IRAQ ECONOMIC MONITOR

A New Opportunity to Reform

Fall 2022

THE WORLD BANK
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Middle East & North Africa

Iraq Economic Monitor

A New Opportunity to Reform

With a Special Focus on
Iraq's Intertwined Development and Climate Realities: An Urgent Call for Action

Fall 2022

Middle East and North Africa Region

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ACRONYMS

AML/CFT	Anti-Money Laundering and Countering Financing of Terrorism
Bscfd	Billion Standard Cubic Feet per Day.
CAB	Current Account Balance
CAPEX	Capital Expenditure
CBI	Central Bank of Iraq
CCDR	Country Climate Development Report
CEDP	Cost-Effective Decarbonization
CEM	Country Economic Memorandum
CNG	Compressed Natural Gas
COSIT	Central Organization for Statistics and Information Technology
COVID-19	Coronavirus Disease 2019
CPS	Current Policies Scenario
CSO	Central Statistical Organization
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FINDEX	Financial Inclusion Database
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GW	Gigawatt
GoI	Government of Iraq
H1	First Half of the Year
IEA	International Energy Agency
IEM	Iraq Economic Monitor
ILO	International Labour Organization
IMF	International Monetary Fund
IQD	Iraqi Dinar
KRG	Kurdistan Regional Government
KRI	Kurdistan Region of Iraq
KRSO	Kurdistan Region Statistics Office
LCOE	Levelized Cost of Electricity
LFS	Labor Force Survey
LHS	Left Hand Side
M2	Broad Money
mbpd	Million barrel per day
MEES	Middle East Economic Survey
MENA	Middle East and North Africa
MoE	Ministry of Electricity
MoF	Ministry of Finance
MoO	Ministry of Oil
NDC	Nationally Determined Contributions
NGFS	Network of Greening the Financial System
OPEC	Organization of the Petroleum Exporting Countries
PIM	Public Investment Management System
pp	Percentage Points
PPP	Public Private Partnership
RHS	Right Hand Side
SOBs	State-Owned Banks
WB(G)	World Bank (Group)
WDI	World Development Indicators
WP	White Paper
UMICs	Upper Middle-Income Countries
USDA	United States Department of Agriculture
y/y	year-on-year
WDI	World Development Indicators

ACKNOWLEDGMENTS

The Iraq Economic Monitor provides an update on key economic developments and policies over the previous six months and presents findings from recent World Bank work on Iraq, placing them in a longer-term and global context and assessing the implications of these developments and other changes in policy regarding the outlook for Iraq. Its coverage ranges from the macroeconomy to business environment and private sector development. It is intended for a wide audience, including policy makers, business leaders, financial market participants, and the community of analysts and professionals engaged in Iraq.

The Iraq Economic Monitor is a product of the Middle East and North Africa (MENA) unit in the Macroeconomics, Trade & Investment (MTI) Global Practice of the World Bank Group. The report was written by Majid Kazemi (Economist, MTI), Ashwaq Maseeh (Economist, MTI), and Zeina Alsharkas (Economist, MTI).

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The findings, interpretations, and conclusions expressed in this Monitor are those of World Bank staff and do not necessarily reflect the views of the Executive Board of the World Bank or the governments they represent. For information about the World Bank and its activities in Iraq, please visit www.worldbank.org/en/country/iraq (English) or www.worldbank.org/ar/country/iraq (Arabic). For questions and comments on the content of this publication, please contact Majid Kazemi (*mkazemi@worldbank.org*), Ashwaq Maseeh (*amaseeh@worldbank.org*), Zeina Alsharkas (*zalsharkas@worldbank.org*) or Eric Le Borgne (*eleborgne@worldbank.org*).

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EXECUTIVE SUMMARY

Recent Economic and Policy Developments

Iraq's economy is rebounding thanks to rising oil output and a recovery in domestic economic activity after the pandemic. After expanding by 2.8 percent in 2021, real GDP growth accelerated to 10.5 percent year-on-year (y/y) in the first half of 2022. Strong growth was largely driven by an increase in oil production as OPEC+ production cuts were tapered to meet higher global oil demand which extended into the third quarter of 2022. Non-oil GDP also grew by 8.4 percent (y/y), supported by a strong expansion of the non-oil industry, services, and agriculture sectors.

Higher government oil revenues, driven by increased export prices and quantities, have significantly strengthened the fiscal position and international reserves. Total government revenues surged by almost 72 percent (y/y) in the first nine months of 2022 (9M-22) as average oil export prices rose to over US$100 per barrel and export volumes gradually increased. In the absence of a budget for 2022, total expenditures grew by a moderate 20 percent, as spending was capped to one-twelfth of previous year's expenditures per month. While this expenditure restriction curbed pro-cyclical discretionary spending, budget rigidities relating to a high wage bill and subsidies remained significant. As a result, the overall fiscal balance registered a surplus of over 13 percent of GDP in 9M-22, up from less than 5 percent in the same period in 2021. The surge in crude oil export revenues has enhanced Iraq's external position, despite imports growing by 46 percent (y/y). Notwithstanding lower Foreign Direct Investment (FDI) inflows, the more favorable external position increased CBI's international reserves to a record US$86 billion as of October 20, 2022; international reserves now cover more than 13 months of imports.

Without deeper structural reforms and economic diversification, Iraq's extreme oil-dependence leaves it vulnerable to commodity price volatility. Despite several reform initiatives, Iraq remains one of the most oil-dependent countries in the world. High dependence on oil, procyclical fiscal policy and insufficient oil revenue management have left Iraq vulnerable to commodity price volatility. Even though oil generates most of government revenue, the oil sector employs less than one percent of the Iraqi workforce. The public sector is the largest formal employer, accounting for 37.9 percent of the country's workforce. The private sector, mostly dominated by the poor and vulnerable segments of the workforce, remains largely informal and stunted. A legacy of conflict, political instability, and weak governance further disincentivize private sector investment and growth.

Persistent high oil prices bode well for the economic outlook, but global demand is expected to gradually weaken. GDP growth is forecast to accelerate to 8.7 percent in 2022 driven by strong oil GDP growth of 12 percent. Oil GDP is slightly below previous projections following the reduction in OPEC+ production quotas in the last quarter of 2022. Non-oil GDP in 2022 is also projected to expand at 5 percent, faster than the rate of potential growth; non-oil growth is expected to be supported by stronger non-oil industry and services activity. Growth is expected to gradually ease over the medium-term as oil production will be constrained by more sluggish global demand. Crude oil production capacity growth will also be constrained by under-executed government investment during the pandemic and the absence of a 2022 budget. Non-oil GDP growth is forecast to average 3.5 percent in 2022-24. Non-oil growth will be supported by a rebound in religious tourism, but restricted by water and electricity shortages and a softening of domestic demand in the absence of growth enhancing reforms. With oil prices projected at over US$90 per barrel in 2022-24, strong oil export revenues are expected to keep fiscal and external accounts in significant surpluses.

Downside risks to the economic outlook relate to further weakening of global demand, insecurity and political instability, and renewed inflationary pressures. Rising food prices exacerbate pre-existing poverty trends and increase food security risks. Risks of social unrest would be compounded by any further erosion of purchasing power due to inflation, and continued electricity and water shortages.

Vulnerabilities could further be amplified by intensifying climate change shocks both in physical (temperature rise, water scarcity, extreme events) and financial terms. For example, while the agriculture sector provides an opportunity for economic diversification, water scarcity and suboptimal quality impose significant risks to Iraq's ال water availability and crop yield adversely affect GDP and sectoral outputs and add to the socio-economic challenges by negatively impacting labor demand and productivity, particularly for unskilled labor. Bridging Iraq's development gaps and climate change vulnerabilities therefore requires broad adaptation efforts, with a focus on the water-agriculture-poverty nexus.

Furthermore, Iraq's dependence on oil leaves it vulnerable to new economic risks amid the global transition towards a decarbonized world. Oil's prominent role in fueling the global economy will gradually diminish in a decarbonized world. The focus of mitigation measures should therefore be on bridging the supply-demand gaps while decarbonizing Iraq's energy value chain and managing the macro-fiscal implications of the transition to a low-carbon economy.

A new government was confirmed into office in October 2022, marking a new opportunity to implement reforms towards economic diversification, tackling longstanding structural challenges and addressing climate challenges. For almost a year after the parliamentary elections in October 2021, the economy was impacted by heightened political and economic uncertainties due to the political impasse in forming a new government. The new government is well placed to reinvigorate the implementation of much needed reforms to lodge the economy on a sustainable growth path that is resilient to oil price shocks and to Iraq's mounting climate change challenges. Safeguarding part of the oil windfall for future downturns and investing some of the additional revenue to enhance the productive capacity and to promote economic diversification are critical for sustainable and inclusive growth. Iraq's intertwining development and climate realities require an urgent call for adaptation and mitigation actions that can bring growth and productivity gains. However, the fiscal implications of these packages are significant if not accompanied by fiscal and structural reforms. There is also a risk that higher oil prices will lower the drive for reform which would deepen structural economic challenges.

ملخّص تنفيذي

التطورات الاقتصادية والسياسية الأخيرة

يشهد الاقتصاد العراقي انتعاشا بفضل ارتفاع إنتاج النفط وتعافي النشاط الاقتصادي المحلي بعد جائحة كورونا. وبعد أن ارتفع نمو إجمالي الناتج المحلي الحقيقي بنسبة 2.8% في عام 2021، تسارعت وتيرته إلى 10.5% على أساس سنوي في النصف الأول من عام 2022. وكان النمو القوي مدفوعا إلى حد كبير بزيادة إنتاج النفط، حيث تم تقليص تخفيضات إنتاج منظمة أوبك+ لتلبية الطلب العالمي المرتفع على النفط الذي استمر حتى الربع الثالث من عام 2022. كما ارتفع إجمالي الناتج المحلي غير النفطي بنسبة 8.4% على أساس سنوي، مدعوما بالتوسع القوي في القطاعات غير النفطية، والخدمات، والزراعة.

وقد أدى ارتفاع العائدات النفطية الحكومية، مدفوعا بزيادة أسعار الصادرات وحجمها، إلى تعزيز مركز المالية العامة والاحتياطيات الدولية بدرجة كبيرة. وارتفع إجمالي الإيرادات الحكومية بنحو 72% (على أساس سنوي) في الأشهر التسعة الأولى من عام 2022 (9 اشهر-2022) مع ارتفاع متوسط أسعار صادرات النفط إلى أكثر من 100 دولار للبرميل، وزيادة حجم الصادرات تدريجيا. وفي غياب الموازنة لعام 2022، زاد إجمالي الإنفاق بنسبة معتدلة قدرها 20%، حيث تم تقييد الإنفاق ليكون واحد من 12 من مصروفات العام السابق شهريا. وعلى الرغم من أن هذا التقييد للإنفاق قد حد من اوجه الجمود في الموازنة المراعي للتقلبات الدورية، فإن انفاق الموازنة فيما يتعلق بارتفاع الأجور والدعم ظلت كبيرة. ونتيجة لذلك، سجل الرصيد المالي الكلي فائضا يزيد على 13% من إجمالي الناتج المحلي في الأشهر التسعة من 2022، مقابل اقل من 5% في الفترة نفسها من عام 2021. وقد عززت الزيادة الكبيرة في عائدات تصدير النفط الخام المركز الخارجي للعراق، على الرغم من نمو الواردات بنسبة 46% على أساس سنوي. وعلى الرغم من انخفاض تدفقات الاستثمار الأجنبي المباشر الوافدة، فإن المركز الخارجي الأكثر ملاءمة زاد الاحتياطيات الدولية للبنك المركزي إلى مستوى قياسي بلغ 86 مليار دولار في 20 أكتوبر/تشرين الأول 2022؛ وتغطي الاحتياطيات الدولية الآن أكثر من 13 شهرا من الواردات.

وبدون تطبيق إصلاحات هيكلية أعمق وتنويع النشاط الاقتصادي، فإن الاعتماد الشديد على النفط في العراق يجعله عرضة لتقلبات أسعار السلع. فالعراق من أكثر دول العالم اعتماداً على النفط. وقد أدى الاعتماد الكبير على النفط، وسياسة المالية العامة المسايرة للاتجاهات الدورية، وعدم كفاية إدارة إيرادات النفط إلى تعرض العراق لتقلبات أسعار السلع. وعلى الرغم من أن النفط يحقق معظم الإيرادات الحكومية، فإن قطاع النفط يعمل فيه أقل من 1% من القوى العاملة العراقية. ويعد القطاع العام أكبر جهة عمل رسمية، إذ يمثل 37.9% من القوى العاملة في البلاد. ولا يزال القطاع الخاص، الذي تهيمن عليه في الغالب الشرائح الفقيرة والأكثر احتياجا من القوى العاملة، يعاني إلى حد كبير من التقزم والنشاط غير الرسمي. كما أن تركة من الصراعات وعدم الاستقرار السياسي وضعف الحوكمة تزيد من تثبيط استثمارات القطاع الخاص ونموه.

