GULF COOPERATION COUNCIL

ECONOMIC PROSPECTS AND POLICY PRIORITIES FOR THE GCC COUNTRIES

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# ECONOMIC PROSPECTS AND POLICY PRIORITIES FOR THE GCC COUNTRIES

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The GCC region's non-hydrocarbon growth momentum remains strong, driven by higher domestic demand, increased gross capital inflows, and reform implementation. Oil production—which depends on OPEC+ decisions—will be subdued in the near term. Inflation is contained and current account surpluses are high. Fiscal balances remain healthy, supported by fiscal reforms and high oil prices. The primary non-oil deficits are expected to decrease to 24 percent of GDP by 2028, with higher non-oil revenue reflecting sustained fiscal and structural reforms and contained expenditures. High global uncertainty is weighing on the outlook.

A comprehensive package of policies should be implemented to respond to near-term shocks and uncertainty and to firmly address medium- and long-term challenges:

- **In the near term, fiscal policy should remain prudent**, avoiding procyclical spending and using the windfall from higher oil prices to rebuild buffers. Targeted and temporary fiscal measures could be undertaken to respond to shocks, if and when they materialize. Monetary policy in the GCC should continue to follow the U.S. Federal Reserve and be accompanied by close monitoring of financial stability risks.

- **In the medium term, GCC countries should continue pursuing fiscal consolidation consistent with ensuring intergenerational equity and sustainability**, supported by a credible rules-based MTFF. Non-oil revenue mobilization efforts, energy subsidy phase-out, rationalization of expenditures while increasing their efficiency, and strengthening social safety nets would help achieve this objective. The application and enforcement of credible fiscal rules should help limit spending procyclically. An integrated asset-liability management framework and enhanced fiscal transparency would strengthen the credibility of the MTFF and help mitigate risks.

- **Continued financial sector reforms are needed to support growth and stability.** The financial sector is sound, underpinned by ongoing efforts—which should be pursued—to deepen financial and capital markets; strengthen the macro-prudential and regulatory frameworks; ensure effective supervision of the financial sector, including digital and fintech activities; foster sustainable finance; and implement measures to strengthen the AML/CFT frameworks.

- **Structural policies should continue focusing on diversifying the economies away from hydrocarbon.** Reform efforts aimed at further enhancing product market regulations, labor markets, and governance will spur growth, as will efficient investments in digital and green initiatives to accelerate transformation and support energy transition. The industrial policy should be carefully calibrated and not substitute for structural reforms while minimizing related inefficiencies. Regional and global integration would help expand markets, attract FDI and grow trade, thus support diversification efforts.

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2 This paper was prepared for the GCC Ministerial Meeting that took place on October 5, 2023, in Muscat. It reflects the information available to IMF staff at the time of the preparation.
A. Global Developments and Outlook

1. **Global growth is slowing (Figure 1).** Growth proved more resilient than expected in 2023 but still falls short of its pre-pandemic path. The resilience reflected a boost from reopening of the Chinese economy (although its recovery is losing steam), strong consumption amid tight labor markets in the United States, and robust activity in the service sector (including travel and tourism). Yet, there are signs that the rebound is fading: the stock of excess savings built up during the pandemic is decline in advanced economies (AEs); international tourist arrivals are approaching pre-pandemic levels in most regions; and recent data show wide-ranging slowdown in non-service activity. Overall, global growth is estimated to slow from 3.5 percent in 2022 to 3.0 percent in 2023 (Figure 1). Several cyclical and structural factors are contributing to the slowdown, including tighter monetary policy, limited fiscal buffers to absorb shocks and mitigate high debt levels, geoeconomic fragmentation, and extreme weather shocks. Global medium-term growth, at 3.0 percent, is at its lowest in decades.

![Figure 1. Selected Indicators of Global Economic Activity](image)

Sources: Bloomberg L.P., International Energy Agency (IEA), Haver Analytics, and IMF staff calculations. GCC PMI reflects simple average of Qatar, Saudi Arabia, and the UAE. AE=Advance Economies; EM=Emerging Markets; LIC=Low-income Countries.

2. **Inflation has moderated but proven to be higher and more persistent than expected (Figure 2).** Global inflation is forecast to steadily decline from 8.7 percent in 2022 to 6.9 percent in

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2023 and 5.8 percent in 2024. The global synchronous central bank monetary tightening to restore price stability is paying off but underlying (core) inflation remains above target for most G20 economies, which raises the prospects of higher-for-longer rates. The drivers of core inflation have mainly included pass-through effects from past headline-inflation shocks (notably from energy prices), as well as demand pressures particularly in the services sector. Wage growth has remained contained and longer-term inflation expectations are generally well-anchored. China is the largest exception, with inflation below the authorities’ target and the People’s Bank of China cutting policy rates since June 2023.

3. **The synchronization of the global monetary policy tightening cycle is starting to fade.** Rapid rate hikes in major AEs over the past 19 months have resulted in a tighter monetary policy stance (Figure 3) and in temporary market turbulence in some AEs (e.g., Switzerland, United States). Monetary policy is projected to remain appropriately tight through 2024 in most G-20 economies, until there are clear signs price pressures have adequately receded. Simultaneously, some emerging market economies (EMs) (including Brazil and China) are already cutting policy rates, as inflation remains subdued while economic momentum is waning. Divergent monetary policies could have implications for global asset prices, investor exposures, and capital flow volatility. Central banks should proceed in a data-dependent manner and stand ready to adjust course depending on the flow of data on the evolving inflation outlook and the strength of monetary policy transmission.
4. Risks to the global outlook are tilted to the downside. On the upside, core inflation could fall faster than anticipated if pass-through from lower energy prices is stronger-than-expected or a compression of profit margins to absorb cost increases. This would support economic growth by restoring purchasing power for households and allowing central banks to bring forward monetary policy easing. Global demand could also recover faster boosted by recovery in investment in AEs (IRA in the US, the EU Recovery Fund). Stronger policy support in China could bolster the recovery and generate positive global spillovers. Downside risks include more volatile food and energy prices due to climate and geopolitical shocks and more persistent core inflation. Further loss of growth momentum in China could exacerbate risks. Moreover, geoeconomic fragmentation hampers multilateral cooperation, investment, and trade.

5. Global financial stability risks remain elevated. Further adverse inflation shocks may require higher-for-longer rates, weighing down economic activity and possibly leading to disruptive repricing in the financial markets and tighter global financial conditions (Figure 4). Additionally, a risk-off episode, could trigger a sudden rise in interest rate expectations and a fall in asset prices. This would further tighten financial conditions and stress banks and non-bank financial institutions, whose balance sheets remain vulnerable to interest rate risk, especially those
highly exposed to commercial real estate. The risk of debt distress increased, as borrowing costs for emerging markets and developing economies (EMDEs) remain high, constraining the room for priority spending and raising the risk of debt distress. A prolonged tightening of global financial conditions could also trigger broad-based capital outflows from vulnerable EMDEs, which could also be detrimental to AEs if it leads to excessive leveraging and risk taking.

B. The Economic and Financial Outlook and Risks in the GCC Countries

Context

6. The GCC countries have embarked in wide-ranging reforms to achieve socio-economic transformation. GCC countries have set out ambitious reform agendas—as shown in Vision 2030 of Saudi Arabia, “We the UAE 2031”, Oman Vision 2040, Qatar National Vision 2030. Implementation has been progressing well and has accelerated after the pandemic. Main progress areas are social and business-friendly reforms, efforts to enhance fiscal sustainability and resilience, investments in strategic industries and digital and green infrastructure. Going forward, stepped up implementation of these reforms will be critical to enhance productivity, diversify the economies, and prepare for the energy transition.

Economic Activity and Outlook

7. Oil production cuts will lower the GCC overall GDP growth to 1.5 percent in 2023. The slowdown in overall growth from the exceptional 7.9 percent registered in 2022 mainly reflects oil production cuts slowing hydrocarbon GDP. While the GCC hydrocarbon GDP grew by 7.8 percent in 2022 supported by global cyclical momentum, it is expected to register a negative growth of around 1 percent in 2023 because of oil production cuts in line with the OPEC+ agreement (Figure 5) and further unilateral cuts of 1mbpd by Saudi Arabia that were extended to end-December 2023.

8. Strong non-hydrocarbon GDP growth is limiting the overall impact of lower oil production on growth (Figure 6). The GCC countries’ non-hydrocarbon GDP grew by robust 5.3 percent in 2022 and will continue growing at buoyant 4.3 percent rate in 2023. This reflects:
ECONOMIC PROSPECTS AND POLICY PRIORITIES FOR THE GCC COUNTRIES

Figure 6. Economic Developments

Real GDP Growth, 2014-2023
(Percent)

Real Non-Hydrocarbon GDP Growth, 2018-2023
(Percent)

Sources: National authorities; and IMF staff calculations.

Non-Hydrocarbon GDP Output Gap

Sources: National authorities; and IMF staff calculations.

* GCC average excludes Qatar.

Google Mobility Indicators
(7-day moving average, Jan 3 - Feb 6, 2020 = 100)

Purchasing Managers Index
(SA, 50+ = expansion)

Sources: National authorities; and IMF staff calculations.

Source: Haver Analytics; and national authorities.
1. **Highest growth rates expected in Saudi Arabia and UAE.** Saudi Arabia’s H1 2023 non-hydrocarbon GDP growth averaged around 4.5 percent (non-oil private and government activities) and the UAE published a robust growth of 5.9 percent in H1 2023, driven by strong domestic demand. High-frequency indicators of economic activity in Saudi Arabia and the UAE—including latest nowcasting analysis (Annex I)—are backing up strong growth expectations despite a dampening seen in some high frequency indicators (e.g., PMI), with the non-oil output gap estimated to be closed in 2023 (Figure 6). In Saudi Arabia, robust non-oil private investment will continue to be the primary driver of growth, fueled by the accelerating pace of non-oil activities, including various giga projects boosting the wholesale, retail trade, construction, and transportation sectors.

2. **Growth normalizing in Qatar.** In 2022, Qatar posted one of the strongest non-hydrocarbon GDP growth rates of 6.8 percent owing to a successful hosting of FIFA World Cup in November-December 2022, which boosted tourism, hospitality, and construction sectors. This is normalizing, with non-hydrocarbon growth expected at 2.5 percent in 2023 driven by investment in public projects, construction of the North Field LNG expansion project, and their spillovers to logistics, manufacturing, and trade. The visibility brought by the World Cup would continue to boost tourism.

3. **Non-hydrocarbon growth is slowing but remaining above 3 percent in Bahrain and Kuwait and stabilizing above 2 percent in Oman.** Slower Bahrain and Oman growth is reflecting continued fiscal consolidation, higher interest rates and a base effect from 2022 growth.

9. **GCC inflation remains contained and is falling (Figure 7).** Inflation in the region averaged about 3.3 percent (y/y) in 2022, a significant increase relative to 2.2 percent (y/y) registered in 2021. The largest increases were registered in Bahrain, Qatar, and UAE and the lowest for Oman, while inflation fell in Saudi Arabia. By end-2022, most of the inflationary pressures have rotated from tradables to non-tradables (Figure 8), as inflation in traded goods subsided due to higher interest rates, slowing global growth, and continued use of subsidies and caps on certain products (e.g., for staple goods, gasoline, electricity, and water). After heavily picked up, non-traded goods inflation has also trended down since February, resulting in inflation slowdown to about 1.6 percent (y/y) in August 2023. Spillovers from the war in Ukraine have had a limited impact beyond the resulting increase in global commodity prices' volatility.
10. Non-tradable goods inflation is becoming the main driver of headline inflation in 2023. Stronger economic activity and rising housing costs are driving price increases (Figure 8, and Box 1). Real estate prices are increasing rapidly in Dubai and modestly in Saudi Arabia (see Box 4), while rents picked up in Kuwait. Wage growth has thus far remained contained, with wage-price spirals—whereby prices and wages accelerate together—not materializing (on average) in the GCC countries. A relatively elastic supply of expatriate workers and increased labor force participation explain tame wage increases in GCC. Inflation is expected to stay contained at 2.6 percent in 2023 and 2.3 percent in 2024, and converge with that of the US in the medium-term with pegs to the US dollar in place.

Box 1. Analyzing Pass-Through Channels of Inflation in the GCC

The Global Economy faced an inflation wave following the COVID pandemic. Some academic papers and other observers linked that rise to what they termed as “greedflation”, where the increasing extraction of economic rents by firms at least partially explains the rise in inflation. Another disputed factor of inflation increase is inflation expectations or inflation uncertainty. We study both channels and find no evidence that the inflation of 2022 in the GCC was associated with a rise in corporate market power or uncertainty of inflation outcomes. Higher imported goods’ prices contributed the most to the GCC inflation in 2022.

Imported Inflation.

Staff’s analysis using a GVAR model shows that external factors such as imported inflation from trading partners (mainly driven by China) and the nominal effective exchange rate (NEER) explained about 80 percent of historical inflation dynamics in the region between 1987Q1 and 2022Q2. The pass-through of commodity price shocks such as oil and raw materials is limited, which can be explained by the prevalence of subsidies and administered prices.1

**Box 1. Analyzing Pass-Through Channels of Inflation in the GCC (concluded)**

**Inflation Expectations.**

**Uncertainty around inflation has subsided in GCC.** An indicator of inflation uncertainty based on dispersion in one year-ahead inflation consensus forecasts rose progressively since 2014, and jumped during the COVID-19 pandemic. Since then, it has continued to moderate to the third quarter of this year, even though the indicator still remained above its lowest in a decade witnessed before the rise in oil price volatility.

**Market Power.**

Our analysis suggests that a rise in corporate market power did not contribute to the GCC inflation surge of 2022. Company profits in the GCC have increased robustly over 2021-2022 with a relatively slow rise in wages compared to prices (Box Figure 1). The rise in profits does not necessarily imply increases in monopoly power with firms deliberately raising prices more than the cost of producing an additional unit of output (marginal costs). A staff analysis based on firm-level data, indicates little rise or even declines in firms’ mark-ups across various sectors in GCC countries (see Appendix II). The findings for GCC countries are consistent with the findings for AEs (Chapter 1, October 2023 World Economic Outlook).

