



Prosperity Unearthed

Wealth-Sharing Mechanisms for
Peace and Equitable Growth in the
Middle East and North Africa

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Peace and Equitable Growth in the
Middle East and North Africa**



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1 2 3 4 28 27 26 25 Revised April 2025

Errata: The trend line positions in figures 1.2 and 1.3 and the numbering on the y-axis of figures 1.5 and 4.1 have been corrected.

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ISBN: 978-1-4648-2218-6

DOI: 10.1596/978-1-4648-2218-6

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Acknowledgments

This report was prepared by a multidisciplinary team from the Prosperity Department of the World Bank's Middle East and North Africa Region under the direction and guidance of Nadir Mohammad, Jens Kromann Kristensen, Clelia Rontoyanni, Eric Le Borgne, Salman Zaidi, Irina Astrakhan, and Djibrilla Adamou Issa. Support from the Climate Support Facility Whole of Economy trust fund is gratefully acknowledged.

The report was prepared by Željko Bogetić, Harun Onder, and Roland Lomme, with research support from Yahui Zhao, Dominik Naeher, and Sriram Balasubramanian. The report is based on inputs and contributions from Naoko Kojo, Olena Ftomova, Ashwaq Natiq Maseeh, Omar Al-Aqel, Michael Papaioannou, Yasmine Osman, Helene Grandvoinnet, Majid Kazemi, Nayantara Sarma, Daniel Prinz, Alan Fuchs, Beenish Amjad, Alia Jane Aghajanian, Bilal Malaeb, Sandra Baquie, Chitra Balasubramanian, Fiona Davies, Mahi Elattar, Abdelkrim Araar, Gladys Lopez-Acevedo, Ekaterina Stefanova, Sara Alnashar, Fatma Elashmawy, Javier Diaz Cassou, Cyril Desponts, Gianluca Mele, Mohammad Al-Akkaoui, Norbert Matthias Fiess, Dima Krayem, Khaled Alhmoud, Saki Kumagai, Nataliya Biletska, John Goddard, Abdoulaye Sy, Kevin Carey, Verena Fritz, and Ehtisham Ahmad.

Executive Summary

The Middle East and North Africa (MENA) has long experienced both the benefits and the drawbacks of hydrocarbons. The MENA region holds more than half of the world's oil reserves and 40 percent of its gas reserves. These resources have enabled several countries in the region to achieve high-income status and driven the rise of some of the world's largest financial and business hubs, while indirectly supporting less fortunate economies through remittances, investment, and job creation. However, hydrocarbon wealth has also contributed to conflict, increased economic instability, and fostered excessive dependence on a narrow range of commodity exports. Even in successful cases, hydrocarbon-led development has not always met expectations, and the region's performance on the Human Capital Index remains below what its average income level would predict.

This report examines the causes of different development outcomes and suggests ways to promote inclusive prosperity and peace. It does so by looking at wealth sharing through three prisms: time, space, and fragility and conflict. More specifically, the report assesses how policy makers in the MENA region have approached the sharing of resources across time (for example, saving versus spending) and across geographical space (for example, concentrating versus distributing). The report argues that deviations from good practices in these two dimensions help explain some of the region's unfulfilled development promise, including in countries affected by fragility, conflict, and violence (FCV). Based on this assessment, the report identifies opportunities to leverage hydrocarbon resources to build sustainable and inclusive prosperity. The report focuses on wealth sharing and emphasizes the crucial role that inclusive economic policies, robust transparency arrangements, and strong, capable institutions play in providing services, infrastructure, and equitable transfers financed by resource wealth.

SHARING WEALTH ACROSS TIME

To responsibly manage hydrocarbon revenues across time, policy makers can decouple fiscal spending from resource-based income. Hydrocarbon prices are highly volatile even compared with other commodities: Since 1990, crude oil has been about three times more likely than copper, and 100 times more likely than gold, to experience a 10 percent price reduction in a given month. The short-term volatility of resource revenues is compounded by their long-term unsustainability: Oil and gas reserves are finite. To optimize natural resource revenue utilization, it is important to address these two critical characteristics. This can be achieved by implementing policies and instruments along two dimensions: (1) stabilization, because volatile and/or procyclical fiscal spending can hinder private economic activity and limit growth, and (2) savings, where revenues that exceed the government's absorptive capacity or the macro-economic utility of additional spending are held in reserve until viable projects can be developed and implemented and when additional spending is warranted. Savings are also vital to intergenerational equity because they enable current financial resource wealth to finance future consumption.

Policy makers in hydrocarbon-rich countries in MENA have faced challenges with respect to effectively managing resource revenues. In terms of stabilization and saving objectives, the performance of MENA over the last two decades has been mixed.

- *Stabilization.* When benchmarked against oil prices, spending in most oil-rich MENA countries has been moderately countercyclical, with the notable exceptions of the Arab Republic of Egypt and the Republic of Yemen. However, in other MENA countries, including the Islamic Republic of Iran and Qatar, spending has been procyclical with respect to the business cycle. In many cases, fiscal procyclicality can stem from a multitude of factors, including the absence or limited effectiveness of automatic stabilizers such as progressive taxes and social protection mechanisms; a narrow tax base dependent on resource revenues, as well as limited administrative, statistical, and analytical capabilities; and short-term policy making in a context marked by weak public institutions.
- *Saving.* Spending in most oil-rich MENA countries exceeds their respective permanent income benchmarks (the level of spending that can be sustained indefinitely), but there have been important gains in recent years. The positions of Gulf Cooperation Council (GCC) countries have been improving rapidly. Between 2019 and 2022, Oman narrowed the gap between its fiscal deficit and its permanent income benchmark from 16 percentage points of gross domestic product to about 7, Saudi Arabia from 11 percentage points to 4, and the United Arab Emirates from 9 percentage points to 0.2.

Across MENA, policies for managing oil and gas revenues largely remain discretionary and most countries lack explicit fiscal rules to align spending with macroeconomic stability and prosperity. Six of the 20 largest sovereign wealth funds (SWFs) are in MENA, several of the oldest SWFs in the world.

While SWFs in GCC countries have sound governance arrangements and have managed their portfolios well, the activities of most of the region's SWFs are weakly coordinated with macroeconomic policies. Deposits and withdrawals from SWFs are discretionary, which can inhibit their alignment with broader macro-fiscal objectives because domestic investment decisions of fund managers often bypass the checks and balances of government budget processes and result in reduced predictability. In many cases, establishing fiscal rules that apply both to the regular budget and SWF operations could provide greater transparency, predictability, and fiscal policy coordination to support the sustainable and effective utilization of hydrocarbon revenues.