.ويبشر استمرار ارتفاع أسعار النفط بالخير بالنسبة لآفاق الاقتصاد، لكن من المتوقع أن يضعف الطلب العالمي تدريجيا. ومن المتوقع أن يتسارع نمو إجمالي الناتج المحلي إلى 8.7% في عام 2022 مدفوعا بقوة نمو إجمالي الناتج المحلي النفطي بنسبة 12%. ويقل إجمالي الناتج المحلي النفطي قليلا عن التوقعات السابقة في أعقاب خفض حصص إنتاج منظمة أوبك+ في الربع الأخير من عام 2022. ومن المتوقع أيضا أن يرتفع إجمالي الناتج المحلي غير النفطي في عام 2022 بنسبة 5%، وهو معدل أسرع من معدل النمو المحتمل؛ ومن المتوقع أن يساند النمو غير النفطي تدعيم أنشطة الصناعات والخدمات غير النفطية. ومن المتوقع أن يتراجع النمو تدريجيا على المدى المتوسط، حيث سيقيد الطلب العالمي مزيدا من التباطؤ في إنتاج النفط. كما ان نمو قدرات إنتاج النفط الخام سيكون مقيدا بالاستثمارات الحكومية التي لم تنفذ بالقدر الكافي أثناء الجائحة وعدم وجود موازنة لعام 2022. ومن المتوقع أن يبلغ متوسط معدل النمو في إجمالي الناتج المحلي غير النفطي 3.5% في فترة السنوات -2022 2024. وسيدعم النمو غير النفطي انتعاش السياحة الدينية، لكن سيقيده نقص المياه والكهرباء وتراجع الطلب المحلي في غياب إصلاحات معززة للنمو. ومع توقع أن ترتفع أسعار النفط عن 90 دولارا للبرميل في فترة السنوات

2022-2024، يُقدر أن تبقي عائدات تصدير النفط القوية على فوائض كبيرة في حسابات المالية العامة وحسابات المعاملات الخارجية.

وترتبط مخاطر التطورات السلبية التي تهدد الآفاق الاقتصادية بتفاقم ضعف الطلب العالمي، انعدام الأمن وعدم الاستقرار السياسي، وتجدد الضغوط التضخمية. ويؤدي ارتفاع أسعار المواد الغذائية إلى تفاقم اتجاهات الفقر القائمة من قبل ويزيد من المخاطر التي تحيط بالأمن الغذائي. وستتفاقم مخاطر الاضطرابات الاجتماعية بسبب أي تآكل آخر للقوة الشرائية بسبب التضخم، واستمرار نقص الكهرباء والمياه.

وقد تتفاقم أوجه الضعف بزيادة الحدة في صدمات تغير المناخ سواء من الناحية المادية (ارتفاع درجة الحرارة، ندرة المياه، والأحداث المناخية المتطرفة) أو من الناحية المالية. فعلى سبيل المثال، وعلى الرغم من أن قطاع الزراعة يتيح فرصة لتنويع النشاط الاقتصادي، فإن ندرة المياه وضعف جودتها يفرضان مخاطر كبيرة على أنظمة الأغذية الزراعية في العراق. ويؤثر انخفاض توافر المياه وغلة المحاصيل تأثيرا سلبيا على الناتج المحلي الإجمالي والمخرجات القطاعية ويزيد من التحديات الاجتماعية والاقتصادية من خلال التأثير سلبا على الطلب على الأيدي العاملة وإنتاجيتها، لاسيما العمالة غير الماهرة. ولذلك، فإن سد الفجوات الإنمائية وأوجه الضعف في مواجهة تغير المناخ في العراق يتطلبان جهودا واسعة النطاق للتكيف مع تغير المناخ، مع التركيز على الصلة بين المياه والزراعة والفقر.

علاوة على ذلك، فإن اعتماد العراق على النفط يجعله عرضة لمخاطر اقتصادية جديدة في خضم التحول العالمي نحو عالم بدون انبعاثات كربونية. وسيتناقص تدريجيا الدور البارز للنفط في تغذية الاقتصاد العالمي في عالم تقل فيه الانبعاثات الكربونية. ولذلك، فإن التركيز على تدابير التخفيف ينبغي أن يتوجه نحو سد الفجوات بين العرض والطلب مع الحد من الانبعاثات الكربونية في سلسلة قيمة الطاقة في العراق، وإدارة آلاثار الناجمة عن التحول إلى اقتصاد منخفض الانبعاثات الكربونية على الاقتصاد الكلي والمالية العامة.

وتم تأكيد تولي حكومة جديدة مهامها في أكتوبر/تشرين الأول 2022، مما يمثل فرصة جديدة لتنفيذ إصلاحات من أجل تنويع النشاط الاقتصادي، والتصدي للتحديات الهيكلية القائمة منذ وقت طويل، والتصدي للتحديات المناخية. وعلى مدى عام تقريبا بعد الانتخابات البرلمانية في أكتوبر/تشرين الأول 2021، تأثر الاقتصاد بتفاقم حالة الغموض السياسي والاقتصادي بسبب الجمود السياسي في تشكيل حكومة جديدة. والحكومة الجديدة في وضع جيد لتنشيط تنفيذ الإصلاحات التي تشتد الحاجة إليها لوضع الاقتصاد على مسار نمو مستدام قادر على الصمود في وجه صدمات أسعار النفط والتحديات المتزايدة لتغير المناخ في العراق. ويعد الحفاظ على جزء من العائدات النفطية لمواجهة تراجع النشاط الاقتصادي في المستقبل واستثمار بعض الإيرادات الإضافية لتعزيز القدرة الإنتاجية والتشجيع على تنويع النشاط الاقتصادي أمرا بالغ الأهمية لتحقيق نمو مستدام وشامل للجميع. ويتطلب الواقع المتشابك للتنمية والمناخ في العراق دعوة عاجلة لإجراءات التكيف والتخفيف التي يمكن أن تحقق مكاسب في النمو والإنتاجية. ومع ذلك، فإن الآثار المالية المترتبة على هذه الحزم كبيرة إن لم تصاحبها إصلاحات مالية وهيكلية. غير أن ثمة مخاطر أيضا من أن يؤدي ارتفاع أسعار النفط إلى خفض دفعة الإصلاح التي من شأنها تعميق التحديات الاقتصادية الهيكلية.

1

RECENT ECONOMIC AND POLICY DEVELOPMENTS

Output and Demand

Iraq's economy is rebounding thanks to rising oil output and a recovery in domestic economic activity following the pandemic. After a 2.8 percent growth in 2021, real gross domestic product (GDP) growth rose to 10.5 percent year-on-year (y/y) in the first half of 2022 (H1-22) (Figure 1). The recovery was primarily driven by the oil sector, which grew by over 12 percent, in line with the increase in OPEC production quota. Non-oil GDP also grew by 8.4 percent, supported by strong expansion of the non-oil industry, services, and agriculture sectors (Figure 3). Rapid population growth (2.4 percent per year) has meant the recent growth would translate to a more modest per capita GDP gain estimated at 6.2 percent in 2022, closing the previous years' gap with Upper-Middle Income Countries (UMICs) (Figure 2).

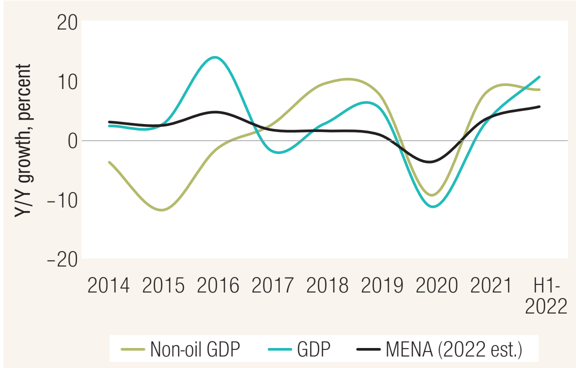
On the supply side, the recovery has been relatively broad-based in H1-2022. Favorable oil market conditions led to the oil sector expanding by over 12 percent (y/y) in H1-22 (see oil and gas developments section below for more details). Non-oil industries recorded strong growth of nearly 28 percent (y/y) largely attributed to a solid recovery in the construction sector benefiting from the government plans to address the housing crisis amid rising population..[1] The second largest growth within the non-oil industries came from the utilities sub-sector which grew by 5.1 percent, driven by a record peak in power supply of 24 Gigawatt (GW) in summer 2022, amid scorching summer temperatures, and accompanied by the revival of gas imports[2] from Iran to increase power generation.[3] Services, on the other hand, grew by 2.6 percent, supported by a revival in

[1] This was also supported by the central bank development initiative, which reached IQD18 trillion in June 2022, to finance housing complexes for low-income classes, among other.

[2] Nevertheless, power supply remains well below the total demand of 34GW as problems linked to transmission, distribution, and bill collection persists.

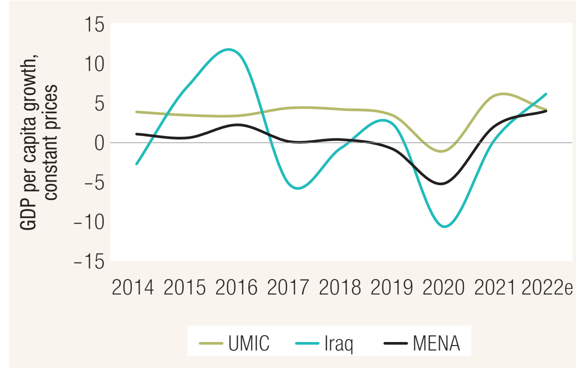
[3] Iran accounts for approximately one-third of Iraq's gas imports. The failure to pay US$1.6 billion owed to Iran for gas imports raised the risk of electricity shortages. The emergency funding package approved in June 2022, allocated US$2.7 billion to the Ministry of Electricity to settle gas debt due to Iran and secure gas imports for power generation.

FIGURE 1 • The Economy Is Strongly Rebounding after the Pandemic…



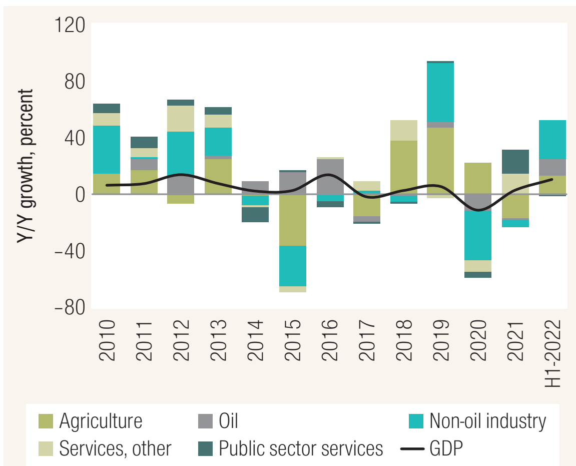
Source: Iraqi Central Organization for Statistics and Information Technology (COSIT), World Development Indicators (WDI) and World Bank staff calculations.

FIGURE 2 • …Helping Iraq Close the Gap with Income and Regional Peer Averages



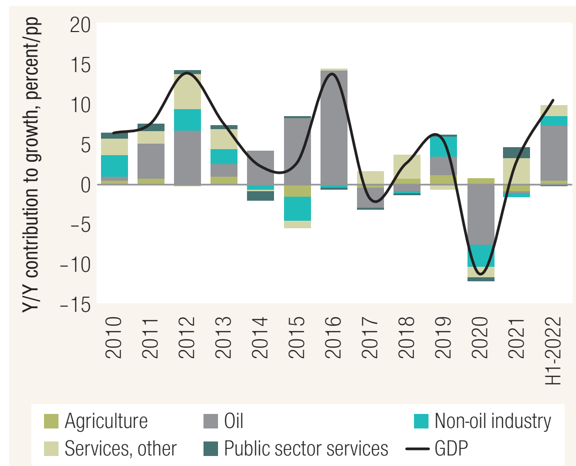
Source: COSIT, WDI and World Bank staff calculations.

FIGURE 3 • The Economic Rebound in H1-2022 Was Broad-Based…



Source: COSIT, WDI and World Bank staff calculations.

FIGURE 4 • …with Oil, Services and Non-Oil Industries Driving Overall Growth



Source: COSIT, WDI and World Bank staff calculations.

domestic demand and religious tourism (Figure 3). Contrary to 2021, agriculture grew by 12 percent (y/y) in H1-22, mainly attributed to the harvest season in the second quarter of the year, contributing marginally to overall growth (Figure 4). However, water shortages due to intensified impact of climate change continue to weigh on agricultural output, with the production of wheat and barley, Iraq's main staples, declining by 24 and 55 percent in 2021, respectively.[4] According to the Food and Agriculture Organization (FAO), the cereal harvest season in 2022 is expected to be lower by 34 percent.[5]

Domestic consumption growth has been driven by public consumption. Primary government spending (i.e., expenditures excluding interest payments) rose by 18 percent (y/y) (in nominal terms) in the first nine months of 2022 (9M-22), including a 33 percent (y/y) increase in social welfare expenditures.