**Corporate Sector Profits and Wages**

<table>
<thead>
<tr>
<th>Corporate Profits ($ per lagged Sales)</th>
<th>Average Monthly Wages in Saudi Arabia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(Ratio)</strong></td>
<td><strong>(Riyals)</strong></td>
</tr>
<tr>
<td>Sources: Compustat; and IMF staff calculations. Note: Median profitability expressed in USD dollars per lagged sales for listed firms. Rest of the ME&amp;CA contains seven ME&amp;CA economies.</td>
<td>Sources: National authorities; and IMF staff calculations. Note: Unskilled labor is defined as workers with no schooling, else is defined as skilled.</td>
</tr>
</tbody>
</table>

11. **Unemployment rates are falling but remain above pre-pandemic levels in some countries.** Aggregate employment rebounded to its pre-pandemic levels in 2022, while exceeding that level in Saudi Arabia. The most recent available data suggest that the employment of expatriates fully recovered from the pandemic, while the employment of nationals continued its upward trend that was largely unaffected by the pandemic. Consequently, unemployment rates continued to drop
for the second consecutive year in 2022, across all countries, yet, with the exception of Saudi Arabia where it reached record lows (5.6 percent as of 2022), they are still above their pre-pandemic levels due to the increased labor market participation (Figure 9).

![Figure 9. Labor Statistics](image)

12. **The GCC countries’ progress to achieve the Sustainable Development Goals (SDG) is mixed (Figures 10 and 11).** All the GCC countries are progressing with the SDGs’ agenda implementation and four of the countries have already exceeded two-thirds of the overall SDG score (Oman, Qatar, Saudi Arabia and UAE), with the UAE and Saudi Arabia fully achieving three and two SDGs, respectively. The improvement in the SDG score was mainly driven by more seats for women in parliament in Bahrain, Kuwait, Oman, and the UAE, higher manufacturing participation in GDP and employment across all countries, enhanced access to technology, increased share of salaries in GDP in Kuwait and Oman, improved statistical performance and higher government spending on health and education.

![Figure 10. Sustainable Development Goals Progress](image)

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4 Latest quarterly data shows 4.9 percent unemployment rate for Saudi Arabia as of 2023 Q2.
Remarkable progress has been achieved in enhancing the role of women in the economy over the past two decades, with female labor force participation (FLFP) rising by more than 10 percent during that period. Nevertheless, female participation in economic activity remains below the level suggested by GCC countries’ level of economic development, as measured by their GDP per capita, while the unemployment rate among women remains higher than their male counterparts. Recently, GCC countries have significantly accelerated climate actions that are necessary to achieve SDG goals in this area (see the discussion on climate in paragraph 56).

**Figure 11. Sustainable Development Goals**

**Abbreviations:**
- SDG1, No Poverty
- SDG2, Zero Hunger
- SDG3, Good Health and Well-Being
- SDG4, Quality Education
- SDG5, Gender Equality
- SDG6, Clean Water and Sanitations
- SDG7, Clean and Affordable Energy
- SDG8, Decent Work and Economic Growth
- SDG9, Industry, Innovation, and Infrastructure
- SDG10, Reduced Inequalities
- SDG11, Sustainable Cities and Communities
- SDG12, Sustainable Consumption
- SDG13, Climate Action
- SDG14, Life below Water
- SDG15, Life on Land
- SDG16, Peace, Justice, and Strong Institutions
- SDG17, Partnerships for the Goals

**Fiscal Developments and Outlook**

13. **The GCC fiscal performance remains robust, supported by relatively high oil prices, strong economic growth, and fiscal reforms (Figure 12).** The GCC registered an extraordinary overall fiscal surplus of 7.7 percent of GDP in 2022 (unweighted), which was largely in line with expectations as most countries maintained fiscal prudence—mainly by limiting capital expenditures and wage increases and supported by continued non-oil revenue mobilization. For 2023, lower oil prices and higher capital expenditures in some GCC are expected to reduce the fiscal surplus to 5.1 percent of GDP (unweighted), with some countries (e.g., Saudi Arabia) likely to go back to a fiscal deficit once again.5

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5 The deficit for Saudi Arabia takes into account higher expenditures—including the estimated non-recurrent one-off spending made in 2022. For details, see 2023 Saudi Arabia Article IV.
The GCC fiscal space is assessed as substantial (with some exceptions) and most GCC governments were increasing their saving rates and net foreign financial assets in 2022 (Figure 13). Fiscal space remains constrained in Bahrain, but the fiscal non-oil deficit is steadily declining. The caveat to the improved GCC fiscal performance is that potential additional capital expenditure to support structural reform agenda may be undertaken by the rest of the public sector (i.e. SWFs and state-owned enterprises (SOEs)) and not reflected in the general government statistics.

14. **Continued reforms on tax policy and revenue administration helped sustain non-oil revenue.** The need to diversify away from oil translated into increased emphasis on revenue mobilization and fiscal cooperation among the GCC since 2015 (Annex IV). The broadening of the GCC tax systems is continuing, with the subsequent doubling of the VAT rate in Bahrain to 10 percent (in 2022), maintaining the VAT rate at 15 percent in Saudi Arabia, and the introduction of federal corporate income tax (CIT) rate of 9 percent in the UAE, which became effective on June 1, 2023. Additionally, new Transfer Pricing regulations have been introduced in Qatar while a new e-invoicing mandate was implemented by Saudi Arabia. Our analysis show that the macroeconomic impact of the broadening tax systems in the GCC countries has been relatively small, so far (Annex IV).
15. The GCC countries accumulated large fiscal buffers, although with significant variation within the region, which need to be enhanced to reinforce long-term fiscal sustainability (Figure 14). The GCC net wealth ranges from a small positive 74 percent of GDP in Bahrain to a positive 1640 percent of GDP in Kuwait. An estimated average public net worth of a single GCC country in 2021 is comparable to that of Norway—a country with a large SWF and facing some of the same challenges as the GCC.

16. The overall sovereign risks in the GCC have subsided as GCC government debt has decreased. Fiscal prudence and strong economic activity resulted in a decrease of the GCC general government debt ratio as a share of overall GCC GDP to pre-pandemic levels of about 43 percent in 2022. Nevertheless, public debt in Bahrain remains above 100 percent despite a noticeable decline in 2022. The GCC debt service burden remained elevated at around 14.2 percent of GDP on average in both...
2022 and 2023, with some GCC countries (Bahrain, Oman) using their windfall revenue to lower their debt liabilities. The GCC countries are expected to keep issuing new debt (including in local currency and sukuk) to: (i) further deepen their domestic market and develop domestic yield curves (Oman, Saudi Arabia, and the UAE); (ii) service high gross financing needs (Bahrain); and (iii) finance urgent emerging needs related to energy transition. The new borrowing will be partly offset by higher GDP growth rates. As a result, general government debt (on average) is expected to stay flat over the medium term, while oil price volatility and contingent liabilities from SOEs (or government related entities (GREs) more broadly) will remain the main sources of vulnerability. GCC GREs' debt and financial vulnerabilities have also declined in 2022, but high interest rates and the global economic slowdown could weigh on the financial performance of some corporates going forward.

Financial and Monetary Developments

17. **Global monetary policy tightening has impacted domestic financial conditions and credit growth in the GCC countries to varying degrees**. Given their fixed exchange rate regimes, GCC central banks have roughly matched the aggressive policy rate increases by the U.S. Federal Reserve during its latest monetary policy tightening cycle (Figure 15). The exception is Kuwait, where the policy rate has risen by only 275 basis points over this period—well below the 525 basis-point increase in the Effective Federal Funds Rate (EFFR)—given the peg of the Kuwaiti dinar to an undisclosed basket of currencies. These policy rate increases have passed through to domestic bank lending and deposit rates to varying degrees across the GCC countries. The resultant tightening of financial conditions has contributed to a moderation in credit growth in most GCC countries (Saudi Arabia, Kuwait, Qatar, and the UAE), with the lagged impact limited by abundant liquidity amid high oil prices. Nevertheless, variation in private credit growth across GCC countries has mainly been influenced by idiosyncratic drivers of private domestic demand growth, rather than higher bank lending rates to date. For example, the relatively sharp fall in credit growth in Kuwait reflects land supply constraints, which have rationed residential investment demand.

![Figure 15. Credit Growth and Policy Rates versus Federal Funds Rate](source: Haver Analytics.)

18. **Banking systems in the GCC remain well capitalized, liquid and profitable, while asset quality is generally strong (Figure 16)**. Capital adequacy ratios remain well above regulatory
requirements, while funding continues to be predominantly deposit-based. The returns on equity and assets have rebounded from their pandemic lows to strong levels across the GCC countries, helped by healthy net interest margins driving profitability as deposit rates adjust less to the increase in lending rates. Asset quality remains high, with non-performing loan ratios being generally low. In the UAE, there is a progressive improvement as the non-performing loan ratio, influenced by legacy NPLs, is on a downward trend. Potential asset quality deteriorations that could have been masked by pandemic support measures did not emerge, as continued strong growth have benefited the GCC corporates. Provisions against credit losses cover most non-performing loans, and are particularly prudent in Kuwait.

**Figure 16. Financial Soundness Indicators**

![Graphs of Financial Soundness Indicators](image)

Sources: Haver Analytics; and IMF staff estimates.
19. The banking system continues to weather shocks relatively well. Using an indicator of banking sector vulnerability (Goodhart and Segoviano, 2009), results show that—at the time of the Global Financial Crisis in 2008–09—more than 40 percent of banks sampled could potentially be in distress if one or more banks were in distress. It improved the following decade to less than 30 percent, before worsening during the COVID-19 pandemic when oil prices fell. The banking sector stability indicator in the GCC is now back to less than 30 percent.

20. GCC financial market developments are supported by strong economic activity and the continued deepening of capital markets.

- **Equities:** In 2022, GCC equities (+3 percent) significantly outperformed EMs (-22 percent). While, as of end-September 2023, GCC stock markets lost 3.9 percent on average, the benchmark for EMs (MSCI EM) gained +0.1 percent) (Figure 17). The GCC countries have expanded market capitalization, with Saudi Arabia being the 9th and the UAE 29th largest in the world for equity. Higher weights for Saudi Arabia in the MSCI EMs index (also due to the exclusion of Russia) attracted more foreign investors.

- **Debt securities:** Long-term external GCC sovereign yields rose on the back of global monetary tightening – 163 basis points in 2022, and another 70 basis points as of end-September 2023, to 6.3 percent. External GCC sovereign spreads remained low, tightened slightly by 55 basis points in 2022 and stayed stable in 2023, and outperformed those of EM peers. Debt-raising activities—such as a $10 billion sovereign issuance, $6 billion sukuk issuance and the green bonds by the PIF ($3 billion in October 2022, and $5.5 billion in February 2023)—are helping diversify Saudi Arabia’s long-term funding options, though still relying on international markets while local debt

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6 Using information on the marginal probabilities of default, represented by the expected default frequencies (EDFs), this methodology infers the banking system portfolio multivariate density, updating a prior multivariate distribution, from which a set of banking stability measures are constructed. These indicators help assess the level of distress from a bank or group of banks on others in the system.

7 Sukuk issuance of Saudi Arabia as of June 2023.
markets are gradually deepening. The UAE federal government has successfully issued USD 8.5 billion in international and AED 16.7 billion in domestic bonds (including AED 5.5 billion in sukuk), since its inaugural issuance in 2021.

External Sector Developments and Vulnerabilities

21. **High hydrocarbon prices continue to support external balances in the GCC (Figure 18).** The GCC has registered a historically high current account surplus of around 16.0 percent of GDP in 2022, which is expected to decrease to a 9.6 percent of GDP in 2023, reflecting lower oil prices, slower global growth and trade, and accelerated imports in line with the rebound in domestic demand. Over the medium term, GCC current accounts are expected to return to levels consistent with medium-term fundamentals and desirable policies.

22. **GCC trade and openness indicators improved in 2022, supported by the negotiation of free trade agreements and regional initiatives. (Figure 19).** The negotiation of free trade agreements has been revived in the GCC region to foster both oil and non-oil trade, and boost services trade and tourism activities. The GCC Secretariat has recently initiated talks with the United Kingdom and resumed negotiations with India and Japan for free trade agreements. Since 2022, the UAE has also signed several CEPAs (Comprehensive Economic Partnership Agreements) with key trading partners and two agreements to settle trade in yuan and rupee. The GCC Tourism Strategy was also adopted in 2022 to promote sustainable tourism practices, diversification of existing offerings and improvement of service quality in the region.

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**Figure 19. Trade and Openness**

*Source: World Economic Outlook, UNCTAD, and IMF staff calculations.*

*Note: Lower value for the export concentration index indicates higher diversification of exports.*
23. **Increasing Foreign Direct Investment (FDI) inflows would contribute to further lifting the non-oil growth and diversifying the economy.** The GCC countries have attracted more FDI (as a share of GDP) than AEs and EMDEs since the pandemic (Figure 20). The UAE remains the region’s largest FDI destination, with inflows of $26 billion in 2022 (more than 5 percent of GDP), which could be attributed to regulatory reforms (for example, legislative changes in 2021 to allow 100 percent foreign ownership of onshore companies and changes to the PPPs legislation in 2022 to encourage larger private sector participation). The substantially improved business environment in Saudi Arabia through various ongoing reforms and the new FDI law in Qatar that allows up to 100 percent foreign ownership are also expected to help attract more FDI. Taking stock of both FDI inflows and outflows, the GCC countries have become more central in the global FDI network in the past decade, driven by the UAE, Saudi Arabia, and to some extent Kuwait, although still lagging AEs and EMs (Figure 21).

24. **The GCC international bond issuances have increased significantly in 2023 reflecting relatively strong economic performance (Figure 22).** The issuances so far this year have already exceeded the total issuances in 2022. More than half of the new issuance was by sovereigns (41 percent) and SWFs (14 percent), and Saudi Arabia was the main issuer, accounting for 64 percent of the total issuance. Bahrain issued international bonds and Sukuk in 2021 (US$ 4.50 billion total, about 10 percent of GDP) and the UAE also received relatively large, syndicated loans in 2023 accounting for about 5 percent of their GDP. The GCC countries have also been faring better than EMs in terms of bond flows through ETFs and mutual funds since 2023 (Figure 23), although the cumulative flows have become negative since the second half of August.

25. **Reserve accumulation and net foreign asset positions are expected to improve further in 2023.** GCC gross FX reserves have increased marginally in 2022 to 19.2 percent of GDP, while a large part of the GCC oil windfall was accumulated abroad, including by SWFs and SOEs. Nonetheless, reserves remain adequate as they average 8.3 month of imports cover (around 100 percent of IMF’s reserve adequacy metric). There is an indication that some part of the windfall is being repatriated in 2023 to finance investment projects. Despite strong growth and financial inflows, few GCC countries remain vulnerable to external shocks, for example, gross financing needs for Bahrain remain elevated.
through the medium term. Positive external spillovers from the GCC countries, include the recovery of outward remittance flows and increased GCC financial support to vulnerable countries in the Middle East, North Africa and Pakistan (MENAP) region.

