INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/218

UNITED ARAB EMIRATES

July 14, 2017

2017 ARTICLE IV CONSULTATION—PRESS RELEASE STAFF REPORT AND INFORMATIONAL ANNEX FOR THE UNITED ARAB EMIRATES

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2017 Article IV consultation with the United Arab Emirates, the following documents have been released and are included in this package:

- A **Press Release** summarizing the staff report that concluded the Article IV consultation with the United Arab Emirates.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse of time basis, following discussions that ended on May 14, 2017 with the officials of the United Arab Emirates on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 21, 2017.
- An **Informational Annex** prepared by the IMF staff.

The document listed below has been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org
Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

Press Release No. 17/283
FOR IMMEDIATE RELEASE
July 14, 2017

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with the United Arab Emirates

On July 7, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the United Arab Emirates and considered and endorsed the staff appraisal without a meeting.[2]

Economic performance was subdued during most of 2016. Together with weaker oil prices and slower oil output growth, the postponement of some public infrastructure projects and a slowdown in global trade caused growth to moderate to 3 percent from 3.8 percent in 2015. Inflation eased to 1.8 percent from 4.1 percent in 2015, reflecting softer domestic demand and declining rents. Despite continued fiscal consolidation, lower oil revenues widened the overall deficit to 4.3 percent of GDP from 3.4 percent of GDP in 2015. Likewise, the current account surplus shrank to 2.4 percent of GDP from 4.7 percent of GDP in 2015. Although impairment charges rose amid the economic slowdown, banks remained well capitalized and liquid.

Economic activity is expected to strengthen gradually in the coming years with firming oil prices and other global indicators, and an easing pace of fiscal consolidation. Nonoil growth is projected to rise to 3.3 percent in 2017 from 2.7 percent in 2016, reflecting increased domestic public investment and a pickup in global trade. Over the medium term, nonoil growth is expected to remain above 3 percent, supported by accelerating investment in the run up to the Expo 2020. The planned VAT introduction in 2018 is not expected to have a significant adverse impact on growth.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

Executive Board Assessment[3]

The economy is weathering the post-2014 oil shock well. With lower oil revenues, fiscal and external positions weakened, financial conditions tightened, and growth slowed. The weaker economy elevated risks of bank loan delinquency, requiring higher provisioning. Yet the UAE's financial buffers, safe-haven status, sound banks, and diversified and business-friendly economy are helping it cope with the shock. Growth is projected to recover over the next few years, as the pace of the necessary fiscal consolidation eases, global trade regains momentum, and investment, including for Expo 2020, accelerates. This outlook is subject to downside risks, stemming mainly from a further sustained decline in oil prices, tighter financial conditions, a rise in protectionism and an intensification of regional conflicts.

The key policy goal is to foster economic adjustment to the new oil market realities. Although the fiscal position remains sustainable, an improvement in the budget balance is needed to ensure that an equitable share of the oil income is saved for future generations. Ample fiscal space allows deficits to decline gradually while mitigating the adverse impact on the economy and the financial sector. Following the rapid pace of fiscal adjustment in 2015–16, the projected pause in consolidation this year is appropriate as it would reduce spare capacity. It needs to be followed by a gradual but steady tightening over the medium term as growth strengthens. The long-standing peg to the U.S. dollar remains appropriate. A moderate current account gap is expected to close over time as fiscal savings rise to the level consistent with intergenerational equity. The authorities' efforts to make the economy more productive are key to alleviating the impact of the oil shock on medium-term growth prospects.

To foster the adjustment, especially given downside risks, the momentum in fiscal reforms needs to be sustained and coordinated with structural reforms. Complementing recent significant subsidy reforms, a timely introduction of the VAT and excises would be another major achievement, to diversify revenues away from oil. In tandem, continual efforts to contain growth of public spending and improve its efficiency are needed to generate the necessary fiscal savings while continuing to use public investment to diversify the economy and expand its productive capacity, consistent with the Vision 2021 National Agenda. Importantly, improving the efficiency of public education spending, in conjunction with education reforms, and gradually raising healthcare spending would help nurture talent and foster a more productive and inclusive economy. Controlling the size and wages of the civil service while promoting entrepreneurship and female participation would improve private sector employment, including for women.

To ensure credibility, fiscal adjustment should be accompanied by strengthening the medium-term policy framework and improving transparency. Adopting and publishing multi-year plans and integrating them with the annual budget process would clarify the direction for fiscal policy. Fiscal anchors and targets can be strengthened further to anchor fiscal sustainability and intergenerational equity. These efforts need to be supported by enhanced

---

[3] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

coordination between governments and GREs regarding their investment and borrowing plans. Strengthened control of contingent liabilities arising from GRE and PPP investment could prevent a buildup of fiscal risks. Close coordination between governments, GREs, SWFs, and the CBU is necessary to facilitate cash management and liquidity forecasting. Looking ahead, stepped up efforts to develop the domestic debt market, together with more active liquidity management by the CBU, would expand financing options while promoting healthy credit conditions.

Ongoing initiatives to upgrade the supervisory and regulatory framework for the financial sector are welcome and need to continue. The CBU's introducing and implementing the Basel III capital and liquidity standards, risk management regulations, corporate governance standards, and new financial products and services are key to strengthen financial resilience while addressing market development needs. Close monitoring of financial vulnerabilities, including currency mismatches, foreign exchange and concentration risk, and prompt undertaking of the necessary supervisory actions are to essential, especially since the macro-financial impact of the oil shock is still unfolding amid downside risks. The authorities need to sustain welcome progress in strengthening the AML/CFT regime, especially in light of risks related to money transfer operators, which facilitate remittance flows from the large expatriate community in the UAE to other countries.

Focused, multi-pronged initiatives to raise productivity and diversify the economy would improve medium-term economic prospects. The authorities have set clear goals for fostering diversified, knowledge-based growth. Achieving them requires focused policy measures that could encourage synergies in investment between emirates, promote foreign investment outside free zones, and foster competition, including for GREs. Following the adoption of the new bankruptcy law, its effective implementation, along with steps to ease access of SMEs to finance, could boost private sector growth. Building on recent energy subsidy reforms, ongoing initiatives to increase energy efficiency are key for raising productivity.

Amid ongoing economic adjustment, continued improvements in statistics are critical for enhancing policy analysis and decision-making. Multifarious efforts by local and federal statistical agencies to improve the availability, quality, and timeliness of economic statistics are welcome. Improved coordination among these agencies as well as continued technical assistance would be needed to address the remaining wide-ranging gaps. The Fund's e-GDDS standard could provide a useful roadmap for such efforts. Compiling quarterly GDP and IIP for the government are immediate priorities in this regard.

Selected Macroeconomic Indicators, 2014–18

(Quota: SDR 752.5 million as of March 2016)
(Population: 9.9 million, nationals: 1 million)
(Per capita GDP-2016: $37,678; poverty rate: n.a.; unemployment rate: 4.2% (2009))

	2014	2015	Est. 2016	Proj. 2017	Proj. 2018
Oil sector					
Exports of oil (incl. oil products and gas) (in billions of U.S.	101.9	61.5	50.9	57.5	60.7
Average crude oil export price (in U.S. dollar per barrel)	98.9	52.4	44.0	52.9	53.1
Crude oil production (in millions of barrels per day)	2.8	2.9	3.0	2.9	3.0
	(Annual percent change, unless otherwise indicated)				
Output and prices					
Nominal GDP (in billions of UAE dirhams)	1,481	1,315	1,281	1,399	1,481
Nominal GDP (in billions of U.S. dollars)	403	358	349	381	403
Real GDP	3.3	3.8	3.0	1.3	3.4
Real oil GDP	0.4	5.4	3.8	-2.9	3.2
Real nonoil GDP	4.6	3.2	2.7	3.3	3.4
CPI inflation (average)	2.3	4.1	1.8	2.2	2.9
	(Percent of GDP, unless otherwise indicated)				
Investment and saving					
Gross domestic investment	24.0	28.4	26.9	26.9	26.8
Total fixed capital formation	22.8	27.0	25.4	25.5	25.5
Public	9.1	11.1	10.1	9.0	8.5
Private	13.6	15.9	15.3	16.5	17.1
Gross national saving	38.8	29.1	29.3	29.5	29.6
Public	9.0	3.0	1.8	2.1	3.1
Private	29.7	26.1	27.5	27.4	26.5
Public finances					
Revenue	35.0	29.0	28.5	27.1	27.4
Taxes	18.9	12.5	9.1	9.3	9.9
Other revenue 1/	15.8	16.2	19.1	17.5	17.2
Expenditures	33.1	32.4	32.6	30.3	29.3
Expense 2/	30.4	29.7	29.1	27.0	26.0
Net acquisition of nonfinancial assets	2.7	2.7	3.5	3.2	3.3
Net lending(+)/borrowing(-) (Revenue minus expenditures)	1.9	-3.4	-4.1	-3.1	-1.9
Adjusted nonoil primary balance 3/	-37.5	-27.8	-21.6	-22.4	-20.8
Gross general government debt	14.2	17.1	20.2	19.6	19.1
Net of government deposits in the banking system	-1.8	3.9	5.2	5.2	5.3
	(Annual percent change)				
Monetary sector					
Net foreign assets	16.7	-12.4	5.3	-3.4	-1.8
Net domestic assets	5.4	11.7	2.7	6.2	11.3
Credit to private sector	11.5	8.4	5.8	8.4	7.2
Broad money	7.9	5.5	3.3	4.2	8.8
	(Billions of U.S. dollars, unless otherwise indicated)				
External sector					
Exports and re-exports of goods, of which:	343	300	292	312	328
Oil	102	61	51	57	61
Nonoil, excluding re-exports	101	104	103	112	122
Imports of goods	235	224	227	241	254
Current account balance	53.6	16.7	8.4	10.0	11.2
Current account balance (in percent of GDP)	13.3	4.7	2.4	2.6	2.8
External debt (in percent of GDP)	48.2	62.9	66.2	61.2	58.5
Gross official reserves 4/	78.5	94.0	85.4	80.7	79.5
In months of next year's imports of goods & services,	5.4	6.5	5.3	4.7	4.5
Memorandum items:					
Local currency per U.S. dollar (period average)	3.67	3.67	3.67	..	..
Nominal effective exchange rate (2010 = 100)	110.7	122.1	125.2	..	..
Real effective exchange rate (2010 = 100)	96.8	108.5	110.6	..	..

Sources: Country authorities; and IMF staff estimates and projections.

1/ Includes staff estimates of profit transfers from the national oil company to SWR and SWR returns (investment income).
2/ Includes loans and equity to finance development projects.
3/ In percent of nonoil GDP. Excludes staff estimates of SWF investment income.
4/ Excludes staff estimates of foreign assets of sovereign wealth funds.

UNITED ARAB EMIRATES

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

June 21, 2017

KEY ISSUES

Context. The UAE is adjusting to the "lower-for-longer" oil price environment from a position of strength, which is reflected in its large financial buffers, long-standing safe-haven status, diversified and business-friendly economy, and sound financial system. The authorities are further streamlining spending and improving the business environment. Yet fiscal and external balances have weakened, the economy has decelerated, and banks are having to adapt to the more challenging environment.

Outlook and risks. Growth is expected to recover in the coming years as the pace of fiscal consolidation eases; domestic investment rises, including for Expo 2020; and global trade rebounds. Uncertainty about oil prices, financial conditions, policies of major economies, and regional conflicts suggest that risks to this outlook are to the downside.

This year's consultation focused on three issues:

Gradual fiscal consolidation. Intergenerational equity requires improving the budget balance over the medium term. Following significant subsidy reforms, policymakers should focus on raising spending efficiency and nonoil revenues, while maintaining spending restraint. A stronger and more transparent fiscal policy framework and closer coordination among key stakeholders would help set clear fiscal policy objectives and reduce the procyclicality of fiscal spending. Continued strengthening of monitoring and control of contingent liabilities would help contain fiscal risks.

Maintaining financial stability. The central bank's efforts to further upgrade the supervisory and regulatory framework, including for AML/CFT, are improving financial resilience. Swift approval of the improved draft central bank and banking law is needed to support these efforts. More active liquidity management by the central bank along with debt market development would promote healthy credit.

Improving efficiency and diversification. Continuing enhancements in the business environment would attract more foreign investment and diversify growth. Multifarious efforts to promote innovation, improve energy efficiency and the quality of education and healthcare could raise productivity. Better economic statistics are essential to facilitate policy analysis and decision-making.

Approved By
Aasim M. Husain and Andrea Richter

Discussions for the 2017 Article IV were held in Abu Dhabi and Dubai during April 30 – May 14, 2017. The mission comprised Mses. Tamirisa (head) and Garcia Martinez, Messrs. Bibolov and Cakir (all MCD), and Soto (FAD). Mr. El Khoury (LEG) participated in meetings on AML/CFT issues via teleconference from HQ. Ms. Merhi (OED) and Messrs. Azour and Husain (MCD) joined the mission for some meetings. Ms. Kargbo-Sical and Mr. Hiland assisted in the preparation of this report.

CONTENTS

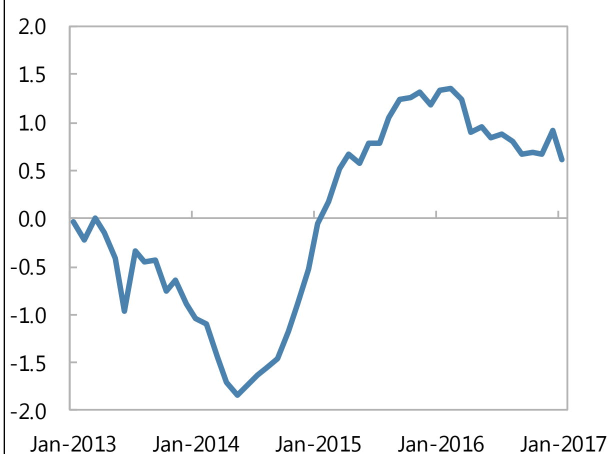
ANNEXES

CONTEXT: GRADUAL ECONOMIC ADJUSTMENT

1. **The UAE is adapting well to the "lower-for-longer" oil price environment**. The country's large financial buffers, safe-haven status, diversified economy, and the authorities' robust policy responses are facilitating the adjustment while safeguarding the economy and the financial system. Among other things, the authorities have reformed energy subsidies. They have also continued to improve the business environment, despite the UAE's already high global rankings. The authorities are also strengthening policy frameworks in the financial, fiscal, and statistical areas, consistent with IMF advice (Table on the Status of the 2016 Article IV Recommendations). Recent agreements among major oil producers to cut supply have supported oil prices and investor sentiment, and a pickup in global trade and domestic investment, including for Expo 2020, has started to lift the economy. Yet the outlook for oil prices remains fundamentally unchanged, requiring continued fiscal consolidation and sustained reforms to raise productivity and diversify the economy further.

2. **Economic performance was subdued during most of 2016**. Together with lower oil prices and lower oil production growth, the postponement of some public infrastructure projects and a slowdown in global trade caused growth to decline to 3.0 percent from 3.8 percent a year earlier. Financial conditions remain tight, reflecting higher interest rates, stronger exchange rate, and subdued stock and property prices. Financial markets have not been significantly affected so far by the diplomatic rift with Qatar. The real estate market remains weak, although house prices in Dubai stabilized in recent months. Economic activity has shown signs of recovery, in line with firming oil prices and other global economic indicators and an easing pace of fiscal consolidation. The PMI came in at 56.1 in April 2017, close to the 19-month high of 56.2 percent in March 2017, and the stock market rebounded. Inflation fell to 1.8 percent last year, reflecting subdued domestic demand and declining rents but picked up in early 2017 with reductions in subsidies for water and electricity and higher gasoline prices.

Financial Conditions Index 1/



Sources: National authorities; and IMF staff calculations.
1/ FCI shows the tightness or looseness of the monetary and financial conditions by examining the interest rate and exchange rate levels, equity market, housing market and the money supply. The weighted sums are normalised with a mean of zero and standard deviation of one. Negative readings of the index indicate a relatively loose, whereas positive readings represent tighter financial and monetary conditions.

Status of the 2016 Article IV Recommendations

Recommendations	Current Status and Progress
Macroeconomic policy mix	
Continue fiscal consolidation.	Fiscal consolidation of 6 percent of nonoil GDP was implemented in 2016.
Composition of fiscal consolidation should favor raising nonoil revenues and rationalizing spending, including lowering capital transfers to GREs.	The authorities continue to prepare for the introduction of VAT and excise taxes by 2018 in coordination with other GCC countries. Grants and capital transfers to GREs have been scaled back.
Strengthen medium-term fiscal frameworks (MTFF).	The federal MTFF has been strengthened. Local governments are taking steps towards developing and adopting their MTFFs. The authorities have initiated work on consolidated medium-term expenditure frameworks for education and healthcare.
Rebalance the deficit financing mix by tapping sovereign wealth funds and/or capital markets rather than drawing down government deposits.	Abu Dhabi financed its deficit through the sovereign wealth fund and by issuing external debt ($5 billion in May 2016).
Financial stability	
Implement plans to phase in Basel III capital and liquidity standards over 2015–19.	The central bank is implementing capital and liquidity regulations in line with Basel III standards.
Strengthen banking supervision.	The central bank is upgrading its framework for supervision and regulation.
Develop the macroprudential framework and strengthen safety nets and resolution frameworks.	The new draft central bank and banking law is under discussion.
Strengthen GREs' balance sheets.	The authorities have stepped up the oversight of GREs' investment and debt plans.
Economic diversification	
Continue to diversify the economy and exports.	The government is implementing its strategic vision to further diversify its economy away from oil.
Further improve the business environment and ease access to finance.	Doing business indicators continue to improve. The bankruptcy law has been adopted. Progress towards adopting a foreign ownership law has continued.
Improving statistics	
Enhance economic statistics, strengthen coordination among local and federal statistical agencies, and improve the coverage of fiscal accounts and financial soundness indicators.	Monetary and financial statistics have been improved. Coordination among local and federal statistical agencies needs to improve further.

3. **Fiscal withdrawal continued at a more gradual pace in 2016**. The nonoil deficit is estimated to have declined by 6 percentage points (pp) to 21.8 percent of nonoil GDP in 2016, following the decline of 9.7 pp of GDP in 2015. Consolidation came broadly equally from increases in revenues and spending restraint. The decline in oil revenues due to lower oil prices was partially offset by increased dividends from GREs, administrative fees,[1] and sale of an oil concession. Transfers to government-related enterprises (GREs) for infrastructure bore the brunt of spending cuts. The adjustment was front-loaded to the first two quarters, with spending rising during the remainder of the year. The deficit was financed mainly through withdrawals from the sovereign wealth funds (SWFs) and external borrowing.

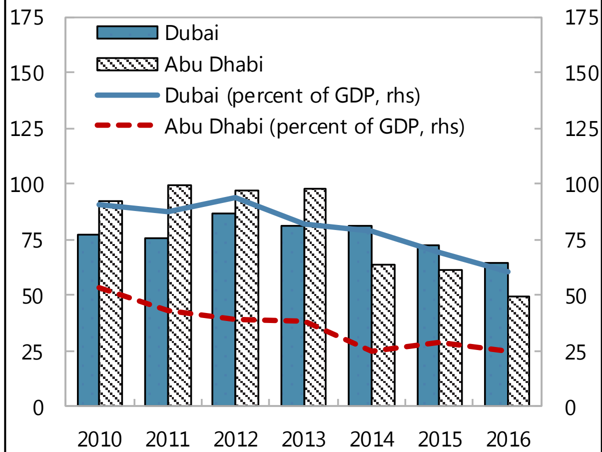
4. **Continued repayment of bonds and syndicated loans by GREs contained the buildup of public debt**. Total government and GRE debt declined by 5 pp of GDP to 24.7 percent of GDP, including Abu Dhabi's Eurobond issue ($5 billion in May 2016) and Sharjah's

[1] Dubai increased parking fees and introduced fees for hotels and airport passengers, among other measures. Abu Dhabi introduced a 4 percent municipality fee on hotel bills and a 3 percent municipality fee on the annual value of expatriates' rental contracts.

sukuk issue ($500 million in January 2016). Dubai's GRE debt decreased by 10 pp of GDP to 60 percent of Dubai's GDP, and Abu Dhabi's GREs also continued to deleverage.[2]

GRE Debt, 2010–16

(U.S. dollar billions; unless otherwise noted)



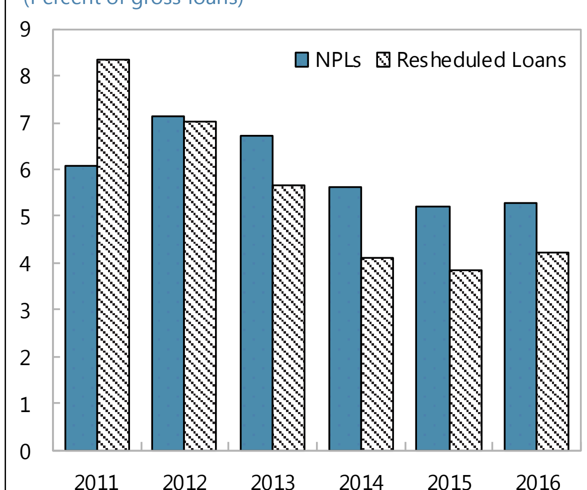
Sources: National authorities; Bloomberg; Dealogic; and IMF staff calculations.

5. **The current account surplus shrank further in 2016 because of lower oil export revenues**. While nonoil exports remained stable, lower oil exports and still strong imports caused the current account surplus to decline to 2.4 percent of GDP from 4.7 percent in 2015. The financial account registered larger net outflows, primarily reflecting an increase in banks' foreign assets. Thus, gross international reserves declined to $85.4 billion (5.4 months of imports) but remained adequate for external stability, especially in the context of the government's large foreign assets held in SWFs. Although the REER appreciated by 2.4 percent in 2016 with the U.S. dollar (to which the dirham is pegged), it depreciated by 1.4 percent in the five months of 2017. The impact on competitiveness appears to have been limited, in part because firms cut costs and profit margins.

6. **Banks continued to adjust to slower growth and higher interest rates**. Shrinking interest margins and rising impairment charges reduced profitability and triggered cost cutting. With the economy slowing, the NPL ratio has stopped declining since 2015, and rescheduled loans have edged up, in part owing to a weakening asset quality of SME loan portfolio. Banks remained adequately capitalized with 18.6 percent total capital ratio and 16.9 percent Tier 1 ratio at end-March 2017. Outstanding loans are concentrated in the private sector (68 percent) followed by GREs and government (12 and 11 percent, respectively). With demand weakening, credit continued to grow, although at a slower rate of 5.3 percent year-on-year in the first quarter of 2017. The resulting negative credit gap was consistent with the negative output gap estimated at less than 1 percent of GDP. While most of new loans went to GREs (40 percent), GREs also brought half of

Bank Asset Quality

(Percent of gross loans)



Sources: National authorities; and IMF staff calculations.