[4] US Department of Agriculture, USDA, https://ipad.fas.usda.gov/countrysummary/default.aspx?id=IZ&crop=Wheat

[5] Food and Agriculture Organization (FAO), Quarterly Global Report, July 2022.

While less stringent pandemic control measures are indicating higher mobility and economic activity[6], rising inflation affects households purchasing power, at a time when unemployment remains high (see Box 1 on the latest labor force survey results).

Investment has contributed only marginally to overall growth given the lack of a 2022 budget and constraints to public investment management. The lack of an approved budget for 2022 has constrained the utilization of the oil windfall to pass new investments projects. Moreover, a weak business environment and inefficiencies in public investment management including governance, corruption, and infrastructure challenges remain the key obstacles to

[6] The COVID-19 Stringency Index from Coronavirus Government Response Tracker, University of Oxford shows a decline from the peak of 84 in February 2020 to 41 by end-August 2022.

BOX 1 THE DISMAL STATE OF IRAQ'S LABOR FORCE IN 2021[a]

A significant share of Iraq's population is not active in the labor market, which is especially significant considering the country's young population. Despite this low labor force participation (39.5 percent), unemployment was high at 16.5 percent in 2020/2021, highlighting the constraints on the supply side of the labor market (i.e., employment creation). Also of concern is a relatively large under-employment (8 percent of the employed population reported time-related underemployment). The labor market indicators are even worse for the youth who constitute a significant share of Iraq's population (Figure B1.1 and Figure B1.2).

The data also confirms the existence of a significant gender gap in the labor market as well as spatial differences. Labor market outcomes are worse for females including in labor force participation (7 times lower) and unemployment rate (twice as high) for females compared to males. The outcomes are also worse in the rural areas in part due to challenges facing the agriculture sector, which is confirmed by the acceleration in the migration trend towards urban areas. Similarly, unemployment ranges widely across governorates (between 33 percent to as low as 6 percent), which shows the geographical heterogeneity and inequality of job opportunities across the country.

The above outcomes are partly explained by the distribution of jobs across the economy. Jobs are focused in urban areas such as construction (16.3 percent), public administration and defense (15.9 percent), and wholesale and retail trade (14.2 percent). Crucially, the data reveals that 37.9 percent of employment was in the public sector and around 54.9 percent of total employment was in the informal sector.

The results of the latest Labor Force Survey (LFS) confirm that Iraq's economy has not been able to meet the job demand of its young population in the labor market. A comprehensive set of labor market and structural reforms are needed to achieve economic diversification and promote private sector job creation. Efforts to improve human capital outcomes, advance digitalization, improve business environment and access to finance will improve job creation and support higher female participation in the labor market. Meanwhile, reforms to support the transition towards a low-carbon economy have potential to attract domestic and foreign investors and eventually contribute to growth and job creation. The White Paper and the new government program agenda include reforms to transform the Iraqi economy to a more diversified and private sector-oriented economy, which would rely on improved competitiveness and creates jobs for its population, especially the youth.

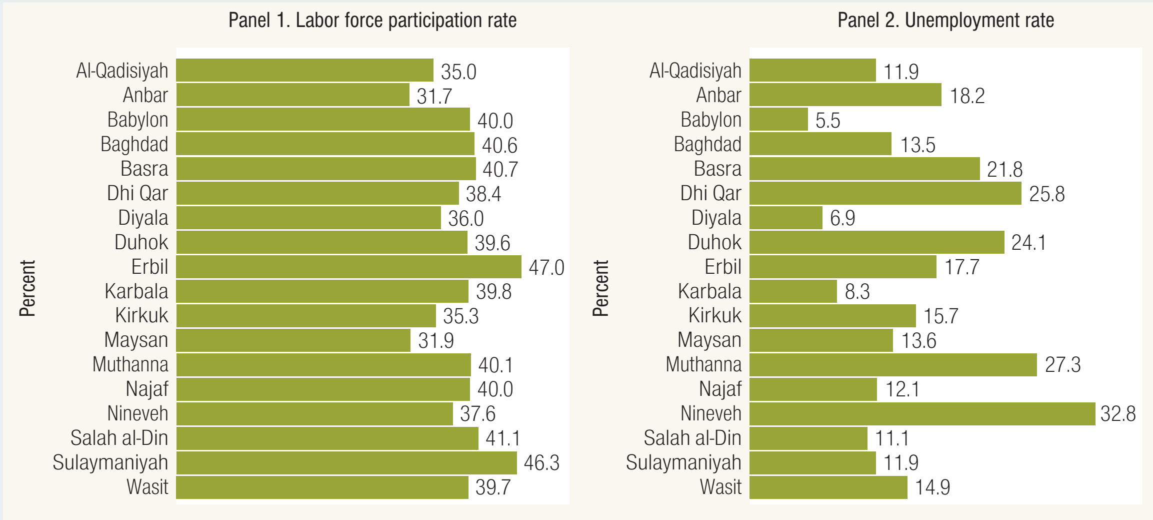
TABLE B1 • Main Labor Force and Labor Underutilization Rates, Iraq LFS 2021

In percentage	Total	Male	Female	Youth (15–24 years old)	Adults (25+ years old)
Labor force participation rate	39.5	68.0	10.6	26.5	45.8
Employment-to-population ratio	33.0	58.0	7.6	17.0	40.6
Unemployment rate	16.5	14.7	28.2	35.8	11.2
Combined rate of time-related underemployment and unemployment	23.0	21.9	31.6	43.2	17.6
Combined rate of unemployment and potential labor force	24.2	19.7	46.9	46.7	17.2
Aggregate measure of labor underutilization	30.2	26.4	49.4	52.8	23.2

(continued on next page)

BOX 1 THE DISMAL STATE OF IRAQ'S LABOR FORCE IN 2021[a]

FIGURE B1 • Labor Force Participation and Unemployment Rate by Governorates



Source. Iraq, Labor Force Survey (LFS), July 2022.

Note: Iraq Labor Force Survey 2021, ILO, CSO, and KRSO, July 2022 https://www.ilo.org/beirut/publications/WCMS_850359/lang–en/index.htm . The International Labor Organization (ILO) partnered with the Central Statistical Organization (CSO) and the Kurdistan Region Statistics Office (KRSO) to launch a national Labor Force Survey (LFS) in July 2022. The LFS 2020/2021 is the first survey of its kind to produce estimates for Iraq at the national, governorate and urban/rural levels, covering a broad array of indicators on the labor market and demographic characteristics.

attracting foreign investment despite some progress in recent years.[7] These factors have kept total investment at less than 2 percent of GDP in 9M-2022, below the significant service delivery needs for Iraq. The government of Iraq (GoI) White Paper includes measures to improve the public investment framework and to redefine the Public Investment Management System (PIM) based on international best practice. However, these plans have yet to be fully implemented.

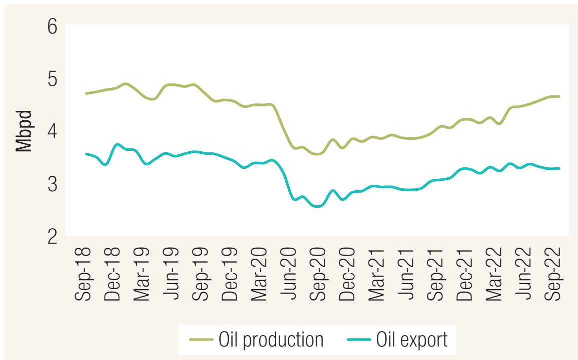
Oil and Gas Developments

Oil production has steadily increased in the first nine months of 2022 in line with the gradual tapering of OPEC+ production quotas. The recovery in global oil demand along with the pick-up in Iraq's oil exports as OPEC+ production cuts gradually eased drove a strong expansion in oil production to an average of 4.43 million barrel per day (mbpd) in the first nine months of 2022 (9M-22), 13.4 percent higher (y/y) (Figure 5). In October 2022, oil production leveled off at 4.65 mbpd, around the highest level since the quota agreement was put in place in April 2020. The growing gap between oil production and exports in 2022 was largely due to higher domestic consumption, following the rebound in non-oil growth and record temperatures. Nonetheless, further expansion of oil production is constrained by cumbersome bureaucratic procedures and insufficient water and gas used for injection into reserves to boost recovery rates. The withdrawal of major oil producers from Kurdistan region of Iraq (KRI) could also cause disruption in the oil sector during a period of oil revenue windfall. The recent OPEC+ agreement to cut oil production as of November 2022 by 2 mbpd from August levels is expected to reduce Iraq's oil production by 5 percent to 4.43 mbpd.[8]

7 The Government of Iraq (GoI) has been pursuing investment friendly policies to improve the business environment such as facilitating company registration and foreign ownership, access to international arbitration for commercial conflict resolution.

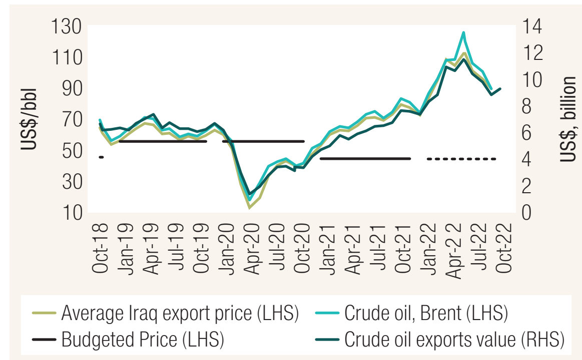
8 According to Iraq Ministry of Oil, despite the cut, Iraq's oil exports would not be affected, partly as domestic consumption will adjust to keep in line with the OPEC+ decision (Ministry of Oil, October 5, 2022).

FIGURE 5 • Oil Production and Export Volumes Increased with Higher Demand…



Source: Iraqi Central Organization for Statistics and Information Technology (COSIT), World Development Indicators (WDI) and World Bank staff calculations.

FIGURE 6 • …while Oil Prices Remained above Pre-pandemic Levels



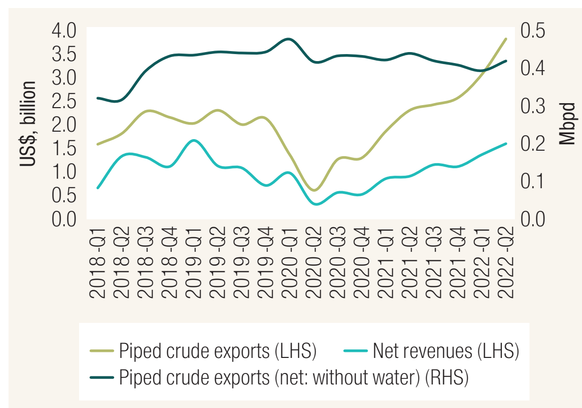
Source: MoO, Iraq's Ministry of Finance (MoF); and World Bank Staff calculations

However, the uncertainty surrounding the global oil market outlook emphasizes the need to accelerate a reduced reliance on fossil fuels.

Oil exports have surged with record oil prices and increased export volumes. In tandem with higher oil production, nationwide crude oil exports rose to 3.3 mbpd in the first ten months of 2022 (10M-22), up by almost 12 percent (y/y) from the same period a year earlier. Concurrently, Iraq's average oil export prices has surged to over US$99 per barrel (pb), a new record following COVID-19-induced lows in April 2020 (Figure 6). This strong recovery brought a total of nearly US$100 billion in oil export revenues, up from less than US$61 billion in 10M-21, providing an opportunity to accelerate structural reforms and advance socio-economic priorities to strengthen Iraq's medium-term economic resilience.

Higher oil prices have also improved oil exports of the Kurdistan Regional Government (KRG), despite mandated cuts in export volumes. Latest figures published by the KRG reveals that oil exports (accounting for over 80 percent of the region's budget) averaged 0.4 mbpd in the H1-2022, down by almost 6 percent (y/y) (Figure 7). The decline in exports volumes coincide with a ruling by Iraq's Supreme Federal Court in February 2022 that deemed the KRG's oil and gas law unconstitutional, jeopardizing all contracts signed by the KRG with international oil companies.[9] However, the decline in export volumes was offset by the recovery in oil prices, which averaged US$94 per barrel in H1-22,

FIGURE 7 • Higher Oil Prices also Improved Fiscal Conditions in KRI



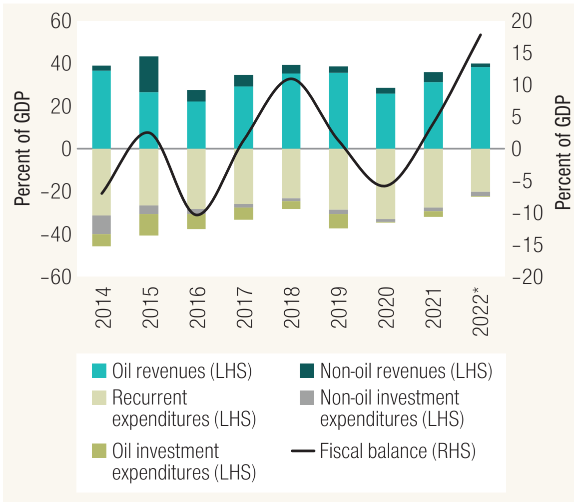
Source: Deloitte, KRG Department of Media and Information, and World Bank staff calculations.