26. GCC countries have also significantly increased their financial support to ME&CA region after COVID pandemic (Figures 24 and 25). The increase in financial flows from the GCC to ME&CA supports private investment, productivity, and growth in recipient countries and, in some cases, helps meet external financing needs, contributing to shared regional macroeconomic stability.
Risks to the Outlook

27. **The GCC near-term outlook is positive, supported by strong domestic activity.** The pace of GCC non-hydrocarbon growth is expected to be healthy, driven by increased capital investment and supported by capital inflows, despite risks from global headwinds. The manufacturing and service sectors are expected to grow significantly over the medium term, as a result of accelerated investments, FDI inflows, and structural reforms. Under the current baseline, international oil prices are expected to average $80.5 in 2023 and decline to about $67.5 in the medium term. Possible revisions to global demand and trade, due to the materialization of global growth and inflation risks, and further shifts in commodity prices, including those due to geopolitical developments, bring exceptional uncertainty to our projections.

28. **The outlook is subject to balanced risks in highly uncertain external environment.** On the downside, lower hydrocarbon prices due to subdued global activity (in the short term) and a quicker shift in demand for fossil fuels (medium to long term) due to global decarbonization efforts could reduce oil demand, pressuring oil prices and production. These developments, compounded by a global recession (see Box 2 on growth impacts from China growth slowdown) and higher-for-longer interest rates, would reduce trade and tourism, pressure fiscal and external balances, and adversely affect vulnerable corporates. The upside risks are higher-than-expected oil production if the OPEC+ production cuts are reversed, higher oil prices if expectations of a supply shortfall persist, faster capital investments, and accelerated structural reforms.

29. **Inflation risks remain contained,** but potential overheating trends from high public investment, accelerated project implementation, and foreign financing inflows could be emerging in some GCC countries (SAU and UAE). The medium-term global inflation outlook continues to see a downward trend, keeping inflation pressures in the GCC low. In addition, caps on domestic energy and food prices persist in the majority of the GCC, are adding to continued lower inflation expectations.
Box 2. Spillovers from China Growth Slowdown

A slowdown in China’s growth would put downward pressure on oil prices and demand, reducing oil GDP and revenue in the GCC. As the second largest consumer of oil, a slowdown in China’s growth would significantly reduce global oil prices and demand for GCC oil products. This would have a direct impact on lower oil GDP, but also impact non-oil GDP if it leads to a reprioritization of public spending (and spending by the sovereign wealth funds). The impact on oil GDP is larger today than a decade ago since the GCC direct exposure to China has now increased significantly, with hydrocarbon exports from the GCC to China representing 20 percent of their total hydrocarbon exports, more than twice the proportion observed a decade ago.

The GCC non-oil GDP could also be directly affected by lower growth in China through their strengthened non-oil linkages. China has been one of GCC’s main non-oil export destinations, absorbing nearly 10 percent of their total non-oil exports. Main non-oil exports include chemical products, plastics and rubbers, machines (such as broadcasting equipment from UAE), and metals. In addition to goods exports, GCC countries have been exporting travel services to China. For example, China was Dubai’s fifth-largest tourist source market in 2019, and it received the most tourism visas issued by Saudi Arabia in 2019.

Financial linkages between GCC and China have also strengthened. FDI from China to the GCC has increased significantly in recent years, especially after the pandemic, reaching more than USD15 billion in 2021, which is more than twice its pre-pandemic value.

A negative growth shock in China would adversely affect GCC non-oil growth in both the short- and medium-term. Following an empirical approach, similar to the 2016 IMF WEO Spillover Note, we estimate the effects of China’s idiosyncratic growth shock on GCCs’ non-hydrocarbon GDP growth:

\[
y_{it+k} - y_{it-1} = \rho_{it} e_{it} + \delta(l) \Delta y_{it} + y^k \% \Delta oil_t + \alpha_i + \mu_t + u_{it},
\]

Where \(y\) is the log of real non-oil GDP; and \(e_{it}\) is the China’s idiosyncratic growth shock in year \(t\) identified by controlling for its country-specific fixed effect and global growth (proxied by average growth in G7 countries). The coefficient \(\rho_{it}\) measures the spillover effect of 1 percentage point negative shock in China’s growth at each time horizon \(k = 0, ..., 4\) for each country \(i\). Two lags of each country’s own real non-hydrocarbon GDP growth are included to account for the dynamics of output, as well as oil prices (in percentage change). The equation is estimated in a panel framework during 1990-2022 period to gauge the average effect in GCC. Figure below shows that China’s shocks have long-lasting effects on non-hydrocarbon output in GCC; in particular, the estimates suggest that a 1 percentage point negative shock in China’s growth decreases non-oil output in the GCC by 0.24 percent in the very short term—the same year as the shock—and then by about 0.57 percent over the medium term, i.e., after four years. These estimates could be seen as direct spillover effects from negative growth shock in China, as global developments are teased out by the time fixed effect. The negative spillover effects could be larger if second-round effects are considered, for example, other countries are also affected by the negative growth shock in China, which could lead to larger cumulative negative effects over the medium term.
Box 2. Spillovers from China Growth Slowdown (concluded)

The negative spillovers to non-oil GDP are transmitted through trade linkages. Time-varying estimates of the short-term effect on non-oil (in absolute term) are positively correlated with China’s share in non-oil exports of GCC as shown above, suggesting the negative spillovers to non-oil GDP are also transmitted through trade linkages.

Output Effect of a Growth Shock in China on GCC Growth (Percent of Real Non-Hydrocarbon GDP)

Sources: WEO and IMF staff calculations.
Note: The x-axis denotes years, where t=0 is the year of the growth shock in China. The lines denote the average response of real non-hydrocarbon GDP and the shaded areas denote 90 percent confidence bands.

Short-Term Output Effect of a Growth Shock in China on GCC Growth (Percent of Real Non-Hydrocarbon GDP)

Sources: WEO and IMF staff calculations.
Note: The x-axis denotes years until which the sample ends; for example, 2010 means the sample spans from 1990 to 2010. The lines denote the average response of real non-hydrocarbon GDP in the same year of the growth shock in China and the error bars denote 90 percent confidence bands.

30. The risks from higher-for-longer global interest rates could slow growth and credit, and lead to repricing of financial markets and tighter financial conditions in GCC. Market implied policy rate expectations continue to shift higher-for-longer in the U.S. and EA, given still elevated core CPI inflation and robust macroeconomic data, putting upwards pressure on sovereign yield curves and bank lending rates worldwide. A prolonged period of tight global credit conditions could trigger further bouts of global banking system turbulence, as explained above. Such global financial stress could be transmitted to GCC banking systems via higher short-term dollar denominated interbank loan spreads and rises in credit loss rates, including on cross-border exposures. Despite the mortgage boom in Saudi Arabia, large and increasing real estate and construction loan exposure of retail banks in Bahrain, and sharp real estate price increases in Dubai, overall banking sector risks from the housing sector are assessed to be manageable (Box 3).
Box 3. Real Estate Sector Developments and Policies in the GCC

Strength in the real estate sector has been part of the robust non-oil economic growth in much of the GCC. Real estate, both its commercial and housing related components, has also been part of most GCC countries’ development strategies. Buoyant real estate demand, supported in a few cases by international investors, has led to steady and sharp price increases in some GCCs’ real estate segments. The authorities should continue to closely monitor real estate market risks and further strengthen macro-prudential and regulatory frameworks.

Current state of the real estate market and risks

- The recent real estate price performance has been mixed. Property prices have continued to grow strongly in Dubai, after having risen by 60 percent in 2022, supported by domestic strong demand and foreign capital inflows. Real estate price performance has been more muted elsewhere in the region. Rental prices (from CPI), which tend to represent large shares of the CPI baskets in the region, only started to increase recently. Demand for housing in Saudi Arabia has not significantly outpaced the supply of dwellings. As a result, property prices have been increasing less rapidly than CPI in recent years, with the average sales prices in Riyadh or Jeddah remain below those in Dubai, Abu Dhabi, or even Bahrain.

- Signs of weakness have appeared among some property developers and contractors. Such signs have emerged as after pandemic (Oman) or an earlier boom (the 2022 FIFA World Cup in Qatar). Real estate corporates at risk moderated from the COVID-19-related peak but is relatively high in some GCC countries. Risks related to property developers have also tended to be higher in Dubai—with a series of boom-and-bust cycles in the past (e.g., 2007, GFC, 2014)—and where some large property developers defaulted or restructured their debts and have been “cleaning up” their balance sheets since these episodes.

- Banks’ real estate lending has increased considerably in parts of the region. For instance, in Saudi Arabia, policy measures to increase home ownership have supported mortgage lending growth, with real estate-related lending also growing rapidly from a low level and now representing more than a quarter of bank claims. Generally speaking, there are still statistical issues that hamper a proper assessment of real estate exposures in the region.
Box 3. Real Estate Sector Developments and Policies in the GCC (concluded)

- **More recently, tighter domestic financial conditions have adversely affected the property sector.** In some countries, NPLs in construction and real estate were already higher than in other sectors and have continued to increase, e.g., in Bahrain (NPLs are 11.4 percent in construction and 4.8 percent in real estate) or Oman (construction sector-related NPLs are 15.7 percent). Tighter conditions are impacting corporates more as they typically borrow at variable interest rates while retail borrowers are more insulated by the prevalence of fixed interest rate mortgages in a few GCC countries (e.g., in Saudi Arabia). Moreover, mortgages tend have full recourse, protecting lenders to some extent.

GCC economies have taken measures to safeguard financial stability which should be further enhanced:

- **Regulation of the real estate sector.** Many GCC countries have established a new framework or agency to regulate and monitor the real estate sector, as this was often missing (e.g., in Saudi Arabia, Qatar).

- **Macroprudential measures and frameworks.** Several GCC economies have introduced measures to help limit financial stability risks (Table). In the UAE, for instance, a new framework to monitor banks' real estate exposure has been established recently and the UAE Cabinet of Ministers has promulgated a Law inaugurating the Financial Stability Council. The new Financial Stability Council will aim to promote financial stability, monitor associated risks, tackle and prevent financial crises, and develop proactive measures to manage and protect economic, financial and monetary systems in the UAE.

### Selected Macroprudential Policy Measures

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</tr>
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</table>

1/ Including limits to lending to real estate related sectors.

Note: “X” Sign represents country has corresponding measures in place.

**Statistics.** Some GCC countries publish comprehensive property prices data (e.g., Dubai in the UAE, main cities in Saudi Arabia). In others property price statistics are unavailable or without sufficient granularity (e.g., in Kuwait, Qatar, Bahrain and Oman). Dissemination of property price indices with sufficient granularity and allowing valuation measures (price to income, price to rent) would enhance monitoring of financial stability risks.

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1 The risks emanating from mortgage lending are relatively contained (for details please see [2023 Saudi Article IV, 2022 UAE Article IV].)
Box 4. The Bank-Sovereign Nexus in the GCC

Rising sovereign debt in the wake of the COVID-19 pandemic has generated renewed attention to the bank-sovereign nexus globally. Banks hold domestic sovereign debt for a number of important reasons, including to meet prudential standards, for sovereign debts’ preferential treatment, and its role as strong collateral assets. Lower quality of sovereign credits would negatively affect banks, including through lower valuation of sovereign bond holdings. Weaker banking sector conditions spill back to reduce the sovereign’s credit quality through higher contingent liabilities.¹

The nexus may not be as strong in the GCC. First, sovereign debt levels are generally lower in GCC, except for Bahrain, than in other countries, supporting their relatively tight credit spreads. Second, partly reflecting the relatively low volume of government debt, bank claims on the central government do not stand out as high either, suggesting the transmission of a shock from the government to banks is manageable. Third, relatively large shares of bank stakes are held by governments, but generally strong bank balance sheet conditions reduce the chance of banks representing contingent liabilities for the sovereigns. Indeed, performance of credit risk for banks and sovereigns in GCC has not shown signs of tightening.


31. Medium-term risks pose challenges and create opportunities for long-term growth.

Risk of disorderly climate transition. The GCC face energy transition risks, including potential disruptions in fossil fuel trade, as the world shifts towards achieving a net zero emissions target,
which will require continuing to build macroeconomic policy buffers, diversify their economies and reduce exposure to extractive industries in the context of high uncertainty and in the event of a potential long-term decline in oil prices. Due to an unknown magnitude of supply effects (e.g., underinvestment in oil) and demand effects (e.g., shift to low-carbon consumption), future oil price developments are highly uncertain (Figure 26) and could move to allow more or less fiscal space. Additionally, if global decarbonization efforts were accelerated to meet Net Zero Emissions targets sooner rather than later, the GCC financial systems would face challenges from deteriorating asset quality linked to carbon-intensive activities and weaker overall growth, potentially resulting in stranded assets and further erosion of financial wealth.8

However, the emergence of the green economy also offers new opportunities for the GCC to build on their existing energy sector infrastructure and knowhow, and leverage the region’s comparative advantage for solar, and hydrogen production.

- **Risk of global fragmentation.** Deepening global geoeconomic fragmentation could also pose risks to GCC countries. While fragmentation may entail strategic advantages for some countries in selected cases, it is very likely to involve significant economic costs in the aggregate (Aiyar et al., 2023) and could delay the green transition.9 The ongoing separation of the world economy into blocs amid the war in Ukraine and other geopolitical tensions, if intensified, could trigger more restrictions on cross-border movements of capital, goods, technology, and labor, and adversely affect trade and growth of the GCC countries. Such fragmentation could also contribute to volatility in commodity prices and affect global demand and supply for some of the main commodities, including oil. While these volatilities pose two-sided risks to growth and inflation, as well as to the GCC fiscal and current account balances in the near term, heightened uncertainties regarding the future geoeconomic landscape could affect firms’ investment in productive capacities, and thus reduce potential growth and productivity over the longer term.

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8 Detailed discussion and quantification of energy transition scenarios could be found in the 2022/2023 Saudi Arabia AIV and 2022 SIP and in the 2023 UAE AIV and SIP.

C. Policy Priorities

Short-term Policies Mix to Ensure continued Balanced Growth and Resilience

32. In the short term, fiscal policy should remain prudent to avoid procyclicality, rebuild policy buffers and support disinflation. Countries with fiscal space could deploy targeted and temporary fiscal measures if there is an economic case such as significant economic slowdown or other shocks.