SHARING WEALTH ACROSS SPACE

Mechanisms that allocate fiscal resources across regions or between levels of government often aim to balance real or perceived trade-offs between efficiency and equity. Centralized, indirect revenue-sharing models, like those used in Norway and the United Kingdom, rely on the general government budget to allocate oil and gas revenues via budgetary expenditures. In contrast, direct revenue-sharing models, like those used in the United States and Canada, allocate a share of resource revenues to subnational governments to manage at their own discretion. One version of this model, known as derivation-based sharing, explicitly recognizes the local right to resources. Both direct and indirect revenue-sharing models can help address grievances associated with the extractive industries, mitigate regional inequalities, and preempt potential conflicts over resources. They can also help prevent Dutch disease effects when they separate oil and gas windfalls from public expenditures. Accountability can also improve when more wealth is shared across space, directly or indirectly. While indirect sharing can compromise fiscal efficiency, the risk can be mitigated through additional fiscal coordination to ensure that the stabilization and saving objectives are met. However, while a well-designed direct-sharing system can theoretically help diffuse tensions and contestation over resources, a poorly designed system can spark or exacerbate struggles for control over resources as seen in Colombia, Nigeria, and Peru. The direct and indirect revenue-sharing models each have their advantages and drawbacks and no single approach fits all circumstances.

In MENA, neither direct nor indirect revenue sharing has succeeded in addressing the spatial inequalities associated with resource wealth. The region's unitary states generally practice indirect revenue sharing: Oil and gas revenues combine with taxes, customs duties, and other revenue streams to finance fiscal expenditures, which may be either progressive or regressive. Even unitary states that achieve high income levels and maintain significant fiscal capacity for stabilization and strategic investment continue to face regional inequalities, partly because of the uneven geographical allocation of fiscal resources and uneven impact of public policies.

While each country's approach to revenue sharing across space is specific to its context, all models require transparent rules-based policies and accountability mechanisms. Across the region, the geographic distribution of revenues is typically subject to discretion; rules-based approaches are rare. Limited transparency and unclear decisions regarding resource allocation can lead to social tensions and potential conflicts. As international experience makes clear, the success of any revenue-sharing model hinges on robust governance arrangements, including transparency and accountability and a focus on equity anchored in rules-based policy. While discretionary approaches can allow for greater short-term flexibility, their tendency to weaken social cohesion and enable rent seeking may outweigh potential benefits.

SHARING WEALTH IN THE SHADOW OF FRAGILITY AND CONFLICT

Wealth sharing does not necessarily entail a trade-off between equity and efficiency, especially in FCV settings. A government facing widespread social grievances and deep socioeconomic inequality may find it infeasible to save resources for macroeconomic stabilization or the welfare of future generations. In countries with weak institutions, low levels of transparency, and limited social trust, resource revenues may be inefficiently overconsumed and used to finance conflict. In such cases, building transparent, rules-based wealth-sharing mechanisms that mitigate inequality—including geographical inequality—can play a role in reducing conflict and strengthening social cohesion.

In many FCV-affected countries, weak legal and institutional frameworks undermine the equitable sharing of resource wealth. In post-conflict settings, wealth-sharing mechanisms are rarely supported by explicit constitutional provisions, robust transparency and accountability mechanisms, or good resource-management practices. Technical solutions may be available, but implementing them requires stable governance arrangements and capable public administration. Risks of renewed conflict can be mitigated by revenue-sharing arrangements reflecting the interests of a wide range of actors and stakeholders. To enhance transparency around the allocation of resource revenues, this report proposes a Revenue-Sharing Tool (appendix A) that is designed to help national technical staff analyze the implications of using alternative approaches through indicator-based revenue-sharing models.

TOWARD PROSPERITY AND PEACE IN THE MIDDLE EAST AND NORTH AFRICA

While the ideal approach to managing and sharing resource revenues is unique to each country, opportunities for improvement exist across the MENA region. Wealth-sharing mechanisms in MENA can be improved along each of their core dimensions.

1. *To foster macroeconomic stability.* Create or strengthen automatic stabilizers, such as social insurance systems and progressive income and property taxes, and enhance macroeconomic monitoring through improvements in data quality and institutional capacity building.
2. *To promote savings.* Decouple fiscal spending from resource revenues by introducing a target for the non-oil fiscal deficit that is compatible with domestic investment needs, the absorptive capacity of public institutions, and long-term resource-revenue dynamics.
3. *To enhance efficiency.* Strengthen transparency and accountability mechanisms and limit discretion by adopting credible rules for allocating and spending natural resource revenues to support inclusive growth.
4. *To mitigate the risk of conflict and strengthen social cohesion in FCV contexts.* Prioritize regional equity through redistribution until an adequate degree of social and political stability and post-conflict recovery makes renewed emphasis on long-term objectives possible. Include all relevant actors and stakeholders when designing a detailed framework to govern the ownership and management of natural resources and resource revenues, with third-party monitoring as appropriate.

Resource-rich MENA countries can boost productivity, enhance inclusion, and achieve sustainable prosperity by diversifying their national assets. Policies for inclusive growth can progressively transform resource wealth into physical infrastructure, human capital, and economic institutions in a way that fosters the transition to a low-carbon economy. While much room for improvement remains, MENA countries are making significant progress toward these objectives and are positioned to embrace both international good practices and policies informed by regional experience. In a time of tension and uncertainty across the region, inclusive growth, including by effectively sharing resource wealth, is especially important. This report is designed to help policy makers in MENA leverage their resource endowments to promote macro-fiscal stability, long-term savings, regional and intergenerational equity, and good governance underpinned by transparency and accountability to support peace, inclusive growth, and prosperity.

The report synthesizes background research, literature reviews, analyses of constitutional and legal provisions, case studies, and empirical assessments of natural-resource wealth sharing. Chapter 1 examines the context of oil and gas production in MENA, including its geographic features and impact on economic development, poverty, and inequality. Chapter 2 evaluates the macroeconomic stability and intergenerational saving functions of revenue-sharing arrangements, including SWF operations, and proposes specific policies to help insulate the economy from revenue volatility, build savings to hedge against future shocks, and foster sustainable, rules-based fiscal management. Chapter 3 reviews revenue-sharing mechanisms around the world and compares them to those in MENA, especially in terms of equity across space and levels of government. The chapter also proposes reforms

based on regional and international good practices. Chapter 4 assesses the revenue-sharing experience of FCV-affected countries worldwide and in MENA, examines the special challenges they face, and presents policy recommendations for leveraging oil and gas revenues to support stability and peace.

Abbreviations

EITI	Extractive Industries Transparency Initiative
EPs	environmental provisions
FCV	fragility, conflict, and violence
GCC	Gulf Cooperation Council
GDP	gross domestic product
GLDF	general local development transfer
GNI	gross national income
HCI	Human Capital Index
IMF	International Monetary Fund
KRG	Kurdistan Regional Government
LDF	Local Development Fund
MENA	Middle East and North Africa
MfMOD	Macro-Fiscal Model
NRGI	Natural Resource Governance Institute
OBI	open budget index
PPP	purchasing power parity
RST	Revenue-Sharing Tool
RSWT	Revenue-Sharing Web Tool
RTAs	regional trade agreements
SWFs	sovereign wealth funds
UNDP	United National Development Program
US\$	United States dollar
WDI	World Development Indicators
<i>WDR</i>	<i>World Development Report</i>
WEO	World Economic Outlook

1 Wealth, Geography, and Prosperity in the Middle East and North Africa

OIL AND GAS WEALTH AND DEVELOPMENT OUTCOMES IN THE MIDDLE EAST AND NORTH AFRICA

The Middle East and North Africa (MENA) is exceptionally rich in natural resources, primarily oil and gas, which have historically been the major sources of wealth for many countries in the region. MENA countries hold over 50 percent of the world's oil reserves and more than 40 percent of its gas reserves. Saudi Arabia, the Islamic Republic of Iran, and Iraq alone account for over one-third of global oil reserves and almost one-quarter of all gas reserves (table 1.1). These resources, which will continue to play a significant role in years to come, have the potential to transform economic and social conditions across the region if managed effectively and equitably for the benefit of their populations.