75 percent increase (y/y).[10] As a result, the KRG's net oil revenues grew by almost 68 percent (y/y) to US$3

[9] This relates to different interpretations of the Constitution's Article 111, which states that "Oil and gas are owned by all the people of Iraq in all the regions and governorates", and Article 112 stating "a) the federal government, with the producing governorates and regional governments, shall undertake the management of oil and gas extracted from present fields, and b) and shall all together formulate the necessary strategic policies to develop the oil and gas wealth."

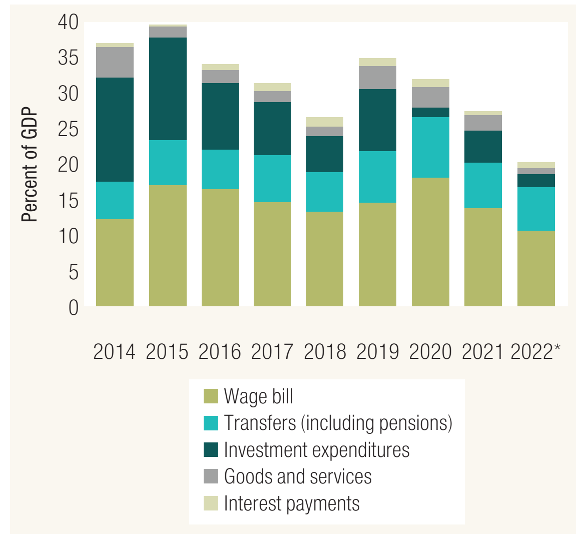
[10] However, oil exported from KRI is sold at rates lower compared to the rest of Iraq despite having the same quality, largely due to risks associated with operations,

FIGURE 8 • Higher Oil Revenues have Significantly Strengthened Iraq's Fiscal Balance in 2022...



Source: MoF and World Bank staff calculations
Note: * The data for 2022 are annualized values based on 9M-22.

FIGURE 9 • ...but Wage Bill and Transfers Remain a Signifcant Component of Expenditures



Source: MoF and World Bank staff calculations
Note: * The data for 2022 are annualized values based on 9M-22 performance.

billion in H1-2022.[11] This situation has helped the region meet its immediate needs, including for public sector salary payments.

The Government's ambitious plans to transform the energy sector are progressing slowly. The government has succeeded in doubling oil production capacity over the last decade to become OPEC's second-largest producer. Iraq further plans to increase oil production capacity to 8 mbpd by 2028. The government has also committed to end gas flaring, by endorsing the "Zero Routine Flaring by 2030" initiative.[12] However, some of these plans have not yet materialized due to several challenges, including security conditions, bureaucratic hurdles, infrastructure deficiencies, and water shortages. Upgrading the infrastructure export capacity and the existing refineries could further boost Iraq's oil output and reduce both petroleum product shortages and the high costs of their imports. Meanwhile, mobilizing the investment for capturing the associated gas could reduce the natural gas imports and related fiscal costs. However, boosting the oil industry will require high levels of governance effectiveness and institutional capacity to enhance competition and mitigate inefficiencies in energy generation, transmission, and distribution. With the global drive to move away from fossil fuels, in parallel, moving toward a low-carbon transition and setting the economy on a greener and more resilient path would be crucial (see the Special Focus Chapter on tackling Iraq's climate challenges).

Public Finance

Higher oil revenues significantly strengthened the fiscal position in 2022. Total government revenues

contracts and other geopolitical factors. This oil price gap was almost US$9 per barrel in H1–22, which shows the premium from the recent oil and gas contract disputes.

11 Total gross oil revenue in H1–2022 reached almost US$7 billion, but the net revenues were only US$3 billion, after deductions for international oil companies, loans, transport and storage fees.

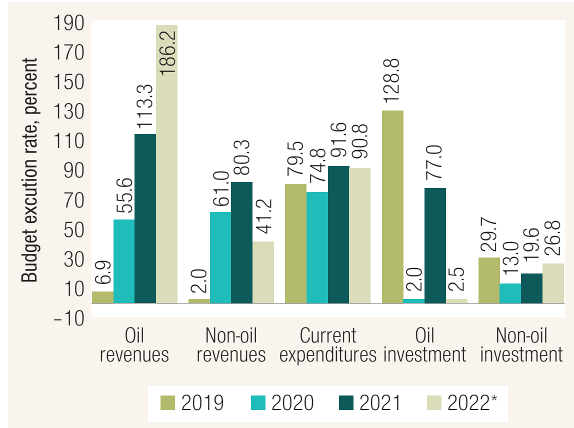
12 According to the World Bank 2022 Global Gas Flaring Tracker Report, Iraq ranked the second-largest source country of flared natural gas in the world, behind Russia. Over the last decade, flaring has steadily increased in Iraq, with volumes rising from 13 billion cubic meters (bcm) in 2012 to almost 18 bcm in 2021, accounting for around 12 percent of total global flaring. The volume of gas flared represents an annual economic loss approximately equivalent to US$2.5 billion.

surged by 72 percent (y/y) in 9M-22 driven by higher oil prices and gradual increase in export volumes. Total expenditures grew by 20 percent in 9M-22, despite being restricted to one-twelfth of previous year's spending per month in the absence of a budget in 2022. As a result, higher oil revenues pushed the overall fiscal balance into a large surplus of over 13 percent of GDP in 9M-22, a significant improvement compared to 2021 (Figure 8).[13] However, the impact of favorable oil market dynamics on Iraq's economic recovery could ease given the recent decline in global demand and its impact on future OPEC+ production quota agreements as witnessed in September and October 2022.[14]

The share of oil revenues in the budget has increased with higher oil revenues, while progress in domestic revenue mobilization remained limited. Oil receipts accounted for over 87 percent of total budget revenues in 2021 and increased to 96 percent during 9M-22 with the oil windfall. Despite past efforts to diversify revenue sources in 2021, there has been limited improvement in non-oil revenues, which remain below the budget targets.[15] Moreover, the full implementation of these measures and the possibility of passing additional measures to diversify fiscal revenues were hampered by weak administrative capacity, and legislative constraints of the care-taker government. As a result, non-oil revenues increased by less than 4 percent (y/y) in 9M-22, down by 0.4 percentage points (pp) of GDP compared to the same period in 2021 (Figure 8). Measures to boost non-oil revenues such as collecting electricity tariffs and increasing revenues from customs and taxes, as outlined in the White Paper, will be key to reduce reliance on oil and subsequent exposure to fiscal risks, and most importantly generate the needed fiscal space to invest in human capital and reap the returns on growth and welfare.

The lack of an approved budget for 2022 impacted fiscal policy and the execution of investments. In the absence of an approved budget for 2022, government spending for 2022 is restricted by Article 13 of the Financial Management Law No. 6 of 2019 (amended), which stipulates that the disbursement of funds is limited to one-twelfth of actual expenditures in the previous year. For investments, the law only permits expenditures related to previously approved projects. To temporarily address this restriction, the parliament passed the "Emergency Law for Food Security and Development" bill in June. The bill allocates IQD25 trillion (US$17.2 billion or 6 percent of GDP) to meet urgent needs for food security, energy

FIGURE 10 • Public Investment Remains Under-executed vis-a-vis Recurrent Spending



Source: MoF and World Bank staff calculations
Note: * The data for 2022 are annualized values based on 9M-22 performance.

13 Iraq's fiscal accounts would be less favorable on accrual basis due to significant unaccounted domestic and external arears. Most of the domestic arrears are owed to domestic banks and the Central Bank of Iraq, and external arrears relate to payments to international oil companies.

14 OPEC+ slashed oil production by 100 thousand bpd and 2 mbpd in September and October 2022, respectively for October and November, amid the uncertainty surrounding the global oil market. The potential loss for Iraq from this cut is estimated at US$586 million a month, based on September-2022 oil export prices.

15 In 2021, the authorities succeeded to boost non-oil revenues by adopting some measures including the automation of customs procedures (unifying documents and improving data sharing via electronic systems), among other actions. However, non-oil revenues stood at less than 5 percent of GDP in 2021 and accounted for less than 13 percent of total budgetary receipts,

BOX 2 EMERGENCY SUPPORT FOR FOOD SECURITY AND DEVELOPMENT[a]

In June 2022, the parliament passed an emergency bill that allowed the government to transfer public funds to meet urgent needs for food security, energy imports, social security transfers, job creation, and essential development projects, among others. The decision came amid a political deadlock that left the country without a budget in 2022. The bill allocates a total amount of IQD25 trillion (US$17.2 billion) for the year 2022 (Table B2.1). The main sources of the funding include foreign funds held by the MoF,[b] grants, subsidies, and foreign aid.

TABLE B2 • Emergency Bill Allocation Breakdown

Expenditure/Entity	Objective	Amount, US$ billion	Share of total bill
Provisional, regional developments, and reconstruction	Develop areas of the governorates not organized within a region, areas affected by terrorists, Dhi Qar reconstruction fund, and other.	7.1	41%
Ministry of Trade	Improve and purchase the items of the ration card, purchase wheat product, strategic storage, and farmers dues of past years.	3.4	20%
Ministries of Oil and Electricity-energy imports	Importing gas and energy and pay foreign debts	3.1	18%
Public payroll	Include all lecturers, contractors, and renewing contracts, 1000 contractors for each governorate for 3 years.	1.0	6%
Petrodollar	Allocations to oil-producing or refining governorates according to the production share.	0.7	4%
Ministries of Agriculture and Water Resources	Seed and fertilizer support, seed purchases payable, and irrigation system.	0.6	3%
Ministry of Labor & Social Affairs	Include social security and individuals of social needs.	0.5	3%
Ministry of Education	Maintaining schools.	0.1	1%
Ministry of Health	Purchase of medications for cancer and anemia patients.	0.1	1%
Security	Military and security forces including border guard command.	0.3	2%
Others	Other expenditures.	0.4	2%
Total bill		**17.2**	**100%**

The emergency bill was an important step to meet urgent financing needs, especially for food security, in the absence of an approved budget in 2022. Even though the law was passed in June 2022, it has not been fully implemented as of October. Even if the law were to be fully implemented, the financing approved by the law (equivalent to 6 percent of GDP) was enough to meet only a fraction of the development needs of the country and was less than a third of the additional oil windfall in 2022. Furthermore, the emergency law, by definition, cannot substitute a budget law that could tackle broader economic challenges. For example, the food security risks remain elevated as domestic food production continues to fall short of demand coming from the country's rapidly growing population, and amid rising of global food prices. Achieving food security calls for additional efforts to improve domestic production including raising the efficiency of irrigation water usage, implementing climate change adaptation and mitigation measures including the adoption of climate-smart agriculture, among others.

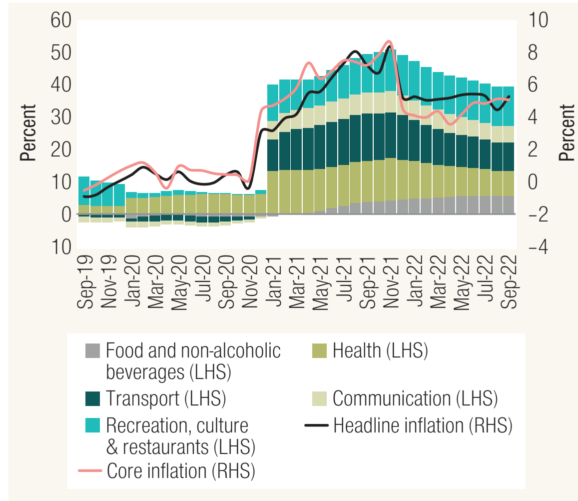
[a] Law of Emergency support for food security and development, No (2) for the year 2022.
[b] Which are surplus from the total expenses stipulated in Article (13) of the Federal Financial Management Law No (6) of 2019 (amended).

imports, social security transfers, and essential development projects (see Box 2 for more details). Nonetheless, the emergency law only accounted for a small share of the fiscal surplus (US$55 billion in 9M-22), restricting the adequate utilization of the oil windfall. Importantly, this has led to a low realization rate of investments comparable to the peak of the pandemic in 2020 (Figure 10).[16]

While expenditure restrictions in 2022 curbed large pro-cyclical spending, budget rigidities remained significant thereby limiting effective fiscal space. Recurrent spending accounted for 91 percent of total budget (more than 15 percent of GDP) in 9M-22. This is largely due to the increase in the wage bill and transfers (Figure 9). Despite having the world's fifth-largest proven oil reserves, Iraq imports most of its refined oil products due to under-developed refining capacity. With rising cost of government imports (US$5 billion (y/y) increase in H1-22) due to higher oil prices, expensive and inefficient energy subsidies pose a significant burden on the government, reaching 6.5 percent of GDP in 2021.[17] Budget rigidities limit fiscal space for much-needed public investment and erode the fiscal buffers for future extreme price shocks such as those illustrated by the COVID-19 crisis. Efforts to rebuild fiscal buffers through enhancing spending efficiency and spending rules, while saving a portion of oil windfall, are key priorities.