[2] Two of the top Abu Dhabi investment corporations merged, creating Mubadala Investment Company, the 14th largest SWF in the world with estimated $125 billion in assets and $18 billion in debt.

new resident deposits, making them net contributors to bank funding. Although interbank rates rose as the Central Bank of the UAE (CBU) followed the U.S. Federal Reserve, the liquid asset ratio remained at a comfortable 22.2 percent at end-March 2017, in part because governments and GREs increased their deposits. Banks' wholesale foreign funding (mostly in U.S. dollars at medium-term maturities) stayed flat compared to end-2015 at 13.4 percent of their total liabilities at end-March 2017. Although deposit growth strengthened, banks continued to access wholesale funding to diversify their funding base.

OUTLOOK FOR MODERATE RECOVERY AMID DOWNSIDE RISKS

7. Economic activity is expected to strengthen gradually in the coming years.

- Nonoil growth is projected to rise to 3.3 percent in 2017, reflecting increased domestic public investment and a pickup in global trade. Thereafter, accelerating investment, including for Expo 2020, will keep nonoil growth above 3 percent. Real oil GDP growth is estimated to contract by 2.9 percent as a result of the UAE's commitment to the OPEC agreement,[3] but is projected to recover in 2018 and return to a rising trend over the medium term. Overall growth will ease to 1.3 percent in 2017, before recovering to above 3 percent in the medium term. The VAT is not expected to have a significant adverse impact on growth. The authorities expect housing market to bottom out in 2017, in part due to Expo 2020 investment. Discussions with market analysts suggest that the real estate market is close to balance but is facing headwinds ahead because of rising supply, government's fiscal restraint, higher interest rates, and stronger exchange rate.

- Inflation will rise to 2.2 percent this year, partly reflecting utility and gasoline price adjustments, and higher imported inflation. Next year inflation is projected to reach 2.9 percent on the one-off impact from the VAT introduction but is projected to stabilize at around 2.3 percent over the medium term. Rent inflation is expected to remain low against the backdrop of an expected increase in housing stock and still subdued demand.

- The current account surplus is expected to improve to 2.6 percent of GDP this year mainly owing to rising nonoil exports. It is projected to increase further to 3.8 percent by 2022, as oil revenues rise with increased oil production, complemented by continued growth of nonoil exports and tourism receipts. Rising infrastructure investment, including in preparation for Expo 2020, is expected to increase remittance outflows to South Asia and other Middle East and North African countries, given the composition of UAE expats. At this stage, the

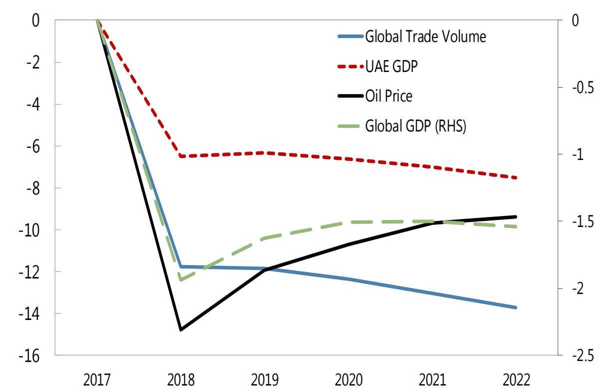
[3] Crude oil production is projected to decline from 3.03 mbd in 2016 to 2.88 mbd in 2017 in line with the OPEC+ agreement. Condensate production is projected to increase from 0.23 mbd in 2016 to 0.26 mbd in 2017.

diplomatic rift with Qatar is not expected to affect the economic outlook for the UAE significantly.[4]

8. Despite the improving outlook, risks are skewed to the downside and largely reflect the uncertainties surrounding oil prices, policies in major economies, and financial market conditions (the Risk Assessment Matrix). Large investment projects, if not implemented prudently, may create additional macro-financial risks for GREs and banks, most of which are government-owned.

- ***Lower oil prices***. Further declines in oil prices, for example, owing to a faster-than-expected recovery of the US shale production and/or reduced compliance with the recent agreement on oil production cuts, could reduce fiscal revenues, investment, and confidence. Spillovers from other oil exporters (particularly the GCC) could weaken trade, tourism, and asset prices, while increased issuance by other oil exporters to finance deficits could put pressure on the cost of funding.

Scenario of a Rise in Protectionism 1/
(Percent Difference Between Scenario and Baseline Forecasts)



Sources: IMF staff estimates.
Note: 1/ The chart illustrates the economic impact of a rise in protectionism in the United States, the United Kingdom, and the European Union. The estimates are obtained using the IMF's global dynamic stochastic general equilibrium model (G20MOD) and country-specific modeling approaches for the UAE. The scenario assumes a rise in tariff and nontariff barriers leads to a 10 percent increase in the effective cost of imports. Sovereign and corporate risk premia are assumed to rise temporarily depending on countries' trade exposures.

- ***Retreat from cross-border integration***. The risk of an inward global shift in policies, including towards protectionism, with lower global growth due to reduced trade, migration, and cross-border investment flows could slow nonoil growth in the UAE, especially given Dubai's role as a major trade, financial, and logistics center. Abu Dhabi could also be affected as global oil demand and oil prices decline.

- ***Tighter and more volatile financial conditions***. A faster rise in U.S. interest rates or higher financial market volatility could increase borrowing costs for banks and GREs and could potentially affect liquidity in the domestic banking system. This risk would rise if contingent liabilities were to increase. If planned megaprojects are not financed prudently, risks for GREs, banks, and sovereigns would rise.

The authorities broadly agreed, noting some upside risks to growth, as the housing market appears to have bottomed out, at least in Dubai, and significant fiscal consolidation has already taken place over the last two years.

---

[4] Trade with Qatar accounts for less than 1 percent of the UAE's total trade. The direct impact on the UAE economy through airline traffic, tourism, real estate investment, and the financial sector is also expected to be limited. Almost one-third of the UAE's natural gas supply comes from Qatar and a disruption in the gas supply could push gas prices higher and affect industrial facilities in the UAE. However, the fact that the gas pipeline company is majority-owned by Abu Dhabi's Mubadala mitigates this risk.

POLICY DISCUSSIONS

A. Growth-Friendly Fiscal Consolidation

9. Sustained yet gradual fiscal consolidation is expected to ensure intergenerational equity while mitigating the adverse impact on nonoil growth.

- Under current policies, the budget is projected to return to balance by 2020. The gap between the current nonoil primary deficit and that consistent with the permanent income hypothesis should close by 2028 (Annexes I-II). Consolidation of 5½ pp of nonoil GDP is projected between 2016 and 2022.

- Following two years of rapid adjustment, a pause in consolidation this year is appropriate in light of continued tightening of monetary conditions and Expo 2020 investment needs.

- During 2018–22, the federal budget is projected to be balanced, as required under the Constitution. Dubai is projected to run deficits reflecting investment for Expo 2020. Abu Dhabi plans to continue steady consolidation. At the consolidated general government level, the fiscal withdrawal is projected at about 1 pp of nonoil GDP per year over 2018–22. The pace and profile of the authorities' consolidation plans are appropriate, given the outlook for only a moderate recovery, significant buffers and fiscal space, investment needs and an expectation that investment would add to productive capacity.

- While broadly agreeing with staff, the authorities considered that the fiscal position could improve even faster, especially if ongoing large investment projects were completed as scheduled and transfers to GREs for capital spending were to decline more sharply than projected by staff.

10. The authorities intend to underpin fiscal consolidation with a combination of spending restraint, improvements in efficiency, and increases in nonoil revenues. Staff supported this strategy, noting that:

- Stepped-up spending reviews supported by appropriate budget controls would be key to increase the efficiency of spending and contain its growth. Containing the wage bill as a share of nonoil GDP and maintaining other current expenses constant in real terms would be a welcome step.[5] With respect to capital expenditures, including those undertaken by GREs, careful cost-benefit analysis needs to support project prioritization. This would help contain expenditure growth while mitigating the adverse impact on the non-oil economy and aligning spending priorities more closely with development goals.

[5] Staff estimates that the consolidated public wage bill amounted to just over 6 percent of non-oil GDP in 2016, much lower than the average of 19 percent of non-oil GDP for other GCC countries. However, the public wage bill in the UAE may be underestimated as wages in some sectors may be classified under other categories of expenditures.

United Arab Emirates: Risk Assessment Matrix[1]		
Source of Risk Nature of the shock	Impact if Realized	Policy Response
Lower energy prices. Production cuts by OPEC and other major producers may not materialize as agreed while other sources of supply could increase production. (Low)	Lower oil exports and fiscal revenues. A $10 drop would worsen fiscal and external balances by 4 and 3½ percentage points of GDP respectively, assuming no policy response.	Sustained and gradual fiscal consolidation.
	Slowdown in nonoil growth. A permanent $10 drop in oil prices could reduce UAE GDP level by 2½ percentage points after five years, assuming revenue losses are fully offset with expenditure cuts.	Gradual fiscal consolidation that preserves efficient investment. Further economic diversification and improvement of the business environment.
	Tighter banking liquidity and financial conditions, and a deterioration of asset quality in the banking sector.	Tap into SWFs and/or issue debt to finance the deficit and maintain strong capital adequacy ratios, incl. through adequate provisioning while further improving the insolvency regime.
Significant further strengthening of the US dollar and/or higher rates. (High)	Reversal of capital flows and a sharp rise in risk premia.	The CBU should stand ready to provide liquidity to banks as needed. Further develop domestic debt markets to reduce reliance on foreign financing.
	Rollover risks and liquidity strains on GREs.	Pursue active management of GREs debt, and avoid transfers of maturing debt to domestic banks.
Retreat from cross-border integration. A fraying consensus about the benefits of globalization could lead to protectionism and economic isolationism, reducing global and regional policy collaboration with negative consequences for trade, capital and labor flows, sentiment and growth. (High)	Slowdown in trade, financial, and labor flows and exacerbation of financial market volatility, which could further increase risk premia. Decline in oil prices and revenues.	Pursue structural reforms to strengthen competitiveness and further diversify the economy. Gradual, fiscal consolidation.
Excessive risk-taking by GREs, related to large infrastructure investment. (Medium)	Imprudent risk-taking and re-leveraging by GREs.	Further strengthen debt management, monitoring of GRE performance, and review of their investment plans to ensure their debt is sustainable.
Intensification of the risks of fragmentation/security dislocation in part of the Middle East, leading to a sharp rise in migration flows with negative global spillovers. (High)	A disruption in oil production in other oil-producing countries could cause a spike in oil prices and improve the UAE's external position.	Maintain prudent policies.
	Intensification of conflicts or regional tensions could lead to an increase in spending or assistance to conflict-ridden populations, possible negative spillovers on growth from high uncertainty.	Preserve the safe-haven status.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of the IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within one year and three years, respectively. Colored boxes represent the severity of impact. Red = High, Yellow =Medium, and Green = Low.

- On the revenue side, the key priority is a timely introduction of the VAT and excise taxes (the latter on tobacco, alcohol, and soft drinks), in coordination with other GCC countries. This would help the UAE move forward with its fiscal adjustment and would facilitate its emulation in other GCC countries. The GCC Unified Selective Excise Tax and the Unified Value Added Tax (VAT) agreements came into effect after ratification by the UAE on May 24, 2017. The remaining steps, which the authorities expect to complete soon, include finalizing the list of exemptions and zero rates; and adopting the Tax Transaction Law, VAT Law, and Excise Law.[6] The authorities were confident that the VAT would be implemented on January 1, 2018, as publicly announced. The overall revenue impact of the VAT tax is projected to reach 1.5 percent of GDP over the medium term. The UAE authorities expect to reach a political decision on the distribution of VAT revenues between the federal and Emirates governments soon; this decision could be part of a broader system of transfer rules in the context of fiscal federalism (the Selected Issues Paper).

- Under the current oil price baseline and assuming fiscal consolidation proceeds as projected, cumulative deficits could reach $89 billion over 2017–22 (Table 3.1). Deficit financing can continue to rely on tapping SWFs and international capital markets rather than withdrawal of domestic deposits. This would help avoid potential tightening of liquidity and crowding out of private sector activity, while diversifying sources of financing, depending on market conditions. Starting domestic sovereign debt issuance would facilitate development of a domestic debt market, providing the federal and Emirates governments with new funding sources and benchmarking the yield curve for corporate financing. Approval of the Public Debt Law and Trust Law would facilitate debt issuance at the federal level, including of sukuk.

11. The underlying goal is to adapt to the new oil market realities. The historical model based on the state's relying on oil revenues to provide generalized benefits and employment has been challenged, demanding sustained efforts to reform public finances and further diversify the economy. In the new environment of persistently lower oil revenues, more diversified sources of revenue could allow the state to focus on providing high-quality services efficiently and equitably, targeting social benefits to the most vulnerable, while creating an even playing field and vibrant environment for the diversified, job-creating private sector. The transformation has started and will take time. Further improvements in the efficiency of government and GRE spending could enhance diversification, education and health outcomes in line with the National Agenda's goals. Building on recent energy subsidy reforms, ensuring that energy prices (especially for gas) are in line with market prices, together with measures to alleviate the impact on the most vulnerable, could improve energy efficiency and support fiscal consolidation. Developing a privatization agenda, with a focus on non-strategic enterprises and supported by better transparency, would complement fiscal reforms and promote private investment.

12. A more comprehensive and transparent fiscal policy framework is needed to facilitate decision-making and foster credibility. The framework could reduce susceptibility to

[6] The GCC countries have agreed to set the VAT rate at 5 percent and the turnover threshold at $1 million. A list of zero-rated or exempted items has also been agreed at the GCC level.

oil cycles and align fiscal policy better with the goals of increasing diversification and productivity. Important progress has been made, especially at the federal level, where a medium-term framework for 2017–22 was approved last October and general government accounts are consolidated and published, albeit with a lag (the Selected Issues Paper). The authorities concurred with staff on the importance of continuing to build on the progress already made:

- *Strengthening budget management.* Regular publication of detailed annual budgets and fiscal outturns (as is done by the federal government) would improve the fiscal policy design, provide clarity on the fiscal strategies, and support market confidence. Making the budgets more comprehensive, clearly identifying transfers to and from GREs and the SWFs, is also important. The authorities noted that detailed budgets and outcomes are already published at the federal level and that Emirates governments are also making progress in this respect.

- *Building fiscal frameworks.* Formally adopting the multi-year frameworks (as is already done at the federal level) and integrating them with the annual budget process can set a direction for fiscal policy. Fiscal anchors and targets, which the authorities are already using to guide their projections, can be strengthened further, tailoring them to the specific circumstances of the Emirates governments and ensuring consistency and comprehensive coverage of liabilities (the Selected Issues Paper). The Emirates governments' frameworks can then be integrated into a consolidated framework for the entire country, helping align resource allocation with national development plans.

- *Enhancing coordination between governments and GREs.* The necessary review and vetting of GREs' investment plans could aim to strike a balance between giving GREs flexibility to make decisions while ensuring consistency of these decisions with fiscal and development goals. Continued efforts to improve monitoring and control of contingent liabilities of GREs would prevent an undue buildup of risks. The authorities explained that most GREs are financially independent from the government, most of their debt is used to finance investment and is collateralized by large assets. Monitoring needs to cover PPPs and liabilities of global subsidiaries and companies with less than 50 percent government ownership (the Selected Issues Paper).

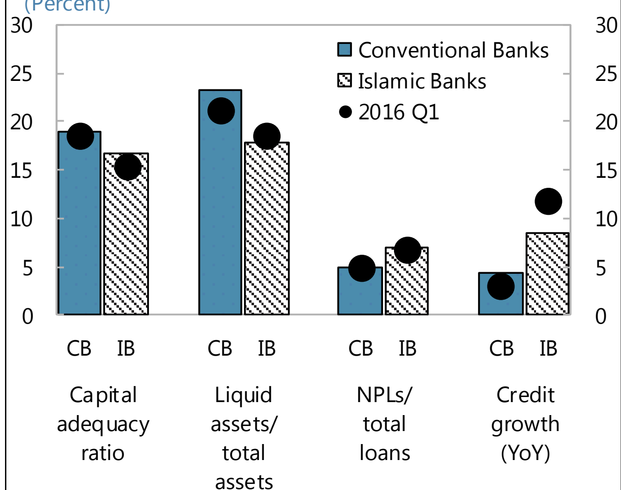
- *Improving cash management remains a priority, particularly in an environment of fiscal consolidation*. Supported by credible and binding budgets, Emirates governments could expand the coverage of their Treasury Single Accounts (TSA) and improve liquidity forecasting for entities outside the TSAs. Ongoing efforts to improve information-sharing on cash management among fiscal and monetary authorities, GREs, and SWFs could improve the predictability of financing flows, facilitate the calibration of liquidity buffers by SWFs and liquidity forecasting by the CBU. The Abu Dhabi authorities noted that a new fiscal law, which, among other things, regulates cash surpluses has recently been adopted.

13. More active liquidity management, as the CBU intends, together with the development of debt markets would promote healthy liquidity and credit conditions. The CBU is considering consolidating its operational framework with a view to keeping money market rates in line with those implied by the peg while introducing market-determined variable-priced certificate-of-deposit auctions (the Selected Issues Paper). In parallel, the recently introduced Basel III liquidity requirements are expected to incentivize banks to manage their liquidity more actively. The development of debt markets would provide banks with new dirham-denominated instruments to do so. The authorities concurred with staff on the importance of developing domestic debt market, noting that the draft Public Debt Law and Trust Law was already under consideration.

B. Strengthening External and Financial Resilience

14. The longstanding exchange rate peg has served the UAE well, most importantly by anchoring prices, and should be maintained. The peg is supported by comfortable external financial buffers (central bank reserves amounted to 107 percent of the Fund's reserve metric at end-2016; substantial additional external buffers are held by SWFs) and open and flexible labor markets. The external sustainability approach consistent with the permanent income model suggests that the external position was moderately weaker in 2016 than the level consistent with fundamentals and desirable policies (Annex III). A moderate negative current account gap is expected to close as desirable medium-term policy settings are reached (as the fiscal balance improves to the levels consistent with intergenerational equity). There have not been any recent changes to the system of exchange controls. The authorities reiterated their commitment to the peg and agreed that gradual fiscal adjustment was appropriate also in this context.

Selected Banking Indicators, 2017 Q1
(Percent)



Sources: National authorities; and IMF staff calculations.

15. Banks are adjusting to slower economic growth amid persistently lower oil prices. Banks remain sound and liquid, with stable and fully provisioned NPLs. However, loans to related parties and concentration risks remain high in some cases. While asset quality at Islamic banks is slightly weaker than at conventional banks, both are adequately capitalized. The CBU's recent stress tests[7] showed that, except for a few small and medium-sized banks, most of the 21 local banks considered in the exercise would keep capital above the 12 percent regulatory minimum in an adverse scenario. Two medium-sized banks had stressed Liquidity Coverage Ratio (LCR) slightly below 100 percent. As the economy gains momentum, credit growth is expected to accelerate, particularly to construction, hospitality, and tourism sectors in the run-up to Expo 2020. In this context,

[7] The adverse scenario assumed a recession in 2017 and an L-shaped slow recovery until 2019. The liquidity stress test scenario assumed 5–10 percent haircut on high-quality liquid assets and 5 percent run-off rate on stable deposits.

policymakers should continue to monitor lending standards and concentration risks, and strictly enforce the existing limits on lending to related or single borrowers. Although credit growth excluding GREs is subdued (below 5 percent year-on-year as of end-March 2017), it does not appear to be limiting diversification and economic growth and is expected to pick up in line with increased demand, especially for Expo 2020 projects. The authorities noted that differentiated loan-to-value and debt-to-income ratios, and requirements for minimum financing for developers put in place after the global financial crisis limit risk from exposures of banks to real estate.

16. The CBU plans to further upgrade the supervisory and regulatory framework for banks (Box 1). Staff welcomed the CBU's introduction of the Basel III capital adequacy standards in March 2017.[8] The authorities did not expect that any bank would need to raise additional capital to satisfy the new capital surcharges for systemically important banks. Implementation of the Basel III liquidity standards published in 2015 is ongoing. The LCR is being applied to the three largest banks at 80 percent, which is set to rise to 100 percent by 2019. The CBU is planning to develop additional guidance to banks on the implementation of liquidity regulations and strengthen offsite and onsite monitoring of liquidity requirements. To support the CBU's ongoing efforts, swift approval of the draft Central Bank and Banking Law is essential to enhance central bank independence, strengthen macroprudential framework, and bolster safety nets. The authorities noted that the draft law reflects best international practices and is being discussed within ministries.

17. Welcome progress has been made in strengthening the legal framework for the anti-money laundering and combatting of terrorism financing (AML/CFT) regime. Given the openness of the economy, the steady increase of nonresident deposits, and the UAE's geographic location, continued focus on measures to mitigate risks stemming from ML/TF is necessary. The authorities have recently launched a national risk assessment, an important step to improve the understanding of risks. Going forward, staff encouraged the authorities to continue improving their understanding of ML/TF risks, including those related to nonresident financial flows, to make further refinements to the identification of the beneficial owners of deposits and loans and improve entity transparency of companies created in the UAE, and to swiftly process the backlog of suspicious reports.

18. To avoid the perception of AML/CFT risks that could prompt correspondent banks to discontinue relations, several domestic banks had preemptively stopped providing banking services to some charities, exchange houses, and remittance offices. The CBU initiated corrective measures to improve the compliance of the affected institutions to AML/CFT requirements to prevent disruption of those sectors' activities or diversion of flows to the informal sector. It has also been actively participating in international forums aimed at clarifying supervisor requirements in home jurisdictions of correspondent banks, maintaining open

[8] The new capital framework brings the minimum Tier 1 capital requirement to 8.5 percent and the total capital to 10.5 percent while introducing a capital conservation buffer at 2.5 percent of the risk-weighted assets, surcharges for systemically important banks and a countercyclical buffer. The latter is currently set at zero.

channels of communication between domestic and foreign banks and regulators. It also requires pre-notification from banks before they close accounts held by exchange houses and remittances. Staff encouraged the CBU to maintain these efforts—in coordination with relevant agencies—to ensure that financial inclusion continues and that any migration of remittances to informal channels is minimized.

Box 1. Strengthening the Bank Regulatory and Supervisory Framework

The CBU is upgrading its regulatory and supervisory framework to align it with the best international practices. The reform program involves five pillars:

I. New **corporate governance regulations** and standards will aim to strengthen board oversight in banks, introduce independent directors on bank boards, and address conflicts of interests, among other things. These regulations and standards will be issued for consultation in mid-2017 and are expected to be adopted in early 2018.

II. Draft **risk management regulations** and standards are currently under final internal review before publication. They will cover issues in overall risk management, operational risk, market risk, interest rate risk, and country and transfer risk. The CBU plans to issue the regulations and standards in 2017.

III. New regulations are being drafted on **compliance**, outsourcing, internal audit, internal controls, financial reporting, major acquisitions, and significant ownership transfer. These regulations are planned to be issued during 2017–18.