MENA's resource wealth is highly concentrated among a few countries and in specific areas within these countries. Spatial concentration is a defining feature of oil and gas resources and poses key challenges for their successful management and equitable distribution. In countries where governments derive a substantial share of their revenue from natural resources, it is important to establish effective governance mechanisms to recycle petrodollars for stability and domestic economic development to reduce macroeconomic volatility, prevent elite capture, promote resource sharing, strengthen service delivery, and promote positive development outcomes. However, research suggests that oil rents have typically been associated with weaker governance in MENA (for example, Karl 2007). The region's oil-rich countries that are affected by fragility, conflict, and violence (FCV) all have a history of governance challenges, including issues with accountability, transparency, corruption, and the perceived quality of the investment climate. Many are subject to particularly acute manifestations of the "resource curse" described in chapter 2.

TABLE 1.1 Oil and gas reserves and production in MENA countries and economies, latest year available, 2021–23

COUNTRY/ ECONOMY	OIL	GAS	OIL (% OF WORLD RESERVES)	GAS (% OF WORLD RESERVES)
<i>Saudi Arabia</i>				
Production	9,733.5	4,303.8	11.9	3.0
Reserves	258.6	332.8	15.2	4.6
<i>Iraq</i>				
Production	4,341.4	348.2	5.3	0.2
Reserves	145.0	131.7	8.5	1.8
<i>Iran, Islamic Rep.</i>				
Production	3,625.2	9,297.6	4.4	6.4
Reserves	208.6	1,200.3	12.3	16.4
<i>United Arab Emirates</i>				
Production	3,393.5	2,001.7	4.1	1.4
Reserves	97.8	215.1	5.8	2.9
<i>Kuwait</i>				
Production	2,710.0	681.0	3.3	0.5
Reserves	101.5	63.0	6.0	0.9
<i>Qatar</i>				
Production	1,322.0	5,989.2	1.6	4.1
Reserves	25.2	842.6	1.5	11.5
<i>Libya</i>				
Production	1,225.4	417.8	1.5	0.3
Reserves	48.4	53.1	2.9	0.7
<i>Algeria</i>				
Production	1,183.1	3,557.1	1.4	2.5
Reserves	12.2	159.1	0.7	2.2
<i>Oman</i>				
Production	1,047.9	1,439.2	1.3	1.0
Reserves	5.4	23.0	0.3	0.3
<i>Egypt, Arab Rep.</i>				
Production	564.2	2,289.0	0.7	1.6
Reserves	3.3	63.0	0.2	0.9
<i>Bahrain</i>				
Production	179.6	635.8	0.2	0.4
Reserves	0.2	2.9	0.0	0.0
<i>Syrian Arab Republic</i>				
Production	90.8	109.0	0.1	0.1
Reserves	2.5	8.5	0.1	0.1

continued

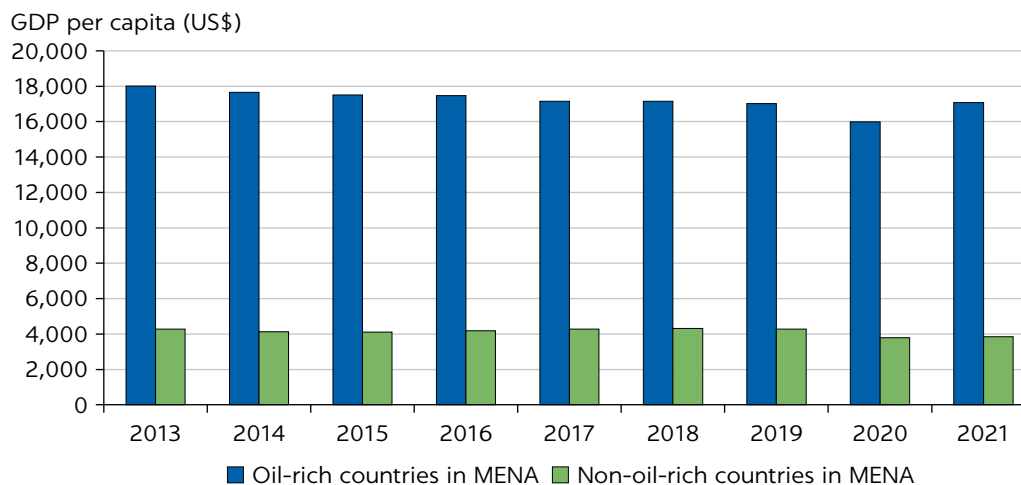
TABLE 1.1, *continued*

COUNTRY/ ECONOMY	OIL	GAS	OIL (% OF WORLD RESERVES)	GAS (% OF WORLD RESERVES)
<i>Tunisia</i>				
Production	31.5	46.7	0.0	0.0
Reserves	0.4	2.3	0.0	0.0
<i>Yemen, Rep.</i>				
Production	15.0	6.7	0.0	0.0
Reserves	3.0	16.9	0.2	0.2
<i>Morocco</i>				
Production	0.0	2.9	0.0	0.0
Reserves	0.0	0.1	0.0	0.0
<i>Jordan</i>				
Production	0.0	6.6	0.0	0.0
Reserves	0.0	0.2	0.0	0.0
<i>Djibouti</i>				
Production	0.0	0.0	0.0	0.0
Reserves	0.0	0.0	0.0	0.0
<i>Lebanon</i>				
Production	0.0	0.0	0.0	0.0
Reserves	0.0	0.0	0.0	0.0
<i>West Bank and Gaza</i>				
Production	0.0	0.0	0.0	0.0
Reserves	0.0	0.0	0.0	0.0
<i>MENA</i>				
Production	29,463.2	31,132.5	36.0	21.5
Reserves	912.1	3,114.5	53.8	42.7
<i>World</i>				
Production	81,784.4	145,068.3	100.0	100.0
Reserves	1,696.9	7,299.0	100.0	100.0

Sources: US Energy Information Administration; World Bank estimates.

Note: Oil reserves in billion barrels (billion bbl), oil production in 1,000 barrels per day, gas reserves in trillion cubic feet, and gas production in billion cubic feet. The actual year for the oil reserves data is 2021. The actual year for the oil production data is 2023. The actual year for the gas reserves data is 2021. The actual year for the gas production data is 2022. Countries/economies are listed in descending order of oil-production volume.

Among hydrocarbon-rich MENA countries, oil and gas reserves are key for exports, government revenue, and overall economic activity. Oil and gas reserves are extensive in countries like Algeria, the Islamic Republic of Iran, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates. These countries have reached much higher levels of per capita income than other countries in the region (figure 1.1). However, heavy reliance on hydrocarbon revenues has historically hindered diversification efforts and fostered

FIGURE 1.1**Real GDP per capita in oil-rich and non-oil-rich MENA countries, constant 2015 US\$**

Source: World Development Indicators.