Higher oil revenues have eased the public debt burden, but significant fiscal risks remain. Iraq's public debt-to GDP ratio is expected to decline from 55 percent in 2021 to 35 percent in 2022, given the fiscal surplus and the denominator effect of high nominal GDP growth (35 percent). The share of domestic debt has steadily increased largely due to increasing debt to State-Owned Banks (SOBs) and the central bank. The external debt includes a sizable component of legacy arrears to non-Paris Club countries, which if successfully restructured in line with Paris Club countries (as requested by authorities), could lower servicing costs and reduce debt sustainability risks. After clearing war reparation to Kuwait in 2021, the Iraqi government also agreed to pay back US$1.6 billion in debt to Iran for gas and electricity imports following the passage of the emergency bill. However, fiscal risks remain, including those related to guarantees to electricity sector and contingent liabilities to SOBs. A medium-term debt management strategy would help manage risks arising from the debt portfolio, reduce macro-financial risks, and reinforce fiscal policy.

FIGURE 11 • Demand Pressures and Currency Devaluation Have Spurred Inflationary Pressures



Sources: COSIT; and World Bank staff calculations

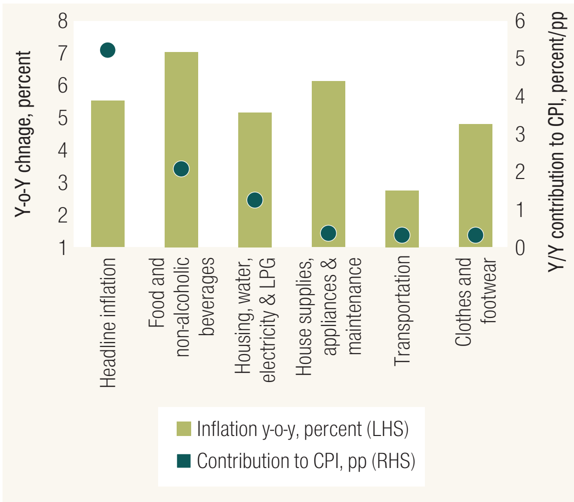
Monetary Policy and Prices

Consumer price inflation remained elevated in 2022, fueled by demand pressures and high global commodity prices. Rising food and utility prices pushed headline inflation to 5.2 percent on average in 9M-22 (y/y) (Figure 11 and Figure 12). Food prices were vulnerable to global food supply shocks and exchange rate devaluation as the fast-growing population and production constraints associated with severe droughts and record-high temperatures, increased Iraq's reliance on agricultural imports. Supply-side disruptions driven by the war in Ukraine and the resulting higher global demand for wheat pushed cereal prices in Iraq up by almost 6 percent. Furthermore, electricity and water

[16] This challenge adds to other structural compounding factors that have led to low and inefficient investment including limited absorptive capacity, inefficiencies in public investment management, cumbersome bureaucracy and opaque regulatory environment.

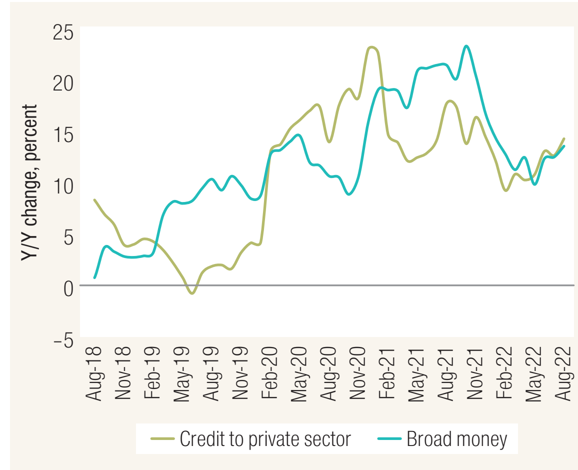
[17] This amount only includes explicit energy subsidies. Total energy subsidies are estimated to be over 21 percent of GDP (IMF Energy Subsidy Template – September 2021, https://www.imf.org/en/Topics/climate-change/energy-subsidies).

FIGURE 12 • Inflation Has Increased in Line with Global Food Commodity and Energy Prices, 9M-22



Sources: COSIT and World Bank staff calculations.

FIGURE 13 • Credit to Private Sector Growth Decelerated in 2022 after the Previous Year's Monetary Stimulus Was Phased Out



Source: CBI and World Bank staff calculations.

supply prices rose rapidly due to the rebound in electricity consumption and more reliance on private electricity generators. Excluding volatile food and energy prices, core inflation also rose by 4.5 percent (y/y) in 9M-22 driven by the rebound in domestic demand, signaling a broader inflationary trend. However, inflationary pressures were partly dampened by the depreciation of main import partner currencies and the Emergency Law for Food Security.

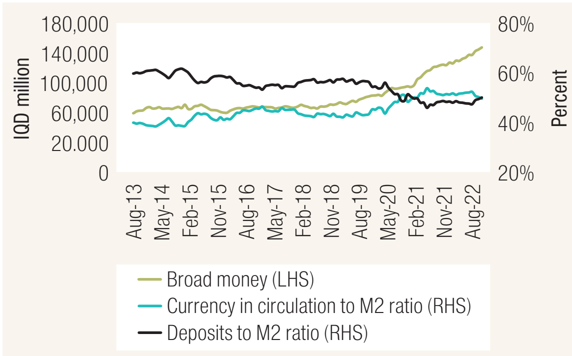
The central bank introduced new measures to strengthen its financial position and to support the economy, while adjusting the monetary stance to anchor inflationary pressures. In May 2022, the Central Bank of Iraq (CBI) raised its capital to IQD5 trillion (US$3.42 billion), from IQD3 trillion, using part of the profits realized in 2021. CBI also increased its gold reserves by 35 percent. In June 2022, CBI increased the financial allocation for private sector projects and housing loans and extended the repayment of loans granted to the agriculture and manufacturing sectors until end-2022. These measures contributed to a 12 percent (y/y) increase in credit to the private sector in the first eight months of 2022 (8M-22) albeit lower than in 2021 due to the phasing out of monetary stimulus (Figure 13). Broad money (M2) growth was driven by the pick-up in non-oil economic activity and cash held outside banks. Non-performing loans (NPLs) at SOBs and private banks increased with less accommodative monetary policy.[18]

Iraq remains a cash-based economy. Since 2021, along with the recovery in non-oil economy, additional liquidity was converted into cash, while the banking deposits declined further. The currency in circulation remains the vast majority of broad money, the share of which has risen in contrast to the share of deposits (Figure 14). According to the 2021 Global Findex, only 19 percent of Iraqis have a bank account.[19] This situation partly reflects a lack of confidence in the banking system and low banking inclusion. Nonetheless, the condition is slowly improving, to a large extent thanks to consistent support of the digital

18 Non-performing loans (NPLs) at State-Owned Banks (SOBs) increased to 15.3 percent in 2021, from 14 percent in 2020, but they are likely understated, as they do not reflect loans to public entities with uncalled government guarantees. Similarly, NPLs at private banks stood at 37 percent in 2021.

19 This puts Iraq well below MENA and UMIC coverage ratio of 53 percent and 84 percent, respectively. Meanwhile, only 10 percent of adults use digital payments compared to 37 percent and 76 percent in MENA and UMIC, respectively (World Bank Global Findex database 2021).

FIGURE 14 • The Economy Operates Predominantly through Cash



Source: CBI and World Bank staff calculations

payment's agenda by the CBI to reduce cash dependence, as an important action to fight corruption, tax evasion, and bureaucracy in financial dealings within banks operating in Iraq.

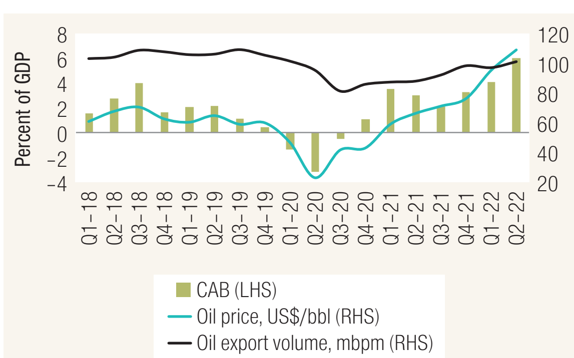
External Sector

Iraq's external account continues to benefit from higher oil exports. The current account surplus significantly strengthened in H1-22, reaching 10.3 percent of GDP (US$28.7 billion) (Figure 15). This improved outcome was thanks to a combination of a sharp increase in oil prices and the higher OPEC+ production quotas, which drove up crude oil exports (accounting for 95 percent of total exports) by 82 percent (y/y). Imports also grew by almost 46 percent (y/y) driven by economic recovery and high commodity prices. Consequently, despite the growth in imports, the trade balance registered a surplus of 13.3 percent of GDP, 4.5 pp of GDP higher than in H1-21 (Figure 16).

The economic recovery after the pandemic has boosted import growth. Iraq's total import bill rose to US$20.6 billion (7.4 percent of GDP) in H1-22 (Figure 16), driven by both higher public and private imports in line with underlying economic recovery and higher prices. The increase in government imports of consumption goods was significantly higher than those of capital goods, reflecting the restricted budget for investments and higher global commodity prices (global energy and food prices rose sharply by 82 and 27 percent in H1-22 (y/y), respectively. A similar trend was reflected in the private sector imports including construction and capital goods imports, driven by the CBI's housing sector initiative (see the monetary section) and higher import prices.

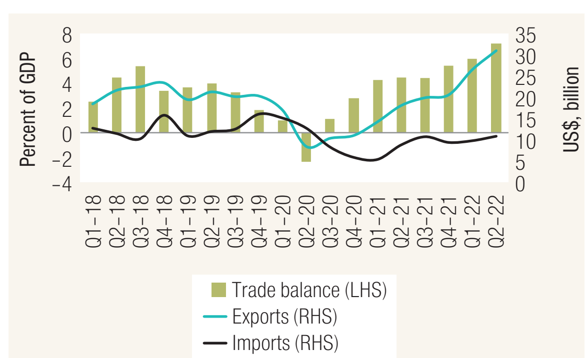
Despite lower Foreign Direct Investment (FDI) inflows, the strong external position improved international reserves. Security challenges and recent political uncertainty continued to discourage net FDI inflows which declined by 24 percent (y/y) in H1-22 and accounted only for 0.4 percent of GDP. However, a strong recovery in trade credits aided the net official investment to reach US$16.2 billion in H1-22, which in turn drove the financial account balance (Figure 17). The surge in oil exports, alongside a recovery in net official investment, has supported

FIGURE 15 • The Current Account Surplus Strengthened in H1-22…



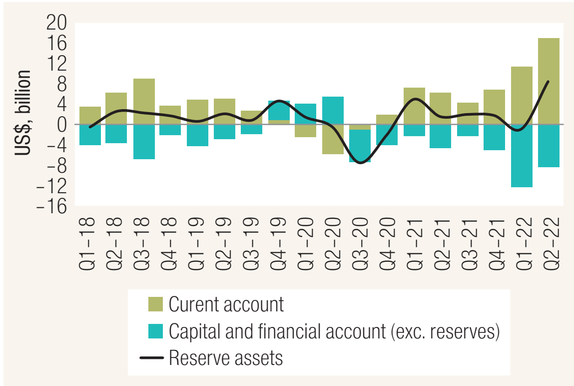
Source: CBI, MoO and World Bank staff calculations

FIGURE 16 • as Higher Oil Exports Drove Up the Trade Balance Despite Higher Imports



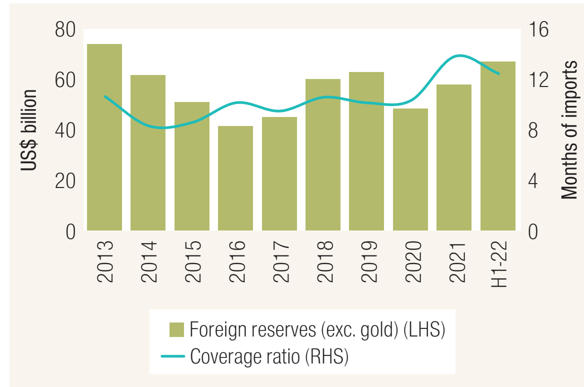
Source: CBI and World Bank staff calculations

FIGURE 17 • A Strong Recovery in Trade Credits Aided Net Official Investment, Improving the Financial Account Balance in H1-22



Source: CBI; and World Bank staff calculations

FIGURE 18 • Reserves Coverage Remains over a Year of Imports in Line with Higher Oil Exports



Source: CBI; and World Bank staff calculations

the increase in the CBI's foreign reserves excluding gold to rise to US$67.2 billion in H1-22 (covering 12.5 months of imports) (Figure 18). These reserves are reported to have increased further to US$86 billion as of October 20, 2022, improving resilience against future external shocks.