33. Given their fixed exchange rate regimes, monetary policy in the GCC countries should continue to follow the U.S. Federal Reserve. GCC central banks should continue to adjust their policy rates in line with the EFFR, except in Kuwait where its exchange rate peg to an undisclosed basket of currencies permits somewhat more monetary policy autonomy. The macroeconomic impact of tighter monetary policy is expected to be muted by abundant banking system liquidity amid elevated oil prices, which dampens the pass-through of higher policy rates to bank lending rates. Nevertheless, financial supervisors in the GCC should remain vigilant to the risks from higher-for-longer interest rates, by closely monitoring banks’ dollar funding liquidity and credit quality.

Medium- and Long-Term Policies for Digital, Green, and Sustainable Growth, Fiscal Resilience, and Financial Stability

Policies to Enhance Fiscal Sustainability and Resilience

34. Fiscal structural reforms should be stepped up to reinforce long-term fiscal sustainability. This can be achieved by further advancing reforms to strengthen public finances, developing a credible
rule-based and forward looking medium-term fiscal framework (MTFF), and fostering sustainable finance (see below paragraph 46).10

35. **Gradual fiscal consolidation consistent with the long-term fiscal objective should continue.** A growth friendly and credible medium-term consolidation of the non-hydrocarbon primary fiscal deficit of 10 to 16 percent of non-hydrocarbon GDP by 2028 would be consistent with the GCC long-term fiscal anchors, further enhancing fiscal buffers and avoiding procyclicality (Figure 27).

36. **Fiscal consolidation should continue through:**

a. **Non-oil Revenue mobilization.** Efforts should continue on tax reform implementation, including on CIT introduction (Bahrain) and expansion (Kuwait and UAE), VAT and excise tax increases as well as developing other forms of taxation (e.g., personal income taxes, property taxation). Broadening the tax base, improving the efficiency of tax collection and administration, including via further digitalization and further enforcement and enhancement of existing taxes, are also priorities. The UAE has requested a TADAT assessment, while Saudi Arabia should accelerate ongoing efforts to remedy tax administration gaps identified through an internal TADAT assessment, which should be also part of a comprehensive medium-term revenue strategy. The economic impacts of tax reforms will be gradual and should be supported by phasing-out numerous nuisance fee structures. The concerned entities are encouraged to pursue a detailed study on the economic impacts of fiscal incentives and exemptions, including to support the implementation of the development strategies and Visions.

b. **Containing spending growth by:**

- **Rationalizing expenditure, particularly the wage bill.** GCC countries should remain committed to containing the wage bill by finalizing public wage and employment reforms in the UAE, rationalizing the public wage bill in Qatar, as well as streamlining resources and increasing the efficiency of manpower in Bahrain. Efforts undertaken early on the high public wage bill in Saudi Arabia (through strategic workforce

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planning and reviewing), to rationalize spending, should be sustained and well anchored. These efforts will also help to incentivize employment in the private sector.

- **Gradually removing poorly targeted fuel and utility subsidies, alongside measures to strengthen social safety nets.** While prices are adjusted regularly to follow international price trends, with subsidy phase out showing some progress in recent years, energy and utility subsidies remain high in all GCC countries (Figure 28). Specifically, in 2022, the sum of gasoline and diesel subsidies alone ranged between 0.9 percent of GDP in Qatar to close to 3.5 percent in Saudi Arabia and Kuwait. Only the UAE fully liberalized fuel prices in 2015. Adding other fuels (e.g., LGP and kerosene), gas, and electricity and water would result in subsidy amounts multiples those for diesel and gasoline in most of the GCC. The gradual removal of subsidies will help generate savings necessary for investment and promote efficient energy and water usage and support climate mitigation efforts (see below).11 Such reforms should be accompanied by better targeted transfers and social safety nets, which should be scaled up by leveraging progress made in unifying the social targeted scheme and digitalizing the provision of social benefits (examples of Saudi Arabia and the UAE). Bahrain and the UAE also are revamping the housing programs for vulnerable groups. In addition, voluntary savings schemes (VSSs) can help sustainably increase protection of informal workers (such savings scheme for expatriate workers recently was launched in Dubai).

- **Increasing spending efficiency.** The GCC countries' public investment efficiency scores rank high among the EMs group (Figure 29), but still show significant gaps with the EMs' efficiency frontier and most AEs. Improving the efficiency of public investment, and more broadly improving public investment management, will become increasingly important as public-led investment projects in the GCC accelerate, especially in green and renewable energy sources. Consideration of **climate-PIMA** and **green PFM** (including a climate tagging system for budgetary purposes), and enhancement of PPP frameworks to better align them with the fiscal framework will further enhance spending efficiency and support Net Zero Emissions targets (see below). Additional efficiency gains would be achieved by further digital adoption in the public sector (for example, such as a utilization of the digitalized expenditure chain platform (Etimad) in Saudi Arabia).

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11 Energy subsidies also crowd out spending on education, health, and other social expenditures that are critical for inclusive growth.
37. **Further progress on GCC fiscal frameworks will buttress fiscal structural reforms’ efforts.** The work on the fiscal frameworks needs to be accelerated to ensure that the ‘upgraded’ and enhanced fiscal frameworks, which should incorporate credible long-term fiscal anchors and fiscal rules, and stronger institutions, can balance both short-term and long-term objectives.\(^{12}\) In addition to stronger linkages with budget planning and execution, GCC fiscal frameworks should be closely coordinated with country development strategies (such as GCC countries’ Visions, etc.) to fully account for reforms’ financing needs and potential growth benefits. Importantly, a proper assessment of the fiscal stance would require full incorporation of the operations of the SWFs and SOEs, which are increasingly involved in national development strategies. Regular public communication of medium-term and annual fiscal plans and outcomes and enhanced coordination with the monetary authorities to limit risks to liquidity management would further enhance the credibility of fiscal policy.

38. **Credible fiscal rules are crucial to support implementation of GCC fiscal frameworks by clearly delinking spending decisions from oil price fluctuations.** Both implicit and explicit fiscal rules have been used by GCC countries to ensure stability. Oman’s and Saudi Arabia’s medium-term fiscal frameworks were initially aimed at achieving a balanced fiscal budget in 2024 and 2020, respectively. Both have modified the frameworks to focus on fiscal sustainability instead of solely targeting a fiscal balance. Bahrain extended its original Fiscal Balance Program, targeting an overall fiscal balance by 2024. Saudi Arabia’s fiscal sustainability program now includes ongoing work and experimentation with a structural fiscal rule which aims at avoiding procyclicality and is based on a 50-year smoothing of oil prices in real terms.\(^{13}\) The UAE uses multiple fiscal rules at central and local governments’ level: a balance budget rule for the federal budget, and oil price and debt rules by local governments (Emirates). However, a fiscal rule that clearly delinks spending decisions from higher oil prices is important for all GCC countries to resist calls for more spending when these prices rise. Any formal rule should aim at being guided by and consistent with a long-term fiscal anchor. Rules should also be enshrined in legislation, signaling the importance attached by governments to reinforcing fiscal sustainability, and detail the circumstances under which the rules can be amended to ensure their flexibility.

\(^{12}\) There is a need to continue responding fast and decisively to manage the large volatility in oil prices and the large crises (like the GFC and COVID-19). Therefore, GCC fiscal frameworks should be flexible in times of major economic shocks that could lead to large deviations from fiscal anchors and rules. Fiscal frameworks should include a possibility to recalibrate a medium-term fiscal anchor, consistent with the long-term objective, if the old rules are not feasible, but these should be clearly communicated to the public. Additionally, to safeguard the integrity and credibility of the fiscal rule, it is important that the rule/s include at the outset stipulations that govern: correction mechanisms (when there are relatively smaller deviations from operational targets due to unforeseen shocks), escape clauses (to set procedures of suspending and returning to the rule following large shocks), as well as periodic reviews (to ensure the design and calibration of the rule are aligned with long-term fiscal strategies).

\(^{13}\) In case of Saudi Arabia, the IMF advice is favoring a spending ceiling with a simple rule, based on the PIH, which may best serve the country in reconciling its stabilization and growth objectives in the longer term. Staff also estimates that an expenditure rule setting 1½-2 percent real growth in spending would have performed well in view of developments in oil prices in the past few years (this rule would have set spending ceilings that were close to actuals and would prevent pro-cyclical expenditure growth during high oil price years). For details, see [the IMF Special Issue Paper for Saudi Arabia, 2022](https://www.imf.org/external/pubs/ft/specialpapers/sp2022.pdf).
39. Advances in GCC fiscal frameworks are needed to support the development of sovereign asset and liability management (SALM) frameworks to improve fiscal policy efficiency and minimize “leakages”. The SALM approach would enhance government fiscal risks monitoring efforts by assessing both sustainability and vulnerability risks of broader public finances to shocks (e.g., commodity prices), but it would require information on public sector balance sheets (PSBS). The governments of Saudi Arabia and the UAE are taking initial steps on developing SALM frameworks by focusing on compiling public sector financial assets and liabilities. Given the increasing role of SWFs and SOEs in GCC countries’ capital expenditures, quickly moving to a SALM approach is critical to ensure effective monitoring of public balance sheet exposures and risks, and to implement cost-effective risk-based management of public sector debt and assets. A preliminary assessment of the GCC’s PSBS suggests that the balance sheet is healthy with significant assets and limited leverage though with notable variation across the GCC (Box 5).

Box 5. Understanding Public Sector Balance Sheets in the GCC: Initial Insights

The GCC countries accumulated substantial public net worth at the end-2022 although with significant variation within the region. Using a public sector balance sheet (PSBS) approach we estimate a narrow and broader measure of public net worth:

- **GCC net worth and net financial assets.** The “narrow” measure of central/general government net worth is estimated at around 688 percent of GCC GDP at the end-2022, while central/general government net financial worth is estimated at negative 123 percent of GDP. At the same time, the GCC’s public sector net assets (a broader measure for the whole public sector) are estimated at above 5000 percent of GDP (eight time larger than the narrow measure estimate) and net financial assets at around 1066 percent of GDP at the end-2022 (Text Table).

- **GCC overall public net worth.** Public sector net worth is estimated to be positive for all countries in the region except for Bahrain. The GCC net wealth is ranging from a small positive of around 74 percent of GDP in Bahrain to 1640 percent of GDP in Kuwait. An estimated average public net worth of a single GCC country of around 840 percent of GDP (including NPV of hydrocarbon assets) is comparable to Norway in 2021. Countries with the highest value of natural resources have the largest estimated assets.

- **GCC total assets, liabilities, and their structure.** Assets of the sovereign wealth funds (SWFs), accounted for 22 percent of GCC total assets, while fixed assets and hydrocarbon assets represented 16 percent and 61 percent of total assets, respectively. Liabilities of about 600 percent of GDP composed largely of central/general government and SOEs debt with significant variation within the region.
Change in GCC net worth over time. Our estimates show the GCC net worth remained broadly stable between 2021 and 2022, at around 5000 percent of GDP.

<table>
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<tr>
<td>Net Liquid Financial Assets</td>
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Sources: Country authorities; and IMF staff calculations and estimates.

1/ A simplified balance sheet.
2/ IMF staff estimate using the perpetual inventory method.
3/ Net present value of government hydrocarbon revenue.


Public sector balance sheet (PSBS) provides the most comprehensive picture of net public wealth by consolidating the entirety of what the state owns and owes, as such it offers a broader fiscal picture than is provided by central or general government deficit and debt alone. PSBS brings greater transparency and allows more efficient and optimal balance sheet management in terms of risk-return profile, potentially increasing return on assets, enhancing monitoring of fiscal risks and reducing the costs of borrowing while improving overall fiscal policymaking.

The GCC PSBS estimate was compiled on a best efforts’ basis using readily available data and financial information from publicly available financial statements. There are significant data limitation on SOEs assets and liabilities, while data on balance sheets of social security and pension funds are not available. Balance sheet information on state controlled financial institutions is not included (apart from central banks).

40. Sound debt management strategies should continue to be pursued. They should focus on further lengthening debt maturities, reducing refinancing costs, pre-financing and lowering debt when conditions are favorable, as well as building a deep and liquid domestic debt market. Efforts to assess and monitor contingent liabilities should be strengthened further. Plans to develop a framework for assessing and monitoring guarantees and other potential contingent liabilities linked to increased private sector participation, including through PPPs, are important steps towards sound fiscal risk management practices (e.g., in Saudi Arabia and the UAE). Improved coordination among
fiscal authorities (central and local governments, SOEs, and SWFs), especially as entities that are not strictly part of the central government play a much more significant role in domestic investment strategies, would help to improve cash flow management and forecasting (including through treasury single accounts) and strengthen risk management practices.

41. **Additional efforts are needed to enhance fiscal risks monitoring and management.** The GCC fiscal frameworks should be strengthened by incorporating risk management strategies to effectively monitor and manage exposures to fiscal risks (Figure 30). The exposure to macroeconomic and financial sources of fiscal risks in the GCC seems to be contained, except for hydrocarbon price volatility (Figure 31). Substantial fiscal buffers would help cover risks from the GCC’s potential contingent liabilities. Although GCC GREs’ performance remains broadly robust as measured by their profitability (ROA, ROE), liquidity, and debt performance (see Figure 32), contingent fiscal risks from GREs should be closely monitored and pre-emptively mitigated. This includes:

- **Addressing data limitations on public sector balance sheets and fiscal statistics**, including government contingent liabilities, that hinder a holistic assessment of the fiscal vulnerabilities and risks. Priority should be given to collecting regular and timely information for fiscal risk analysis, including for macro-fiscal risks monitoring. Saudi Arabia is leading the region’s work on accounting for fiscal risks, through its quarterly and annual internal reports on macro-fiscal risks that are in line with best international practices.

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14 Fiscal risks are factors that may cause fiscal outcomes to deviate significantly from plans or forecasts. Fiscal risks can arise from macroeconomic shocks or other unexpected events that affect a government’s fiscal position. Macroeconomic shocks often directly impact public finances by leading to lower revenue or higher spending and affecting the value of government assets and liabilities. Besides macroeconomic shocks, the second source of fiscal risks are contingent liabilities—obligations that remain off-balance sheet until triggered, when they become on-balance sheet liabilities. For details, see IMF FAD/MCD Departmental Paper “Managing Fiscal Risks in the Middle East and North Africa”, DP/2023/005.
• **Formal reporting requirements for SOEs and PPPs should be established in all GCC countries.** Mechanisms to improve control over contingent liabilities should be enhanced by requiring approval of SOEs' annual borrowing and investment plans by finance authorities; setting up predictable dividend payout rules; and establishing clear criteria (based on credit risk assessments) for issuance of guarantees.