Note: In this figure, oil-rich countries in MENA include Algeria, Bahrain, the Arab Republic of Egypt, the Islamic Republic of Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, the Syrian Arab Republic, the United Arab Emirates, and the Republic of Yemen. Non-oil-rich countries/economies include Djibouti, Jordan, Lebanon, Morocco, Tunisia, and the West Bank and Gaza.

dependence on oil and gas exports. In addition, as the global energy transition continues to accelerate, the region must not only manage its existing oil and gas wealth but also convert that wealth into new sources of growth—while addressing and adapting to climate change. Some countries (for example, Qatar, Saudi Arabia, and the United Arab Emirates) have implemented major policy initiatives over the years that are focused on diversification and innovation to build an economy of the future that is more diversified and green—and less dependent on oil and gas.

In addition to accelerating their own development, hydrocarbon-rich MENA countries—especially Gulf Cooperation Council (GCC) member states—have contributed to regional growth by creating economic opportunities for migrants and generating large-scale remittances and foreign investment inflows. For middle- and low-income countries in MENA, remittances have long represented the largest source of external resources, exceeding official development assistance, foreign direct investment, portfolio equity, and debt flows. In 2023, remittances contributed approximately 6 percent to GDP in the Arab Republic of Egypt, 10 percent in Jordan, and 18 percent in the Republic of Yemen (KNOMAD 2024). The size of these flows is linked to economic conditions and growth in major remittance-source markets, which include GCC countries and the European Union. The distribution of labor and capital endowments in the region creates a consistent demand for expatriate workers in capital-extensive but labor-scarce countries, especially GCC member states.¹

CHALLENGES AND CONSTRAINTS

While oil and gas have contributed to overall economic growth, development outcomes fall short of the potentials. Globally, hydrocarbon-rich countries tend to have lower Human Capital Index (HCI) scores and higher child mortality than their income levels would suggest (table 1.2, figure 1.2). Most hydrocarbon-rich MENA countries underperform not only their non-hydrocarbon-rich global counterparts but also the global trend for hydrocarbon-rich countries, albeit with notable exceptions. Understandably, hydrocarbon-rich and FCV-affected MENA countries exhibit particularly weak human development outcomes. Patterns of growth have also varied widely as evidenced by the growth incidence curves, with overall growth patterns favoring the nonpoor.²

TABLE 1.2 Development outcomes in selected hydrocarbon-rich and non-rich MENA countries and economies

COUNTRY/ECONOMY	GNI PER CAPITA, ATLAS METHOD (CURRENT US\$)	LOWER-MIDDLE- INCOME POVERTY RATE (US\$3.65 A DAY IN 2017 PPP)	HUMAN CAPITAL INDEX (HCI)	GINI INDEX
Saudi Arabia	28,690	n.a.	0.58	n.a.
Iraq	5,600	2.4 ⁱ	0.41	29.5 ⁱ
Iran, Islamic Rep.	4,680	3.8 ^a	0.59	34.8 ^a
United Arab Emirates	53,290	0 ^d	0.67	26.4 ^d
Kuwait	46,140	n.a.	0.56	n.a.
Qatar	70,070 ^a	0 ^e	0.64	35.1 ^e
Libya	7,570	n.a.	n.a.	n.a.
Algeria	4,960	4.3 ^j	0.53	27.6 ^j
Oman	21,540	n.a.	0.61	n.a.
Egypt, Arab Rep.	3,900	17.6 ^c	0.49	31.9 ^c
Bahrain	28,280	n.a.	0.65	n.a.
Syrian Arab Republic	560 ^b	67 ^a	n.a.	26.6 ^a
Tunisia	3,770	2 ^b	0.52	33.7 ^b
Yemen, Rep.	820 ^d	54.4 ^g	0.37	36.7 ^g
Morocco	3,700	9.8 ^h	0.50	39.5 ^h
Jordan	4,460	0.4 ^k	0.55	33.7 ^k
Djibouti	3,450	43.8 ^e	n.a.	41.6 ^e
Lebanon	4,410 ^a	0.1 ^j	0.52	31.8 ^j
West Bank and Gaza	4,220	3.1 ^f	0.58	33.7 ^f

continued

TABLE 1.2, *continued*

COUNTRY/ECONOMY	GNI PER CAPITA, ATLAS METHOD (CURRENT US\$)	LOWER-MIDDLE- INCOME POVERTY RATE (US\$3.65 A DAY IN 2017 PPP)	HUMAN CAPITAL INDEX (HCI)	GINI INDEX
Oil-rich countries in MENA	21,238	18.7	0.56	31.1
Non-oil-rich countries in MENA	4,002	9.9	0.53	35.7
MENA	15,795	14.9	0.55	33.0
World	13,212	22.4 ^a	0.56	36.4

Source: World Development Indicators (WDI) database.

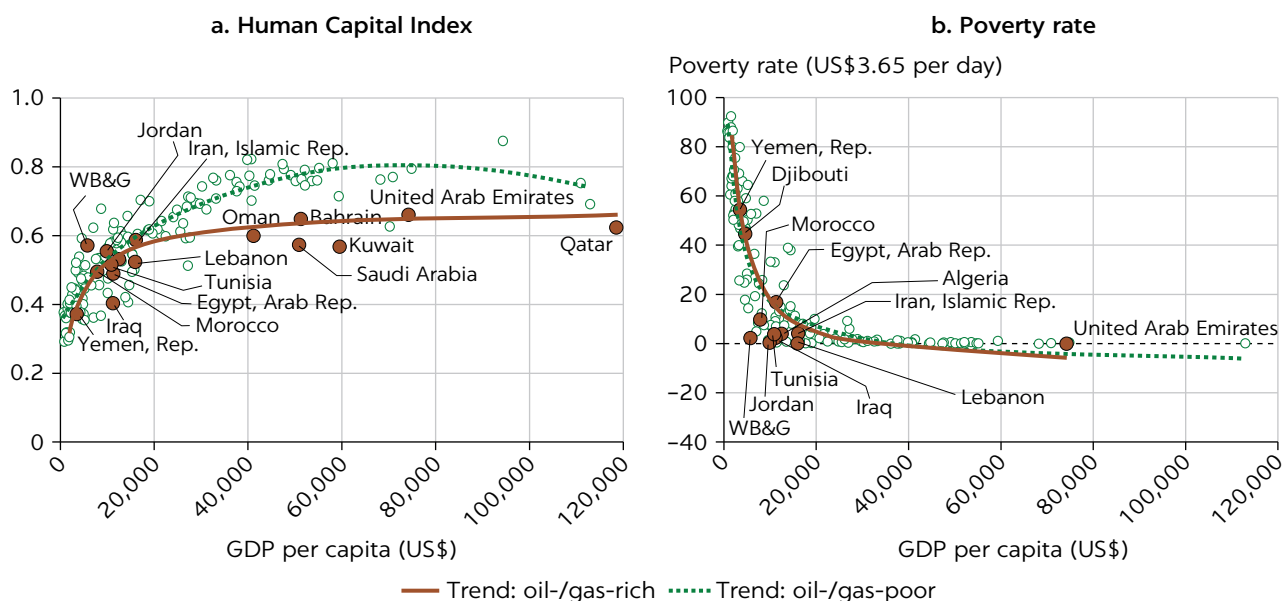
Note: The actual year for the GNI per capita data is 2023. The lower-middle-income poverty rate (US\$3.65 a day in 2017 PPP) for average, oil-rich countries, and non-oil-rich countries in MENA was calculated using the most recent data available. Bahrain, Kuwait, Libya, Oman, and Saudi Arabia have been excluded because of missing data. The HCI is calculated on a scale from 0 to 1; the actual year for the HCI is 2020. Djibouti, Libya, and the Syrian Arab Republic were not included in the HCI MENA average because of missing data. The Gini index for the average, oil-rich, and non-oil-rich countries in MENA and the world average were calculated using the most recent data available for all countries and all MENA countries, including oil-rich and non-oil-rich countries. Bahrain, Kuwait, Libya, Oman, and Saudi Arabia were excluded for lack of data. The countries are listed in descending order based on oil production (see table 1.1). Research indicates that household surveys in MENA and the Gini coefficient calculated on that basis do not capture income inequality, especially with respect to top incomes. When complementary data are used, inequality estimates increase (see Van der Weide, Lakner, and Lanchovichina 2018). GNI = gross national income; n.a. = not applicable; PPP = purchasing power parity.