Longstanding structural impediments to trade prevent Iraq from diversifying exports and achieving its tariff revenue potential. Trade facilitation and trade policy reforms are yet to be significantly implemented. Trade across the borders remains cumbersome, costly, and time-consuming. The legal and regulatory framework for customs is outdated and not in line with the international best practices. Iraq's current tariff structure reflects a high degree of dispersion (i.e., high average rate, and few duty-free lines), which distorts economic incentives and attracts tariff evasion. While the KRI operates under a simpler uniform tariff rate, its tariff regime is not harmonized with the rest of Iraq. The tariff discrepancy creates incentives for misreporting and smuggling over Iraq's porous borders and intensifies tensions over budget revenue allocation to KRI, which is partly determined by expected customs revenues.

2

OUTLOOK AND RISKS

Outlook

The economic outlook is projected to benefit from persistent high oil prices, but weaker global demand will provide a damper. GDP growth is forecast to accelerate to 8.7 percent in 2022 driven by a strong oil GDP growth of 12 percent, albeit slightly below previous oil production projections following the reduction in OPEC+ production quotas in the last quarter of 2022. Non-oil GDP in 2022 is also projected to expand by 5 percent, a rate which is faster than that of the potential growth rate, supported by stronger non-oil industry and services activity. Growth is expected to gradually ease over the medium-term as oil production is constrained by a more sluggish global demand outlook. Oil production capacity growth is also constrained by underrealized government investments during the pandemic and, in 2022, due to the absence of the budget previously envisioned projects. Non-oil GDP growth is forecast at 3.5 percent on average in 2022-24, supported by a rebound in religious tourism but restricted by the water and electricity shortages, softening domestic demand, and in the absence of policies to boost non-oil growth potential.

With oil prices projected at over US$90 per barrel in 2022-24, strong oil export revenues are expected to keep the fiscal and external accounts in significant surpluses. Government revenues dominated by oil exports are expected to grow by 72 percent in 2022 as oil export prices surge and volumes rise. This contrasts with slower growth in expenditures, which for the main part, were constrained by the lack of a 2022 budget, resulting in the fiscal surplus to reach a record 13 percent of GDP. Similarly, these dynamics support the current account surplus to increase to an estimated 18 percent of GDP, bringing central bank international reserves to a record US$98.5 billion (more than 15 months of imports), their highest level in decades. Beyond 2022 in 2023-24, the double surpluses are forecast to gradually narrow as oil prices are expected to decline to US$80 per barrel by 2024. Nonetheless, the public debt-to-GDP ratio is expected to improve steadily over the outlook as the fiscal balance remains in surplus.

Risks and Opportunities

Downside risks to the economic outlook relate to further weakening of global demand, heightened insecurity and political instability, and renewed inflationary pressures. Food insecurity and heightened unemployment pose further risk for poverty and inequality. Severe droughts and rising temperatures have severely affected food production and agricultural employment (20 percent of total employment). The ongoing Russia-Ukraine war and the resulting surge in global commodity prices have exacerbated food security risks. The recent rebound in GDP growth has been insufficient to create new jobs, despite unemployment remaining high at 16.5 percent. Unemployment is disproportionately higher among women and youth, at 28.2 percent and 35.8 percent, respectively. Iraq has one of the lowest female labor force participation rates in the world (10.6 percent) and more than a third of youth are neither in employment or education or training. Apart from the sheer scale of forgone resources, the lack of jobs and adequate service delivery add to social tensions and weaken the country's social capital while the country already faces other security and development challenges amplifying economic uncertainties. Risks of social unrest would be compounded by any further erosion of purchasing power due to inflation and continued electricity and water shortages.

These vulnerabilities could also be amplified by intensifying climate change shocks both in physical (temperature rise, water scarcity, extreme events) and financial terms. For example, while the agriculture sector provides an opportunity for economic diversification, water scarcity and suboptimal quality impose significant risks to Iraq's agri-food systems. Lower water availability and crop yield adversely affect GDP and sectoral outputs and add to the socio-economic challenges by negatively impacting labor demand and productivity, particularly for unskilled labor. Bridging Iraq's development gaps and climate change vulnerabilities therefore requires broad adaptation efforts, with a focus on the water-agriculture-poverty nexus.

Furthermore, Iraq's dependence on oil leaves it vulnerable to new economic risks amid the global transition towards a decarbonized world. Oil's prominent role in fueling the global economy will gradually diminish in a decarbonized world. Inaction on decarbonization risks transforming investments in the oil sector as stranded assets as future energy supply would also be shaped by decarbonization commitments and requirements of global energy markets. The focus of mitigation measures should therefore be on bridging the supply-demand gaps while decarbonizing Iraq's energy value chain, and managing the macro-fiscal implications of the transition to a low-carbon economy. To this end, the World Bank Iraq Country Climate Development Report (CCDR) takes stock of Iraq's climate challenges and lays out steps towards climate change mitigation and adaptation.[20]

Pursuing economic diversification and addressing longstanding structural challenges as an urgent priority would put the economy on a more resilient and sustainable path. Despite several reform initiatives to diversify the economy, Iraq remains one of the most oil-dependent countries in the world. High economic volatility has been driven by the dominance of oil, which is amplified by procyclical fiscal policy and insufficient oil revenue management. The oil sector employs less than one percent of the Iraqi workforce, despite its large share in the economy, while the public sector employs 37.9 percent of the workforce, acting as the main source of job creation in the formal sector. Years of conflict, political instability and weak governance have disincentivized investments and stunted the growth of the private sector, which remains largely informal, mostly dominated by the poor and vulnerable segments of the workforce. The new government of Iraq is well placed to utilize the accumulated oil wealth to strengthen the implementation of economic reforms to put the economy on a path of sustainable growth that is less volatile and can better adapt and mitigate to Iraq's mounting climate change challenges. The special focus chapter of this report highlights that Iraq's climate and development

[20] The full report is accessible at https://openknowledge.worldbank.org/handle/10986/38250. See the Special Focus chapter for a summary of the report's key messages.

TABLE 1 • Iraq: Selected Economic and Financial Indicators, 2019-2024

	2019	2020	2021	2022e	2023p	2024p
Economic growth and prices						
Real GDP (percentage change)	5.5	−11.3	2.8	8.7	4.0	2.9
Non-oil real GDP (percentage change)	7.9	−9.4	7.8	5.0	3.5	2.0
GDP per capita (US$)	5,943	3,768	5,048	6,646	6,582	6,249
GDP (IQD trillion)	276.2	219.8	301.4	406.3	412.0	400.3
Non-oil GDP (IQD trillion)	161.8	156.4	163.8	181.8	196.6	206.5
GDP (US$ billion)	233.6	151.6	207.9	280.2	n.a.	n.a.
Oil production (mbpd)	4.74	4.00	3.97	4.43	4.62	4.78
Oil exports (mbpd)	3.54	2.99	3.02	3.3	3.4	3.6
Iraq oil export prices (US$ pb)	61.1	38.4	68.4	100.0	92.0	80.0
Consumer price inflation (percentage change; average)	−0.2	0.6	6.0	5.7	4.5	3.0
			In percent of GDP			
Public Finance						
Government revenue and grants	39.0	28.7	36.2	46.2	44.1	41.4
Government oil revenue	35.9	26.0	31.6	42.6	40.4	37.6
Government non-oil revenue	3.0	2.7	4.6	3.6	3.6	3.8
Expenditures	37.7	34.6	32.2	33.2	37.9	38.3
Current expenditure	28.8	33.1	27.8	24.7	28.4	29.8
Wages and salaries	14.7	18.2	14.1	12.0	14.8	15.7
Goods and Service	3.2	2.9	2.3	2.2	2.3	2.4
Interest payment	1.1	1.0	0.5	0.8	0.5	0.3
Other	9.8	11.0	10.9	9.7	10.8	11.4
Investment Expenditure	8.8	1.5	4.4	8.5	9.5	8.5
Oil investment	6.9	0.1	2.6	5.5	6.5	5.5
Non-oil investment	2.0	1.3	1.9	3.0	3.0	3.0
Primary fiscal balance, cash basis	2.4	−4.8	4.5	13.7	6.6	3.4
Budget balance	1.3	−5.8	4.0	13.0	6.2	3.1
Gross budget financing needs	−1.5	−8.3	2.1	9.5	2.8	−0.3
			In percent of GDP, unless otherwise indicated			
Public Debt						
Total government debt (percent of GDP)	44.7	76.0	55.1	35.3	33.5	31.3
Total government debt (US$ billion)	104.4	115.2	114.5	98.9	95.1	86.5
External government debt (percent of GDP)	23.1	39.3	28.5	18.2	17.3	16.2
External government debt (US$ billion)	54.0	59.5	59.2	51.1	49.2	44.7

(continued on next page)

TABLE 1 • Iraq: Selected Economic and Financial Indicators, 2019–2024 *(continued)*

	2019	2020	2021	2022e	2023p	2024p
Monetary indicators						
Growth in broad money	8.4	15.9	16.7	n.a	n.a	n.a
Policy interest rate (end of period)	4.0	4.0	4.0	4.0	4.0	4.0
			In percent of GDP, unless otherwise indicated			
External sector						
Current account	5.8	-4.0	12.0	17.9	10.0	7.1
Trade balance	12.9	2.6	18.7	27.0	19.1	16.2
Exports of goods	34.9	25.4	35.2	44.2	41.9	39.0
Imports of goods	22.0	22.8	16.5	17.2	22.9	22.9
Gross reserves (US$ billion, excl. gold)	62.9	48.1	58.2	92.9	105.7	109.6
In months of imports of goods and services (excl. gold)	10.1	10.3	13.9	14.6	13.6	14.5
Exchange rate (IQD per US$; e.o.p)	1182	1450	1450	1450	n.a	n.a
Exchange rate (IQD per US$; avg)	1182	1192	1450	1450	n.a	n.a

Source: Iraqi authorities and World Bank staff estimates and projections.

challenges are intertwined and it is only through economic diversification and implementation of fiscal reforms that Iraq can mitigate challenges facing its economy in a decarbonizing world. The recently announced agenda of the new government focuses on many of the key reforms.[21] These measures, if fully executed through a detailed and sequenced plan of action, could help address urgent priorities as well as addressing crucial longstanding economic challenges.

1 For example, the government plan proposes a reduction in the share of oil revenues in the budget to 80 percent in 3 years. It also proposes establishing an investment fund using fiscal surpluses.

SPECIAL FOCUS IRAQ'S INTERTWINED DEVELOPMENT AND CLIMATE REALITIES: AN URGENT CALL FOR ACTION[22]

Climate change is amplifying Iraq's existing economic vulnerabilities through direct climate impact and, indirectly, due to a decarbonizing world. Growing water scarcity and declining crop yield are pressing issues, which adversely affect GDP, increase food security risks, and add to the socio-economic challenges. Electricity and oil and gas operations (flaring) are not only a major source of emissions that contribute to climate change, but they also carry a significant fiscal burden. Iraq's oil-dependent development model exposes it to significant macroeconomic and fiscal risks as other countries gradually move away from oil. Thus, Iraq's intertwined development and climate realities call for urgent adaptation and mitigation actions that can be possible through economic diversification and implementation of fiscal reforms that reduce oil dependence. While climate change challenges are already impacting livelihoods and posing additional costs, it is still not too late to heed the urgent call for action and put the economy on a more resilient path.

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[21] This chapter is a synopsis of the main findings of the World Bank Iraq Country Climate and Development Report (CCDR), https://openknowledge.worldbank.org/handle/10986/38250.