• **In the medium term,** consideration should be given to incorporating SOEs in overall fiscal targets as this would promote greater fiscal discipline and transparency. In the long term, climate change and energy transition could further expose GCC to significant fiscal risks, which need to be monitored closely under strong fiscal frameworks.

42. **Further enhancing fiscal transparency would strengthen the credibility of the MTFF and reduce implementation risks.** Saudi Arabia has made significant progress in fiscal transparency through the expanded Budget Statement and higher frequency reports publication. Further important efforts have been made through the publication of the PIF financial statements and by improved transparency in public procurement. Regular publication of MTFFs, general government budgets and their reconciliation with budgeted outcomes (with sufficient details on government spending), sectoral fiscal statistics, the hydrocarbon revenue management strategy, and public sector balance sheet would enhance fiscal transparency and accountability. Phasing out extrabudgetary spending, can reduce reform implementation risks and improve fiscal transparency further (for example, in Bahrain).
Figure 32. Selected Corporate Sector Indicators

Source: S&P Global Market Intelligence; BvD Orbis database, and IMF staff calculations.

Monetary and Exchange Rate Policies

43. Exchange rate pegs remain appropriate nominal anchors for monetary policy given the GCC countries’ economic structures. These fixed exchange rate regimes have continued to deliver relatively low and stable CPI inflation across the GCC. Strong external positions support the pegs, and fiscal consolidation and competitiveness-enhancing reforms going forward should maintain external
stability. Nonetheless, GCC central banks should continue to regularly review their exchange rate pegs to ensure that they remain appropriate. Reforms to strengthen monetary policy frameworks and transmission mechanisms should continue to support transitions to more independent monetary policy regimes in the future should this become appropriate. These include deepening the money and debt markets by issuing more sovereign debt across a wide range of maturities (as necessary), further developing financial market infrastructure, and continuing to strengthen liquidity management and forecasting. The latter will require better high-frequency data to calibrate interventions, appropriate government forecasts of revenue and expenditure, enhanced coordination between central banks and fiscal authorities, as well as regular exchanges of information with the SWFs and Development Banks/Funds in view of the large impact of their interventions on the economy.

Policies to Ensure Financial Stability and Market Development

44. Financial sector policies in the GCC should continue to adapt to emerging financial stability risks and evolving international standards. To proactively manage financial stability risks arising from tight global monetary policy, financial regulators should continue to closely monitor banks’ foreign funding liquidity and credit quality. They should also incorporate risks from higher-for-longer interest rates into their stress test scenarios. If potential capital or liquidity shortfalls are identified, then measures such as reviewing the countercyclical capital buffer, introducing dollar-specific liquidity coverage or net stable funding ratio requirements, or strengthening dollar-specific reserve requirements, should be considered (Box 3). More generally, the GCC countries should continue to strengthen their macroprudential policy frameworks. In cases where bank credit growth has been rapid, the authorities should consider gradually building up macroprudential policy buffers as the credit cycle matures, including by activating the countercyclical capital buffer. Finally, modernization of the regulatory and supervisory frameworks for banks in GCC countries should continue, including by fully implementing the Basel III final reforms and adopting IFRS9 reporting requirements where still needed, as well as making supervision more risk-based.

45. Advancing digitalization and supporting the fintech sector could drive higher non-oil growth but a careful assessment of benefits and risks is critical. The fintech sector is growing rapidly with the support of the authorities, including establishing regulatory sandboxes (Bahrain, Kuwait, Oman, Saudi Arabia and UAE), licensing digital banks (Saudi Arabia and UAE), and creating a FinTech Hub (Bahrain, Qatar and Saudi Arabia) and DIFC FinTech Hive (the UAE). GCC countries are also actively exploring Central Bank Digital Currencies (CBDC) with Bahrain, Saudi Arabia and UAE leading in this area while already at the proof-of-concept stage, and Oman is working on the assessment of the need and feasibility of CBDC implementation. Staff analysis in the context of Bahrain suggests that a CBDC, depending on its design, can enhance the monetary policy transmission but might pose risks to the financial sector, including by potentially drawing deposits away from banks. Qatar is exploring the concept of W-CBDC. The innovation drive should continue to be underpinned by careful assessment and balance of benefits and risks, including those to monetary and financial stability, arising from new technologies and innovative fintech business models. Finally, the authorities should continue to apply a mix of activity- and entity-based regulation proportionate
to the size, complexity, and risk of fintech firms. The fast-evolving regulatory landscape of AML/CFT also requires continued strengthening of AML/CFT framework regulations in line with the FATF standards, particularly with regards to risk-based supervision of virtual assets and virtual asset service providers (VASPs) and strengthening the overall effectiveness of AML/CFT regime.

46. **Policymakers must also ensure that GCC financial sectors are prepared for a green future.** This means enhancing the resilience of banks to physical and transition risks from climate change and boosting the capacity of insurance sectors to speed recovery from climate-related disasters and help offset economic costs. Moreover, given the urgency of energy transition and the size of estimated green financing needs in GCC countries, policies are needed to foster an enabling environment for private green finance, while scaling up green investments by SWFs (Box 6).

- **In the near term**, policy efforts should focus on better understanding and measuring climate-related risks (including both physical and transition risks). This includes prioritizing the implementation of methodologies for quantifying and reporting such risks, promoting their transparent disclosure by financial institutions, and strengthening frameworks for their forecasting and analyzing. Policymakers should also ensure the adoption of robust climate risk management practices within financial institutions and take steps to develop insurance sectors and leverage re-insurance markets. At the same time, efforts are needed to create a more conducive ecosystem for green finance. This includes the development of standardized sustainable finance taxonomies and the promotion of enhanced disclosures.

- **Over the medium term**, governments can play an important role in supporting green finance through incentives and market mechanisms, while phasing-out energy subsidies, and introducing new tools and markets, which can stimulate demand for investment in green technologies. Similarly, central banks and regulators can provide guidance on integrating green finance into investment decisions and enforcing green investment disclosure standards.

47. **Reforms to develop and deepen domestic financial and capital markets are also important.** For example, in the UAE, the full implementation of the Dirham Monetary Framework and continued issuance of local currency federal debt will support domestic capital market and yield curve development. Concrete steps are needed to develop and deepen domestic corporate bond markets, including via further developing green and sukuk markets and increasing their sovereign issuances. However, some challenges related to the depth and complexity of markets are structural (e.g., need for longer maturities, collateral, and refinancing). In this context, both central banks and other financial sector regulators have a role to play, as they can shape financial regulations and support the

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16 The World Resources Institute expects all of the GCC countries to be among the top 10 water stressed countries in the world by 2040. Desalination is expensive and is by itself a heavy carbon producer, as for now it depends heavily on the availability of cheap fossil fuels. Greening desalination has begun (for example in Saudi Arabia’s Vision 2030 and the UAE Vision 2031), but much will need to be done to lower the desalination carbon footprint.
development of financial market infrastructure, thereby promoting the deepening of domestic markets.

Box 6. The Special Role of GCC’s Sovereign Wealth Funds in Scaling up Green Finance

GCC SWFs could play an important role in financing energy transition in their home countries and the rest of the ME&CA region, albeit care should be taken to avoid crowding out the private sector in such initiatives. SWFs’ characteristics, particularly their long-term investment strategies and their contribution to economic and financial diversification, make them well-suited to finance the transition to a green economy. The GCC region is home to some of the world’s largest SWFs, with 12 regional SWFs collectively managing assets around $4 trillion.1 The share of climate finance in their portfolios remains limited so far, but is rapidly progressing. In that context, significant developments and trends include:

- Some of the SWFs have an important role in economic diversification and domestic investment, such as Saudi Arabia’s Public Investment Fund and the UAE’s Mubadala. Through the operations of SWFs, some large mitigation projects (e.g., solar and wind farms) are already being financed domestically. Saudi Arabia’s PIF, for example, has a specific mandate to lead the development of renewable energy and reach a renewable energy target as part of Saudi Arabia’s Vision 2030.

- SWFs are acting as a minority partner attracting international and local private investors and leveraging the scale of the fast-growing green investment funds investments2 and co-investing jointly with asset managers, private equity funds and institutional investors in green and sustainable projects. The One Planet Sovereign Wealth Funds (OPSWF) Network has demonstrated that increased cooperation among SWFs, asset managers and private equity funds can contribute to investments in clean hydrogen while accelerating investments in renewable energy globally.

- Several GCC SWFs (from the UAE, Saudi Arabia, and Oman) are also taking a leading role in providing climate finance in other MENA countries through individual projects in mitigation mostly (e.g., Morocco, Egypt).

Policies to Reinforce New Growth Drivers to Bolster Competitiveness, Reinvigorate Diversification, and Ensure a Smooth Energy Transition

48. The GCC countries are actively working towards diversifying their economies away from hydrocarbon (Figure 33). GCC reform agendas aim to spur non-hydrocarbon growth and foster competitiveness. Four out of six GCC countries (Bahrain, Qatar, Saudi Arabia and UAE) are among the top 30 most competitive economies (IMD, 2023). The relative high ranks for GCC countries were driven by continued improvement in the business environment, exchange rate stability, stable low

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1 See for details Global SWF.
2 IMF October GFSR 2021, Chapter 3 “Investment Funds: Fostering the Transition to a Green Economy.”

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Figure 33. Economic Diversification
Index Scores, 2000 versus 2021


Note: The series are based on a multidimensional index which quantifies diversification across three angles: trade, output, and revenue as well as an overall weighted index. An increase in the index is interpreted as an increase in diversification.
inflation levels and a well-developed basic infrastructure. Special Economic Zones (SEZs) and local procurement for government contracts are among the strategies being deployed by the GCC countries to support the implementation of diversification and growth strategies featuring tax waiver, relaxation of localization requirements, full repatriation of profits, and a streamlined process for work permits and foreign ownership.

49. **Efforts on enhancing product market regulations, and the frameworks for good governance and anti-corruption should continue.** More efforts are needed to attract foreign direct investments (FDI), enhance product market competition, business regulations, strengthen the frameworks for good governance, and anti-corruption frameworks; streamline administrative and regulatory requirements, including export and import procedures; further remove restrictions on foreign ownership and align tax treatments of local and foreign firms; and reduce preferential treatments for government related entities; improve transparency and accountability in the public sector; promote investment in infrastructure and R&D to further improve the competitiveness and productivity of the non-hydrocarbon tradable sectors (including industrial and logistic sectors), in addition to developing technological and scientific infrastructure. Though greater transparency of economic, fiscal and financial data is being gradually achieved, greater data and information availability will also help in addressing the need for a better business environment and ultimately long-term diversification.

50. **The authorities also undertaking industrial policies to boost diversification and generate jobs, however associated risks need to be carefully managed.** These include ensuring compliance with the World Trade Organization (WTO) rules, managing the uncertainty of spillovers from SEZs, and avoiding fiscal incentives provided to SEZs evolving into a fiscal burden. There is skepticism regarding the spillover benefits of FDI in SEZs, and there are also concerns that fiscal incentives may lead to cannibalization of the base economy. Policy implications should center on minimizing industrial policy-associated inefficiencies through rigorous calibration and monitoring, cost-benefit analysis, integration into the broader reform agenda, clear exit criteria, sunset clauses and strategic workforce upskilling, with a focus on export orientation. The authorities’ plans should avoid discriminatory provisions, such as local content requirements in government contracts, as these could lead to production allocation distortions and provoke retaliations from trade partners.

51. **Labor market reforms should continue focusing on improving labor market flexibility and dynamism.** Despite significant improvements, labor markets in the GCC continue to suffer from longstanding structural issues that hamper productivity and discourage nationals from playing a bigger role in the private sector. Many GCC countries embarked on a reform of social safety nets to improve the rights and benefits of workers in the private sector and improve the flexibility of the labor market. For example, the UAE, announced programs to provide wage subsidies and training for citizens to take private jobs as well as set a minimum wage for all workers and a form of unemployment insurance in the private sector. Similar reforms were also undertaken in Qatar, where pension schemes were also expanded to cover more Qatari nationals working in the private sector.

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17 See [Gulf Cooperation Council: Economic Prospects and Policy Challenges for the GCC Countries](https://imf.org)
Full implementation of the new Labor Law in the UAE and Oman is required to address structural rigidities in the labor market. Additionally, enhancing labor mobility, particularly for expatriate workers, would activate market incentives (promotions and higher wages) across GCC labor markets and improve competition between nationals and expatriate workers. This will also incentivize upskilling and attract more international talent, leading to higher productivity gains. Moreover, improving labor mobility and institutionalizing minimum wage and flexible work arrangements should help significantly increase female labor force participation (FLFP) (Figure 34). In Saudi Arabia, for example, reforms in promoting gender equality (e.g., removal of formal restrictions in the legal code, childcare assistance, training and scholarship programs) have led to a record-high of 37 percent FLFP in 2022.

52. **The region, has made noticeable progress in improving human capital, but some impediments remain.** While the provision of education and health services has helped to keep human capital at relatively high levels, the quality of education still lags behind AEs and EMs and has yet to equip young nationals with the required skills for the private sector. Continuous efforts to improve the quality of education would help to address the skills mismatches in the labor market, as well as encouraging young GCC nationals to pursue technology and science-related majors with positive implications for productivity. Moreover, adopting a dual-education system that combines vocational training in education with an apprenticeship in firms, in collaboration with all stakeholders, would help in bridging the skills gap.

![Figure 34. Real GDP Per Capita, Female Participation, and Human Capital Index](image)

**Figure 34. Real GDP Per Capita, Female Participation, and Human Capital Index**

*Sources: World Bank, Saudi authorities; and IMF staff calculations.*

53. **Notwithstanding recent efforts, more action is needed to meet SDGs’ goals:**

- Several initiatives in the GCC have been introduced to promote sustainable development; for instance, Bahrain recently issued a guideline regulating Public Private Partnerships (PPPs) and the UAE enhanced the PPPs Law to promote private sector-led development and green growth. Qatar also adopted a new PPP law to attract private investment. Saudi Arabia launched a PPP framework and numerous initiatives supporting sustainable development, such as the Saudi Green Initiative,
the Middle East Green Initiative, and the Circular Carbon Economy Initiative, in addition to the PIF’s planned projects to promote growth and sustainable development.

- Efforts to advance gender balance initiatives are progressing with the introduction of the Gender Budgeting Program in Saudi Arabia, increasing maternity leave to 14 weeks and introducing paternity leave in Oman, introducing the right to gender nondiscrimination in access to finance in Bahrain, and efforts to support a gender balance agenda through the Gender Balance Council in the UAE. However, more action is required to accelerate the progress in SDGs associated with further enhancing the role of women in the economy in all GCC countries by advancing gender equality targets, legislating and enforcing equal gender remuneration (Kuwait, Oman and Qatar) and introducing gender balance acts that promote gender equality in senior positions, promoting sustainable production, and advancing national climate targets (see below).