Most recent value: a. 2022. b. 2021. c. 2019. d. 2018. e. 2017. f. 2016. g. 2014. h. 2013. i. 2012. j. 2011. k. 2010.

Significant inequalities in the spatial distribution of resource wealth and the modest and inefficient redistribution of revenues have limited their impact on human development outcomes (figure 1.2). Empirical studies find that countries that have achieved higher levels of development have typically had lower levels of inequality. That has been achieved through stronger redistributive mechanisms that foster more equitable human development and reinforce social cohesion and trust among citizens and subnational communities. Inequality is a function of context and government policies and institutions that can be improved with the right mix of policies. These challenges are relevant in hydrocarbon-rich countries (figure 1.3).

FIGURE 1.2

Development outcomes in oil- and gas-rich MENA countries, Human Capital Index and poverty rate, 2010–24

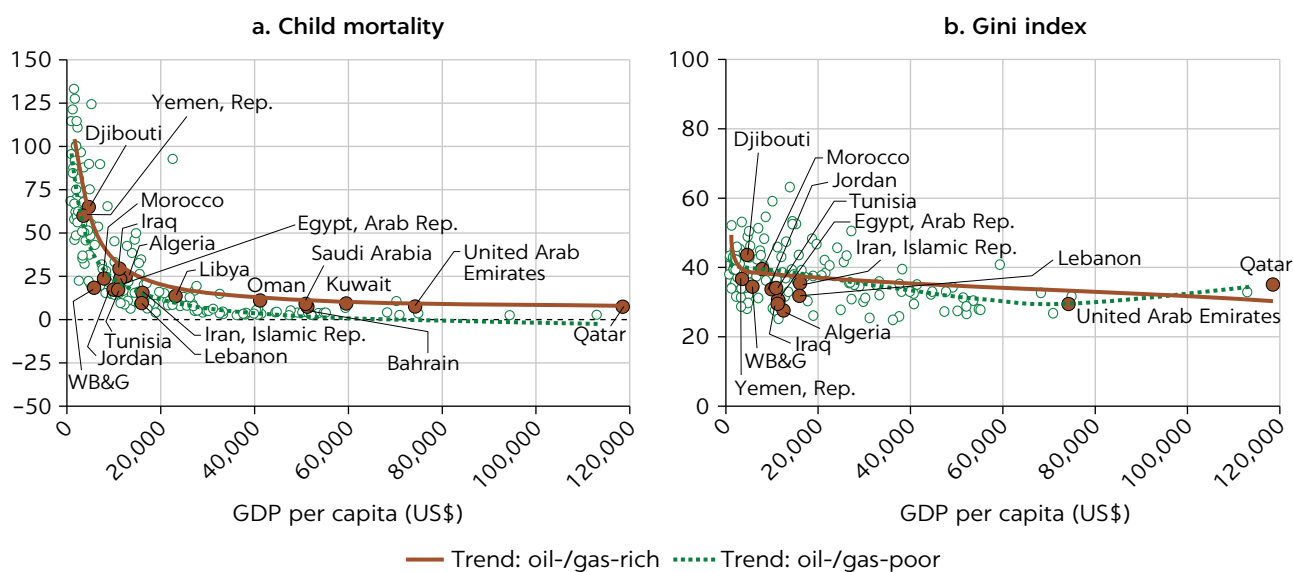


Source: World Development Indicators.

Note: The sample covers 174 countries, including 46 countries labeled “oil-/gas-rich” that have oil and gas rents above 2 percent of GDP. Trend lines are estimated via fractional polynomials for the respective subsets of countries.

FIGURE 1.3

Development outcomes in oil- and gas-rich MENA countries, child mortality and Gini index, 2010–24



Source: World Development Indicators.

Note: The sample covers 174 countries, including 46 countries labeled “oil-/gas-rich” that have oil and gas rents above 2 percent of GDP. Trend lines are estimated via fractional polynomials for the respective subsets of countries.

Many countries across the MENA region are at risk of being caught in the middle-income trap. While the oil- and gas-rich GCC countries are now high income; oil-/gas-rich countries like Algeria, Egypt, the Islamic Republic of Iran, Iraq, and Libya are middle income. The World Bank's latest *World Development Report (WDR)* notes that “as countries grow wealthier, they usually hit a ‘trap’ at about 10 percent of annual US GDP per person—the equivalent of \$8,000 today” (World Bank 2024b). Based on an in-depth study of the global experience in recent decades, the report concludes that over 100 countries are struggling to progress from middle-income to high-income status. Based on the relatively few countries that have managed to reach high-income status, the report proposes a three-pronged strategy that balances investment, infusion of foreign technologies, and innovation, highlighting examples such as Chile and the Republic of Korea (box 1.1).

Box 1.1

The middle-income trap and MENA countries

The World Bank's 2024 *World Development Report (WDR)* concludes that escaping the middle-income trap requires an effective policy mix that generates “increasingly dynamic enterprises, an increasingly productive workforce, and an increasingly energy-efficient economy.” To this end, economies need a mix of economic creation, preservation, and destruction, as well as abundant energy capacity.

In MENA, key issues include a low-carbon transition, diversification, technology infusion (for middle-income countries), and innovation (for high-income countries). The *WDR* emphasizes strategies for decoupling greenhouse gas emissions from economic growth by disciplining incumbency, rewarding merit, and de-risking investments in low-carbon energy. Some hydrocarbon-rich MENA countries, such as high-income Saudi Arabia, have timed their policy interventions to coincide with high commodity prices in an effort to boost investment and spur technological uptake. In the Arab Republic of Egypt, low rates of female labor force participation and concerns around the sustainability of investment flows pose challenges. But the country's potential for manufacturing green

products is high by the standards of middle-income countries (World Bank 2024b, 226).