IV. After Basel III capital and liquidity requirements are implemented, the CBU plans to develop a framework for **bank resolution**. The authorities would like to tailor the framework to the specific structure of the UAE's banking system where systemic banks are owned by Emirates governments. The framework is expected to cover recovery and resolution planning, supervisory colleges, and depositor protection.

V. The **market development** pillar involves developing regulations to address new financial products and services. Digital payments regulation was issued in December 2016 to address new ways of payments, e.g., digital wallet and other stored value facilities. Draft regulation on crowd-funding aims to address this fintech mode of financing new business initiatives. New regulation on nonbank financial institutions will specify areas where such institutions can operate to add value to the existing banking system.

These new regulations are expected to strengthen the supervisory and regulatory framework and facilitate the CBU's move towards risk-based supervision. It is important to move ahead with their implementation while providing guidance as needed. Together with the recently introduced Basel III capital and liquidity regulations and the draft Central Bank Law, which is currently under consideration, the regulatory and supervisory reforms are expected to enhance resilience of the financial system in the UAE.

C. Improving Efficiency and Diversifying Growth

19. As part of the adjustment to lower oil prices, the authorities are continuing to take steps to diversify the economy and strengthen its productivity and competitiveness. The UAE already scores high on global indicators for the ease of doing business and competitiveness (Figure 6). To further enhance the business environment, a new bankruptcy law was adopted last December. The authorities have also intensified their efforts towards a leaner government by merging ministries, outsourcing the provision of some services, and expanding online services. They have established an Innovation Fund, worth AED 2 billion ($545 million), to provide funding to entrepreneurs at subsidized rates and guarantee them access to bank loans. They are also enhancing capital market regulations, to facilitate issuance and trading of conventional and Islamic instruments and improve firms' access to market financing. Due to these improvements, the UAE's rankings moved up by eight places in the World Bank's Doing Business Survey and by one place in the World Economic Forum's Global Competitiveness Index (Figure 6).

20. Structural reforms aimed at raising productivity, improving competitiveness, trade openness and further diversifying the economy should be pursued.[9] To achieve the authorities' goal of transforming the UAE into a knowledge-driven economy, the authorities and staff considered that reforms need to continue, focusing on four priority areas:

- ***Competition***. Reducing the footprint of the government in the economy by ensuring that GREs are subject to competition laws and regulations, and privatizing nonstrategic GREs could raise productivity. Adopting the draft law liberalizing rules for foreign investment outside the free zones could bring in new capital and spur diversification.[10] It would also increase liquidity in the stock markets, enabling local companies to raise capital more easily and facilitating privatization of nonstrategic GREs. In addition, reducing the cost of doing business would further improve competitiveness. Improved coverage by credit bureaus and collateral registries is a welcome step towards improving access of small and medium-sized enterprises (SMEs) to finance. Effective implementation of the new bankruptcy law could further improve access to credit while safeguarding banks' balance sheets.

- ***Energy efficiency***. Given high and rising energy consumption, in early 2017 the authorities announced 2050 Energy Plan, which targets an energy mix that combines renewable, nuclear and clean energy resources to meet the country's requirements and environmental goals.[11] The UAE aims to increase the contribution of non-hydrocarbon energy in the total energy mix to 50 percent and increase consumption efficiency by 40 percent by 2050, including through use of innovative technologies and urban planning strategies (Annex IV).

- ***Employment***. Controlling the size and wages of the civil service and promoting entrepreneurship would increase private sector employment and productivity.[12] While the gender gap is the second lowest in the GCC, it is still below global comparators. Building on past success, the authorities reiterated their commitment to encourage female labor force participation, with a view to expanding the pool of talent in the economy and policymaking.

---

[9] Mitra, P., Hosny, A., Abajyan G., and Fischer M. (2015) "Estimating Potential Growth in the Middle East and Central Asia," IMF Working Paper No. 15/62 (Washington, D.C.: International Monetary Fund.

[10] At present, foreign ownership is not allowed to exceed 49 percent of total assets of a company.

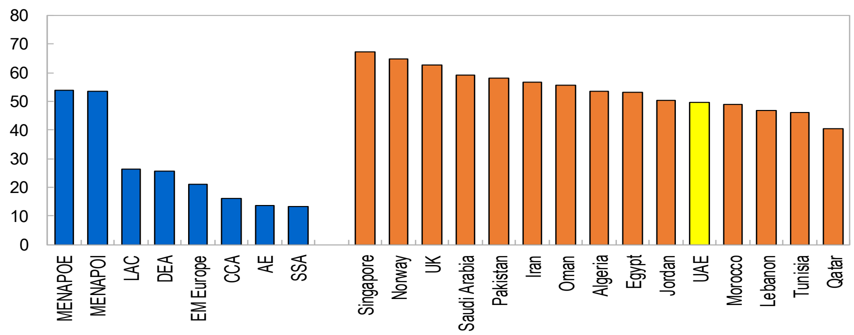
[11] The UAE authorities have eliminated pre-tax petroleum subsidies. See International Monetary Fund, 2017, "If Not Now, When? Energy Price Reform in Arab Countries" Paper presented at the 2017 Annual Meeting of the Council of Arab Finance Ministers, Rabat, April.

[12] The average annual income of private sector employees is significantly lower than that of public sector employees. See Tong, Q., 2010, "Wage Structure in the United Arab Emirates," Institute for Social and Economic Research, Zayed University, UAE.

- ***Synergy***. The UAE would benefit from further cooperation and coordination among emirates to create cost, revenue, and market synergies and complementarities in investments. The success of Emirates Global Aluminum illustrates the potential benefits. The company, which was created in 2014 by merging Dubai Aluminum and Emirates Aluminum, has become one of the world's largest aluminum producers, benefiting from economies of scale and scope.

Gender Gaps in Labor Force Participation, 2015[1/]

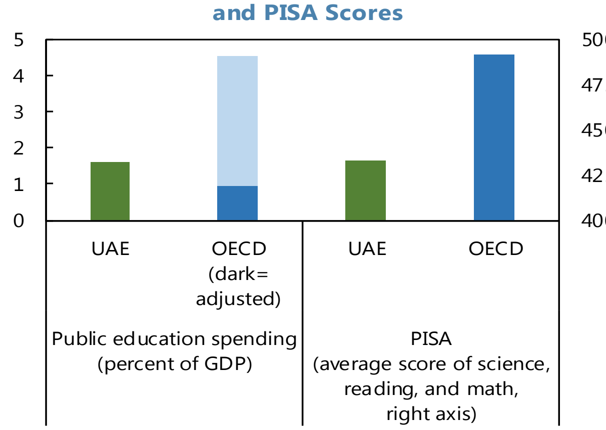
(Percent of population ages 15+, group averages weighted by GDP PPP)



Sources: International Labour Organization, Key Indicators of the Labour Market database; and IMF staff estimates.
[1]Defined as male less female labor force particpation rate.
Note: AE = Advanced Economies; DEA = Developing and Emerging Asia; EM = Emerging Markets; LAC =

21. Increasing the efficiency of public education and healthcare spending while ensuring equitable outcomes is important for creating a more diversified, productive and inclusive economy (the Selected Issues Paper). The National Agenda sets ambitious targets across the gamut of indicators, including raising student performance and teacher quality, reducing the prevalence of non-communicable diseases and raising the number of healthcare professionals.

Public Education Spending and PISA Scores



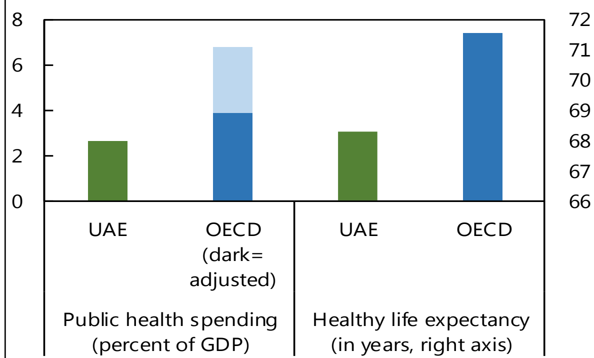
Sources: Ministry of Education, OECD, UN, and IMF staff calculations.

Note: For OECD expenditure, the dark bar accounts for differences in the role of the private sector in education (in the UAE 80 percent of primary and secondary students are enrolled in private schools, compared to 31percent in the OECD) and demographics (the school-age population is 17 percent of the working age population compared to 29 percent in the OECD).

- *On education*, the relatively high level of spending—per student expenditure in public schools in the UAE is about twice as much as in the average OECD economy—is not yet reflected in high quality outcomes. The authorities acknowledged that there is scope to improve performance, although the scores might reflect factors other than the education system (i.e., the level of education of parents) which might take time to overcome. The ongoing initiatives could bridge some of the performance gap without raising costs, including by implementing new quality standards for teachers and schools, developing curriculums, introducing a common framework for school evaluation, and enhancing the focus on STEM and innovation. The establishment of a national exam is expected to help monitor performance across different jurisdictions and systems.

- *On healthcare*, meeting the Agenda's goals is likely to require more public resources, as healthcare expenditure as a share of GDP and per capita is on the low end compared to the OECD countries, even after adjusting for demographic differences. Given fiscal constraints, this expansion could be gradual and supported by improvements in spending efficiency. Healthcare budgets should be protected during fiscal consolidation. In the short term, efficiency gains could come from ongoing efforts towards greater integration across the different emirates' models. In the medium term, enhancing monitoring and oversight may unlock the potential for the universal insurance model at an affordable cost.

Public Health Spending and Healthy Life Expectancy



Sources: WHO, OECD, UN, and IMF staff calculations.

Note: For OECD expenditure, the dark bar accounts for differences in demographics (in the UAE, the population age 65 and older is 1 percent of the population compared to 16 percent in the OECD). Healthy life expectancy applies disability weights to health states to compute the equivalent number of years of life expected to be lived in full health.

D. Upgrading Statistics

22. Bringing economic statistics up to par with the UAE's high level of economic development and sophistication would facilitate policy analysis and decision-making and enhance credibility. The local and federal authorities have made progress in strengthening data collection, particularly in the monetary statistics area (Statistical Annex). Stepped up efforts to fill the remaining gaps in data on the national accounts, fiscal, labor, and external sectors (including balance of payments and international investment position (IIP)) are underway. Priorities are to further improve fiscal statistics and start compiling quarterly GDP for the country as a whole[13] and the IIP for the government. Implementation of the Enhanced General Data Dissemination System could provide a roadmap for action plans to improve statistics and facilitate dissemination of economic and financial data through a National Summary Data page. Fund technical assistance would continue to support the authorities' efforts. Success would also require increasing statistical agencies' resources, enhancing capacity building, continuing progress in information-sharing among local and federal statistical agencies, and agreeing on consistent methodologies.

[13] Quarterly GDP is already being produced by Abu Dhabi and Dubai, although with different base years than the year used by the federal government for the annual data.

STAFF APPRAISAL

23. The economy is weathering the post-2014 oil shock well. With lower oil revenues, fiscal and external positions weakened, financial conditions tightened, and growth slowed. The weaker economy elevated risks of bank loan delinquency, requiring higher provisioning. Yet the UAE's financial buffers, safe-haven status, sound banks, and diversified and business-friendly economy are helping it cope with the shock. Growth is projected to recover over the next few years, as the pace of the necessary fiscal consolidation eases, global trade regains momentum, and investment, including for Expo 2020, accelerates. This outlook is subject to downside risks, stemming mainly from a further sustained decline in oil prices, tighter financial conditions, a rise in protectionism and an intensification of regional conflicts.

24. The key policy goal is to foster economic adjustment to the new oil market realities. Although the fiscal position remains sustainable, an improvement in the budget balance is needed to ensure that an equitable share of the oil income is saved for future generations. Ample fiscal space allows deficits to decline gradually while mitigating the adverse impact on the economy and the financial sector. Following the rapid pace of fiscal adjustment in 2015–16, the projected pause in consolidation this year is appropriate as it would reduce spare capacity. It needs to be followed by a gradual but steady tightening over the medium term as growth strengthens. The long-standing peg to the U.S. dollar remains appropriate. A moderate current account gap is expected to close over time as fiscal savings rise to the level consistent with intergenerational equity. The authorities' efforts to make the economy more productive are key to alleviating the impact of the oil shock on medium-term growth prospects.

25. To foster the adjustment, especially given downside risks, the momentum in fiscal reforms needs to be sustained and coordinated with structural reforms. Complementing recent significant subsidy reforms, a timely introduction of the VAT and excises would be another major achievement, to diversify revenues away from oil. In tandem, continual efforts to contain growth of public spending and improve its efficiency are needed to generate the necessary fiscal savings while continuing to use public investment to diversify the economy and expand its productive capacity, consistent with the Vision 2021 National Agenda. Importantly, improving the efficiency of public education spending, in conjunction with education reforms, and gradually raising healthcare spending would help nurture talent and foster a more productive and inclusive economy. Controlling the size and wages of the civil service while promoting entrepreneurship and female participation would improve private sector employment, including for women.

26. To ensure credibility, fiscal adjustment should be accompanied by strengthening the medium-term policy framework and improving transparency. Adopting and publishing multi-year plans and integrating them with the annual budget process would clarify the direction for fiscal policy. Fiscal anchors and targets can be strengthened further to anchor fiscal sustainability and intergenerational equity. These efforts need to be supported by enhanced coordination between governments and GREs regarding their investment and borrowing plans. Strengthened control of contingent liabilities arising from GRE and PPP investment could prevent a buildup of fiscal risks. Close coordination between governments, GREs, SWFs, and the CBU is necessary to facilitate cash management and liquidity forecasting. Looking ahead, stepped up efforts to develop the domestic debt market, together with more active liquidity management by the CBU, would expand financing options while promoting healthy credit conditions.

27. Ongoing initiatives to upgrade the supervisory and regulatory framework for the financial sector are welcome and need to continue. The CBU's introducing and implementing the Basel III capital and liquidity standards, risk management regulations, corporate governance standards, and new financial products and services are key to strengthen financial resilience while addressing market development needs. Close monitoring of financial vulnerabilities, including currency mismatches, foreign exchange and concentration risk, and prompt undertaking of the necessary supervisory actions are to essential, especially since the macro-financial impact of the oil shock is still unfolding amid downside risks. The authorities need to sustain welcome progress in strengthening the AML/CFT regime, especially in light of risks related to money transfer operators, which facilitate remittance flows from the large expatriate community in the UAE to other countries.

28. Focused, multi-pronged initiatives to raise productivity and diversify the economy would improve medium-term economic prospects. The authorities have set clear goals for fostering diversified, knowledge-based growth. Achieving them requires focused policy measures that could encourage synergies in investment between emirates, promote foreign investment outside free zones, and foster competition, including for GREs. Following the adoption of the new bankruptcy law, its effective implementation, along with steps to ease access of SMEs to finance, could boost private sector growth. Building on recent energy subsidy reforms, ongoing initiatives to increase energy efficiency are key for raising productivity.

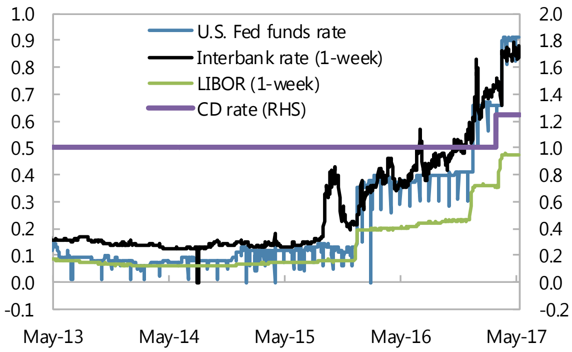
29. Amid ongoing economic adjustment, continued improvements in statistics are critical for enhancing policy analysis and decision-making. Multifarious efforts by local and federal statistical agencies to improve the availability, quality, and timeliness of economic statistics are welcome. Improved coordination among these agencies as well as continued technical assistance would be needed to address the remaining wide-ranging gaps. The Fund's e-GDDS standard could provide a useful roadmap for such efforts. Compiling quarterly GDP and IIP for the government are immediate priorities in this regard.

30. It is recommended that the next Article IV consultation takes place on the standard 12-month cycle.

Figure 1. Latest Economic Developments

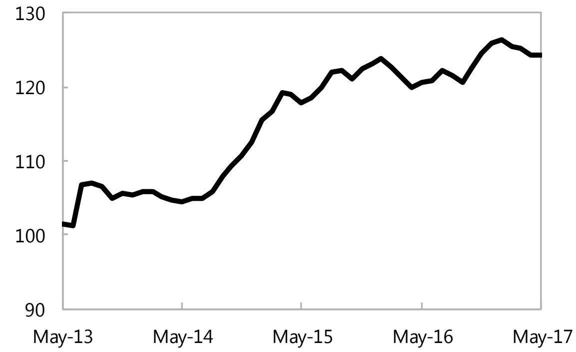
The domestic rates have followed increases in the U.S. Federal Reserve rates …

Policy Rates, May 2013–May 2017
(Percent)



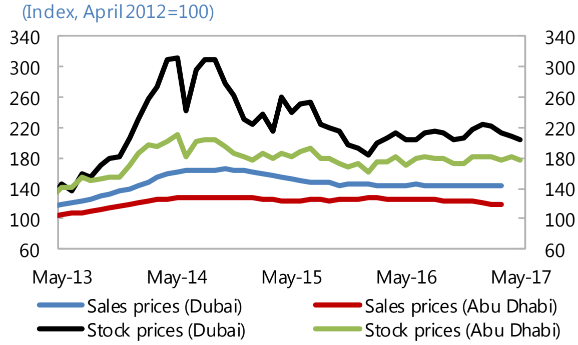
…and Dirham appreciated in tandem with the stronger U.S. dollar.

Real Effective Exchange Rate, May 2013–May 2017
(Index; 2005=100)



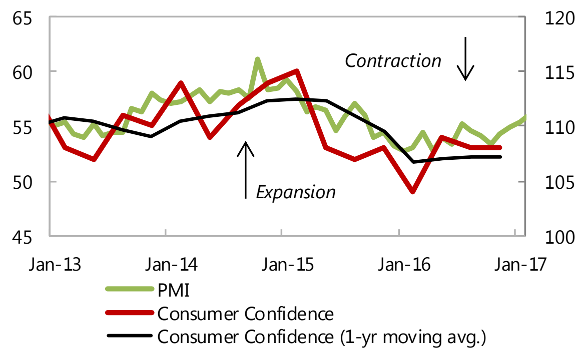
Asset prices have recovered recently.

Residential Real Estate and Stock Market Index, May 2013–May 2017
(Index, April 2012=100)



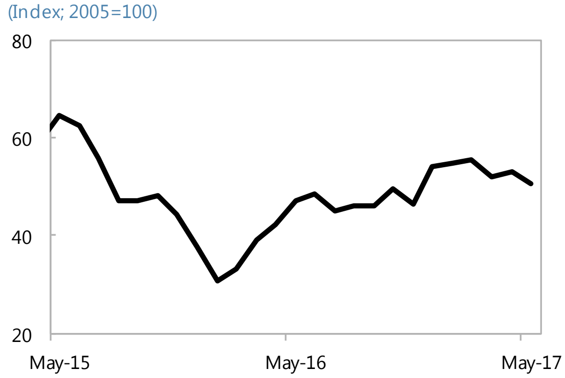
Indicators for economic activity and confidence improved, …

Activity and Confidence Indexes, January 2013–January 2017
(Index)



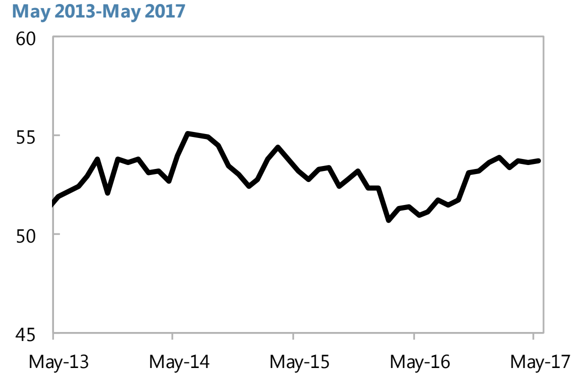
…as oil prices firmed…

Oil Prices, May 2015–May 2017
(Index; 2005=100)



…and global economic indicators improved.

Global Purchasing Manager's Index (PMI), May 2013-May 2017

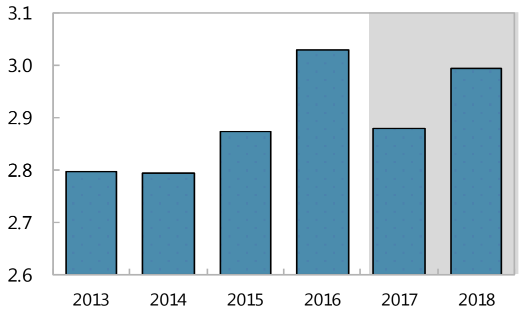


Sources: Country authorities; ENDB; Haver; HSBC; Reidin; and IMF staff estimates.

Figure 2. Real Sector Developments and Outlook

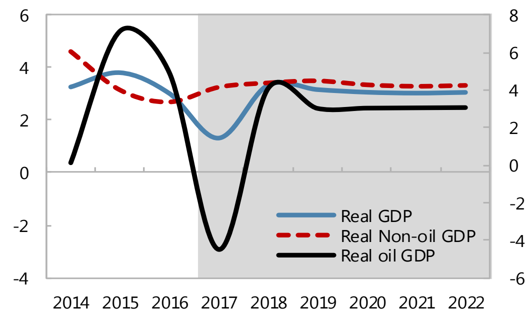
GDP growth will decline in 2017 due to oil output cuts...

Crude Oil Production, 2013–18
(Millions of barrels per day)



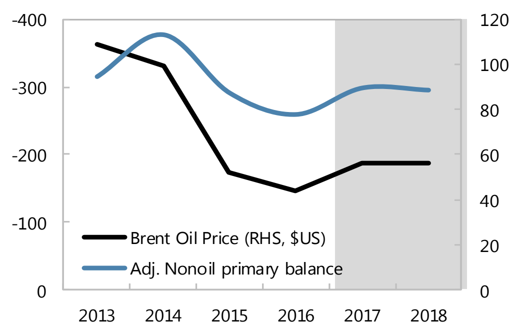
...yet nonoil activity will strengthen,...

Real GDP Growth, 2014–22
(Annual percent change)



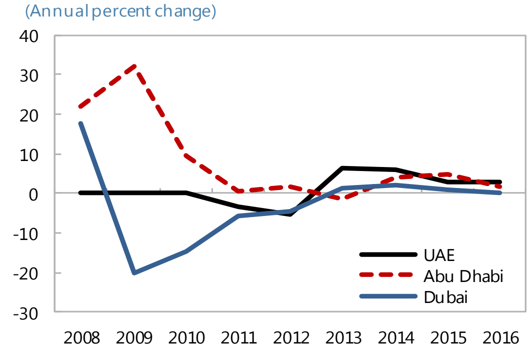
...reflecting reduced fiscal drag...

