999–2001 1/

(In millions of U.A.E. dirhams)

	1999	2000	Prel. 2001
Live animals, animal products	122	102	201
Vegetable products	134	112	185
Fats, oil and waxes	136	137	168
Foodstuffs, beverages, spirits, and tobacco	309	343	365
Mineral products	297	349	335
Chemicals and related materials	297	293	422
Plastics and rubber	131	160	153
Raw hides, leather, and articles thereof	12	7	21
Wood, cork, and articles thereof	9	3	0
Wood pulp, paper, and paperboard	110	113	146
Textiles and textile articles	942	1,005	1,160
Footwear and other accessories	3	3	3
Stone, plaster, cement, ceramic, and glassware	175	162	217
Pearls, precious stones, and precious metals	237	276	224
Base metals and related products	2,656	3,052	2,997
Machinery and electrical equipment	163	246	95
Vehicles and other transport equipment	158	135	286
Optical and medical equipment	1	2	1
Arms and ammunition	...	...	...
Miscellaneous manufactured goods	30	41	26
Works of art and antiques	12	20	8
Total exports 2/	5,934	6,561	7,012

Source: Central Bank of the United Arab Emirates.

1/ Excluding hydrocarbons; pre-1999 data not available.

2/ Exports by Emirates, excluding free zone exports.

Table 38. United Arab Emirates: Direction of Trade: Imports, 1997–2001 1/

(In percent of total)

	1997	1998	1999	2000	Prel. 2001
Total imports, c.i.f.	100.0	100.0	100.0	100.0	100.0
Industrial countries	52.0	52.2	52.4	52.7	52.5
Of which					
Japan	10.2	9.9	10.1	10.3	10.2
United States	9.4	9.3	9.5	9.6	9.6
United Kingdom	8.7	8.8	8.6	8.8	8.8
Italy	5.2	5.6	5.9	6.1	6.2
Germany	6.9	6.8	6.5	6.5	6.7
France	3.9	3.8	3.9	4	4.1
Netherlands	1.7	1.8	1.6	1.7	1.5
Australia	2.0	1.9	1.8	1.7	1.6
Switzerland	1.6	1.7	1.5	1.4	1.5
Developing countries	47.1	46.8	46.5	46.3	46.5
Arab countries	6.2	5.8	5.7	5.5	5.6
Of which: Saudi Arabia	3.5	3.1	2.9	3	2.9
Other developing countries	40.9	41.0	41.2	41.3	41.5
Of which					
India	5.8	5.9	6.1	6.8	6.7
Korea	5.1	5.4	5.3	5.4	5.3
Hong Kong, SAR	0.8	0.7	0.7	0.6	0.7
China	8.0	7.9	8.2	8.4	8.6
Pakistan	1.1	1.2	1	1	0.9
Iran	1.4	1.5	1.4	1.3	1.5
Other unspecified	0.9	1.0	1.1	1.2	1.0

Source: IMF, *Direction of Trade Statistics*.

1/ Based on partner country information.

Table 39. United Arab Emirates: Direction of Trade: Exports, 1997–2001 1/

(In percent of total)

	1997	1998	1999	2000	Prel. 2001
Total exports (hydrocarbons, reexports)	100.0	100.0	100.0	100.0	100.0
Industrial countries	45.1	39.7	45.8	46.1	45.9
Of which					
Japan	35.8	29.7	36.5	36.1	36.4
United States	6.2	6.4	2.2	2.4	2.1
United Kingdom	2.5	3.3	1.8	1.8	1.9
Australia	1.5	0.8	1.9	1.8	2
France	0.2	0.4	0.2	0.3	0.2
Germany	0.5	0.7	0.7	0.9	0.9
Italy	0.2	0.4	0.6	0.7	0.8
Netherlands	0.2	0.3	0.2	0.2	0.3
Developing countries	41.1	42.9	42.3	42.5	42.4
Arab countries	7.0	9.9	10.2	10.4	10.2
Of which					
Oman	3.5	5.1	3.6	3.1	3.4
Saudi Arabia	1.3	1.8	1.4	1.7	1.8
Other developing countries	34.1	33.0	32.1	32.8	32.5
Of which					
Korea	9.0	7.6	7.2	7.0	7.1
Iran	1.6	2.0	3.5	3.7	3.8
Singapore	4.8	3.8	6.4	6.1	6.3
India	4.9	6.4	7.2	7.4	7.5
Thailand	2.5	2.6	2.4	2.1	2.3
Kenya	0.9	1.1	1.1	1.3	1.4
Hong Kong, SAR	0.8	0.9	1.2	1.1	1.1
Pakistan	3.0	2.1	2.0	2.4	2.4
Philippines	1.1	0.9	0.9	0.8	0.8
Other unspecified	13.8	17.4	11.9	11.4	11.7

Source: IMF, *Direction of Trade Statistics.*

1/ Based on partner country information.