Successfully transitioning to a low-carbon economy requires considerable up-front investment and low-cost capital to make green technologies more affordable, which may be difficult for middle-income countries. Moreover, lower-middle-income countries tend to be highly exposed to the effects of climate change, making climate adaptation and mitigation especially costly (World Bank 2024b, 77).

The *WDR* offers several lessons that MENA countries can draw on to avoid the middle-income trap. Countries need to create better economic conditions for environmentally friendly foreign investment by creating a favorable investment climate, enhancing the ease of doing business, and fostering a predictable, credible, and efficient judicial system with integrity. As energy-transition technologies are among the largest investment gaps across lower-middle-income countries, MENA countries will benefit from enabling such investments to thrive. A strong enabling environment is important to foster technology transfer and promote innovation, with a focus on the low-carbon transition.

Source: World Bank 2024b.

A variety of reforms can promote the equitable distribution of resource revenues. Effective policies include focusing on enhancing macroeconomic stability, the absorptive capacity of public institutions, and intergenerational equity. Because fiscal volatility and procyclicality can hamper private economic activity and constrain growth, managing hydrocarbon revenues often requires stabilization mechanisms like fiscal buffers (savings) underpinned by fiscal rules. Independent of macroeconomic stabilization, countries may need to set aside fiscal resources that exceed their institutional capacity for efficient public spending, further underscoring the importance of savings mechanisms. Investing in physical and human capital is vital to transferring resource wealth to future generations, but such investments may be limited by the macroeconomic and absorptive-capacity constraints noted in box 1.1. In the face of high inequality, redistributive policies and longer-term structural reforms can foster more inclusive development outcomes, diversification, and productivity growth (box 1.2).

Box 1.2

The empirical relationship between inequality and economic development

Schools of thought on inequality and economic development

An extensive body of research has examined the complex relationship between inequality and economic development, highlighting effects in both directions. This literature can be divided into three primary schools of thought: the Kuznets hypothesis, the negative-impact perspective, and the nuanced, context-dependent view. Kuznets (1955) postulated an inverted U-shaped relationship between inequality and development, where inequality increases in the early stages of development and decreases as countries become wealthier. While some empirical support exists for this hypothesis, particularly historical data from early industrializing nations, the pattern's universality is debated because the anticipated decline in inequality is not consistently observed in many contemporary developing countries. A substantial body of research suggests that high levels of inequality can hinder economic development. Inequality may foster political instability and social unrest, deterring economic activity (Persson and Tabellini 1994; Perotti 1996),

and may contribute to credit constraints that limit the ability of large segments of the population to invest in education, healthcare, and entrepreneurship, thereby diminishing overall human capital and productivity (Banerjee and Newman 1993; Alesina and Rodrik 1994; Aghion, Caroli, and Garcia-Penalosa 1999; Galor and Moav 2004). Recent literature emphasizes that the relationship between inequality and economic development is not straightforward and is highly context dependent. Factors such as the nature of inequality (wealth-versus-income disparities), the level of institutional capacity, the presence or absence of redistributive policies, and the country's stage of economic development are all crucial (Forbes 2000; Van der Ploeg 2011; Berg et al. 2018).

Inequality and economic development in oil-rich MENA countries

Significant natural resource wealth often leads to economic structures that are heavily reliant on extractive industries, exacerbating inequality and creating developmental challenges.

continued

Box 1.2, continued

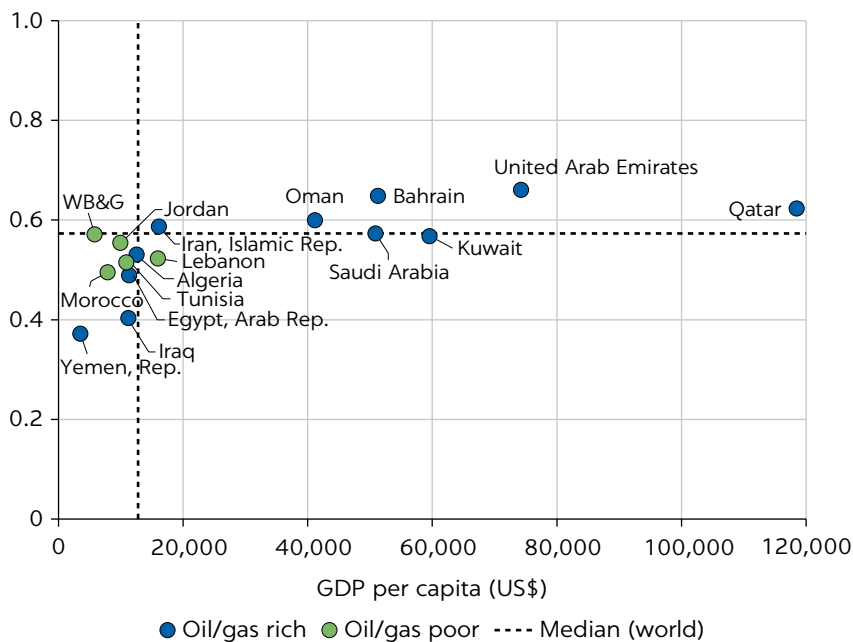
Resource wealth tends to concentrate economic activity within specific sectors and regions, leading to significant disparities across different parts of the country. This spatial inequality often translates into territorial disparities and causes tensions that undermine the provision of public goods. It can also fuel civil conflicts (Fearon and Laitin 2003; Malik and Awadallah 2013). High resource revenues can foster rent-seeking behavior and corruption, with elites capturing resource wealth at the expense of the public (Caselli and Cunningham 2009; Arezki and Brückner 2011). This dynamic can weaken institutional development if resource rents supplant broad-based taxation, making governments less accountable to their citizens. Research suggests that oil wealth can also negatively impact democratic development, leading to lower levels of social spending which exacerbates inequality (Ross 2012). Finally, there is evidence that household surveys may fail to capture the extent of inequality, especially regarding top incomes (Van der Weide, Lakner, and Ianchovichina 2018).

Policy implications for the Middle East and North Africa

1. *Equitable distribution of resources.* Implementing policies that fairly distribute resource revenues across society, including through private sector growth, access to social safety nets, infrastructure, and public services, can prevent marginalization of communities.
2. *Regional development programs.* Targeted investments to improve the business environment, infrastructure, education, and healthcare in underserved areas can reduce regional inequalities and prevent conflict.
3. *Economic diversification.* Reducing dependency on oil and gas by diversifying the economy can mitigate economic volatility and create more equitable economic opportunities. For instance, countries can adopt policies that provide incentives for private sector development in non-oil industries such as manufacturing, agriculture, and technology, and support small and medium enterprises (SMEs).

GEOSPATIAL INEQUALITY AND THE REDISTRIBUTION OF OIL AND GAS WEALTH

Although hydrocarbon-rich MENA countries tend to have higher average per capita income levels, they do not always effectively convert their resource wealth into inclusive growth and shared prosperity. Saudi Arabia is a prime example of oil-driven development, with its abundant oil resources forming the backbone of its economy. The country has invested heavily in infrastructure, education, and diversification efforts that have created substantial economic development and a high standard of living for its citizens. Iraq, in contrast, possesses vast oil reserves but has faced significant challenges in translating its oil wealth into broader development outcomes (figure 1.4). Years of conflict, sectarian violence, political instability, and governance issues have hindered Iraq's ability to harness its oil resources effectively for the benefit of its population. Libya and the Republic of Yemen have experienced similar trajectories, as detailed in chapter 4.