54. The GCC countries have actively embraced digitalization, investing heavily in technology infrastructure, and promoting entrepreneurship and innovation through various initiatives. A close examination of GCC’s progress on digitalization in key sectors (government, financial, corporate) reveals they have made rapid. Using a novel and comprehensive index, the Enhanced Digital Access Index (EDAI), to measure digital connectivity, we illustrate a significant acceleration in digitalization across GCC during the pandemic, with several aspects of UAE and Saudi Arabia now on par with AEs. Notably, Saudi Arabia and UAE ranked third and fourth globally as of 2022 on the GovTech Maturity Index (GTMI), a measure of digital adoption in the public sector (Figure 35).

55. However, there is still room for improvement in financial inclusion and public sector effectiveness, and the COVID-19 pandemic has highlighted untapped potential for digital adoption. While digitalization offers increased productivity and growth, it presents challenges such as job displacement, skill mismatches, and uneven benefit distribution. Therefore, comprehensive policy responses are needed to maximize benefits, foster competition, innovation, and international economy integration, and ensure equitable sharing of digitalization benefits across society. Key policies include:

- **Digital skills and infrastructure investment.** Prioritize training to enhance digital literacy and upskill the workforce. Reinforce digital infrastructure with a focus on R&D, eCommerce, and electronic payment systems.

- **Holistic Digital Adoption:** Encourage digital adoption across all sectors, foster public-private collaboration, and address challenges and opportunities of digitalization on labor markets, including job displacement, unevenly distributed benefits through social safety nets and progressive taxation.
The region has significantly stepped up its climate change policies and initiatives in recent years, but more needs to be done to ensure targets can be met. The UAE will host COP28 this year. Saudi Arabia, the UAE and Bahrain announced net zero emission targets by 2050 or 2060, and all GCC countries have pledged to reduce emissions considerably over the next decade (Table 1). Saudi Arabia is also spearheading the Middle East Green Initiative (MGI), a regional effort to mitigate the impact of climate change on the region. Some GCC companies are followed suit, such as Saudi Arabia’s Aramco. GCC countries have invested heavily in solar power capabilities in recent years, as they boast some of the highest sunlight levels in the world. Wind power is also increasingly being explored (examples include Kuwait’s Sagaya Wind Power Plant (10 MW), Oman’s Harweel Wind Power Plant (50 MW) and Saudi Arabia’s Dumat Al Jandal (400 MW)). However, much more needs to be done, including:

- Reducing fuel subsidies to incentivize cleaner consumption (see paragraph 36). For example, using the IMF-ENV model for Saudi Arabia, eliminating fuel subsidies is estimated to achieve one third of the authorities’ 2030 emissions reduction target. Similarly, the IMF CPAT tool shows that phasing out subsidies and using additional revenue for renewable energy investment would go a long way in achieving Bahrain’ 2035, Qatar’s 2030, and the UAE’s 2030 climate mitigation goals.

- Carbon Capture Utilization and Storage (CCUS) is receiving increasing focus and should be scaled up towards the goal of achieving net zero or large emission reduction targets as outlined in the GCC’s NDCs. Saudi Aramco has substantially invested in CCUS R&D and pilot projects, but it has yet to be tested to scale. Similarly, UAE’s ADNOC is investing in strengthening CCUS
infrastructure, and Qatar is expected to grow CCUS capabilities to 5 million tons of CO2 per annum by 2025 in line with its planned LNG production increase.18

- **Investment into renewables should be scaled up further.** The GCC’s sovereign wealth funds could play an important role in financing investments in clean and renewable energy projects, as well as catalyzing and fostering private sector participation in renewables. Several large programs are in development stage already. For example, Qatar’s general electricity and water corporation Kahramaa plans to install up to 1000 EV charging stations by the end of the decade to promote green transportation. Saudi Arabia is already working on decoupling water production from fossil fuel consumption, embarking on the world’s largest solar desalination plant. Saudi Arabia is also in the testing phase of hydrogen-powered trains. Besides shifting to clean power generation, other sectors will also need to be decarbonized, including transport, industry, and buildings.

- **Clean fuels such as hydrogen may be one way to fill the gap between capability and supply.** Already being produced by Oman, Saudi Arabia and the UAE for export, hydrogen could significantly fuel the region’s energy exports and its transportation, manufacturing and power sectors. However, hydrogen production should focus on green or at least blue hydrogen, to avoid merely shifting between high-emission energy products.

- **Continuing efforts to mainstream sustainable finance could reduce the direct fiscal burdens of meeting energy transition targets.** Alternative financing strategies (including relying more on green and sustainable private finance) would help preserve net public financial wealth (paragraph 46 and the UAE 2022 SIP, Chapter 3).

57. **Regional integration is gaining momentum, which could further aid diversification efforts and the fight against climate change.** For example, in July 2023, Bahrain and Saudi Arabia signed a memorandum of understanding with the aim of positioning both countries as a single regional and global tourism destination, aiming to jointly increase tourism flows. Saudi Arabia also signed a memorandum of understanding with Oman to promote tourism between the two destinations. In addition, the GCC is considering a unified visa for tourists and businesspeople that would allow entry to all GCC countries. Bahrain and Saudi Arabia have also begun discussions about a potential transnational solar project that could supply Bahrain with a fifth of its power needs. In addition, to improve supply chains, Bahrain, the UAE, Egypt and Jordan entered into an agreement on joint EV production to use Bahrain’s FTA agreement with the USA, which will also be produced for local markets. Further increasing economic cooperation would position the GCC well to fully build on its economic diversification efforts. The role of the GCC in the wider MENAP region is equally increasing, with increasing financial support and investment initiatives supported by GCC governments and their SWFs (see also Box 6 on green initiatives).

18 However, CCUS remains costly and largely still in study stage due to significant investment needs into equipment and materials for storage and to build the needed infrastructure more broadly. For details see, Carbon Capture, Utilisation and Storage - Energy System - IEA.
D. Concluding Remarks

58. The economic outlook for the GCC region is positive, supported by relatively high oil prices and ambitious reforms. Non-hydrocarbon growth is expected to remain strong; inflation has been contained and is falling, fiscal and external positions are healthy, and financial sector is sound. Risks are balanced.

59. Going forward, stepping up reforms is needed to enhance economic prospects and diversify economies away from hydrocarbon. In the short term, fiscal policy should remain prudent to avoid procyclicality, rebuild buffers and support disinflation; monetary policy should follow the U.S. Federal Reserve’s; and financial stability risks from higher-for-longer rates should be closely monitored. Over the medium term, fiscal consolidation should be pursued in line with the long-term fiscal anchors and supported by a credible rules-based MTFF. This could be achieved through non-oil revenue mobilization, energy subsidy reform and spending rationalization while strengthening social safety nets. Further strengthening of the fiscal, monetary, and prudential frameworks would be needed to support growth and stability, guarding against risks and vulnerabilities. GCC countries should leverage regional cooperation, increased FDI, investment in digital and green initiatives to further advance diversification and support a smooth energy transition.
## Table 1. GCC: Climate Target and Strategies

<table>
<thead>
<tr>
<th>Country</th>
<th>Latest NDC or country climate strategy</th>
<th>Unconditional Targets (% reduction from 2030 BAU level, unless specified)</th>
<th>Net-zero target</th>
<th>Renewable Energy targets</th>
<th>Emissions reduction target</th>
<th>National Climate Strategy</th>
<th>Other climate initiatives/governance entities</th>
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<tr>
<td>Bahrain</td>
<td>2021</td>
<td>1.9 Mt CO(_2) annually</td>
<td>Yes by 2060</td>
<td>5% by 2025</td>
<td>10% by 2035</td>
<td>No, but climate goals embedded in Bahrain’s Vision 2030</td>
<td>Joint National Committee on Climate Change (2007) - The National Renewable Energy Action Plan - The National Adaptation Investment Plan</td>
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<td>Kuwait</td>
<td>2021</td>
<td>7.4</td>
<td>Yes by 2060</td>
<td>15% by 2030</td>
<td>N/A</td>
<td>No</td>
<td>Kuwait National Committee on Climate Change</td>
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<tr>
<td>Qatar</td>
<td>2021</td>
<td>25</td>
<td>No</td>
<td></td>
<td>20% by 2030</td>
<td>Reduce 25% of GHG emissions by the year 2030</td>
<td>National Climate Change Committee (chaired by the Ministry of Environment)</td>
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<tr>
<td>UAE</td>
<td>2023</td>
<td>40</td>
<td>Yes by 2050</td>
<td>Clean energy 50% (44% RE, 6% Nuclear) by 2050</td>
<td>An absolute emissions reduction of 19% by 2030, compared to the 2019 base year level. If expressed in terms comparable to BAU, this represents a 40% decrease from estimated 2090 emissions.</td>
<td>Yes (2017: Green Growth Strategy/2023: UAE Energy Strategy 2050)</td>
<td>Dubai Integrated Energy Strategy 2030 - Abu Dhabi Carbon trading exchange and carbon cleaning - National Hydrogen Strategy 2050</td>
</tr>
</tbody>
</table>

Sources: [The GCC and the road to net zero](https://mei.edu), NDC plans - [https://unfccc.int/NDCREG](https://unfccc.int/NDCREG)
Table 2. GCC: Selected Economic Indicators\(^1\)

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<td>4.1</td>
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<td>3.3</td>
<td>2.6</td>
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<td>(Annual average; percent)</td>
<td></td>
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<tr>
<td>Bahrain</td>
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<td>-2.3</td>
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<td>3.6</td>
<td>1.0</td>
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</tr>
<tr>
<td>Kuwait</td>
<td></td>
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<td>2.1</td>
<td>3.4</td>
<td>4.0</td>
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<td>0.1</td>
<td>-0.9</td>
<td>1.5</td>
<td>2.8</td>
<td>1.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Qatar</td>
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<td>-0.9</td>
<td>-2.6</td>
<td>2.3</td>
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<td>2.8</td>
<td>2.3</td>
</tr>
<tr>
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<tr>
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<td>-1.9</td>
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<td><strong>General Gov. Overall Fiscal Balance</strong></td>
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<td>-8.0</td>
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<td>3.5</td>
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<td>(Percent of GDP)</td>
</tr>
<tr>
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<td></td>
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<td>-11.0</td>
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<tr>
<td>Kuwait(^2)</td>
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<td>19.1</td>
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<td>9.5</td>
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<tr>
<td>United Arab Emirates(^4)</td>
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<td>16.0</td>
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<td>(Percent of GDP)</td>
</tr>
<tr>
<td>Bahrain</td>
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<td>-2.1</td>
<td>-9.4</td>
<td>6.6</td>
<td>15.4</td>
<td>6.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Kuwait</td>
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<td>27.2</td>
<td>36.0</td>
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<td>27.7</td>
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<tr>
<td>Oman</td>
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<td>-16.2</td>
<td>-5.4</td>
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<tr>
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<td>26.7</td>
<td>17.6</td>
<td>15.4</td>
</tr>
<tr>
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<td>4.6</td>
<td>-3.1</td>
<td>5.1</td>
<td>13.6</td>
<td>5.9</td>
<td>5.4</td>
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<td>6.0</td>
<td>11.5</td>
<td>11.7</td>
<td>8.2</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Sources: National authorities; and IMF staff calculations.
1/ GCC aggregates in the form of growth rates or shares of GDP are weighted.
2 Central Government
3/ Central government and estimated net income of sovereign wealth funds.
4/ Federal government and emirates.
Appendix I: Nowcasting GDP: A Machine Learning Solution for Enhanced Non-Oil GDP Prediction

In an increasingly dynamic GCC economic landscape, the need for real-time prediction and monitoring of GDP growth becomes paramount. Nowcasting, the prediction of the present, has emerged as a powerful tool to address the challenges posed by delayed publication of economic indicators. While the GCC non-oil GDP data is not subject to the same publication delays as in other countries, the desire for more accurate and timely predictions has motivated the implementation of a nowcasting framework. We leverage machine learning algorithms to harness the predictive power of various high frequency macroeconomic indicators and produce real-time nowcasts of non-oil quarterly GDP growth in Saudi Arabia and the UAE. The approach could be replicated for other GCC countries, subject to data availability.

Machine Learning Approaches for Nowcasting

1. The machine learning-driven approaches used to nowcast economic indicators are underpinned by non-parametric statistics. Machine learning algorithms can identify intricate patterns and non-linear relationships in historical economic data, enabling accurate predictions for current economic conditions. A diverse range of machine learning models are employed, including Support Vector Machines (SVMs), Random Forests, Stochastic Gradient Boosting Trees, Elastic Net, Principal Component Regression (PCR), and Ordinary Least Squares (OLS). These algorithms offer robustness, flexibility, and scalability in addressing the complexities of non-oil GDP growth prediction.

Model Evaluation and Selection

2. The evaluation and selection of machine learning models are crucial to ensure accurate nowcasts. The project employs a rigorous three-stage process. First, a diverse set of models are trained on historical data and evaluated using an out-of-sample Root Mean Squared Error (RMSE) metric. For each machine learning model applied to the data, the first 85 percent of data is used as a training dataset, and the remaining 15 percent is set aside as a holdout dataset to evaluate the out-of-sample performance of the model. The focus on out-of-sample performance reflects the models' real-world predictive capabilities. Second, before being evaluated on the holdout test set, cross-validation techniques are applied to tune hyperparameters in the training set and select the best-performing models. The framework then evaluates performance from more than 30 different types of models on the holdout test set after having already tuned them in the training set. Lastly, the top-performing model is re-estimated using the entire sample and becomes the foundation for generating nowcasts.
Variable Consideration and Selection

3. The selection of predictive variables plays a pivotal role in accurate nowcasting. A comprehensive array of economic indicators is considered, both from within the country and neighboring economies. These variables are subjected to rigorous selection criteria, including predictive power, historical data availability, and short lag periods. A careful balance is struck between the number of predictors and the number of observations to avoid overfitting. The selected variables undergo transformation into year-on-year growth rates, enabling consistent analysis and forecasting across different frequencies.

Implementation of the Nowcasting Framework

4. The project adheres to a phased approach, mirroring the previous work at the IMF (Barhoumi, Karim, et al 2022, Akbal, Faruk, at al 2023). The framework encompasses variable selection, model evaluation and tuning, and ultimately, the production of nowcasts. The focus is on selecting the most suitable predictors and tuning models to optimize out-of-sample performance.