Iraq is among the countries most vulnerable to climate change both in physical and financial terms. Reduced water availability and quality degradation impose significant risks on Iraq's agri-food systems and hence on the ability to diversify the economy. Water scarcity negatively affects GDP and other sectoral outputs, including crops which lower the demand for unskilled workers. Extreme heat temperature adversely impacts (unskilled) labor productivity, which further intensifies the socio-economic challenges associated with climate change. Inefficiencies and high carbon emissions in the power generation sector add to Iraq's climate-related challenges. These challenges are intensified by the economy's high dependence on oil revenues, leaving the country vulnerable to new economic risks amid the global transition toward a decarbonized world, wherein oil as a commodity loses its role in fueling the global economy. The intersection of Iraq's development gaps and climate change vulnerabilities requires: (i) adaptation efforts, with a focus on the water-agriculture-poverty nexus, (ii) mitigation measures, with a focus on bridging the supply-demand gaps while decarbonizing Iraq's energy value chain, and (iii) managing the macro-fiscal implications of the transition to a low-carbon economy.

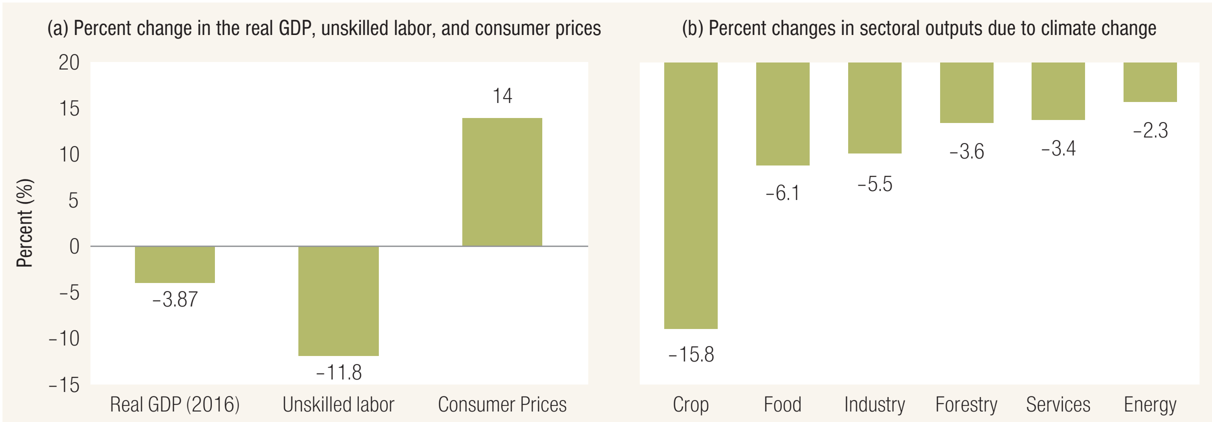
Reduced water availability and crop yield are expected to have a substantial negative impact on GDP and sectoral outputs. The impact of a 20 percent decline in water availability and higher temperatures on crop yields could lead to a 3.9 percent reduction in GDP in the medium-term (Figure 19). Sectoral outputs are also negatively affected by water scarcity and high temperatures, with crop production being affected the most (16 percent decline), followed by food production (6 percent decline).

Climate change will have wide-ranging socio-economic consequences affecting all economic sectors and negatively impacting labor demand and productivity, particularly for unskilled labor. A decline in unskilled labor demand, coupled with projected increases in food prices stemming from reduced crop production will disproportionally affect the poorest and most vulnerable segments of the population as they spend a higher share of their household budget on food and are more at risk of food insecurity (Figure 19a). Estimates indicate that a 10–20 percent increase in food prices would increase poverty by 1.6 to 4.4 percentage points. Improvement in water use efficiency, an example of water adaptation, can counterbalance these trends, mitigating the socio-economic costs of inaction. Estimates indicate that the reduction in GDP would shrink to 3.1 percent and 2.4 percent with 10 percent and 20 percent improvements in water use efficiency, respectively. Furthermore, 35 percent of workers in the agriculture and construction sectors are exposed to extreme heat, which affects their productivity and translates to lower output and thus lost earnings as most of these jobs are informal and the compensation is directly tied to output.

Without adaptation measures, water scarcity and suboptimal water quality pose significant risks to agri-food systems and will increase reliance on imports. Adaptation actions that focus on the water-agriculture-poverty nexus would increase water productivity, diversify the economy, create employment, improve the quality of jobs and livelihoods, contribute to food security, and support the resilience of the most vulnerable. To that effect, recommended policy levers along three pillars (infrastructure, innovation, and institutions) include the following:

- Improve regional cooperation and at the national level enhance water use efficiency and productivity jointly with demand management policies, and improve water allocation and appropriate valuation
- Modernize irrigation and drainage systems, manage salinity, and rehabilitate and update the operation of dams
- Implement climate-smart agricultural options by, for example, promoting drought and heat-resistant crop varieties and improving soil management
- Repurpose public sector support and policies (including subsidies) toward sustainable outcomes in the water and agricultural sectors, and de-risk investments in the agri-food sector
- Adopt and implement a cross-sectoral governance and coordination framework with adequate provisions for transparency and public engagement to plan, implement and monitor climate change actions at the national and sub-national levels.

FIGURE 19 • Estimated Impact of 20 percent Reduction of Water Supply and Temperature Impacts on GDP



Source: Iraq CCDR, 2022.

Iraq's power sector is characterized by high inefficiency, widening supply-demand gap, and persisting subsidies. Inefficiencies, such as gas flaring, high use of liquid fuels, high grid losses, and low-cost recovery prevent the energy sector from meeting energy demand. Critical to the issue of fast-growing electricity demand is the presence of deep subsidies. Energy prices are well below the cost-recovery level, particularly for electricity and liquid fuels. In the power sector, Iraq has one of the highest levels of subsidies and unbilled electricity rates in MENA. In 2019, of the US$11.3 billion total annual operational cost of Iraq's power system, direct fuel subsidies comprised half (US$5.6 billion), leaving the remaining US$5.7 billion as Ministry of Electricity (MoE)-related costs.

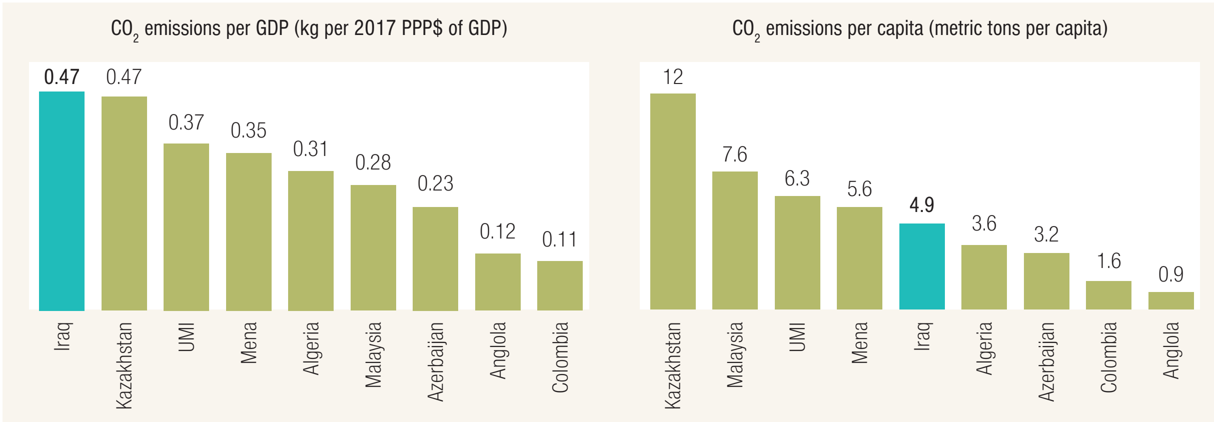
Almost three-quarters of Iraq's total carbon emissions are attributed to the energy sector (electricity, oil and gas operations, and transport) (Figure 20). Iraq has one of the highest levels of carbon intensity (emissions per GDP) compared to its regional and income peers (Figure 20). Production of oil and gas itself also generates significant volumes of GHG emissions from combustion in operations, unabated flaring and venting of natural gas, and leakages of methane along the oil and gas value chain (Figure 21a). Power generation, flaring and venting of natural gas and fugitive leakages of methane are responsible for more than 60 percent of the country's emissions (Figure 21b).

In 2020, Iraq's flared natural gas represented US$2.5 billion in foregone annual value and would have been sufficient to fuel much-needed electricity generation capacity. Iraq ranks second in the world, after Russia, for the volumes of gas flared. The country flares 1.7 billion cubic feet per day (Bscfd) of associated natural gas and imports up to 1 Bscfd from Iran to use for power generation. Iraq's flared gas volumes account for around 14 percent of the country's total emissions, among the highest levels in the world. The new government of Iraq plans to stop gas flaring and use the recovered gas in power generation in addition to boosting gas production from other gas reserves.

Progressive expansion of renewable energy minimizes electricity generation costs and improves energy security while reducing emissions. Addressing the electricity supply-demand gap while considering mitigation measures would require a gradual phasing out of liquid fuels, the strengthening of system generation availability and flexibility using gas-based generation, investment in renewable energy, and the use of electricity imports from reliable sources. With these considerations, a cost-effective decarbonization (CEDP) scenario is the recommended pathway for decarbonizing Iraq's power sector.[23] It tackles elec-

[22] A Cost-Effective Decarbonization Pathway (CEDP), which was designed to meet the highest target of abatement without increasing system costs from a levelized cost of electricity (LCOE) of generation standpoint.

FIGURE 20 • Iraq's CO_2 Emissions per GDP and Capita: A Comparative Perspective



Source: World Bank data, 2019.
Note: UMIC = Upper-Middle-Income Country; MENA = Middle East and North Africa.

tricity supply-demand balance requirements head-on, and it minimizes the levelized cost of electricity (LCOE) (Figure 22a). The share of renewables in total generation capacity in 2040 is projected to be 31 percent. The CEDP pathway also prevents the consumption of liquid fuels for power generation, reducing the power sector's emissions by 42 percent. Compared to a global benchmark of net-zero pathways for all countries, namely the net-zero scenarios put forward by the Network of Central Banks and Supervisors for Greening the Financial System (NGFS),[24] the CEDP pathway for the power sector produces about 25 percent less emissions in 2040 (Figure 22b).

Managing the macro-fiscal implications of the transition to a low-carbon economy

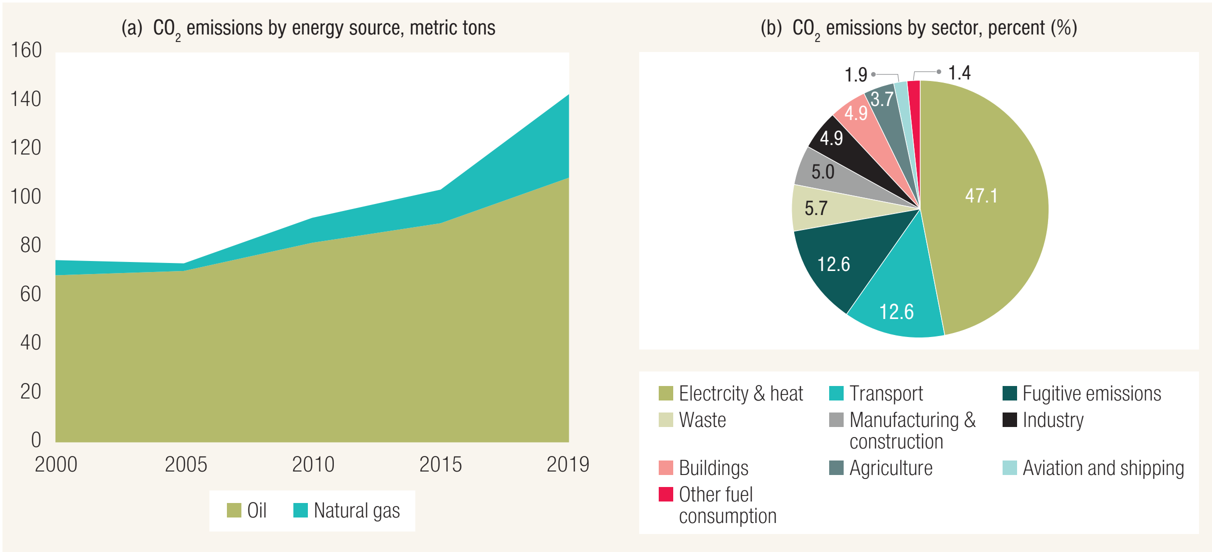
Fiscal and structural reforms and availing to private financing for investments can absorb the costly adaptation package in the face of water scarcity. An adaptation package of US$70 billion of frontloaded investments and operational spending till 2040 is identified. This includes (i) critical infrastructure programs for the rehabilitation of dams, barrages, regulators, drains, and canals; (ii) reclamation and modernization of irrigation (on-farm and off-farm); as well as (iii) soft investments in public and private water service institutions and programs (e.g. capacity building of farmer-led organizations, cost recovery policy reform, and update of the operations of dams); and (iv) water security and conservation programs.[25] These adaptation measures are estimated to reduce water scarcity by half (down to 10 percent). Macro simulations reveal that introducing this package would add 0.12 percent to the GDP in the first 5 years on top of the gains from the CEDP transition pathway and the accompanying fiscal reforms (0.87 percent gain by 2040). However, it would come at a fiscal cost where the budget deficit would average 11 percent of GDP in the first 5 years before declining to an average of 4.3 percent of GDP thereafter.