Adjusted Nonoil Primary Balance, 2013–18
(Billions of Dirham)



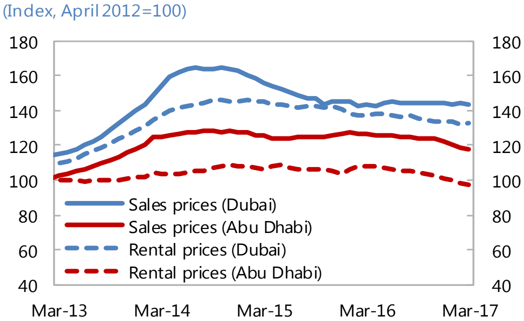
...and a pickup in contruction activity ahead of Dubai Expo 2020.

Construction Sector Real Gross Value Added Growth, 2008–16
(Annual percent change)



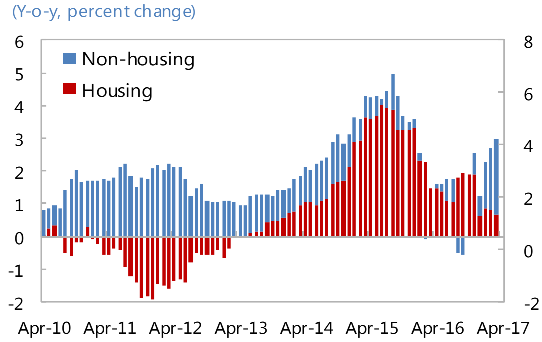
Inflation fell in 2016, reflecting subdued domestic demand and declining house prices,...

Residential Real Estate Sales and Rental Price Index, March 2013–March 2017
(Index, April 2012=100)



...but is expected to pick up in 2017 owing to utility price adjustments and higher imported inflation.

Contributions to CPI Inflation, April 2010–April 2017
(Y-o-y, percent change)

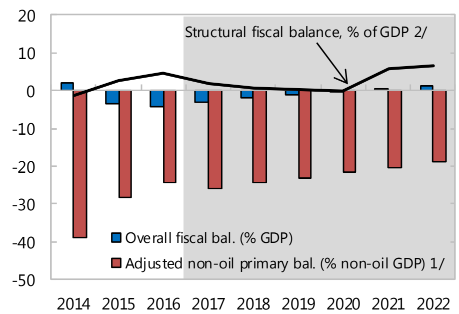


Sources: Country authorities; Haver; Markit; HSBC; Reidin; and IMF staff estimates.

Figure 3. Fiscal Developments and Outlook

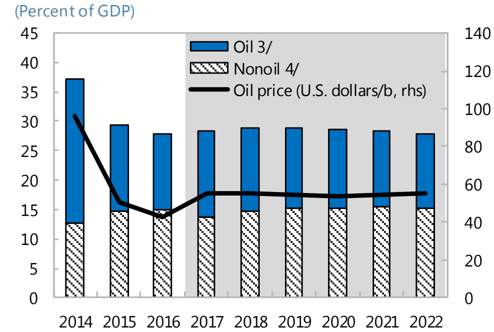
Despite fiscal consolidation, the overall fiscal balance deteriorated in 2016,…

Fiscal Stance, 2014–22



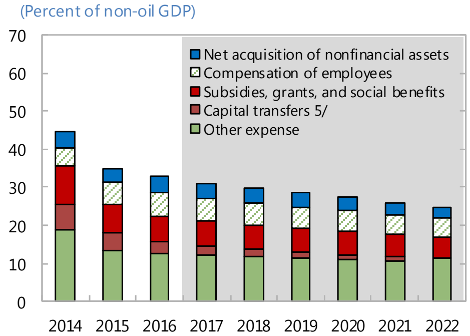
…as oil-related revenues declined due to lower oil prices.

General Government Revenue, 2014–22
(Percent of GDP)



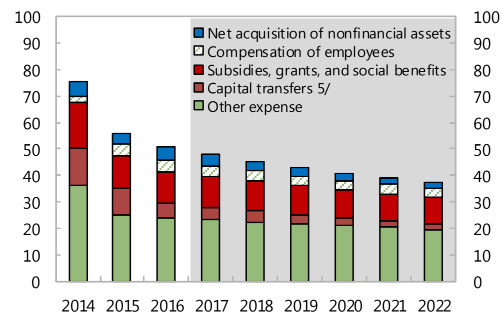
Government spending decreased…

Consolidated General Government Expenditure, 2014–22
(Percent of non-oil GDP)



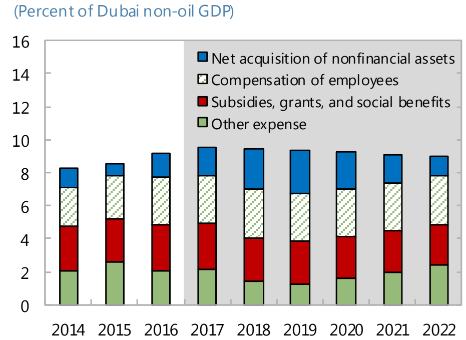
…due to government expense cuts in Abu Dhabi.

Abu Dhabi Government Expenditure, 2014–22
(Percent of Abu Dhabi non-oil GDP)



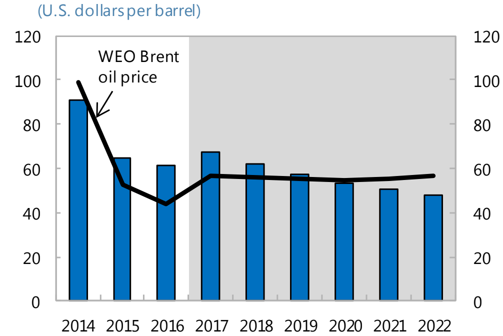
Government expense remained broadly stable in Dubai.

Dubai Government Expenditure, 2014–22
(Percent of Dubai non-oil GDP)



The gap between breakeven and Brent oil prices is expected to close in 2020.

Fiscal Breakeven Oil Prices, 2014–22
(U.S. dollars per barrel)

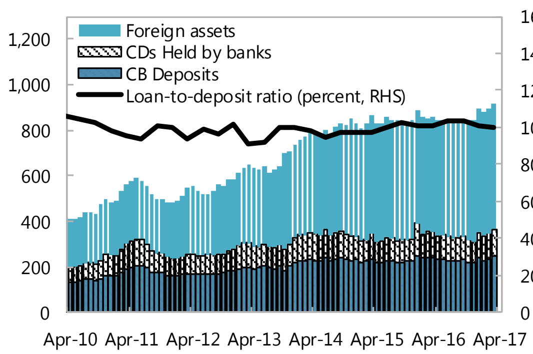


Sources: Country authorities; and IMF staff calculations.
1/ Excludes staff estimates of SWF returns (investment income).
2/ A nine-year moving average of oil prices (prices of the past five years and projected prices for the current and the next three years).
3/ Includes staff estimates of profit transfers from the national oil company to SWF.
4/ Includes staff estimates of SWF returns (investment income).
5/ Abu Dhabi loans and equity to finance development projects.

Figure 4. Monetary and Financial Developments

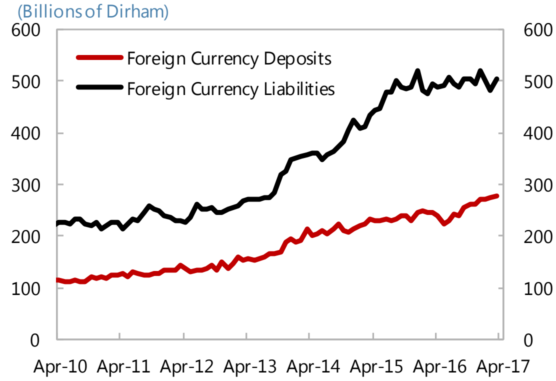
Banking sector liquidity continues to be comfortable…

Bank Liquidity, 2010–17
(Billions of Dirham)



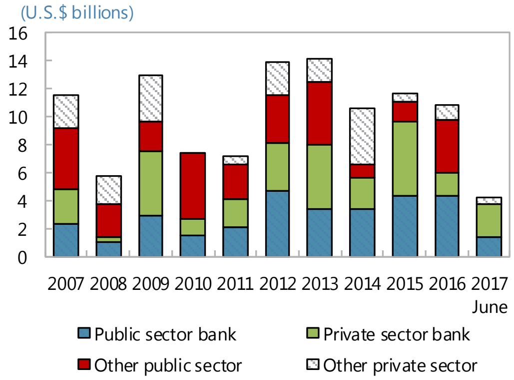
…driven by an increase in foreign-currency denominated liabilities.

Bank Liabilities, 2010–17
(Billions of Dirham)



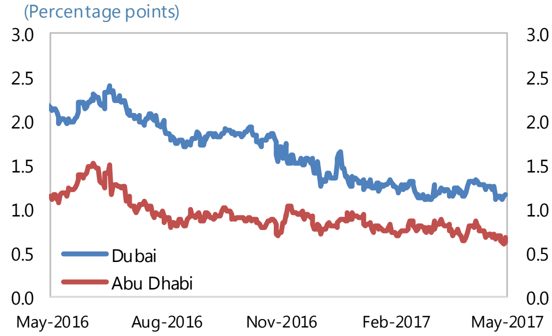
Though total debt issuance has declined, debt issuance by the public sector has increased in 2016…

Debt Issuance by Borrower Type, 2007–June 2017
(U.S.$ billions)



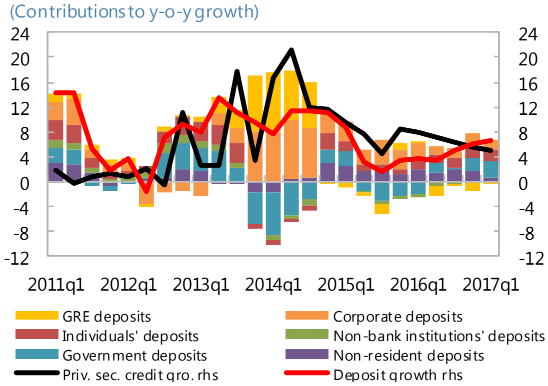
…while yields spreads tightened.

10-Year Bond Spreads over Corresponding U.S. T-bonds
(Percentage points)



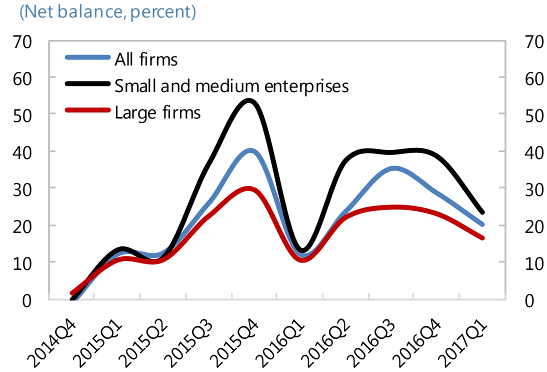
The gap between credit and deposit growth has narrowed…

Bank Deposits and Credit to the Priv. Sector, 2011Q1–2017Q1
(Contributions to y-o-y growth)



..while credit risk perceptions improved, following increase in oil prices.

Change in Credit Standards, 2016
(Net balance, percent)

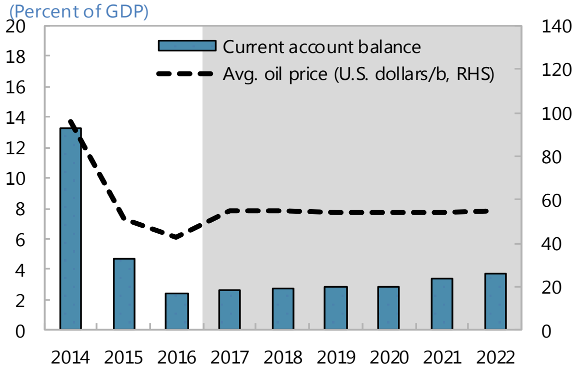


Sources: Country authorities; Haver; Markit; Bloomberg; Dealogic; and IMF staff calculations.

Figure 5. External Sector Developments and Outlook

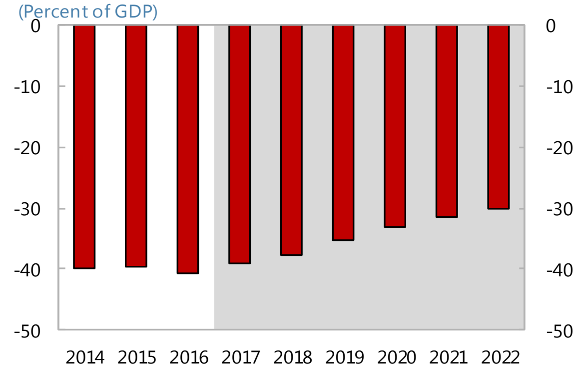
The current account surplus declined further in 2016.

Current Account Balance, 2014–22
(Percent of GDP)



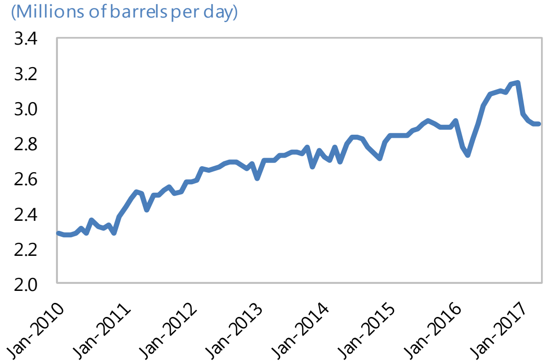
Nonoil external deficits remain large.

Balance on Non-Oil Goods and Services, 2014–22
(Percent of GDP)



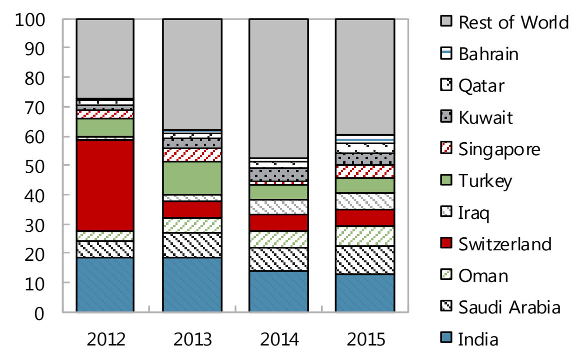
Oil exports increased in 2016 as domestic consumption declined and production remained robust.

IEA Oil Production, January 2010–April 2017
(Millions of barrels per day)



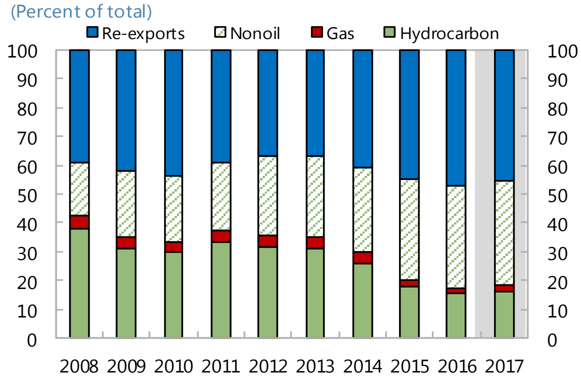
The diversification of export destinations is underway…

Non-Oil Exports: Top 10 Partners, 2012–15
(Share of Total Nonoil Exports)



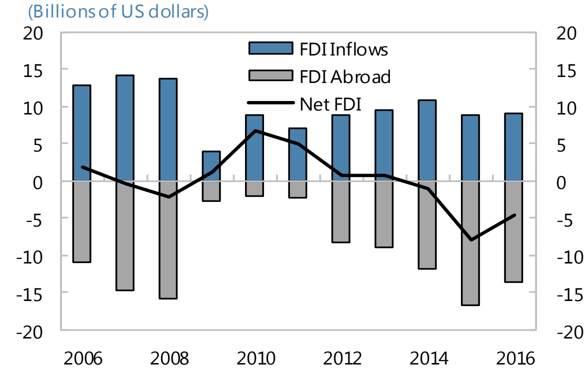
…in tandem with the diversification of export products.

Exports Composition, 2008–17
(Percent of total)



Foreign direct investment has increased steadily.

Foreign Direct Investment, 2006–16
(Billions of US dollars)

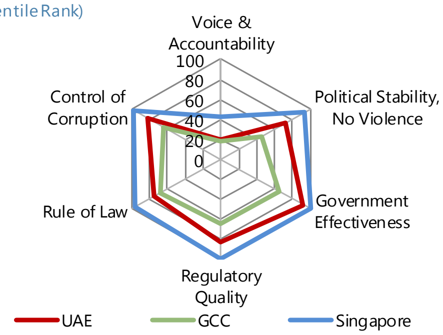


Sources: Country authorities; Haver; IEA; NBS; and IMF staff estimates.

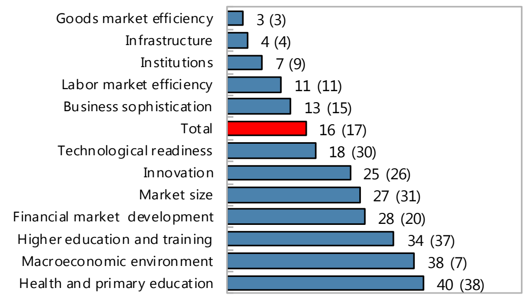
Figure 6. Business Environment and Governance Indicators

UAE ranks favorably on a number of governance and competitiveness indicators, yet there is scope for improvement.

World Governance Indicators, 2015
(Percentile Rank)

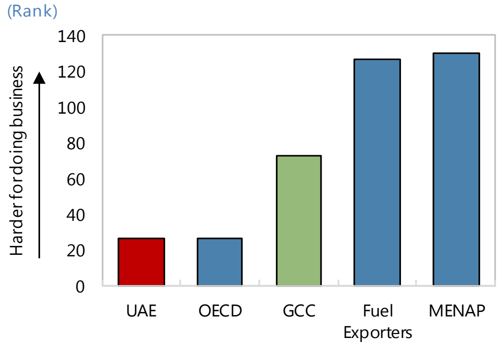


Global Competitiveness Index Ranks by Category, 2016–17
(Rank, previous rank in parentheses)

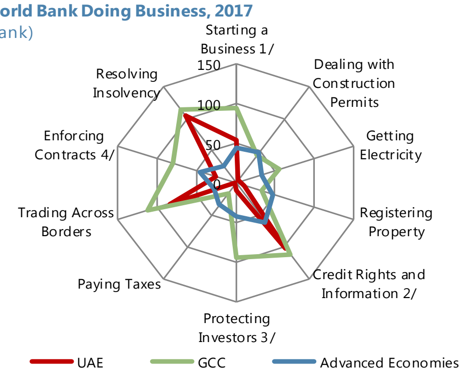


Further progress in contract enforcement, and registering property rights would be particularly helpful.

World Bank Doing Business, 2017
(Rank)

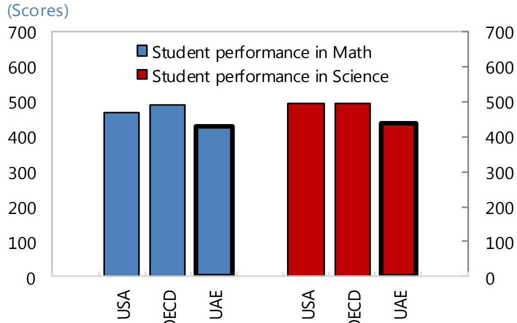


World Bank Doing Business, 2017
(Rank)

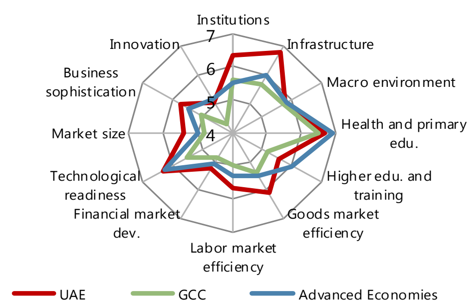


Education and innovation policies need to be further improved.

PISA Student Performance Scores in Math and Science, 2015
(Scores)



Global Competitiveness Index, 2016-17
(Value, 1=minimum, 7=maximum)



Sources: Global Competitiveness Report (2016–17); World Bank Doing Business Report (2017), World Governance Indicators (2016 Update); World Development Indicators (2013); Nielsen; PISA (2016), OECD; and IMF staff estimates.

1/ Starting a business encompasses the procedures, time, and cost (including minimum capital requirement) required for an entrepreneur to start and operate a business.

2/ Getting credit is a combination of (i) the legal rights of borrowers and lenders that facilitate lending; and (ii) the coverage, scope, and accessibility of credit information via public credit registries and private credit bureaus.

3/ Protecting investors measures the strength of minority shareholder protection against directors' misuse of corporate assets for personal gain.

4/ Enforcing contracts measures the procedures, time, and cost involved in resolving a standardized commercial lawsuit between domestic businesses through the local first-instance court.