Saudi Arabia Results

5. In the final stage of nowcasting 2023 Q3 non-oil GDP in Saudi Arabia, the best performing algorithm is support vector machine learning (radial basis function (RBF); oneSE. The oneSE notation indicates that the model selected adheres to the one-standard-error rule. This helps strike a balance between model complexity and generalization ability, providing a more conservative and robust model selection approach, and helps prevent overfitting. In general, all machine-learning algorithms generally performed better than the competing parametric models. Leading nowcasting indicators were examined using Shapley value and linear decomposition analyses to interpret their respective impacts and contributions to predictive modeling. Of the leading nowcasting indicators chosen for the models, we found that the 4-week treasury bills, monthly oil production, and Tadawul stock market indices were the primary contributors to the final prediction of Q3 2023.
United Arab Emirates Results

6. In the final stage of nowcasting 2023 Q3 non-oil GDP for UAE, the best performing algorithm was stochastic gradient boosting trees. This model combines the concept of boosting and decision trees to create an ensemble of weak prediction models that collectively form a strong predictive model. In the case of UAE as well, all machine-learning algorithms generally outperformed competing parametric models. Here too, leading nowcasting indicators were examined using Shapley value and linear decomposition analyses to interpret their respective impacts and contributions to predictive modeling. Of the leading nowcasting indicators chosen, the primary contributors to the prediction were the VIX index, the Dubai Fateh: spot crude price, and the European Brent spot price.

<table>
<thead>
<tr>
<th>Leading Nowcasting Indicators (Monthly)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global PMI: Composite Output</td>
</tr>
<tr>
<td>Global PMI: Composite New Orders</td>
</tr>
<tr>
<td>Global PMI: Services Business Activity</td>
</tr>
<tr>
<td>Saudi Arabia PMI: Total Economy New Orders</td>
</tr>
<tr>
<td>Saudi Arabia PMI: Total Economy</td>
</tr>
<tr>
<td>UAE PMI: Total Economy</td>
</tr>
<tr>
<td>UK: Index of Production</td>
</tr>
<tr>
<td>European Brent Spot Price FOB</td>
</tr>
<tr>
<td>U.S.: Industrial Production excluding Construction</td>
</tr>
<tr>
<td>Germany: Industrial Production: Total Industry</td>
</tr>
<tr>
<td>Dubai Fateh: Spot Crude Price</td>
</tr>
<tr>
<td>United Arab Emirates Murban: Spot Crude Price</td>
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<tr>
<td>CBOE Market Volatility Index: VIX (Index)</td>
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<tr>
<td>India Cargo Traffic: International</td>
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<td>India Passenger Traffic: International</td>
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<table>
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<tr>
<th>Nowcasting Results</th>
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<th>Q2-2023</th>
<th>Q3-2023</th>
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<tr>
<td>Non-oil GDP</td>
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<td></td>
</tr>
<tr>
<td>Actual</td>
<td>4.5</td>
<td>7.3</td>
<td></td>
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<tr>
<td>IMF staff estimate</td>
<td>4.6</td>
<td>7.1</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Concluding Remarks

7. The nowcasting initiative undertaken in Saudi Arabia and the UAE provides a glimpse to the potential of machine learning methodologies in forecasting and tracking the trajectory of non-oil GDP growth in the region. Through the integration of a diverse array of machine learning algorithms and the assimilation of a wide spectrum of high-frequency economic indicators, combined with meticulous model assessment and choice, the project exemplifies a holistic and flexible strategy for real-time economic prediction. This project will continue to build upon the advancement of nowcasting techniques within the region and the iteration to the evolving economic landscape to produce more timely and accurate results.
References


Appendix II. Dynamics of Market Power and Inflation in the GCC

We study the evolution of market power among listed firms and inflation in the GCC in 2000-2022. Market Power, according to multiple measures, is higher in the GCC and the rest of the Middle East (ME), when compared to the US. The firm-level analysis reveals important country and sector heterogeneities in the levels and dynamics of market power in the region. The inflation wave of 2022 in the GCC was not associated with a rise in corporate market power. There seems to be ‘unintended’ benefits from the VAT reforms that reduced market power, in addition to increasing fiscal space. Policymakers should continue to use available anti-trust levers to deter market power to achieve economic efficiency, while the VAT tax might be a novel instrument to use.

1. The global economy faced a great inflation wave following the COVID pandemic. Some academic papers and other observers attributed this surge to a phenomenon they called “greedflation”, which refers to the increasing extraction of economic rents by firms as a partial cause of inflation. Compared to the rest of the world, GCC economies experienced a smaller and short-lived rise in inflation. We investigate whether a reduction in corporate market power among listed firms followed the inflation spike in the Gulf. To do this, we use state-of-the-art methods to estimate corporate markups among listed firms in the GCC.¹

2. The ME region has long been regarded as a region with extractive entrepreneurial institutions (Chaudhry 1997, Robinson & Acemoglu 2012). However, the degree of corporate market power in the region has received little attention. In contrast, a growing body of research has detected a trend of increasing corporate market power both in the US and globally (De Loecker et al. 2020, Diez et al. 2018, Autor et al. 2020). We use markups as a measure of corporate market power and ask the following questions: is the ME uniquely uncompetitive? Has the region witnessed a significant trend of rising market power similar to the rest of the world? Finally, we examine the “unintended” benefits of the introduction of the VAT in some Gulf countries and its impact on corporate market power in the GCC.

Method: Production Function Approach

3. A sizeable literature starting from Hall (1988) recognized that price-marginal cost markups can be recovered as

\[
\mu_{it} = \frac{P_{it}}{MC_{it}} = \epsilon_{it} \cdot \left( \frac{S_{it}}{R_{it}} \right)^{-1}
\]

where \(\epsilon_{it}\) is the output elasticity of the variable input \(s\), \(S_{it}\) is the expenditure on input \(s\), and \(R_{it}\) is sales or turnover. This result follows from the first order conditions in the cost minimization problem of a firm with variable cost.

¹ We interchangeably use the words “market power” and “markups.”
4. The revenue share, $\frac{S_{it}}{R_{it}}$, is directly observable in the data. To estimate $\epsilon_{it}$, we employ the following auxiliary regression based on a panel of firms for each (two-digit) industry,

$$y_{it} = \epsilon_{it}^S s_{it} + \epsilon_{it}^k k_{it} + \phi(k_{it}, x_{it}) + v_{it}$$

where lowercase letters denote logs, $\phi_{it}$ is semi-parametric specification of other inputs $k_{it} \& x_{it}$, $y_{it}$ is a measure of realized firm’s revenue, and $k_{it}$ is the firm’s capital stock. We rely on identification arguments in Olley & Pakes (1996) to identify $\epsilon_{it}^S$. Due to the unavailability of output data, we in fact estimate a revenue elasticity, $\epsilon_{it}^s$, instead of the output elasticity, $\epsilon_{it}^x$. This is in line with literature. For example, De Loecker & Warzynski (2012) and De Loecker et al. (2020) use firm accounting data to estimate corporate markups. The literature usually places assumptions on the demand schedule in order to identify the true $\epsilon_{it}$. However, Bond et al. (2021) argue that markup estimation along this method does not identify the true markups and suggest ways forward for markup estimation. We also follow their suggestions to confirm our findings.

Data

5. We use consolidated firm accounts from a sample of publicly listed firms from COMPUSTAT Global for 2000-2022. We limit the location of the firms to 13 Middle East & Central Asian (ME&CA) countries, including GCC countries. Following the literature, we winsorize the sales-cogs (cost of goods sold) ratio at the 1 percent level. We also exclude observations that report negative sales or cogs. We then deflate firm accounts using country-level deflators from the IMF WEO database and convert them to USD for cross-country comparability. This results in a sample of approximately 1300 firms and 20,700 firm-year observations.

Findings

6. Market power in the GCC and ME regions has been higher than in the US. However, unlike the US, GCC market power has not shown an upward trend over the last twenty years. A significant spike in market power in 2016 is observed after the listing of Saudi Arabia’s ARAMCO. Despite the rising global trends of corporate market power, the GCC and the ME have escaped the trend (Figure 1). In a perfectly competitive market, markups should be equal to 1. Deviations from 1 indicate market power. The average markup in the GCC was close to 1.4 around 2010. Excluding ARAMCO, the trend is downward and stable around 1.45 between 2010 and 2020. Listed firms in the
ME display a “superstar” phenomenon, where firms with higher sales have higher market power. This is true for both the oil, mining, and utilities sector and all other sectors (Figure 2). The oil, mining, and utilities sector has higher market power than other sectors across the entire sales distribution, indicating some unique market dynamics associated with OPEC+.

7. **Within the GCC, sales-weighted average markups slightly fell over the period, but they showed a weak upward trend in Oman and Kuwait (Figure 3).** Conversely, Qatar, Saudi Arabia (after excluding ARAMCO), and the UAE showed a downward trend. This fact can have multiple explanations. First, one can argue that some countries succeeded in implementing structural reforms to enhance market competitiveness and strengthen antitrust laws. The passage of several laws across the region, such as Qatar’s competition law of 2006 and Saudi’s competition law of 2019, might explain some of the falling trends in some countries. Second, markups and market power are closely related to the price elasticity of demand: one possible reason for such trends are underlying changes in the elasticity of demand within the countries. A decrease in the price elasticity of demand means that a firm with market power can charge higher prices since demand does not adjust as much. Third, an increase in licensing agreements to build and run certain industries would also lead to an increase in market power. This can be rationalized as the government allocating incentives to diversify out of the oil sector.

8. **Among listed firms, the construction sector has the lowest average markups, while the oil, mining, and utilities sector and market services has the**
highest. One main reason for the low markups in construction is that some large construction firms in the region are missing from the sample and might have skewed the average.

9. **Markups in the GCC decrease in response to a positive inflation shock, whereas in the rest of the ME, markups do not change in response to inflation shocks.** Figure 5 shows the results of a local projection exercise of the effect of an inflation shock on sales-weighted markups using a panel of GCC and non-GCC MENAP countries. The result indicates that after a 1 percent inflation shock, firms in the GCC reduce their markups by 0.05 units relative to an average of 1.3 after two years of the shock. This implies that local firms absorb some of the inflationary pressures and pass less of the price changes onto consumers. However, this is not the case in the non-GCC MENAP sample, where firms do not seem to adjust their markups in response to an inflationary shock, indicating that they pass on price rises to their customers.

10. **The introduction of the VAT reforms in the region may have lowered markups of some final product markets.** Since the VAT does not affect business-to-business interactions, it influences the demand curve of the final product customers. Hence, this affects the ability of firms in the final market to extract economic rents. In this picture, we compare changes in markups for B2B firms and B2C firms. If changes in markups of final goods firms had followed a similar trend to that of business-to-business firms over the tax space, we should have seen higher markups in the B2C firms as indicated by the counterfactual black line.
11. **Our analysis suggests that a rise in market power did not contribute to the GCC inflation surge of 2022.** Corporate profits and dividend payouts in the GCC have increased robustly over 2021-2022, while wages have risen relatively slowly compared to prices (Figure 7 and 8). The rise in profits does not necessarily imply increases in monopoly power with firms deliberately raising prices above the cost of producing an additional unit of output (marginal costs). A staff analysis based on firm-level data indicates little or no change in firms’ markups across various sectors in GCC countries (Figure 4). Our findings for GCC countries are consistent with those for AEs (see Chapter 1 of the 2023 October WEO).
References


Appendix III. From Sand to Silicon: Digital Transformation in the GCC Economies

1. The COVID-19 pandemic has fast-tracked the digital transformation of the global economy, with the tech-savvy GCC countries leading the way. Digital technologies—such as AI and IoT, which convert analog practices into digital—are reshaping the global economic and financial realms, offering enhanced efficiency, innovation, and superior services. The pandemic accelerated digitalization, pushing various sectors onto online platforms, from e-education to e-businesses, highlighting the digital economy’s vast potential, especially in nations with a young, tech-savvy populace like the GCC countries.

2. GCC economies have initiated strategic blueprints for digitalization, embedded within broader economic transformation agendas, with a strong emphasis on improving digital connectivity and developing the digital sector. Ambitious policies have been implemented to foster digitalization across public, financial, and private sectors (Figure 1), with the pandemic serving as a catalyst for advancements.

3. The GCC countries have made rapid progress across all aspects of digitalization. A close examination of GCC’s progress on digitalization in key sectors (government, financial, corporate) reveals they have not only made rapid progress but also leading the charge in several aspects. Using a novel index constructed in the same spirit as the one used by Alper and Miktus (2019), Enhanced Digital Access Index (EDAI), which integrates five sub-categories to measure digital connectivity, we illustrate a significant acceleration in digitalization across GCC during the pandemic, with several

---

1 The five sub-categories of EDAI include: availability of infrastructure, affordability of access, educational level of the population, quality of information and communication technology services, and internet usage. All raw data are rescaled to a [0, 1] interval using the min-max transformation. The EDAI is constructed using equal weights across different dimensions of digitalization and the sub-indices are then aggregated in a single composite index. A score closer to 1 indicates a higher level of digitalization in that economy. EDAI is rescaled from [0, 1] to [0, 100] for regressions.
aspects of UAE and Saudi Arabia now on par with AEs (Figure 2). Notably, Saudi Arabia and UAE ranked third and fourth globally on the GovTech Maturity Index (GTMI) as of 2022.

![Figure 2. GCC’s Acceleration in Digitalization](image)

**Figure 2. GCC’s Acceleration in Digitalization**

(Index: 0-1, 1=highest level of digitalization)

Sources: World Bank and IMF staff calculations.

5. While GCC countries are much advanced on several fronts, some still lag AEs in digital payments, fintech, and corporate sector’s digital skills (Figure 3). Despite the significant improvements over the past few years, GCC countries still lag AEs in digital payments. In the 2021 Fintech country ranking, UAE and Saudi Arabia were ranked 28 and 65 respectively among 83 countries, and Riyadh was the top rising Fintech city (improved by 106 in the global city ranking). In terms of digital skills for the corporate sector, while GCC countries rank high on ICT skills in the ITU survey, user-generated data from LinkedIn suggest that there is room for them to increase digital skills intensity across several industries. According to LinkedIn data for Saudi Arabia and UAE, GCC countries fall below the global average on penetration of “tech skills”—defined as a range of abilities to use digital services, communication applications, and networks to access and manage information.