All decarbonization pathways for the electricity sector bring additional growth and productivity gains, but without accompanying reforms, the transition pathways' fiscal implications are steep and could have detrimental implications for the economy (Figure 23). Proceeding with an investment program that would switch the electricity generation fuel mix to favor natural gas and raise the contribution of renewables would have financial

23 The NGFS emissions projections are based on three different Integrated Assessment Models, run by three different modeling groups. The modeling is done at a regional level and is then downscaled to the national level. Throughout the Iraq CCDR, the NFGS scenarios are not used as predictions but rather indicative of what-if possibilities.

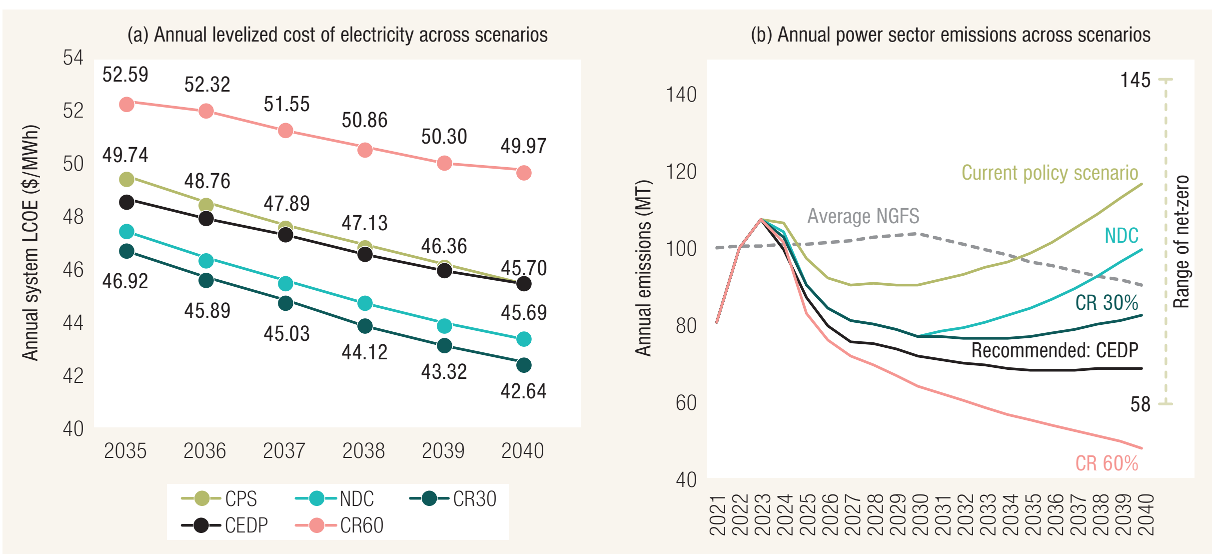
24 Labor-related investments are not included.

FIGURE 21 • Sources and Sectoral Distribution of Iraq's CO_2 Emissions



Sources: IEA and World Bank data, 2019.

FIGURE 22 • Annual Levelized Cost of Electricity and Power Sector Emissions across Scenarios

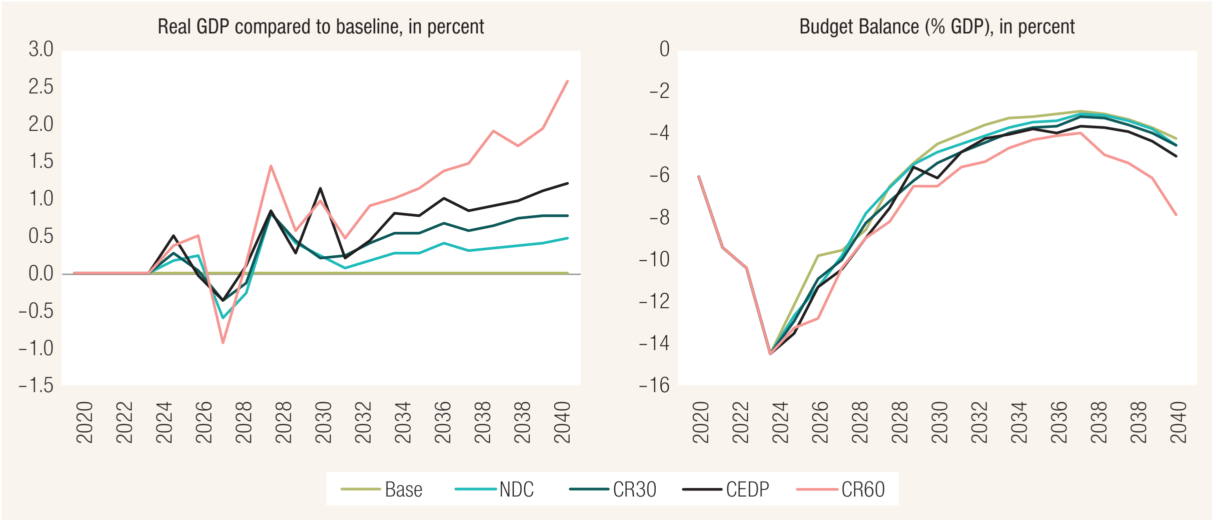


Source: Iraq Country Climate and Development Report (CCDR), 2022.
Note: CPS (Current Policies Scenario); NDC (Nationally Determined Contributions scenario), CR30 (reduction in annual carbon dioxide equivalent emissions of 30 percent by 2040 scenario); CEDP (Cost-Effective Decarbonization Scenario); CR60 (reduction in annual carbon dioxide equivalent emissions of 60 percent by 2040 scenario).

benefits. Simulations show that the decarbonization scenarios, CEDP and CR60, will boost GDP by 0.1 and 0.15 percent, respectively, by year 5 of the transition, compared to the Base scenario. The transition according to the CEDP is expected to raise non-oil GDP growth by over 1.5 percent. Capturing flared natural gas for power generation would reduce the reliance on imports to fill the electricity supply-demand gap and create fiscal space.

However, the decarbonization pathway is fiscally costly given the current energy subsidies and substantial upfront capital expenditure required to

FIGURE 23 • Decarbonization Pathways Are Supportive of Growth, but the Transition Will Come at a Fiscal Cost



Source: Iraq CCDR, 2022.

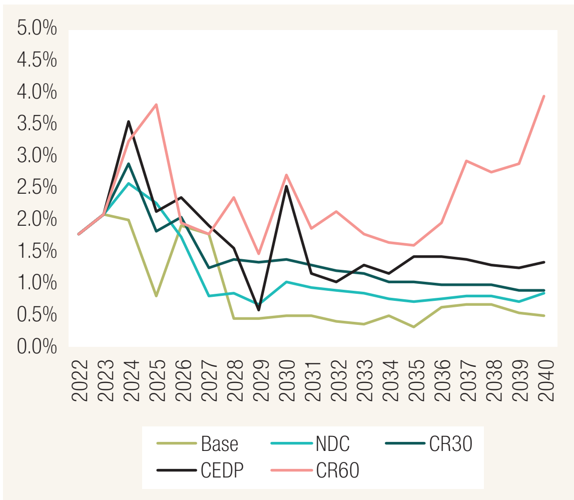
depart from relying on hydrocarbons for economic activity and growth. After including the cost of fuel subsidies, commercial losses, and non-technical losses, around 90 percent of annual operating costs are currently not recovered in Iraq's power system. Simulations reveal that undertaking one of the electricity transition pathways under current conditions would raise the fiscal deficit to an average of between 10.9 to 12 percent of GDP in the first 5 years, and between 3.8 to 5.7 percent of GDP by 2040, bringing public debt to critical levels (between 90.8 and 96.7 percent of GDP in year 5 and between 55.4 and 65.5 percent of GDP by 2040). Thus, the decarbonization effort should be accompanied by reforms to ensure cost recovery of services, better targeting of electricity subsidy, mobilization of green public and private sector financing, and fiscal consolidation through public wage bill controls and domestic revenue mobilization. However, Iraq's macroeconomic outcomes will not only be determined by its policy, but also by the global effort pursued by other countries to reduce emissions. Given the overdependence of the country on oil, such policies would influence global oil markets (through demand and prices) and in turn could impact Iraq's growth (in oil and non-oil sectors), fiscal and external balances, and financial sector operations. These oil market dynamics could also have significant implications on Iraq's welfare, social, and political prospects as previous cycles have shown.

Low-Carbon Transition Policy Levers Framework: Priorities and Recommendations

By 2040, Iraq requires investments of around US$233 billion (6 percent of GDP per year) to respond to its most pressing development gaps while embarking on a green and inclusive growth pathway. Under the CEDP the electricity investment is slightly frontloaded with 28 percent of total CAPEX (2.3 percent of GDP) being required by 2025 (Figure 24). While securing financing for the proposed investments is feasible given the recent improvement in external reserves (US$80 billion),[26] fiscal and pro-growth reforms are needed to mobilize domestic

25 According to official data, annual investment in Iraq in 2015–2020 averaged 17 percent of GDP, out of which public sector investment accounted for more than half (67 percent). In recent years, most of the government investment budget has been allocated to the oil sector (annually 3.8 percent of GDP in oil versus 1.6 percent of GDP in non-oil on average in 2017–2021).

FIGURE 24 • Capex Investments as a Share of GDP (%)



Source: Iraq CCDR, 2022.

revenues and create fiscal space to meet part of these investments, especially considering the volatility in oil revenues. Utilizing external financing sources will also be necessary to avoid crowding out private sector investment and increasing borrowing costs for other investments. Ultimately, accompanying (green) economic diversification reforms would reduce oil dependency and make the transition more feasible and sustainable in the long run. Figure 25 summarizes the recommended interventions according to their urgency and economic cost. The "no-regret" measures, which are recommended in the initial five years (starting in 2022) offer Iraq the chance to respond to its development needs and establish a foundation of climate action while achieving low-carbon transition benefits (efficiency and social welfare, new jobs, fiscal savings, etc.) at a relatively low economic cost. Short- to medium-term measures, which are recommended over the coming 10-year period, are critical for Iraq to build economic and social resilience and set a greener transition pathway that shifts the approach of designing and executing mitigation and adaption policies in preparation for deeper climate action in 2030–2040.

FIGURE 25 • Prioritization and Investment Needs of Recommended Policies and Interventions

Development Urgency: High

HIGH IMPACT INVESTMENTS (Trade-offs: High)

Urgent interventions with moderate to high tradeoffs

- Close the electricity supply- demand gap and adopt the CEDP pathway for the power and transport sectors
- Modernize irrigation, manage salinity, and rehabilitate and update operations of dams

HIGH IMPACT INVESTMENTS (Trade-offs: Low)

Urgent interventions with low tradeoffs

- Establish a sovereign wealth fund
- Ensure power sector cost recovery and targeted subsidies
- Eliminate gas flaring and utilize it in power generation
- Improve efficiency jointly with water demand policies, including water valuation, and repurpose agriculture support policies
- Strengthen private sector participation in the economy
- Develop a national planning guideline for climate resiliency
- Adopt national CC governance framework

Development Urgency: Low

MEASURES TOWARDS NET ZERO (Trade-offs: High)

Long-term interventions to keep in mind

- Invest in CCUS and LCH
- Diversification of energy exports
- Expand E-mobility
- Decarbonize industry, agriculture and waste sectors
- Leverage regional trade and connectivity

MEDIUM-TERM MEASURES (Trade-offs: Low)

Less urgent, but highly beneficial interventions

- Improve water allocation and reuse of wastewater
- Adopt and scale-up climate smart agriculture
- Initiate methane abatement in the oil & gas sectors
- Apply short and long-term labor transition policies
- Curricular reforms to shift towards STEM-Climate knowledge space
- Launch CC outreach and public participation program and scale up local participatory approaches

High Low

Trade-offs (Economic Costs)

Identified "no regret" and "high impact" investments	(US$ billions) 2040
Rehabilitation of hydraulic infrastructure and irrigation, and reclamation of irrigation	42
Water and agriculture non-structural investments	6
Eliminate gas flaring and utilize it in power generation	29
Adopt the CEDO pathway for the power sector	63
Overhaul the power grid	52
Adopt the "high Ambition" transport decarbonization pathway	31
Total	233

Source: Iraq CCDR, 2022.

SELECTED RECENT WORLD BANK PUBLICATIONS ON IRAQ

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