Table 1. United Arab Emirates: Selected Macroeconomic Indicators, 2014–22

(Quota: SDR 752.5 million as of March 2016)
(Population: 9.9 million, nationals: 1 million)
(Per capita GDP-2016: $37,678; poverty rate: n.a.; unemployment rate: 4.2% (2009))

	2014	2015	Est. 2016	Proj. 2017	Proj. 2018	Proj. 2019	Proj. 2020	Proj. 2021	Proj. 2022
Oil sector									
Exports of oil (incl. oil products and gas) (in billions of U.S. dollars)	101.9	61.5	50.9	57.5	60.7	61.9	64.0	66.8	70.3
Average crude oil export price (in U.S. dollar per barrel)	98.9	52.4	44.0	52.9	53.1	52.8	53.0	53.8	55.0
Crude oil production (in millions of barrels per day)	2.8	2.9	3.0	2.9	3.0	3.1	3.2	3.3	3.4
			(Annual percent change, unless otherwise indicated)						
Output and prices									
Nominal GDP (in billions of UAE dirhams)	1,481	1,315	1,281	1,399	1,481	1,559	1,641	1,730	1,824
Nominal GDP (in billions of U.S. dollars)	403	358	349	381	403	424	447	471	497
Real GDP	3.3	3.8	3.0	1.3	3.4	3.2	3.1	3.1	3.1
Real oil GDP	0.4	5.4	3.8	-2.9	3.2	2.4	2.5	2.5	2.5
Real nonoil GDP	4.6	3.2	2.7	3.3	3.4	3.5	3.4	3.3	3.3
CPI inflation (average)	2.3	4.1	1.8	2.2	2.9	2.5	2.4	2.3	2.1
			(Percent of GDP, unless otherwise indicated)						
Investment and saving									
Gross domestic investment	24.0	28.4	26.9	26.9	26.8	26.8	26.8	26.6	26.5
Total fixed capital formation	22.8	27.0	25.4	25.5	25.5	25.6	25.6	25.5	25.5
Public	9.1	11.1	10.1	9.0	8.5	7.9	7.1	6.4	5.7
Private	13.6	15.9	15.3	16.5	17.1	17.7	18.5	19.1	19.7
Gross national saving	38.8	29.1	29.3	29.5	29.6	29.6	29.7	30.0	30.3
Public	9.0	3.0	1.6	2.1	3.1	3.6	4.1	4.2	4.4
Private	29.7	26.1	27.7	27.4	26.5	26.0	25.6	25.8	25.9
Public finances									
Revenue	35.0	29.0	28.3	27.1	27.4	27.3	27.1	26.6	26.0
Taxes	18.9	12.5	8.9	9.3	9.9	9.8	9.7	9.7	9.7
Other revenue 1/	15.8	16.2	19.1	17.5	17.2	17.3	17.1	16.5	16.1
Expenditures	33.1	32.4	32.6	30.3	29.3	28.3	27.2	25.9	24.7
Expense 2/	30.4	29.7	29.1	27.0	26.0	25.1	24.3	23.4	22.5
Net acquisition of nonfinancial assets	2.7	2.7	3.5	3.2	3.3	3.2	2.9	2.5	2.1
Net lending(+)/borrowing(-) (Revenue minus expenditures)	1.9	-3.4	-4.3	-3.1	-1.9	-1.0	-0.1	0.6	1.3
Adjusted nonoil primary balance 3/	-37.5	-27.8	-21.8	-22.4	-20.8	-19.8	-18.6	-17.4	-16.4
Gross general government debt	14.2	17.1	20.2	19.6	19.1	18.8	18.5	18.1	17.5
Net of government deposits in the banking system	-1.8	3.9	5.2	5.2	5.3	5.0	4.9	4.3	3.6
			(Annual percent change)						
Monetary sector									
Net foreign assets	16.7	-12.4	5.3	-3.4	-1.8	-0.9	0.1	4.2	7.7
Net domestic assets	5.4	11.7	2.7	6.2	11.3	8.9	6.8	7.3	6.5
Credit to private sector	11.5	8.4	5.8	8.4	7.2	6.8	6.6	6.5	6.3
Broad money	7.9	5.5	3.3	4.2	8.8	7.2	5.8	6.9	6.8
			(Billions of U.S. dollars, unless otherwise indicated)						
External sector									
Exports and re-exports of goods, of which:	343	300	292	312	328	337	348	363	381
Oil	102	61	51	57	61	62	64	67	70
Nonoil, excluding re-exports	101	104	103	112	122	130	139	149	160
Imports of goods	235	224	227	241	254	260	267	278	291
Current account balance	53.6	16.7	8.4	10.0	11.2	12.1	12.9	15.9	18.7
Current account balance (in percent of GDP)	13.3	4.7	2.4	2.6	2.8	2.9	2.9	3.4	3.8
External debt (in percent of GDP)	48.2	62.9	66.2	61.2	58.5	56.3	54.2	52.0	50.0
Gross official reserves 4/	78.5	94.0	85.4	80.7	79.5	78.9	79.1	82.0	87.5
In months of next year's imports of goods & services, net of re-exports	5.4	6.5	5.3	4.7	4.5	4.2	4.0	4.0	4.0
Memorandum items:									
Local currency per U.S. dollar (period average)	3.67	3.67	3.67	..	..	..	..	..	..
Nominal effective exchange rate (2010 = 100)	110.7	122.1	125.2	..	..	..	..	..	..
Real effective exchange rate (2010 = 100)	96.8	108.5	110.6	..	..	..	..	..	..

Sources: Country authorities; and IMF staff estimates and projections.

1/ Includes staff estimates of profit transfers from the national oil company to SWF and SWF returns (investment income).

2/ Includes loans and equity to finance development projects.

3/ In percent of nonoil GDP. Excludes staff estimates of SWF investment income.

4/ Excludes staff estimates of foreign assets of sovereign wealth funds.

Table 2. United Arab Emirates: Balance of Payments, 2014–22
(Billions of U.S. dollars)

	2014	2015	Est. 2016	Proj. 2017	Proj. 2018	Proj. 2019	Proj. 2020	Proj. 2021	Proj. 2022
	(Billions of U.S. dollars, unless otherwise specified)								
Current account balance	53.6	16.7	8.4	10.0	11.2	12.1	12.9	15.9	18.7
(In percent of GDP)	13.3	4.7	2.4	2.6	2.8	2.9	2.9	3.4	3.8
Trade balance	108.4	76.6	64.9	70.5	74.5	77.3	80.3	85.4	90.4
Exports	343.1	300.5	291.5	311.5	328.3	337.0	347.7	363.3	381.5
Oil and oil products	88.9	53.8	45.6	50.6	53.6	54.7	56.6	59.2	62.3
Natural gas	13.0	7.7	5.3	6.9	7.1	7.2	7.4	7.6	8.0
Nonoil	100.7	104.2	103.5	111.8	121.5	130.1	138.9	149.0	159.8
Re-exports	140.4	134.8	137.2	142.3	146.1	145.0	144.8	147.5	151.4
Imports (f.o.b.)	-234.6	-223.9	-226.6	-241.0	-253.8	-259.7	-267.3	-277.9	-291.1
Imports by emirates	-148.2	-144.7	-149.2	-160.4	-168.6	-177.0	-188.2	-193.0	-199.4
Free zones	-80.5	-75.1	-74.6	-74.7	-78.8	-75.8	-71.8	-77.0	-83.3
Natural gas	-5.9	-4.1	-2.8	-5.9	-6.4	-6.9	-7.3	-7.9	-8.4
Income, net	0.7	1.7	2.1	2.0	2.2	2.4	2.7	3.0	3.4
Banking system (net)	-1.6	-1.6	-1.9	-2.1	-1.7	-1.0	-0.8	-0.9	-0.8
Private non-banks (net)	-1.5	-1.4	-1.3	-1.3	-1.5	-1.8	-1.9	-1.9	-1.9
Government	8.2	8.2	8.5	8.9	9.2	9.6	10.0	10.4	10.8
Official debt service (interest)	-1.4	-1.4	-1.4	-1.4	-1.7	-2.1	-2.2	-2.2	-2.2
Foreign partners - oil	-3.1	-2.0	-1.8	-1.8	-1.9	-1.9	-2.0	-2.1	-2.2
Foreign partners - gas	0.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Services, net	-27.3	-22.0	-19.1	-19.9	-20.1	-19.7	-19.4	-18.9	-18.5
Credits	56.5	58.9	63.4	67.1	70.1	72.6	75.2	78.5	82.0
Debits	-83.8	-80.9	-82.5	-87.0	-90.3	-92.3	-94.6	-97.4	-100.4
Transfers, net	-28.2	-39.6	-39.5	-42.5	-45.3	-48.0	-50.8	-53.7	-56.6
Private (incl. remittances)	-22.1	-30.9	-32.7	-35.2	-37.5	-39.7	-42.0	-44.4	-46.9
Official	-6.2	-8.8	-6.8	-7.3	-7.8	-8.3	-8.7	-9.2	-9.8
Capital account balance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial account balance	-41.7	-3.2	-22.7	-14.7	-12.5	-12.7	-12.8	-13.0	-13.1
Private capital	-9.1	11.3	-19.9	-10.8	-8.5	-8.5	-8.6	-8.6	-8.7
Direct investment, net	-0.9	-7.9	-4.6	-4.4	-4.6	-4.9	-5.1	-5.4	-5.7
Outward	-11.7	-16.7	-13.6	-14.2	-15.0	-15.8	-16.6	-17.5	-18.5
Inward	10.8	8.8	9.0	9.8	10.4	10.9	11.5	12.1	12.8
Portfolio flows, net	1.3	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.7
Commercial banks	-1.8	24.9	-11.1	-2.2	0.0	0.0	0.0	0.0	0.0
Private nonbanks and other 1/	-7.6	-6.8	-5.4	-5.4	-5.3	-5.2	-5.0	-4.9	-4.7
Official capital 2/	-32.6	-14.6	-2.7	-3.9	-4.0	-4.1	-4.2	-4.3	-4.4
Errors and omissions	-4.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	7.4	15.0	-14.3	-4.7	-1.2	-0.5	0.1	2.9	5.5
Change in central bank reserves	-7.4	-15.0	14.3	4.7	1.2	0.5	-0.1	-2.9	-5.5
Memorandum items:									
GDP (billions of U.S. dollars)	403.2	357.9	348.7	380.9	403.3	424.5	446.9	471.2	496.6
Gross reserves of central bank (billions of U.S. dollars)	78.5	94.0	85.4	80.7	79.5	78.9	79.1	82.0	87.5
in months of next year's imports, net of re-exports	5.4	6.5	5.3	4.7	4.5	4.2	4.0	4.0	4.0

Sources: Country authorities; and IMF staff estimates and projections.

1/ Estimate based on *UNCTAD World Investment Report.*
2/ Including estimated changes in SWF net external assets.

Table 3a. United Arab Emirates: Consolidated General Government Finances, 2014–22

	2014	2015	Est. 2016	Proj. 2017	Proj. 2018	Proj. 2019	Proj. 2020	Proj. 2021	Proj. 2022
	(Billions of UAE dirhams, unless otherwise specified)								
Total revenue	518.8	381.4	362.3	379.7	405.9	426.2	444.6	459.4	474.4
Taxes	279.9	164.5	113.4	130.1	146.7	152.2	159.7	168.6	176.6
Social Contributions	5.3	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Revenue 1/	233.6	212.6	244.6	245.1	254.6	269.3	280.1	285.9	292.8
Expenditures (a+b)	490.5	425.6	417.3	423.4	434.7	441.8	445.7	448.4	450.1
Expense (a)	450.6	390.5	372.3	378.3	385.4	391.9	398.3	404.8	411.1
Compensation of employees	47.5	63.0	64.9	67.4	70.2	72.8	75.4	78.1	80.8
Use of goods and services	49.5	59.8	58.8	59.1	59.6	60.1	60.7	60.9	61.0
Consumption of fixed capital	3.8	4.6	5.8	7.4	7.8	8.3	8.8	9.3	9.8
Interest	4.1	2.8	2.0	2.0	2.1	2.1	2.2	2.2	2.3
Subsidies	29.6	22.2	16.4	16.8	17.3	17.8	18.2	18.7	19.1
Grants	21.9	8.8	14.9	15.2	15.5	15.9	16.3	16.7	17.0
Social Benefits	43.9	42.6	42.2	43.4	44.8	45.9	46.7	47.6	48.5
Other expenses 2/	250.2	186.7	167.2	167.0	168.1	169.0	170.0	171.3	172.7
Net acquisition of nonfinancial assets (b)	39.9	35.1	45.0	45.2	49.2	49.9	47.4	43.6	39.0
Net operating balance (Revenue minus expense)	68.2	-9.2	-10.0	1.4	20.4	34.3	46.3	54.6	63.3
Net lending(+)/borrowing(-) (Revenue minus expenditures)	28.3	-44.2	-55.0	-43.7	-28.8	-15.6	-1.1	11.1	24.3
Net acquisition of financial assets 1/ 3/	32.4	32.9	-17.6	-14.1	-7.1	12.6	17.5	32.8	42.0
Domestic	-82.9	-60.0	16.8	-5.0	-2.2	5.3	4.8	9.3	8.7
Foreign	115.3	92.9	-34.4	-9.0	-4.8	7.3	12.7	23.5	33.3
Net incurrence of liabilities	4.1	68.6	37.3	29.7	21.7	28.2	18.6	21.8	17.7
Domestic	14.2	62.4	17.4	23.0	18.4	16.3	14.2	12.1	12.7
Foreign	-10.1	3.1	19.9	6.6	3.3	11.9	4.5	9.6	5.0
Memorandum Items:									
Oil revenue	352.0	188.3	138.3	163.8	170.1	172.8	178.4	185.5	195.5
Profit transfers from the national oil company to SWF 4/	91.7	44.9	42.4	51.1	52.9	53.5	55.1	57.2	60.2
Nonoil revenue	166.8	193.0	224.0	215.9	235.7	253.4	266.2	273.9	278.9
Investment income (from SWF) 4/	46.3	55.5	41.9	51.7	57.5	70.0	77.7	79.9	82.4
Abu Dhabi capital transfers	65.2	49.1	30.8	27.7	25.0	22.5	20.2	18.2	16.4
Adjusted nonoil primary balance 5/	-365.9	-285.3	-233.2	-257.3	-254.4	-256.3	-255.1	-252.1	-251.3
In percent of nonoil GDP	-37.5	-27.8	-21.8	-22.4	-20.8	-19.8	-18.6	-17.4	-16.4
Fiscal breakeven oil price (US $ per barrel)	91.0	64.7	61.5	67.1	62.1	57.5	53.3	50.6	48.1
	(Percent of GDP)								
Total revenue	35.0	29.0	28.3	27.1	27.4	27.3	27.1	26.6	26.0
Taxes	18.9	12.5	8.9	9.3	9.9	9.8	9.7	9.7	9.7
Social Contributions	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Revenue 1/	15.8	16.2	19.1	17.5	17.2	17.3	17.1	16.5	16.1
Expenditures	33.1	32.4	32.6	30.3	29.3	28.3	27.2	25.9	24.7
Expense	30.4	29.7	29.1	27.0	26.0	25.1	24.3	23.4	22.5
Compensation of employees	3.2	4.8	5.1	4.8	4.7	4.7	4.6	4.5	4.4
Use of goods and services	3.3	4.5	4.6	4.2	4.0	3.9	3.7	3.5	3.3
Consumption of fixed capital	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Interest	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Subsidies	2.0	1.7	1.3	1.2	1.2	1.1	1.1	1.1	1.0
Grants	1.5	0.7	1.2	1.1	1.0	1.0	1.0	1.0	0.9
Social Benefits	3.0	3.2	3.3	3.1	3.0	2.9	2.8	2.8	2.7
Other expenses 2/	16.9	14.2	13.1	11.9	11.3	10.8	10.4	9.9	9.5
Net acquisition of nonfinancial assets	2.7	2.7	3.5	3.2	3.3	3.2	2.9	2.5	2.1
Net operating balance (Revenue minus Expense)	4.6	-0.7	-0.8	0.1	1.4	2.2	2.8	3.2	3.5
Net lending(+)/borrowing(-)	1.9	-3.4	-4.3	-3.1	-1.9	-1.0	-0.1	0.6	1.3
Net acquisition of financial assets 1/ 3/	2.2	2.5	-1.4	-1.0	-0.5	0.8	1.1	1.9	2.3
Domestic	-5.6	-4.6	1.3	-0.4	-0.2	0.3	0.3	0.5	0.5
Foreign	7.8	7.1	-2.7	-0.6	-0.3	0.5	0.8	1.4	1.8
Net incurrence of liabilities	0.3	5.2	2.9	2.1	1.5	1.8	1.1	1.3	1.0
Domestic	1.0	4.7	1.4	1.6	1.2	1.0	0.9	0.7	0.7
Foreign	-0.7	0.2	1.6	0.5	0.2	0.8	0.3	0.6	0.3
Memorandum Items:									
Oil revenue	23.8	14.3	10.8	11.7	11.5	11.1	10.9	10.7	10.7
Profit transfers from the national oil company to SWF 4/	6.2	3.4	3.3	3.7	3.6	3.4	3.4	3.3	3.3
Nonoil revenue	11.3	14.7	17.5	15.4	15.9	16.3	16.2	15.8	15.3
Investment income (from SWF) 4/	3.1	4.2	3.3	3.7	3.9	4.5	4.7	4.6	4.5
Abu Dhabi capital transfers	4.4	3.7	2.4	2.0	1.7	1.4	1.2	1.1	0.9

Sources: Country authorities and IMF staff estimates and projections.
1/ Includes staff estimates of profit transfers from the national oil company to SWF and SWF returns (investment income).
2/ Includes Abu Dhabi capital transfers (loans and equity to finance development projects).
3/ Excludes Abu Dhabi capital transfers (loans and equity to finance development projects).
4/ Staff estimates.
5/ Excludes staff estimates of SWF investment income.

Table 3b. United Arab Emirates: Consolidated Government Finances, 2014–22

	2014	2015	2016	Proj. 2017	Proj. 2018	Proj. 2019	Proj. 2020	Proj. 2021	Proj. 2022
Consolidated Government				(Billions of UAE dirhams)					
Total revenue	518.8	381.4	362.3	379.7	405.9	426.2	444.6	459.4	474.4
Taxes	279.9	164.5	113.4	130.1	146.7	152.2	159.7	168.6	176.6
Other Revenue	233.6	212.6	244.6	245.1	254.6	269.3	280.1	285.9	292.8
Expenditures	490.5	425.6	417.3	423.4	434.7	441.8	445.7	448.4	450.1
Expense	450.6	390.5	372.3	378.3	385.4	391.9	398.3	404.8	411.1
Net acquisition of nonfinancial as:	39.9	35.1	45.0	45.2	49.2	49.9	47.4	43.6	39.0
Net lending (+) / borrowing (-) (Revenue minus expenditures)	28.3	-44.2	-55.0	-43.7	-28.8	-15.6	-1.1	11.1	24.3
				(Percent of GDP)					
Total revenue	35.0	29.0	28.3	27.1	27.4	27.3	27.1	26.6	26.0
Other Revenue	15.8	16.2	19.1	17.5	17.2	17.3	17.1	16.5	16.1
Expenditures	33.1	32.4	32.6	30.3	29.3	28.3	27.2	25.9	24.7
Expense	30.4	29.7	29.1	27.0	26.0	25.1	24.3	23.4	22.5
Net lending (+) / borrowing (-) (Revenue minus expenditures)	1.9	-3.4	-4.3	-3.1	-1.9	-1.0	-0.1	0.6	1.3
Central Government				(Billions of UAE dirhams)					
Total revenue	61.8	64.2	64.4	65.0	67.3	68.4	69.5	70.6	71.4
Taxes	5.3	5.6	5.3	5.5	6.8	7.2	7.7	8.1	8.4
Other Revenue	34.0	36.6	37.3	37.3	37.6	37.8	37.9	38.0	38.0
Expenditures	63.0	70.4	69.5	69.0	69.2	69.1	68.8	68.6	68.3
Expense	57.7	62.5	61.5	60.8	60.8	60.4	59.9	59.5	59.1
Net acquisition of nonfinancial as:	5.4	7.9	8.0	8.2	8.4	8.6	8.8	9.1	9.2
Net lending (+) / borrowing (-) (Revenue minus expenditures)	-1.3	-6.2	-5.1	-4.0	-1.9	-0.7	0.7	2.1	3.0
				(Percent of GDP)					
Total revenue	4.2	4.9	5.0	4.6	4.5	4.4	4.2	4.1	3.9
Other Revenue	2.3	2.8	2.9	2.7	2.5	2.4	2.3	2.2	2.1
Expenditures	4.3	5.4	5.4	4.9	4.7	4.4	4.2	4.0	3.7
Expense	3.9	4.8	4.8	4.4	4.1	3.9	3.6	3.4	3.2
Net lending (+) / borrowing (-) (Revenue minus expenditures)	-0.1	-0.5	-0.4	-0.3	-0.1	0.0	0.0	0.1	0.2
Abu Dhabi Government				(Billions of UAE dirhams)					
Total revenue	401.1	262.1	242.6	257.1	275.3	292.1	306.7	317.6	329.8
Taxes	256.7	140.2	89.2	104.3	114.9	118.5	123.8	130.4	137.2
Other Revenue	144.3	121.9	153.5	152.8	160.4	173.5	182.8	187.1	192.7
Expenditures	378.3	307.9	291.3	290.8	293.1	295.0	297.2	299.8	302.3
Expense	352.8	288.0	265.8	267.3	271.4	275.0	278.7	282.8	286.6
Net acquisition of nonfinancial as:	25.6	19.9	25.5	23.5	21.7	20.0	18.5	17.0	15.6
Net lending (+) / borrowing (-) (Revenue minus expenditures)	22.8	-45.8	-48.7	-33.7	-17.8	-2.9	9.5	17.8	27.6
				(Percent of Abu Dhabi GDP)					
Total revenue	41.8	33.7	33.3	32.5	33.0	33.5	33.5	33.0	32.6
Other Revenue	15.0	15.7	21.1	19.3	19.2	19.9	20.0	19.4	19.0
Expenditures	39.4	39.6	40.0	36.8	35.1	33.8	32.5	31.2	29.9
Expense	36.7	37.0	36.5	33.8	32.5	31.5	30.4	29.4	28.3
Net lending (+) / borrowing (-) (Revenue minus expenditures)	2.4	-5.9	-6.7	-4.3	-2.1	-0.3	1.0	1.8	2.7
Dubai Government				(Billions of UAE dirhams)					
Total revenue	59.1	61.1	60.9	63.2	69.0	71.5	74.3	77.2	79.2
Taxes	16.6	17.1	17.4	18.8	23.3	24.7	26.4	28.1	29.1
Other Revenue	42.6	43.9	43.5	44.4	45.7	46.8	48.0	49.1	50.1
Expenditures	52.2	51.2	59.7	66.2	74.7	79.7	81.5	81.3	80.3
Expense	45.8	47.1	51.6	56.4	59.5	62.6	65.7	68.4	71.1
Net acquisition of nonfinancial as:	6.5	4.0	8.0	9.8	15.2	17.1	15.7	12.9	9.2
Net lending (+) / borrowing (-) (Revenue minus expenditures)	6.9	9.9	1.2	-3.0	-5.7	-8.2	-7.2	-4.1	-1.1
				(Percent of Dubai GDP)					
Total revenue	15.7	15.8	15.5	15.3	15.6	15.3	15.0	14.7	14.3
Other Revenue	11.3	11.4	11.1	10.7	10.4	10.0	9.7	9.4	9.1
Expenditures	13.9	13.2	15.2	16.0	16.9	17.0	16.5	15.5	14.5
Expense	12.2	12.2	13.2	13.6	13.5	13.4	13.3	13.1	12.9
Net lending (+) / borrowing (-) (Revenue minus expenditures)	1.8	2.6	0.3	-0.7	-1.3	-1.7	-1.5	-0.8	-0.2

Sources: Country authorities; and IMF staff estimates.