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2 GTMI, compiled by the World Bank, is one of the most comprehensive measures of digital transformation in the public sector. It measures public sector digital transformation by focusing on four key areas: supporting core government systems, enhancing service delivery, mainstreaming citizen engagement, and fostering GovTech enablers.
6. Enhanced digital adoption is associated with improvements and resilience in financial inclusion and government effectiveness, a positive impact on economic growth, and mitigation of the impact of external shocks. Using the novel index EDAI and data across 175 economies for 2000 to 2022, we employ the following base specification:

\[
Y_{it} = \beta_0 + \beta_1 Digital_{it} + \beta_2 Z_{it} + \alpha_i + \alpha_t + \epsilon_{it}
\]

Corresponding to three pillars in Figure 1, \(Y_{it}\) is measured by financial inclusion (to gauge households’ digital assess), return of equity (measure of banking sector performance), GDP per capita (proxy for growth and welfare), and government effectiveness (measure of the quality and credibility of public services), as shown in Table 1. \(Digital_{it}\) is measured by EDAI—or GTMI for digital adoption specifically in the public sector. \(Z_{it}\) represents a vector of controls commonly considered in literature, such as inflation, lagged real GDP growth, control of corruption, and trade openness. \(\alpha_i\) and \(\alpha_t\) denote unobserved country/regional-specific effects and time effects, respectively; and \(\epsilon_{it}\) is the error term. The above equation is estimated by fixed-effect model except for the regression of public sector, which is estimated by OLS model due to data constrain (GTMI is only available for two years). For the banking sector, our focus is the role that digitalization plays in mitigating crises shocks, therefore an interaction with crises episodes \((Digital_{it} \times Shocks_{it})\) was employed to ascertain resilience. This is also because, rather than being directly impacted by the country-wide digitalization measure of EDAI, the banking sector’s profitability is largely affected by micro factors (such as net interest rate margin, leverage, and bank-level digital adoption) with significant heterogeneity across banks and countries.
7. The full sample results imply a positive and statistically significant impact of digitalization across sectors, with the results of the EMs subsample indicating even greater impact. This suggests that further improvements in digitalization can potentially help GCC countries further reduce gaps with AEs. Due to insufficient dependent variable data, it is challenging to estimate GCC-specific effect. Thus, we rely on the results of EMs subsample to draw implication for the GCC. A one-unit increase in the EDAI, which is approximately Saudi Arabia’s average annual improvement of EDAI during 2017-2021, is positively associated with a 0.76 percentage point increase in financial inclusion on average for EMs (Table 1 regression (1)). Improvement in the EDAI is also associated with an increase in the resilience of banking sector profitability during crises as well as higher GDP per capita (Table 1 regression (2)-(3)). As for the public sector, improvement in the GTMI exhibits a significant and positive impact on government effectiveness (Table 1 regression (4)) – and the result is robust across quantiles, implying that some GCC countries’ marginal gains from further improvement in government digital adoption would still be statistically significant and economically meaningful although they already rank top globally.

![Figure 4. Key Coefficients of Digitalization Impacts](image)

**Source:** IMF staff calculations.

**Note:** Value represent increase of dependent variable with respect to one-unit increase of key dependent variables. See Table 1 for details.

### Table 1. GCC: Regression Result of Digitalization Impacts on Different Sectors (EMs subsample)

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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
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<td>Return on Equity EMs</td>
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<td>Crisis Shocks * EDAI</td>
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</tr>
<tr>
<td>GovTech Maturity Index (GTMI)</td>
<td>1.24***</td>
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<tr>
<td></td>
<td>(0.18)</td>
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<td>Vector of controls</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Year effect</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Country/Regional effect</td>
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<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
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<td>1,616</td>
</tr>
<tr>
<td>Number of Countries</td>
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<td>65</td>
<td>86</td>
</tr>
<tr>
<td>R²</td>
<td>0.86</td>
<td>0.35</td>
<td>0.98</td>
</tr>
</tbody>
</table>

**Note:** (1) Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1
8. The corporate sector analysis found a positive impact of digitalization on firm-level performance and increased resilience during recessions. Given the lack of adequate data on digitalization at the firm level, we consider digitalization at the industry level and compare firms across those industries, following recent studies (Copestake, Estefania-Flores, and Furceri, 2022). We use Jorda’s (2005) local projection method to estimate the following equation:

\[ y_{n,i,t+h} - y_{n,i,t-1} = \alpha_i h + \gamma_{nq} h + \beta_1 h \text{Shocks}_{i,t} + \beta_2 h \text{Dig}_i y_{i,t} + \beta_3 h \left( \text{Shocks}_{i,t} \cdot \text{Dig}_{i,t} \right) + \theta M_{it} + \varepsilon_{n,i,t+h} \]

where the dependent variable is the log difference in a selected performance indicator (revenue, ROA, and ROE) for firm \( n \) from country \( i \) at quarterly date \( t \) over \( h \) quarters, \( \text{Shocks} \) is a dummy variable equaling 1 at the start of a technical recession. \( \text{Dig}_i y_{i,t} \) is industry-level digital intensity, which adopts three different measures: (i) intangible assets share; (ii) share of each industry’s inputs that come from digital industries; and (iii) a composite index created by Calvino et al. (2018) based on ICT input shares and other ICT sector variables; Controls \( M_{it} \) include lags of dependent variable and shock, and firm-quarter dummy to control for unobservable time-invariant firm characteristics and firm-specific seasonality, and country-sector FE to account for cross-sector variations across countries (e.g., country-specific comparative advantage in specific sectors). Results in Figure 5 below indicate that recovery from recessions appears to be faster for digital-intensive industries.

9. To continue supporting the strong development of digital economy in the GCC, national authorities should be mindful of potential risks and re-adjust national digital targets as necessary. Strong growth of the digital economy is expected to continue promoting the GCC.
countries’ overall and sectoral productivity and efficiency. However, there are risks tied to digitalization adoption and use, including data privacy, cybersecurity, and digital literacy issues, which need addressing for sustainable and inclusive growth. Some GCC authorities have already taken legislative measures to mitigate the risks associated with the fast-growing digital ecosystem. Going forward, it would be crucial for the authorities to monitor progress towards national digital strategies to ensure targets are reached, or re-adjusting targets as domestic/external conditions evolve.

10. The GCC countries should continue to invest in digital skills literacy, and digital infrastructure supported by cybercrime regulations. The GCC has made significant strides in digitalization, investing heavily in technology infrastructure, entrepreneurship, and innovation. While the GCC’s digitalization level is comparable to AEs, continued focus on key areas such as education, digital infrastructure, public-private collaboration, and regulatory reforms is essential to maximize benefits, foster competition, innovation, and international integration, and minimize risks such as job displacement, and skill mismatches. Ultimately, a comprehensive approach involving investments in digital infrastructure, skills development, social safety nets, and progressive taxation, as well as fostering competition, innovation, international integration, and technological adoption, will be crucial to ensure the digitalization benefits are shared equitably across society and support economic growth and diversification.
References


Appendix IV. The Impact of Expanding GCC Tax Systems on Firms and the Economy

1. To reduce the large fiscal deficits resulting from lower oil prices, most GCC countries embarked on significant fiscal adjustments starting in 2015. The sharp decline in oil prices that started in mid-2014 prompted a wave of tax reforms to balance strained fiscal positions across the GCC and diversify revenue sources. A GCC excise tax treaty introduced in 2016 harmonized excises on products deemed harmful to human health (energy and soft drinks, and tobacco) as of 2017. The 2016 VAT tax treaty set the stage for a uniform imposition by the GCC of a 5 percent VAT. All countries, except Kuwait and Qatar (the latter having introduced excises), implemented both treaties at different speeds, with both UAE and Saudi Arabia being first movers. One of the main characteristics of tax systems in the GCC remains that there is no personal income tax. However, Saudi Arabia enforces a 2.5 percent Zakat on national companies and individuals alike. In addition, after implementation of the Common External Tariff (CET) in 2003, all non-GCC products, except for those exempted, are subject to 5 percent customs duty.

2. Broadening of the GCC tax systems is continuing. Since 2020, VAT rates in Bahrain and Saudi Arabia were increased to 10 and 15 percent, respectively, and excise regimes in the UAE and Saudi Arabia were broadened to include electronic smoking devices, other sugary products, as well as alcohol and pork in some of them. All excises are levied at a rate of either 50 or 100 percent. As of today, Bahrain remains the only GCC without any form of corporate taxation outside the oil and gas sector. Kuwait, Qatar and Saudi Arabia tax foreign companies (outside the GCC) only. In addition,
Saudi Arabia’s 2.5 percent Zakat, levied on all domestic companies, can, depending on the sector, equal a tax burden equivalent to a general CIT. Oman has a broad CIT of 15 percent (increased from 12 percent in 2017). The UAE introduced a federal CIT in June 2023, with a 9 percent standard rate for taxable income exceeding 375,000 UAE dirhams ($102,000). Multinationals will be subject to the Corporate Tax under the regular UAE Corporate Tax regime until the Pillar Two rules are officially adopted by the UAE. Significant tax incentives will remain, especially for companies operating in the UAE’s many free zones.\(^1\) Discussions about the implementation of Pillar II are also progressing in other countries.

\[\text{Figure 2. GCC CIT and VAT Rates}\]

\[
\begin{array}{c}
\text{GCC CIT on Non-oil Companies (Percent)} \\
\begin{array}{cccccc}
\text{Kuwait} & \text{Oman} & \text{Qatar} & \text{Saudi Arabia} & \text{UAE} \\
\text{(Foreign only)} & \text{All (foreign & domestic)} \\
\end{array}
\end{array}
\]

\[
\begin{array}{c}
\text{GCC VAT Rates (Percent)} \\
\begin{array}{cccccc}
\text{Bahrain} & \text{Oman} & \text{Saudi Arabia} & \text{UAE} & \text{Standard VAT rate for GCC} \\
\end{array}
\end{array}
\]

Sources: Tax documents (such as PWC), country authorities, IMF staff calculations.

The Impact of Tax Changes on the Economy

3. **Using the standard Jorda (2005) method, a cross-country fixed effects panel analysis is used to study the impact of the recent tax changes on non-oil GDP growth, inflation (total, tradable and non-tradable), and private consumption.** Due to the majority of tax changes having been recent and a relatively low number of years in observation overall (2007-2022, with some series only available as of 2015), the impact is studied only for the first two years following the shock. Controls used are world GDP growth, the average federal reserve rate, international oil prices, and a COVID stringency index\(^2\) to control for different lockdown procedures across GCC countries.

4. **The impact of VAT has been minor to date.** Results indicate no significant impact of VAT on non-oil GDP growth nor on private consumption. Inflation increases in the year of the VAT increase by 0.1 percentage points for each 1 percent VAT increase, but reverses in the following year to a similar magnitude. The same observation holds true for inflation of tradable goods, while non-

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\(^1\) The UAE Corporate Tax regime offers certain targeted tax reliefs which enable Free Zone companies and branches that meet certain conditions to benefit from a 0% Corporate Tax rate on income from qualifying activities and transactions.

\(^2\) The stringency index (OxCGRT) is calculated using nine metrics: school closure, workplace closure, cancellation of public events, restrictions on public gatherings, closure of public transport, stay-at-home requirements, public information campaigns, restrictions on internal movement, and international travel controls. A higher score indicates a stricter response (i.e., 100=strictest response). See the author’s full description.
tradable goods experience a price reduction in the year after VAT increases instead. An explanation for this effect could lie in the fact that the direct effect of tax increases is to slow the pace of aggregate demand growth, which by itself is disinflationary. It is thus possible that tax increases lead to reduced demand and thus price reductions primarily in non-tradeable goods. Excise taxation (computed as an average over the 7 main existing excise categories) is not found to impact inflation or private consumption significantly, but it has a small negative impact on non-oil GDP in the year following its increase, potentially due to a temporary increase in smuggling or imports of similar lower-taxed goods from neighboring countries.

<table>
<thead>
<tr>
<th>Table 1. GCC Tax and Commodity Price Changes on Firm Financials: Main Regression Results</th>
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</thead>
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<tr>
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<td>Lagged Return on Assets</td>
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<td>Number of country id</td>
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Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Sources: CompStat and IMF staff calculations.
Note: Firm sizes are calculated by taking firms within the bottom quartile (25%) of total assets (small firms), and within the upper quartile (75%+) of total assets.
5. **A panel fixed-effects regression is used to examine the relationships between tax changes and firms’ ROA, ROE, and various independent variables.** Independent variables include lagged financial indicators, macroeconomic factors, and unique Covid related variables. The model accounts for fixed effects by industry and country and clusters standard errors by industry groups. Multiple iterations of the regression are carried out, iteratively adding, or excluding variables to observe their impacts on the results.

6. **Recent changes in tax rates are found to have had a relatively modest impact on firms.** The impact of VAT increases on ROA is found to be insignificant, for large and small firms alike, indicating a well-functioning VAT refund system across the GCC. The impact of excises is small and significant at the 5% level for ROA, but only for food and tobacco companies. For those companies, ROA is declining by 0.01 for each percent increase of the composite excise tax index. Excises are found to be insignificant for all other companies, unsurprising given that most excises are levied on food and tobacco, but also a sign that excises are not impacting the economy through secondary channels such as lower consumption following a private wealth decline.

7. **We find some impact of CIT on firm performance, particularly on smaller companies.** Changes to CIT levied on foreign companies is found to significantly impact ROA negatively (p < 0.01), but the impact is relatively small overall. Specifically, a one percent increase in foreign corporate income tax is associated with a reduction of 0.04 percent in ROA. However, large firms, which are more profitable on average to begin with, are impacted by CIT changes noticeably less than smaller firms.

8. **In sum, the recent broadening of GCC tax systems had a relatively small impact on the GCC economies.** This is confirmed both from a macroeconomic and a firm-level analysis. While future analysis will be important to monitor the tax burden of firms and economic activity going forward, the current analysis suggests that additional broadening of tax systems will unlikely create a strong negative impact. There seems to be space for well-calibrated and targeted excise tax introductions on certain goods, especially those with negative externalities. CIT broadening or introduction should be broad without too many exemptions, but could give special consideration for small firms. For example, to support small companies, businesses below the countries' VAT thresholds could be exempted from CIT and subject to a simplified regime on turnover (e.g., 2 percent). To further support smaller firms, fees that target business activity could be streamlined to reduce administrative and financial burdens that tend to hit SMEs particularly hard. To reduce a possible impact on investment decisions, loss carry forward, accelerated depreciation and investment tax credits could be applied. Taxes are not the only determinants of competitiveness, and reforms to the labor and product market structure would likely have an even greater impact and
thus should continue across the GCC. A well-coordinated approach on additional tax types, as done with VAT and excise implementation, can also help to avoid competitive disadvantages for first movers.
References