FIGURE 1.4**Human capital in oil-rich and non-oil-rich MENA countries, 2010–24**

Source: Human Capital Index data are available at <https://www.worldbank.org/en/publication/human-capital>.

Note: The depicted median values were calculated from a sample covering 173 countries.

Oil and gas revenues in the MENA region have long been subject to contestation, conflict, and geopolitical tensions, which continue to shape the region's political landscape and influence global energy markets. Disputes over control of oil resources have driven conflicts within and between MENA countries. Regional conflicts, such as the Iran–Iraq War and the Gulf War, have been partly fueled by disputes over oil-rich territories and geopolitical dynamics, while oil revenues continue to be among the factors influencing factional violence in Libya, the Syrian Arab Republic, and the Republic of Yemen (World Bank 2022, 2023, 2024a, 2024c, 2024d). However, oil revenues are not the only factor in any of these cases, and other issues have played equal or more important roles, as discussed in chapter 4.

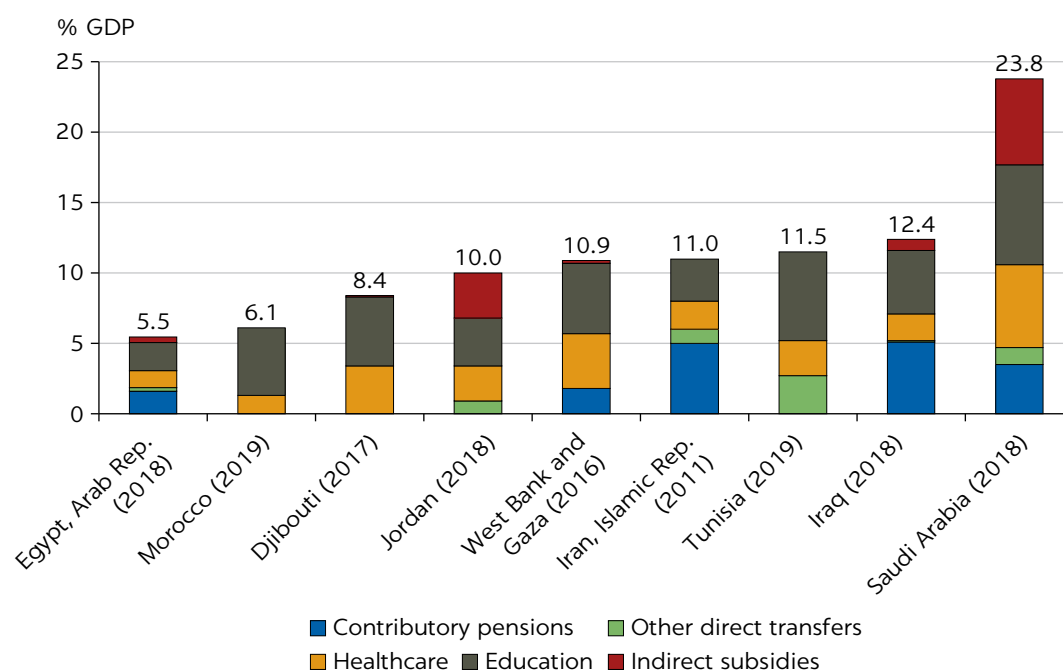
Within countries, hydrocarbon-rich areas do not necessarily have lower poverty rates. This is shown on the maps of subnational poverty levels that are available for a few countries in the region: The positive oil wealth-development relationship is not necessarily found at subnational levels.

The centralized management of oil and gas revenues does not necessarily benefit hydrocarbon-producing areas or poorer parts of a country, and oil and gas revenues do not significantly cascade to regions and areas in need

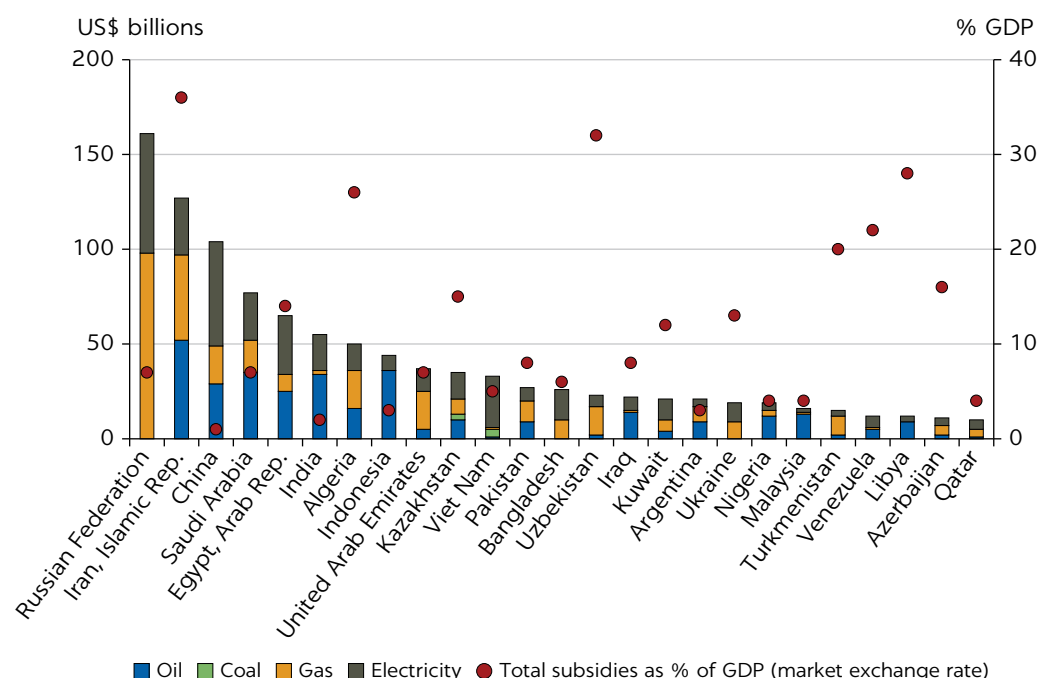
(Courant, Gramlich, and Rubinfeld 1979). This is especially true in FCV settings. The disconnect between hydrocarbon production and fiscal spending undermines trust between central and subnational governments and breeds grievances, tensions, and even conflict. Many countries lack effective redistributive policies and policies for inclusive growth, and non-oil revenues are often insufficient to compensate for the centralization of oil revenues. It is essential to create or expand redistributive policies and policies for inclusive growth, as well as to promote more efficient governance to ensure that oil revenue contributes to poverty alleviation, social cohesion, and shared prosperity.