Table 4. United Arab Emirates. Monetary Survey, 2014–22

	2014	2015	Est. 2016	Proj. 2017	Proj. 2018	Proj. 2019	Proj. 2020	Proj. 2021	Proj. 2022
	(Billions of UAE dirhams)								
Net foreign assets	288	252	266	257	252	250	250	261	281
Foreign assets	780	842	861	852	851	852	855	868	891
Central Bank	288	345	314	296	292	290	290	301	321
Commercial banks	492	496	548	556	559	562	564	567	570
Foreign liabilities	492	589	596	596	599	602	605	608	611
Central bank	8	9	5	5	5	5	5	5	5
Commercial banks	484	580	591	591	594	597	600	603	606
Net domestic assets	837	934	960	1,020	1,138	1,240	1,326	1,425	1,519
Claims on government (net)	-85	-49	-61	-33	-12	-1	8	11	15
Claims	123	129	148	171	189	206	220	232	245
Deposits	209	177	209	204	202	207	212	221	230
Claims on other sovereign	107	117	117	117	117	117	117	117	117
Claims on public sector enterprises	197	205	225	230	236	242	248	254	259
Claims on private sector	959	1,040	1,100	1,192	1,278	1,365	1,455	1,550	1,648
Claims on other financial institutions	42	49	29	31	33	36	38	40	43
Other items (net)	-382	-429	-450	-517	-515	-519	-540	-547	-563
Capital and reserves (-)	-319	-345	-368	-387	-396	-414	-431	-447	-466
Other assets (net)	-63	-84	-82	-130	-119	-105	-109	-100	-97
Central Bank	-251	-309	-277	-261	-255	-251	-249	-257	-274
Commercial banks	188	225	194	131	136	145	141	157	177
Broad money (M2)	1,125	1,187	1,225	1,277	1,390	1,490	1,576	1,686	1,800
Money	436	457	474	494	538	577	610	653	697
Currency outside banks	59	58	62	65	71	76	81	86	92
Dirham demand deposits	377	399	412	429	467	501	530	566	605
Quasi-money	689	730	751	783	852	913	966	1,033	1,103
Foreign currency deposits	214	245	271	282	307	329	348	373	398
Dirham time and savings deposits	475	484	480	500	544	584	618	661	705
Memorandum items:									
Dirham denominated liquidity	911	942	955	995	1,082	1,161	1,228	1,313	1,402
Reserve money	309	365	338	352	363	390	412	441	471
Foreign currency deposits/total deposits (in percent)	20.1	21.7	23.3	23.3	23.3	23.3	23.3	23.3	23.3
NFA/M2 (in percent)	25.6	21.3	21.7	20.1	18.1	16.8	15.9	15.5	15.6
CBU foreign assets/reserve money (in percent)	93.2	94.5	92.8	84.1	80.3	74.4	70.4	68.3	68.3
NFA of Central Bank	280.3	336.2	308.9	291.7	287.2	285.2	285.6	296.3	316.6
NFA of commercial banks	7.8	-83.9	-43.2	-35.0	-35.2	-35.3	-35.5	-35.7	-35.9
M2 velocity (in percent of nonoil GDP)	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Private sector credit (in percent of oil GDP)	98.4	101.3	103.1	103.7	104.5	105.3	106.1	106.9	107.7
	(Changes in percent; unless otherwise indicated)								
Claims on private sector	11.5	8.4	5.8	8.4	7.2	6.8	6.6	6.5	6.3
Broad money (M2)	7.9	5.5	3.3	4.2	8.8	7.2	5.8	6.9	6.8
Money	19.3	4.8	3.8	4.2	8.8	7.2	5.8	6.9	6.8
Quasi Money	1.7	5.9	2.9	4.2	8.8	7.2	5.8	6.9	6.8
Velocity (nonoil GDP/M2)	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Base money	9.7	18.1	-7.4	4.3	3.1	7.2	5.8	6.9	6.8
Money multiplier (M2/base money)	3.6	3.3	3.6	3.6	3.8	3.8	3.8	3.8	3.8

Sources: Central Bank of the UAE, and IMF staff estimates and projections.

Table 5. United Arab Emirates: Maturing Bonds, Syndicated and Bilateral Loans in Non-Financial Public Sector 1/ 2/

(In millions of US dollars)

	Debt Type	2016H2	2017	2018	2019	2020	2021	2022	2017-22	Beyond	Unallocated	Total
Abu Dhabi						**Government**						
Government	Bonds	0	0	0	1,500	0	2,500	0	4,000	2,500		6,500
	Loans	164	313	313	313	300	60	60	1,360	120		1,644
	Guarantees	96	192	166	166	166	16	16	724	0		820
	Total	260	506	480	1,980	466	2,576	76	6,084	2,620		8,964
						Government Related Enterprises (GREs)						
GREs with >50% government ownership,	Bonds	1,000	2,748	2,424	1,000	1,490	3,371	6,959	17,993	6,462		25,454
including subsidiaries debt guaranteed by parent GRE	Loans	3,870	2,806	3,429	3,574	2,664	1,055	2,703	16,230	1,953		22,053
	Total	4,870	5,554	5,853	4,574	4,154	4,426	9,662	34,223	8,415		47,507
Government plus GREs with >50% government ownership			6,060	6,333	6,553	4,620	7,002	9,739	40,307	11,035		51,342
In percent of Abu Dhabi 2016 GDP			2.9	3.0	3.1	2.2	3.4	4.7	19.4	5.3		24.7
Memorandum items:												
GREs with <50% government ownership		...	990	2,615	1,304	941	176	198	6,226	707		6,933
Government owned banks: bonds and loans		...	260	230	230	533	215	3,078	4,546	0		4,546
Dubai						**Government**						
Government	Bonds		600	20,000		750	500	650	22,500	3,519		26,019
	Loans		40	40	40	40	294	575	1,030	80		1,110
	Total		640	20,040	40	790	794	1,225	23,530	3,599		27,129
Other sovereign	Loans domestic										32,879	32,879
	Total										32,879	32,879
						Government Related Enterprises (GREs)						
GREs with >50% government ownership,	Bonds		2,508	2,414	2,433	4,545	1,370	1,006	14,276	7,632	2,000	23,908
including subsidiaries debt guaranteed by parent GRE	Loans		2,348	4,793	3,875	1,632	3,226	13,255	29,129	4,545	1,375	35,049
	Total		4,856	7,207	6,308	6,177	4,596	14,261	43,405	12,177	3,375	58,957
Government, other sovereign, and GREs with >50% government ownership			5,497	27,247	6,348	6,967	5,390	15,486	66,935	15,776	36,254	118,965
In percent of Dubai 2016 GDP			5.2	25.5	5.9	6.5	5.1	14.5	62.7	14.8	34.0	111.5
Memorandum items:												
GREs with <50% government ownership			0	950	1,000	450	1,500	0	3,900	1,500		5,400
Government guaranteed 3/			266	508	358	313	275	2,335	4,054	69		4,123
Restructured debt of Dubai Inc.			4,148	0	0	0	0	0	4,148	13,000		17,148
Government owned banks: bonds and loans			3,224	1,431	3,731	2,048	1,530	1,275	13,240	3,500		16,740
Ras Al Khaimah	Sovereign	0	0	500	0	0	0	0	500	1,215		1,715
Sharjah	Sovereign	0	0	0	0	0	500	0	500	750		1,250

Sources: Dealogic; Zawya; Bloomberg; Fitch; Abu Dhabi authorities; and Fund staff estimates.
1/ Excluding bilateral bank loans and accounts payable, except for the sovereign.
2/ Regardless of residency of debt holders.
3/ RTA, Dubai World, and Dubai Airport.

United Arab Emirates. Table 6: Financial Soundness Indicators

(In percent)

	2013	2014	2015	2016	2017q1
Regulatory Capital to Risk-Weighted Assets	19.3	18.2	18.3	18.9	18.6
Regulatory Tier 1 Capital to Risk-Weighted Assets	16.9	16.2	16.6	17.3	16.9
Non-performing Loans Net of Provisions to Capital	9.8	7.6	5.8	5.7	5.9
Non-performing Loans to Total Gross Loans 1/	6.7	5.6	5.2	5.3	5.3
Sectoral Distribution of Total Loans: Residents 1/	80.5	79.2	81.0	80.6	80.2
Sectoral Distribution of Total Loans: Deposit-takers	5.0	4.2	3.6	3.8	3.6
Sectoral Distribution of Total Loans: Other financial	4.4	1.1	1.4	1.0	1.0
Sectoral Distribution of Total Loans: General government	9.2	9.0	9.4	9.2	9.4
Sectoral Distribution of Total Loans: Nonfinancial	44.4	47.2	48.0	48.2	48.0
Sectoral Distribution of Total Loans: Other domestic sectors	17.6	17.6	18.5	18.3	18.2
Sectoral Distribution of Total Loans: Nonresidents	19.5	20.8	19.0	19.4	19.8
Return on Assets	1.6	1.7	1.5	1.4	1.5
Return on Equity	11.1	13.9	11.8	10.7	11.7
Interest Margin to Gross Income	70.2	68.2	69.6	68.9	65.4
Non-interest Expenses to Gross Income	37.8	36.4	38.0	38.0	37.8
Liquid Assets to Total Assets (Liquid Asset Ratio) 2/	19.4	22.9	21.5	21.2	22.2
Liquid Assets to Short Term Liabilities 2/	27.7	30.3	28.8	28.6	29.8
Net Open Position in Foreign Exchange to Capital	11.7	9.4	20.7	9.4	10.9

Source: Central Bank of the United Arab Emirates.

1/ Total gross loans include interbank loans.

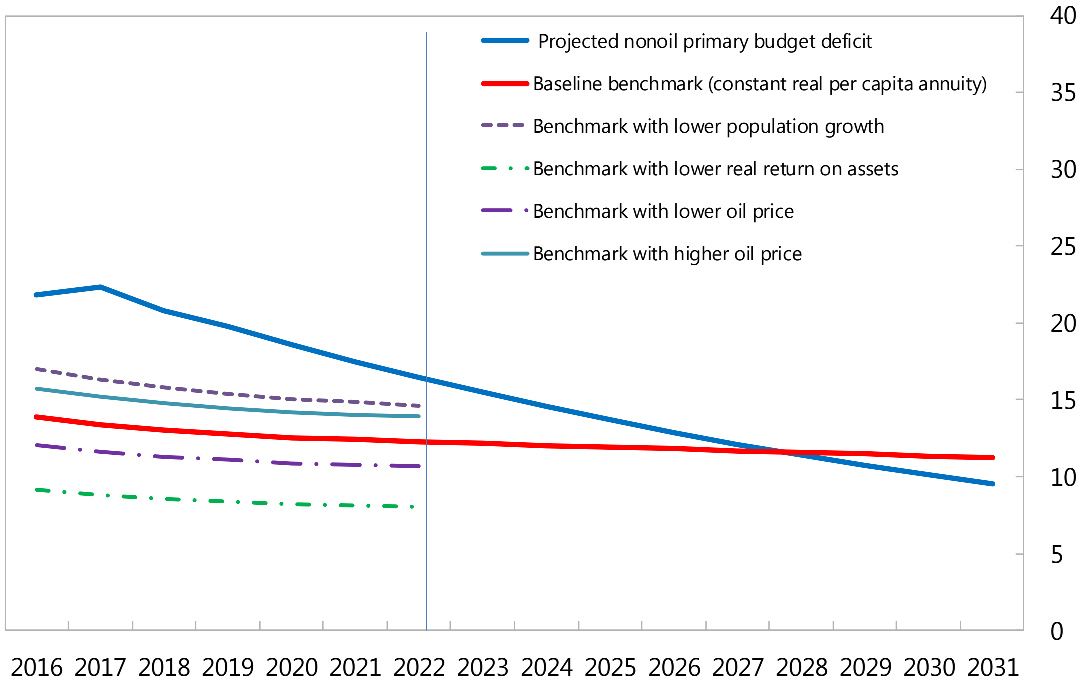
2/ Total liabilities include interbank and interbranch placements.

Annex I. Long-Term Fiscal Sustainability Analysis

Staff analysis using the permanent income hypothesis (PIH) suggests that the government does not save its exhaustible oil revenue sufficiently for future generations. The gap between the projected deficits and the deficits consistent with a constant real per capita annuity was about 8 percent of nonoil GDP in 2016. With the gradual fiscal consolidation assumed in the baseline and other conservative assumptions, the gap is projected to shrink to about 4.2 percent of nonoil GDP by 2022 and close by 2028.[1] Favorable persistent shocks could imply a smaller gap and/or its faster closure.

Fiscal Sustainability Analysis, 2016–31

(Percent of nonoil GDP)



Source: IMF staff calculations.

[1] Long-term sustainability assumes intergenerational equity by calculating a constant real per capita government spending path (and related nonoil deficit) that delivers a constant real per capita annuity to finance government spending after oil revenues are exhausted. Projections until 2022 are based on staff's macroframework, including the WEO assumptions about the oil price. After 2022, the baseline scenario assumes flat oil production and annual oil price growth of 2 percent, inflation of 2 percent, population growth of 1.5 percent, and real return on assets of 3.7 percent. Alternative scenarios assume (i) lower population growth by 0.5 percentage point, (ii) lower real return on assets by 1 percentage point, (iii) lower oil price by $10 in 2017-22 and constant thereafter, and (iv) higher oil price by $10 in 2017–22 and increasing by 2 percent per annum in nominal terms thereafter.

Annex II. Debt Sustainability Analysis

Figure 1. Government Debt Sustainability Analysis (DSA) – Baseline Scenario

Debt, Economic and Market Indicators

	Actual			Projections					
	2006-2014 1/	2015	2016	2017	2018	2019	2020	2021	2022
Nominal gross government debt	19.1	17.1	20.2	21.9	21.3	20.8	20.5	20.0	19.3
Government gross financing needs	-6.4	5.3	8.9	5.9	9.2	4.0	2.8	2.2	1.5
Real GDP growth (in percent)	5.1	3.8	3.0	1.3	3.4	3.2	3.1	3.1	3.1
Inflation (GDP deflator, in percent)	4.4	-14.5	-5.4	7.8	2.4	2.0	2.1	2.3	2.2
Nominal GDP growth (in percent)	10.2	-11.2	-2.6	9.2	5.9	5.3	5.3	5.4	5.4
Effective interest rate (in percent) 3/	7.5	5.0	4.7	5.9	3.9	4.9	5.1	5.1	5.1

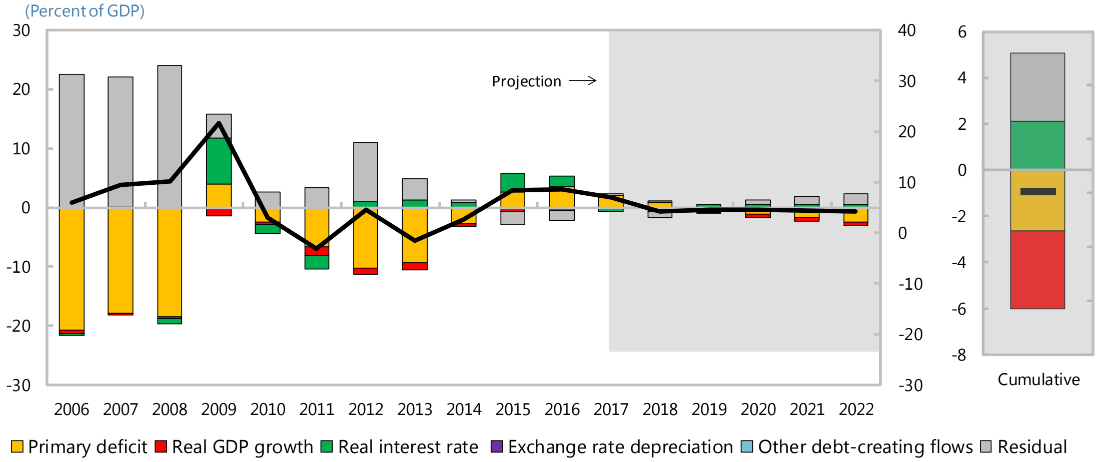
As of April 01, 2017		
Sovereign Spreads		
EMBIG (bp) 2/		30
5Y CDS (bp)		114
Ratings	Foreign	Local
Moody's	Aa2	Aa2
S&Ps	AA	AA
Fitch	AA	AA

Contribution to Changes in Public Debt

	Actual			Projections							
	2006-2014	2015	2016	2017	2018	2019	2020	2021	2022	Cumulative	Debt-stabilizing primary balance 8/
Change in gross government sector debt	0.7	2.9	3.1	1.7	-0.6	-0.4	-0.4	-0.5	-0.7	-0.9	
Identified debt-creating flows	-9.6	5.2	4.7	1.4	0.4	-0.2	-1.1	-1.8	-2.5	-3.9	
Primary deficit	-9.4	2.6	3.5	2.0	0.8	-0.2	-1.1	-1.8	-2.4	-2.7	-0.1
Primary (noninterest) revenue and grants	35.6	29.0	28.3	27.1	27.4	27.3	27.1	26.6	26.0	161.5	
Primary (noninterest) expenditure	26.2	31.6	31.8	29.2	28.2	27.2	26.0	24.8	23.6	158.9	
Automatic debt dynamics 4/	-0.2	2.6	1.3	-0.6	-0.4	-0.1	0.0	-0.1	-0.1	-1.3	
Interest rate/growth differential 5/	-0.2	2.6	1.3	-0.6	-0.4	-0.1	0.0	-0.1	-0.1	-1.3	
Of which: real interest rate	0.7	3.2	1.8	-0.4	0.3	0.6	0.6	0.5	0.5	2.1	
Of which: real GDP growth	-0.8	-0.6	-0.5	-0.2	-0.7	-0.6	-0.6	-0.6	-0.6	-3.4	
Exchange rate depreciation 6/	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Accumulation of deposits (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Prefunding	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes 7/	10.3	-2.3	-1.6	0.3	-1.0	-0.2	0.8	1.4	1.8	3.0	

Debt-Creating Flows

(Percent of GDP)



Source: IMF staff calculations.

1/ Based on available data.

2/ Abu Dhabi's Long-term bond spread over U.S. bonds.

3/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

4/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured as an increase in the local currency value of U.S. dollar).

5/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.

6/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

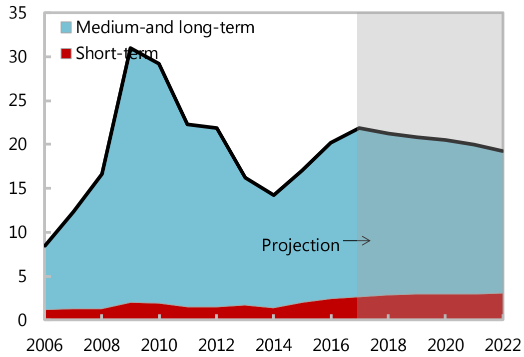
7/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

8/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

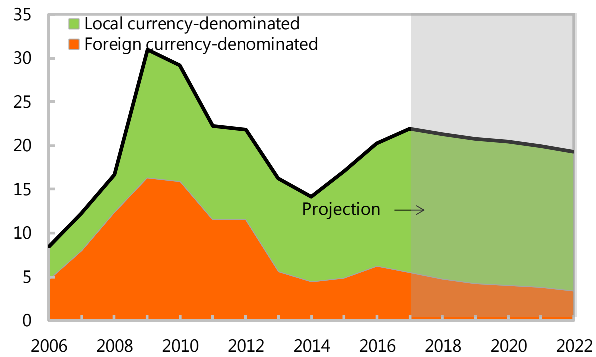
Figure 2. Government DSA – Composition of Government Debt and Alternative Scenarios

Composition of Government Debt

By Maturity
(Percent of GDP)



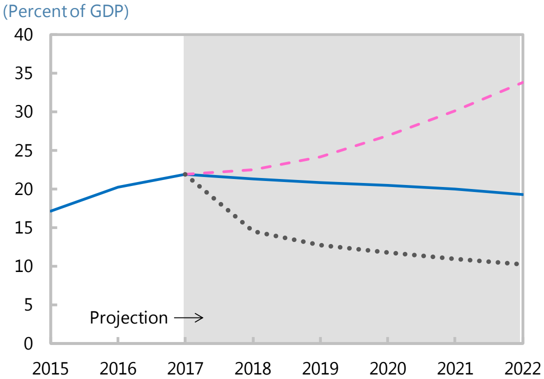
By Currency
(Percent of GDP)



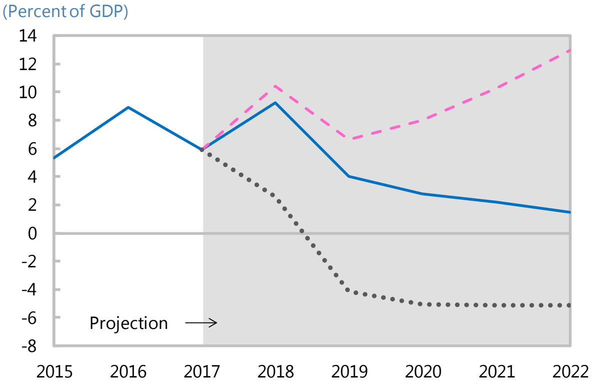
Alternative Scenarios

Baseline Historical Constant Primary Balance

Gross Nominal Government Debt
(Percent of GDP)



Government Gross Financing Needs
(Percent of GDP)



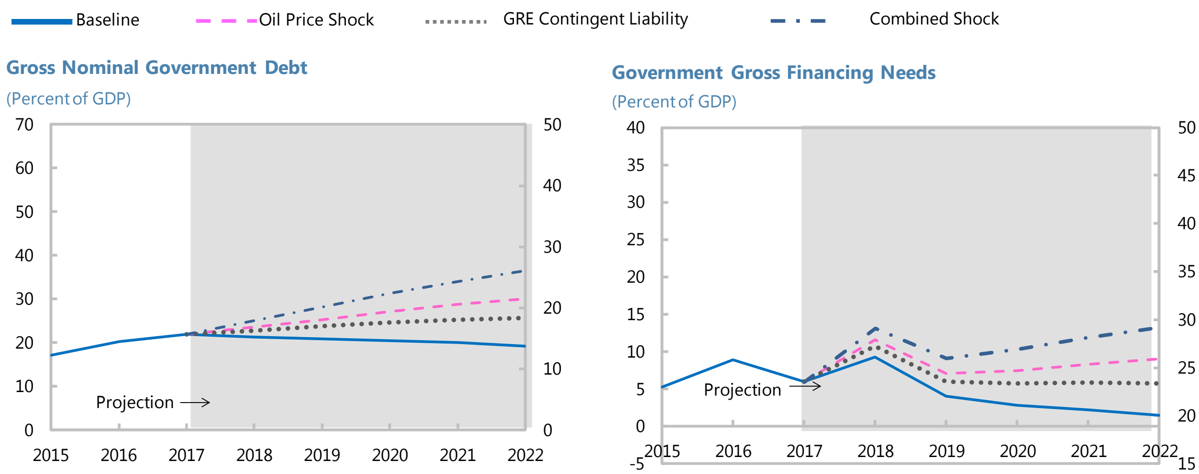
Underlying Assumptions
(Percent)

Baseline Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	3.4	3.2	3.1	3.1	3.1
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	-0.8	0.2	1.1	1.8	2.4
Effective interest rate	5.9	3.9	4.9	5.1	5.1	5.1
Constant Primary Balance Scenario 1/						
Real GDP growth	1.3	3.4	3.2	3.1	3.1	3.1
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Effective interest rate	5.9	3.9	4.9	5.0	4.9	4.8

Historical Scenario 1/	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	4.3	4.3	4.3	4.3	4.3
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	5.8	5.8	5.8	5.8	5.8
Effective interest rate	5.9	3.9	5.1	5.3	5.3	5.3

1/ The scenario assumes that no new debt is issued if the gross financing needs are negative.
Source: IMF staff calculations.

Figure 3. Government DSA – Stress Test Scenarios



Assumptions
(Percent)

Baseline Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	3.4	3.2	3.1	3.1	3.1
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	-0.8	0.2	1.1	1.8	2.4
Effective interest rate	5.9	3.9	4.9	5.1	5.1	5.1
GRE Contingent Liability Scenario 2/						
Real GDP growth	1.3	3.4	3.2	3.1	3.1	3.1
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	-2.3	-1.2	-0.2	0.6	1.4
Effective interest rate	5.9	3.9	4.9	5.0	5.0	5.0

Oil Price Scenario 1/	2017	2018	2019	2020	2021	2022
Real GDP growth	1.3	3.4	3.2	3.1	3.1	3.1
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	-3.1	-2.1	-1.1	-0.4	0.3
Effective interest rate	5.9	3.9	5.0	5.0	5.0	4.9
Combined Scenario 3/						
Real GDP growth	1.3	3.4	3.2	3.1	3.1	3.1
Inflation	7.8	2.4	2.0	2.1	2.3	2.2
Primary balance	-2.0	-4.6	-3.5	-2.4	-1.5	-0.8
Effective interest rate	5.9	3.9	5.0	5.0	4.9	4.9

1/ Oil price is lower by $10 in 2017-22.
2/ 20 percent of GRE debt is assumed to be taken over by the government in 2017-22.
3/ This scenario combines the oil price and the GRE contingent liability scenarios.

Source: IMF staff calculations.

Fiscal Risks Highlighted in the Alternative Scenarios

1. ***Lower oil prices***. An illustrative drop in oil prices by $10 a barrel would put the gross debt ratio on an upward path. The primary balance would deteriorate to 0.3 percent of GDP in 2022, with government debt and gross financing needs rising to 30.1 percent and 9 percent of GDP, respectively.

2. ***GRE contingent liability***. The scenario assumes that the government gradually takes over 20 percent of GRE debt (in 2017-22). The primary balance would deteriorate to 1.4 percent of GDP in 2022, with government debt and gross financing needs increasing to 25.6 percent and 5.7 percent of GDP, respectively.

3. ***Combined scenario***. This scenario combines the oil price and GRE contingent liability scenarios. The primary balance would deteriorate to -0.8 percent of GDP in 2022, with debt and financing needs rising to 13.2 percent and 30 percent of GDP, respectively.

Dubai Government's Debt Sustainability

4. While Dubai's government debt sustainability has improved, debt could still rise sharply under severe shocks:

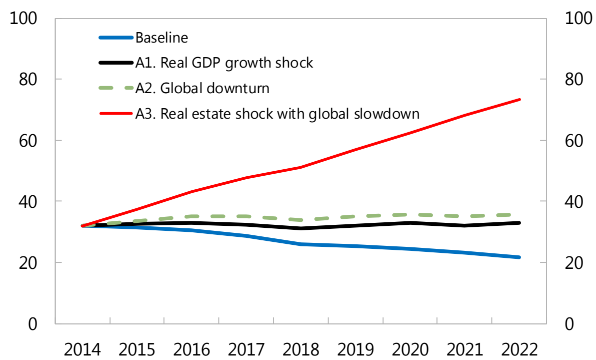
A sharp decline in GDP growth in 2017 (by ¾ standard deviation from the baseline) and a gradual recovery in 2018–22 would raise the debt-to-GDP ratio by about 14.1 percentage points in 2022 compared to the baseline.

Under a severe global downturn scenario, which assumes a real GDP shock, lower real interest rates, and deterioration in the primary balance in the medium term, Dubai's government debt would increase to about 35.7 percent of GDP in 2022.

A scenario that combines a global downturn with a real estate shock, under which the government would take over 20 percent of the GREs' total debt in the medium term, would imply a substantial increase in the government debt-to-GDP ratio, to 73.3 percent, three times as large as under the baseline

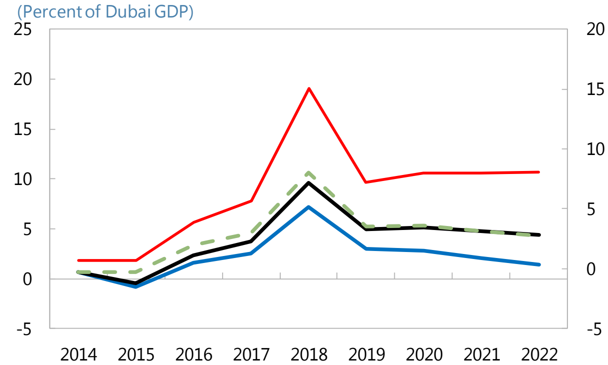
Figure 4. Dubai Government's Debt Sustainability Analysis 2014–22
(In percent of Dubai GDP)

Gross Nominal Government Debt, 2014–22
(Percent of Dubai GDP)



Sources: Country authorities; and IMF staff estimates.

Gross Government Financing Needs, 2014–22
(Percent of Dubai GDP)



Sources: Country authorities; and IMF staff estimates.

	Actual 2014	Projections 2015	2016	2017	2018	2019	2020	2021	2022	Debt stabilizing primary balance
Government debt 1/	32.0	31.3	30.6	28.7	25.9	25.3	24.3	23.3	21.6	-0.2
Alternative scenarios										
A1. Real GDP growth shock 2/		32.7	33.1	32.4	31.0	32.2	33.0	32.2	33.0	0.2
A2. Global downturn scenario 3/		33.7	35.0	35.0	33.9	35.0	35.7	35.0	35.7	0.8
A3. Real estate shock with global downturn 4/		37.3	43.2	47.7	51.1	57.0	62.5	68.2	73.3	5.8
Memorandum items										
Real GDP growth baseline	4.0	4.1	3.4	2.7	3.6	3.6	3.4	3.4	3.4	
Real GDP growth path in the global downturn scenario		1.2	1.9	1.2	2.1	2.1	1.9	1.9	1.9	

Sources: UAE authorities and Fund staff estimates and projections.

1/ Dubai government and government guaranteed debt.
2/ Real GDP growth is at baseline minus 3/4 standard deviation in 2017, 1/2 standard deviation in 2018 and 1/4 standard deviation thereafter.
3/ Combination of real GDP growth shock scenario and 1/4 standard deviation shocks to the baseline for real interest rate and 1/2 standard deviation shocks to primary balance in 2017–22
4/ Under the global downturn scenario, the government takes over 20 percent of total GREs debt in 2017-22.

Table 1. External Debt Sustainability, 2012–22

(Percent of GDP unless otherwise indicated)

	Actual							Projections						
	2012	2013	2014	2015	2016			2017	2018	2019	2020	2021	2022	**Debt-stabilizing non-interest current account 6/**
Baseline: External debt	38.4	44.3	48.3	60.8	62.2			**57.4**	**54.3**	**52.3**	**50.1**	**48.0**	**46.0**	**-0.3**
Change in external debt	-1.2	5.9	4.0	12.4	1.4			-4.8	-3.1	-2.1	-2.2	-2.1	-2.0	
Identified external debt-creating flows (4+8+9)	-22.9	-21.0	-12.3	0.0	-3.2			-5.1	-7.1	-6.6	-6.9	-7.0	-7.1	
Current account deficit, excluding interest payments	-21.2	-20.6	-11.6	-5.4	-4.9			-6.2	-7.0	-7.5	-7.8	-7.8	-7.9	
Deficit in balance of goods and services	-26.3	-25.8	-17.0	-10.9	-9.2			-10.3	-10.6	-10.7	-11.0	-11.2	-11.4	
Exports	100.5	100.9	91.3	88.5	89.2			88.9	87.2	85.4	84.3	83.6	83.1	
Imports	74.3	75.2	74.3	77.6	80.0			78.7	76.6	74.7	73.3	72.4	71.7	
Net non-debt creating capital inflows (negative)	-0.4	-0.5	-0.8	-0.8	-0.7			-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	
Automatic debt dynamics 1/	-1.2	0.0	0.1	6.2	2.4			1.8	0.8	1.8	1.6	1.7	1.6	
Contribution from nominal interest rate	1.4	1.5	1.6	2.1	2.5			2.7	3.1	3.5	3.3	3.2	3.1	
Contribution from real GDP growth	-2.6	-1.7	-1.3	-2.0	-1.7			-0.8	-2.4	-1.7	-1.7	-1.5	-1.5	
Contribution from price and exchange rate changes 2/	0.0	0.2	-0.2	6.1	1.5			...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 3/	21.7	27.0	16.3	12.4	4.6			0.3	4.0	4.5	4.7	4.9	5.2	
External debt-to-exports ratio (in percent)	38.2	43.9	53.0	68.7	69.8			64.5	62.3	61.2	59.4	57.5	55.4	
Gross external financing need (in billions of US dollars) 4/	-4.9	-45.5	-5.9	26.5	36.2			31.8	29.8	28.7	26.6	24.8	23.0	
in percent of GDP	-1.3	-11.7	-1.5	7.2	9.8	10-Year	10-Year	7.8	6.8	6.3	5.5	4.8	4.2	
Scenario with key variables at their historical averages 5/								**57.4**	**50.2**	**43.2**	**36.6**	**30.2**	**24.1**	**-1.0**
						Historical	Standard							
Key Macroeconomic Assumptions Underlying Baseline						Average	Deviation							
Real GDP growth (in percent)	7.1	4.7	3.1	3.8	2.7	2.9	3.2	1.5	4.4	3.3	3.5	3.2	3.2	
GDP deflator in US dollars (change in percent)	0.0	-0.6	0.3	-11.2	-2.4	2.3	10.7	8.1	2.5	1.9	2.2	2.4	2.3	
Nominal external interest rate (in percent)	3.8	4.1	3.8	4.0	4.2	4.8	2.5	4.7	5.8	6.7	6.8	6.8	6.8	
Growth of exports (US dollar terms, in percent)	18.9	4.5	-6.5	-10.7	1.1	9.5	18.2	9.4	4.9	3.1	4.4	4.7	5.1	
Growth of imports (US dollar terms, in percent)	11.1	5.4	2.2	-3.8	3.4	11.4	18.0	7.9	4.1	2.6	3.8	4.3	4.7	
Current account balance, excluding interest payments	21.2	20.6	11.6	5.4	4.9	11.5	6.3	6.2	7.0	7.5	7.8	7.8	7.9	
Net non-debt creating capital inflows	0.4	0.5	0.8	0.8	0.7	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

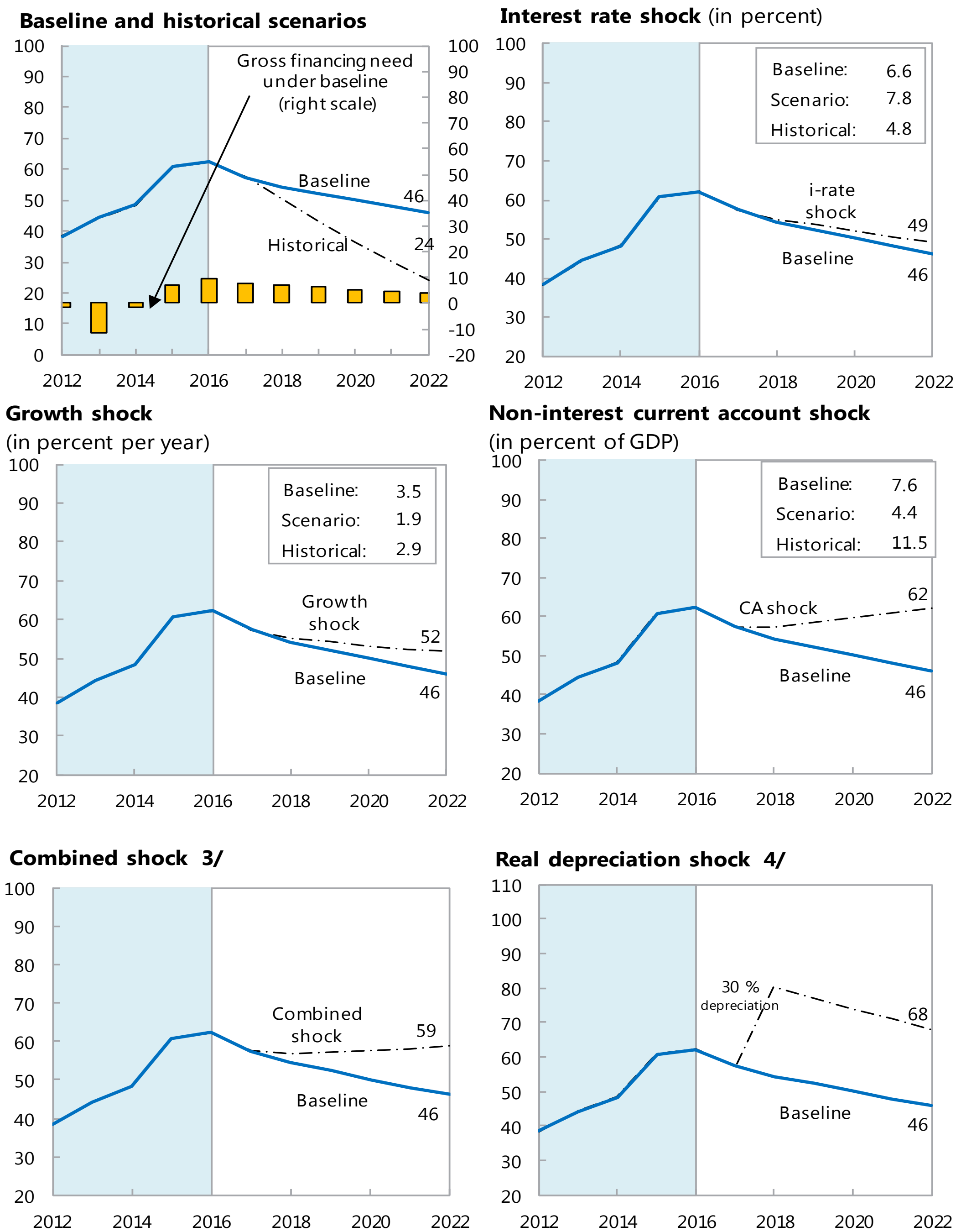
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Figure 5. External Debt Sustainability Bound Tests 1/ 2/

(External Debt in Percent of GDP)

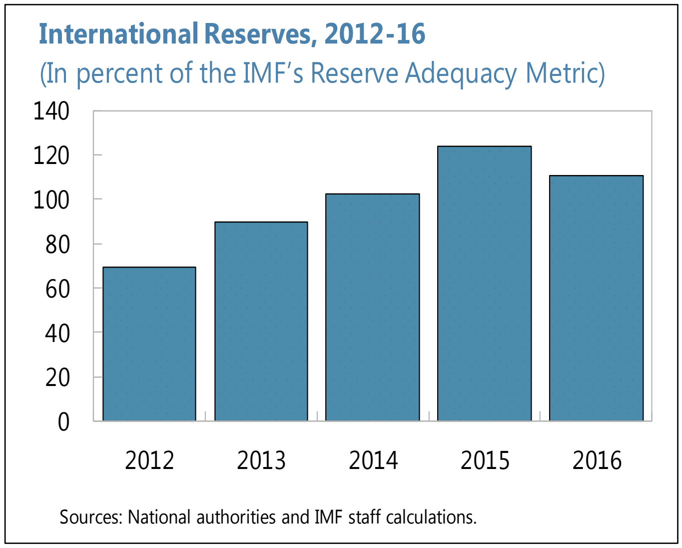


Sources: International Monetary Fund, Country desk data, and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2018.

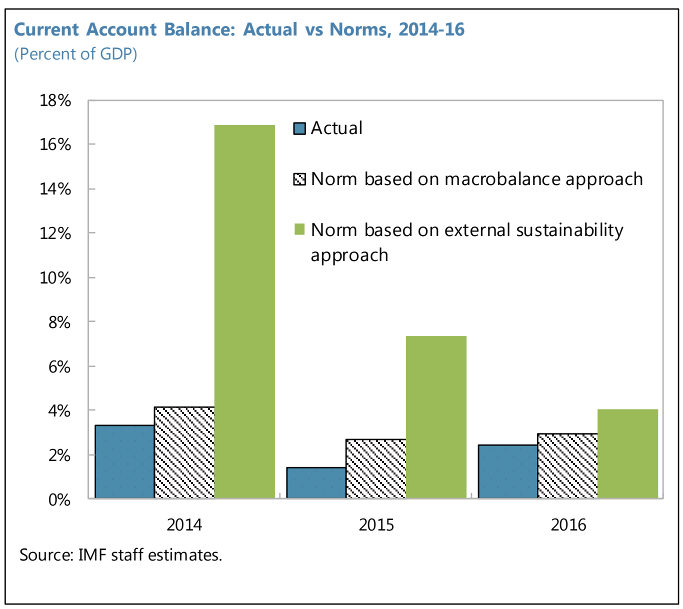
Annex III. External Sector Assessment

Based on the external sustainability approach consistent with the permanent income model, the current account appears to be moderately weaker than the level implied by fundamentals, mainly owing to insufficient saving for future generations.

1. The external position is strong and sustainable. Based on the latest available (albeit limited) information on the UAE's external assets and liabilities, staff estimates the UAE's net IIP at 167 percent of GDP at end-2016. The NIIP is projected to remain stable over the medium term. It is dominated by assets held in SWFs, which play a dual role of precautionary savings and savings for future generations once the oil resources are exhausted. The CBU's international reserves are comfortable at 24 percent of GDP, 5.3 months of imports or 111 percent of the combined Fund's metrics consisting of external short-term debt, other liabilities, broad money, and exports of goods and services, as of end-2016. External liabilities are estimated at 66 percent of GDP at end-2016.

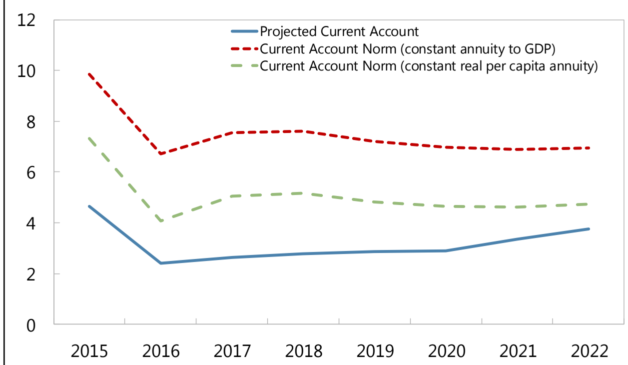


2. The current account balance appears to be moderately weaker than the level implied by medium-term fundamentals and desirable policies. This result, however, is sensitive to the assumptions made, for example, about oil prices, return on assets, and population growth.



- The preferred method for the assessment of the current account position in a major oil exporting country like the UAE is the external sustainabilty approach because it is based on the permanent income model and hence reflects the goal of achieving intergenerational equity in a country with nonrenewable resources.[1] It estimates the current account norm required to provide constant real per capita income even when oil revenue is exhausted by setting the oil and investment income equal to imports less nonoil exports, all in net present value terms. Assuming the annuity is constant in real per capita terms, the current account norm is estimated at 4.1 percent of GDP. This estimate implies a moderately negative current account gap of 1.7 percent in 2016. The gap is attributed to insufficient savings of oil wealth for future generations and is expected to be closed gradually with fiscal consolidation. Under an alternative assumption of keeping the annuity constant in percent of GDP, the current account norm is estimated at 8 percent of GDP, implying a negative current account gap of close to 6 percent of GDP.

External Sustainability's Current Account Norms vs. Projection, 2015–22 (Percent of GDP)



Source: IMF staff estimates.

- A macroeconomic balance approach, which uses the IMF's multilaterally consistent External Balance Assessment-Lite framework and estimates an equilibrium level of the current account consistent with a range of structural and policy factors, suggests that the current account is broadly in line with fundamentals. For 2016, the model estimates the current account norm at 2.9 percent of GDP and a cyclically adjusted current account gap at a negative 0.5 percent of GDP. The small size of the gap suggests that, based on this approach, the current account is not misaligned. The policy gap of negative 2.3 percent mainly reflects the fiscal policy gap due to insufficient saving for future generations.

Macrobalance Approach, 2016

CA-Actual	2.4%	CA-Fitted	0.6%
CA-Norm	2.9%	Residual	1.8%
CA-Gap	-0.5%	Policy gap	-2.3%

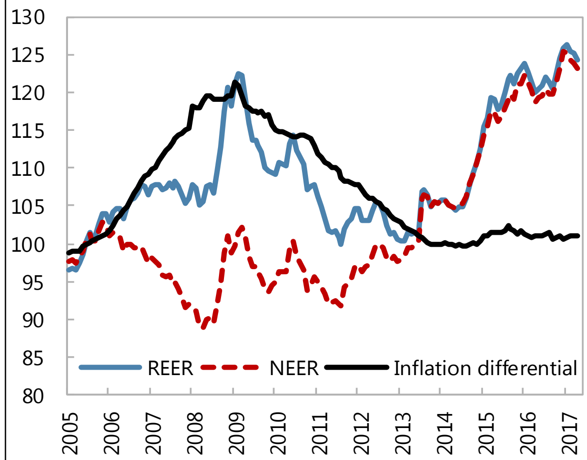
Source: IMF staff estimates.

- This approach, however, focuses on traditional competitiveness issues and does not fully capture the special features of commodity exporters such as the UAE, such as, for example, the need for intergenerational saving. Like in other oil-producing countries, given oil exports and the high import content of nonoil exports (including not only intermediate inputs but also labor), real depreciation would have only a limited impact on external competitiveness and would affect the external position mainly through the fiscal balance and import compression.

[1] See Bems, R., and I. de Carvalho Filho, 2009, "Exchange Rate Assessments: Methodologies for Oil-Exporting Countries," IMF Working Paper 09/281.

3. Recent appreciation was driven by the U.S. dollar. The dirham has been pegged to the dollar at a rate of 3.67 since November 1997. The real effective exchange rate (REER) appreciated by 2.3 percent in 2016 and was 12 percent stronger than a decade ago. The recent appreciation has been driven mostly by the U.S. dollar nominal appreciation vis-à-vis trading partners' exchange rates. The external sustainability approach suggests that the exchange rate is moderately overvalued, with the REER gap in a range of 2.5 percent to 8.3 percent. The macroeconomic balance approach suggests that the exchange rate is not misaligned (the REER gap estimated at 0.7 percent.) Similar to other oil exporting countries, exchange rate movements have limited impact on the current account.

Effective Exchange Rate, January 2005-May 2017
(Indices, 2005=100)



Sources: National authorities; and IMF staff calculations.

4. The UAE is a net supplier of capital. Capital and financial accounts are open and domestic capital markets are the most developed in the Middle East and North Africa region. Capital inflows are dominated by stable FDI, inflows to the banking sector (mostly medium-term), and external debt issuance, while outflows are largely trade credits and portfolio investment. Risks of a reversal in bank inflows are mitigated by the UAE's long-standing safe-haven status. Steps to attract further FDI inflows are ongoing.

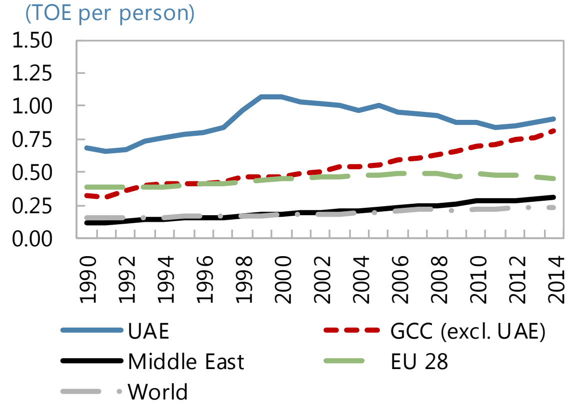
Annex IV. Increasing Energy Efficiency and Reducing Emissions

High energy consumption rates amid expanding economic activity, urbanization, and rapid population growth make improving energy efficiency a priority for the UAE. The authorities have recently released UAE Energy Plan 2050, which intensifies efforts to raise energy efficiency and reduce the share of carbon in the total energy mix. Technological improvements, price adjustments, tariff reform, and demand side management measures are key steps towards achieving the authorities' goals.

1. Energy consumption per capita in the UAE is among the highest in the world. The key reasons are a hot desert climate, the need for desalination for all urban water needs, easy access to energy resources, as well as economic distortions encouraging the development of highly energy intensive industries. Most of the UAE's population lives in the urban areas, making the UAE one of the most urbanized countries in the world. In addition, the UAE's population has more than tripled since 1995, intensifying pressure on energy and water supplies. Overall electricity consumption has doubled over the past decade.

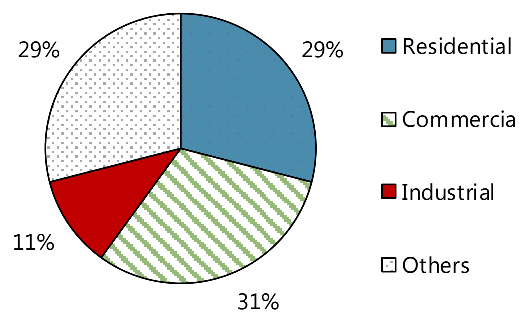
Total Final Energy Consumption per Capita

(TOE per person)



Source: International Energy Agency; and IMF staff calculations.

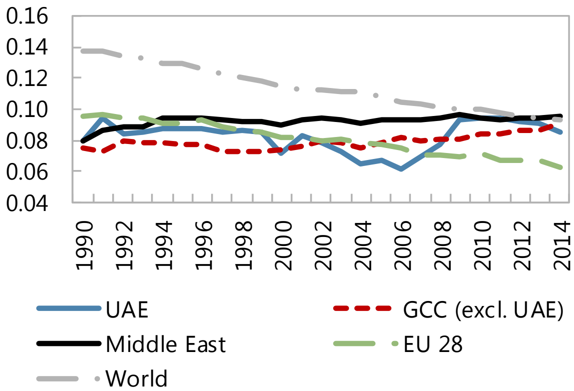
Electricity Consumption by Sector, 2013



Source: Ministry of Energy.

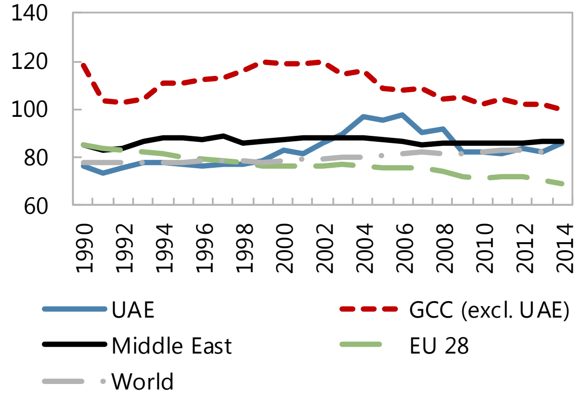
2. The efficiency with which energy is used, defined as total energy consumption relative to economic activity, has improved in recent years yet remains relatively high, due to the factors mentioned above. This ratio remains significantly below the GCC average yet above the world average. Similarly, the UAE has reduced the carbon intensity of its total energy consumption over the last decade in part by shifting from oil to natural gas.

Total Final Energy Consumption to GDP
(TOE per thousand, 2010 USD PPP)



Source: International Energy Agency; and IMF staff calculations.

Carbon Share of Total Energy Consumption
(Tonnes of CO2 per TJ)



Source: International Energy Agency; and IMF staff calculations.

3. **In the 2015 Paris Agreement, the UAE authorities committed to increase the share of zero-carbon energy from 0.2 percent of the total energy mix in 2014 to 24 percent by 2021**, per their Intended Nationally Determined Contributions (INDC). The UAE will achieve most of its zero-carbon energy target through nuclear power. The first of the four units in Barakah nuclear power plant is scheduled to become operational in 2017 and is expected to reach full capacity by 2020. The national clean energy target has been raised since the INDC submission. The target is now 27 percent, with the additional portion coming from solar energy, most of which will come from the Mohammed bin Rashid Solar Park, which is expected to be the largest solar park on a single plot in the world when completed in 2020.

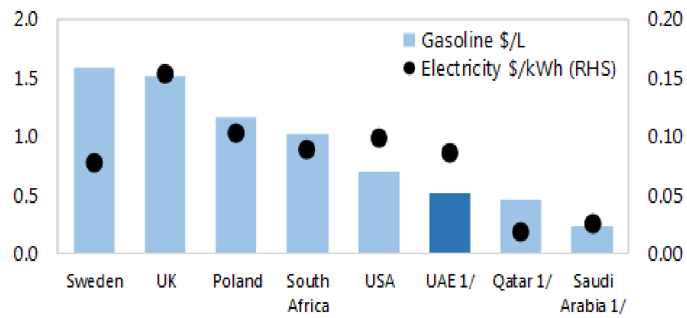
4. **In January 2017, the authorities released UAE Energy Plan for 2050 which would extend and complement the INDC.** The new strategy aims to change the energy mix as follows by 2050: 44 percent clean energy, 38 percent gas, 12 percent clean coal and 6 percent nuclear. The strategy also aims to change the energy consumption culture by slashing residential energy consumption by 40 percent. Solar is currently viewed as the most attractive renewable energy for the UAE because the country is blessed with abundant sunshine and the technology is maturing, with project implementation and further technology developments bringing down costs. The Ministry of Energy is currently working on demand-side management measures to support its 2050 strategy.

5. **Several demand-side management initiatives are underway**. The Emirate of Dubai is implementing a program as part of its Clean Energy Strategy 2050 to reduce energy and water consumption by 30 percent each by 2030. The authorities plan to achieve that goal through building regulations, change of tariffs, standards and labels, district cooling, and building retrofits. Dubai electricity and Water Authority (DEWA) launched a smart meter program and aims to introduce 1 million smart meters by 2020. In 2013, the Etihad Energy Service Company (ESCO) was established by DEWA to facilitate the creation of a performance market for energy companies and develop energy efficiency projects, focusing on district cooling and retrofitting 30,000 buildings by 2030.

Dubai smart city initiative involves construction of "smart buildings", promotion of energy conservation through visualization to residents of their consumption of electricity, gas and water, promotion of local energy production for local consumption through financial benefits to emirates' districts and residents, managing energy needs centrally for the districts. Abu Dhabi initiated a Comprehensive Cooling Pan to reduce cooling related energy consumption by 15 percent by 2030 and launched a strategy for groundwater, desalinated water and treated sewage effluent covering the period 2014-2018. The authorities see the development of low-carbon Masdar City integral in transforming Abu Dhabi's economy from an oil foundation to a global hub for renewable energy. It serves as a centralized test bed for renewable energy and technology companies. The city itself is designed to reduce environmental impacts as each building in Masdar City is designed to lower energy consumption by 40 percent.

6. **Water and electricity tariff reform has been an important step towards promoting prudent use of resources in the UAE**. Dubai implemented initial electricity and water reforms in 2008 and made further reforms in 2011. Abu Dhabi has been developing a comprehensive electricity and water consumption strategy, which led to an increase in tariffs in January 2015 (by 170 percent for water and by 40 percent for electricity). Water and electricity tariffs were increased again by 23-28 percent in January 2017. The primary focus of the reforms has been on prices charged to expatriates. The utility fees for expatriates are about three times the rate paid by locals. Through the electricity tariff reform, the authorities have raised the prices to close to cost-recovery levels for expatriates, which make up 90 percent of the UAE's population. In 2015, the UAE reformed its fuel pricing policy by adopting a mechanism to adjust monthly gasoline and diesel prices against international prices and eliminated subsidies on gasoline and diesel prices.

Gasoline and Electricity Prices
(U.S. dollars)



Sources: GlobalPetrolPrices.com; WorldAtlas.com; Saudi Electric Company; Qatar General Electricity & Water Corporation; and IMF staff calculations.
1/ Electricity price for 2001-4000 kWh consumption range.

7. **The authorities might consider further price adjustments to complement other efforts**. Price reform is effective as it reduces the use of energy-consuming products in addition to promoting energy efficiency, and it raises revenue. Continuous improvements in the efficiency of final energy use and reductions in carbon intensity of energy supply and consumption are needed to meet the authorities' goals set in the "INDC" and "UAE Energy Plan for 2050". Higher utility fees, including those applying to locals, stepped-up communications to persuade the society, further focus on research and technology to benefit from the new technology would strengthen demand-side policies. Continued targeting of emissions from the building sector through green building regulations, efficiency standards, and measures to move towards district cooling system would improve the efficiency of energy use further.

References

Boersma, Tim and Griffiths, Steve, 2016, "Reforming Energy Subsidies Initial Lessons from the United Arab Emirates, Masdar Institute, January 2016.

Decker, Christopher, Moussalli, Jad and Karlsson, Per-Ola, 2015, "Energy Efficiency in the UAE", Strategy&Formerly Booz&Company, 2015.

International Monetary Fund, 2017, "If Not Now, When? Energy Price Reform in Arab Countries" Paper presented at the 2017 Annual Meeting of the Council of Arab Finance Ministers, Rabat, April.

Masdar City, 2017, The Source of Innovation and Sustainability", Abu Dhabi, 2017.

Ministry of Climate Change and Environment, 2016, "United Arab Emirates State of Green Economy Report" (United Arab Emirates: Ministry of Climate Change and Environment).

Ministry of Energy, 2015, "The UAE State of Energy Report 2015" (United Arab Emirates: Ministry of Energy).

Saidi, Nasser, 2015, "Paris COP21, Climate Change and Decarbonisation", Gulf Business, December 2015.

Saidi, Nasser, 2017a, "Making it Clean: A Rapidly Changing Global Mix", Aspenia, n. 76, May 2017.

Saidi, Nasser, 2017b, "Carbon tax can fund clean energy transition", Gulf News, January 4, 2017.

Smart Dubai, 2015, "Smart District Guidelines", Dubai, March 2015.

INTERNATIONAL MONETARY FUND

UNITED ARAB EMIRATES

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

June 21, 2017

Prepared By | Middle East and Central Asia Department

CONTENTS

FUND RELATIONS

(As of April 30, 2017)

Membership Status: Joined 9/22/72; accepted Article VIII status in February 1974

General Resources Account	**SDR Million**	**Percent Quota**
Quota	752.50	100.00
Fund holdings of currency	749.41	99.59
Reserve tranche position	3.62	0.48

SDR Department	**SDR Million**	**Percent Allocation**
Net cumulative allocation	568.41	100.00
Holdings	542.53	95.45

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected Payments to Fund

			Forthcoming		
	2016	**2017**	**2018**	**2019**	**2020**
Charges/interest	0.01	0.03	0.03	0.03	0.03
Total	**0.01**	**0.03**	**0.03**	**0.03**	**0.03**

Implementation of HIPC Initiative: Not Applicable

Implementation of Multilateral Debt Relief Initiative (MDRI): Not Applicable

Implementation of Catastrophe Containment and Relief (CCR): Not Applicable

Exchange Arrangement

The U.A.E dirham was officially pegged to the SDR at the rate of AED 4.76190=SDR1 from November 1980 to February 2002—albeit de facto it was pegged to the dollar at a fixed parity. Since then, the de jure and de facto exchange rate regime has been a conventional peg to the U.S. dollar, with the mid-point between the official buying and selling rates fixed at AED 3.6725 = US$1.

The U.A.E. has accepted the obligation of Article VIII, Sections 2, 3, and 4. There are no restrictions on the making of payments and transfer for current international transactions, except for those restrictions for security reasons that have been notified to the Fund, by the authorities, in accordance with Executive Board Decision No. 144 (52/51).

Article IV Consultation

The U.A.E. is on the annual consultation cycle. The previous consultation discussions were held during April 26—May 9, 2016. The Article IV consultation was concluded on July 20, 2016. The staff report was published on July 27, 2016, and is available at

http://www.imf.org/external/pubs/cat/longres.aspx?sk=44129.0

FSAP Participation, ROSCs, and OFC Assessments

FSAPs were conducted in 2003 and 2007.

Technical Assistance:

STA	Multi-sector	April 2008
STA	Balance of Payments	March-April 2009
MCM	Macroprudential Tools and Liquidity Management	January 2011
STA	National Accounts	September 2011
MCM	Payment Systems	November 2011
STA	Balance of Payments Statistics	June 2012
FAD	Fiscal Coordination	June 2012
STA	Government Finance Statistics	April 2013
STA	National Accounts Statistics	May 2013
STA	International Investment Position	January 2014
FAD	Fiscal Coordination	January 2014
FAD	Fiscal Coordination	March 2014
STA	Fiscal Information and Coordination	May 2014
STA	Consumer Price Index	November 2014
STA	Government Finance Statistics	January 2015
FAD	Fiscal Coordination	January 2015
STA	Monetary and Financial Statistics	November 2015
STA	Balance of Payments Statistics	November2015
STA	National Account Statistics	April 2016
MCM	Bank Liquidity Risk Management and Liquidity Forecasting	March 2017
STA	Business Conditions Survey	March 2017
STA	Monetary and Financial Statistics	April 2017

Resident Representative: None

WORLD BANK RELATIONS

As of May 2017

Technical cooperation between the United Arab Emirates (UAE) and the World Bank began in 1980s with a comprehensive national health assessment study and a government computer center restructuring study. Later, the Government requested assistance in water resource management, debt market development, and labor market development.

In 2013, the Ministry of Finance conducted an awareness program about World Bank Group services to various audiences, which increased the level of engagement with the Bank. Since then, the World Bank prepared reports at the national level on financial implications of various health insurance schemes, assessment of private education improvement efforts through an innovative governance approach, upgrading public finance laws, and helped prepare Public Expenditure Reviews (PER) in health, education, higher education and public works. The authorities note that World Bank assistance has been informing policy dialogue among various stakeholders including the Federal National Council (Parliament) as well as informing policy formulation and implementation.

At the sub-national Emirate level, the World Bank has provided assistance to Abu Dhabi, Dubai, Sharjah and Ajman in various domains including the regulatory environment for private sector development, mobile savings and retirement options for expatriate workers, Doing Business, and institutional strengthening.

In 2016, the World Bank became a key partner of the World Government Summit and launched a permanent Education Platform at the Summit in 2017. Support to the Summit will be in the areas of governance, education, and SDGs.

Moving forward, the World Bank is supporting the Ministry of Finance with fiscal coordination among the Emirates, and will support efforts at the national and Emirate levels in the domains of diversification, education, efficiency and effectiveness of public resource utilization, as well as planning and visioning exercises.

Counterpart Agency – Basic Activity Data	*Activity Description*	*Current status*
Ministry of Finance PFM Legislation Review (P157431) Project Dates: 12/8/15 to 12/31/16 TTL: Manuel Vargas Budget: $0.3 million	Review Laws on preparing the General Budget, Final Accounts, State General Revenue, and the main supporting policies and procedures. Help upgrade such laws and regulations in accordance with pertinent international good practice.	Outputs delivered and activity closed.
Ministry of Finance Fiscal Coordination Program (FCP) (P158089) Project Dates: 12/15/15 to 3/20/17 TTL: Sahar Hussain Budget: $1.37 million	Building on delivered PERs in the health and education sectors, the FCP helps with (i) stocktaking the UAE's and best practice countries' fiscal policy coordination mechanisms; (ii) preparing a fiscal coordination manual and medium term implementation plan; and (iii) developing a fiscal framework for analysis of fiscal sustainability at every level. This will require a lot of team and capacity building effort at the individual Emirate level and among emirates.	Mission scheduled May 8-12 to focus on MTFF. PM and TTL will address the Fiscal Coordination Council May 10. We continue to try to clearly define the scope and outputs.
Dubai PMO Office World Government Summit (P162153) Project dates: 10/25/16 to 04/25/17 TTL: Edward Dahdah Budget: 0.3 million	The Bank will support WGS 2017 deliver technical and ministerial panels in the Governance domain, and hold global dialogue on the issue of measuring 'Happiness' as a complement to GDP measurement.	PMO asked to extend the agreement (will close before end FY) to do a few more items. Dialogue underway to prepare a new 3 year engagement. Jamal and Paul will follow up in Dubai mid May.

Dialogue is currently underway for possible cooperation with the following Ministries:

- Ministry of Finance: Proposal submitted to review and support the implementation of recommendations of the Education PER.
- PMO: Dialogue underway for a 3 year support to WGS in the domains of Governance, Education Platform, and SDGs.
- Ministry of Education: Dialogue will continue in May in Dubai to prepare a National Education Strategy.
- Ajman: Dialogue will start mid May on possible cooperation in the Economic Development domain to be followed by Urban Development issues after summer.
- Abu Dhabi Department of Economic Development: Dialogue will start mid May on economic modeling, planning, and PPP issues. AD DoED also asked to update its Doing Business sub-national report.

STATISTICAL ISSUES

(As of June 2017)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has some shortcomings but is broadly adequate for surveillance. There are substantial shortcomings on the dissemination of accounts of government-related entities (GREs). In particular, there is limited data on GRE debt and contingent liabilities to the government. The federal and individual emirates' agencies have improved the availability and quality of their statistics, but more progress is needed.
National Accounts: The methodology broadly conforms to the 1993 SNA. GDP is compiled annually with a lag of around 5 months. National accounts compilation is undertaken by the Federal Competitiveness and Statistics Authority (FCSA) and regional (Emirati) statistical agencies of Abu Dhabi and Dubai. These regional statistical agencies are independent of the FCSA and function as the central agencies of the respective Emirates. They report directly to the Emirates governments. This creates problems of priorities and hinders the sharing of data by the regions to the FCSA. Although the FCSA is responsible for compiling the national estimates of GDP, it only compiles estimates for the Northern Emirates (that is, the UAE excluding Abu Dhabi and Dubai). These estimates are then added to the regional estimates for Abu Dhabi and Dubai that are compiled by the Statistics Center of Abu Dhabi (SCAD) and the Dubai Statistics Center (DSC) respectively, to derive a national estimate. The process of summing the gross value added (GVA) compiled by the three agencies to arrive at national GDP is not advisable and should be discontinued. The compilation process is not consistent across the three agencies as they use different data sources and compilation techniques to estimate GVA for the same activities. The base year for the GDP estimates is 2010.
Price statistics: Data are published with a delay of one month. Consumer price indexes need further harmonization at the federal level.
Government finance statistics (GFS): In April 2017, for the first time since 2012, the UAE authorities have recommenced reporting high frequency data for budgetary central government. The UAE has submitted general government fiscal accounts for the *GFS Yearbook* from 2012, after the implementation of *GFSM 2001* in 2009 by the federal and several emirate governments. Further initiatives should be taken to establish debt management units at both the emirate and federal levels to improve fiscal balance sheet data. It is anticipated that the remaining smaller emirates will start producing GFS data from 2017, after which the UAE authorities can include them in the consolidated general government data.
Monetary statistics: The central bank of the UAE (CBU) has started disseminating SRF based monetary data in September 2016, with monthly frequency and timeliness of less than one month. An STA mission visited the UAE in April 2017 to assist the CBU in developing report forms for the other financial corporations (OFCs) that enable the compilation of monetary data for OFCs.

Financial sector surveillance: The central bank reports quarterly FSIs to the Fund, which are disseminated on the IMF's FSI website (fsi.imf.org). The reported FSIs at this stage only include the 12 core FSIs for deposit takers. STA has recommended the CBU to also compile and report encouraged FSIs for deposit takers and other sectors.
External Sector Statistics: The central bank has introduced an international transactions reporting system to improve the source data for compilation of balance of payments statistics. The authorities continue a project to compile the IIP, which will close an important statistical gap. The information needed to compile the balance of payments has shortcomings, especially for the financial account. The current data gaps prevent the CBU from presenting and disseminating balance of payments (BOP) data according to the international standards. Also, many components of the international investment position (IIP) data are missing or incomplete, as the data on private holdings of foreign assets and liabilities and government foreign assets lack appropriate surveys or are not published. The development of a comprehensive BOP and IIP is feasible if the CBU, the FCSA, and the Ministry of Economy strengthen their capacity and receive appropriate support at the highest level. The CBU relies on the international transactions reporting system to improve the source data and strengthen the quality of the balance of payments statistics. The authorities continue a project to start compiling IIP data by closing important data gaps.

II. Data Standards and Quality	
Participant in the GDDS/e-GDDS since July 31, 2008. The metadata were all updated in June 2013.	No Data ROSC is available.

UAE: Table of Common Indicators Required for Surveillance

(As of June 12, 2017)

	Date of latest observation	Date received	Frequency of Data[1]	Frequency of Reporting[1]	Frequency of publication[1]
Exchange Rates	Real time	Real time	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[2]	03/17	04/17	M	M	M
Reserve/Base Money	03/17	04/17	M	M	M
Broad Money	03/17	04/17	M	M	M
Central Bank Balance Sheet	03/17	04/17	M	M	M
Consolidated Balance Sheet of the Banking System	03/17	04/17	M	M	M
Interest Rates[3]	Real time	Real time	D	D	D
Consumer Price Index	03/17	05/17	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[4]– Central Government	12/16	05/17	Q	Q	Q
Stocks of Central Government and Central Government-Guaranteed Debt[5]	12/16	05/17	A	A	NA
External Current Account Balance	2016	05/17	A	A	A
Exports and Imports of Goods and Services	2016	05/17	A	A	A
GDP/GNP	2016	05/17	A	A	A
Gross External Debt	...	...	NA	NA	NA
International Investment Position[6]	...	...	NA	NA	NA

[1] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I): Not Available (NA).

[2] Any reserve assets that are pledge of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by means as well as the national values of derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

[3] Both market-based and officially determined, including discount rates, money market rates, and rates on treasury bills, notes and bonds.

[4] Foreign, domestic bank, and domestic nonbank financing.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.