Social welfare programs do not always benefit the poor. A fiscal-incidence analysis using the commitment-to-equity approach (Lustig 2023) shows that some hydrocarbon-rich MENA countries have used their oil and gas revenues to finance extensive social welfare programs and explicit budgetary energy subsidies, but the coverage of these initiatives and their ability to target poor households remain limited. Fiscal spending on healthcare, education, and pensions represents an average of 5–10 percent of total government spending in developing countries in MENA (figure 1.5). About 37 percent of the population of these countries received no transfers; 42 percent were covered only by social assistance programs; and 6 percent were covered only by social insurance programs that were often concentrated in the public sector (World Bank 2024b). As a result, poverty remains pervasive outside the GCC, even in hydrocarbon-rich countries, and especially in FCV-affected countries such as Syria and the Republic of Yemen (see table 1.2), while a large share of households above the poverty line remains vulnerable.

In 2022, global fossil fuel subsidies amounted to 7 percent of global GDP, a share that is in double digits in many MENA countries. These subsidies are calculated as the difference between market price and cost and represent total subsidies, including any explicit and implicit subsidies. The subsidies tend to be regressive and narrow the available fiscal space. Nominal spending on fuel subsidies in MENA countries is high compared with other oil- and gas-producing countries worldwide (figure 1.6). The extent to which these subsidies benefit poor and vulnerable households depends on their structure, but while energy represents a large share of spending for poor households, the most well-off often spend more on fossil fuels than the poor and therefore tend to benefit more from energy subsidies. Subsidy regimes vary by country, but in most cases replacing energy subsidies with social protection programs could better support poverty alleviation while also creating incentives for efficiency and climate mitigation. Currently, explicit energy subsidies exceed spending on social assistance and cash transfers in almost all MENA countries except Morocco. Reforming these subsidies could boost fiscal space across the region.

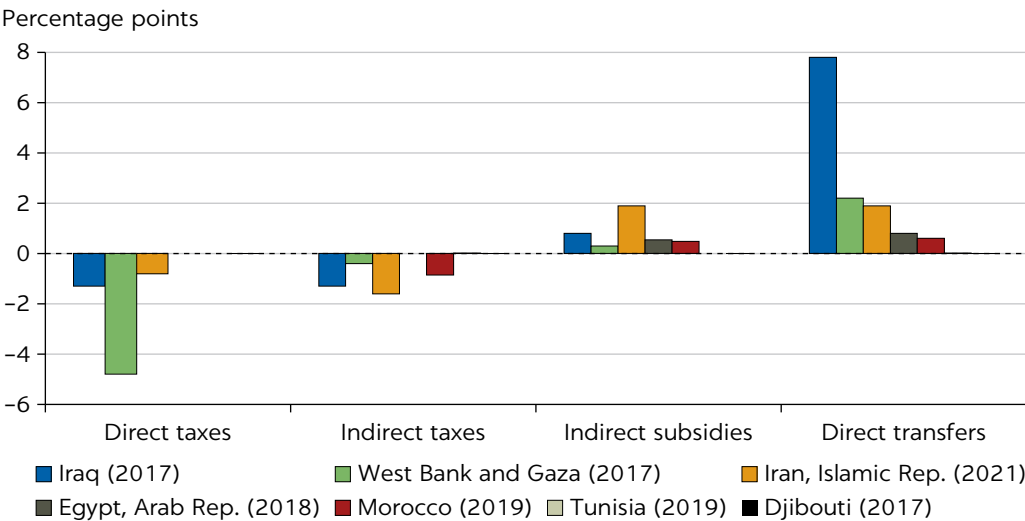
FIGURE 1.5**Spending on direct transfers and explicit budgetary energy subsidies in the MENA region**

Sources: CEQ Data Center on Fiscal Redistribution; General Authority for Statistics for Saudi Arabia; Amjad et al. (2023); Marzo and Younger (2023); Rodriguez and Wai-Poi (2021); Malaeb et al. (2023); Amjad et al. (forthcoming).

FIGURE 1.6**Top 25 countries by value of fossil-fuel subsidies, 2022**

Source: International Energy Agency (IEA). Graph and data available at <https://www.iea.org/data-and-statistics/charts/value-of-fossil-fuel-subsidies-by-fuel-in-the-top-25-countries-2022>.

FIGURE 1.7
Effect of government transfers on poverty reduction



Sources: CEQ Data Center on Fiscal Redistribution; General Authority for Statistics for Saudi Arabia; Amjad et al. (2023); Marzo and Younger (2023); Rodriguez and Wai-Poi (2021); Malaeb et al. (2023); Amjad et al. (forthcoming).

Direct transfers, in contrast, are the most effective type of government transfers for reducing poverty and inequality. A fiscal-incidence analysis of eight regional economies—Egypt, the Islamic Republic of Iran, Iraq, Jordan, Morocco, Saudi Arabia, Tunisia, and the West Bank and Gaza—shows that direct conditional or unconditional cash transfers contribute the most to poverty alleviation (figure 1.7). The positive effect of direct transfers is particularly strong in Morocco where they lower the poverty rate by approximately 8 percentage points. In comparison, indirect subsidies reduce the poverty rate by just 1 percentage point in all eight countries except the Islamic Republic of Iran, thus confirming the effectiveness of cash transfers for reducing poverty and improving equity.

**FOSTERING AN EQUITABLE TRANSITION TO
A LOW-CARBON ECONOMY**

The green energy transition can support sustainable prosperity, notably by promoting job-rich economic diversification. Along with technology transfer, managing the low-carbon transition is key to escaping the middle-income trap, as explained in box 1.3. Green sustainability metrics can be linked to certain fiscal expenditures to ensure that additional revenue is generated from sustainable sources (for example, by quantifying, monitoring, and reducing carbon-intensive tax expenditures, increasing fuel excises, and/or introducing an explicit carbon tax) and to ensure that expenditure cuts are limited to nonsustainable expenditures (for example, unproductive current and capital

spending, extrabudgetary spending, and excessive guarantee-driven public investment). In addition, changing how public investments are prepared, selected, and designed can facilitate a green transition, including by reflecting climate adaptation and mitigation in the investment project pipeline, as well as providing guidance on investment project design, appraisal, and selection. This would go hand in hand with improving the overall capacity for investment project design and implementation, and thereby government absorptive capacity, as discussed in subsequent chapters of this report.

In addition to its positive effects on poverty and equity, moving away from untargeted subsidies toward more direct redistribution via cash transfers could accelerate the low-carbon transition. Repurposing energy subsidies would increase fiscal space and help mitigate climate effects by encouraging energy efficiency. Cash transfers can also help ensure that the transition does not harm poor households, women, and other vulnerable groups. The mining of materials critical for the transition to a low-carbon economy also represents an opportunity for the region to diversify its revenue sources while contributing to global climate-mitigation efforts.

Box 1.3

Energy transition, trade, and labor in MENA

Climate change vulnerability

The MENA region is highly vulnerable to climate change. An estimated 60 percent of the region's population lives in areas facing severe water stress, and the situation is expected to worsen. Climate change may reduce rainfed crop yields by 30 percent, threatening food security and increasing dependence on imports. Rising temperatures and sea levels put coastal cities at risk of population displacement and economic loss, while more frequent and intense climate-related disasters such as droughts and floods exacerbate the region's challenges. The global shift to green energy and the pressure to reduce carbon emissions are reshaping trade dynamics and labor markets in MENA, presenting unique challenges and opportunities.

Trade and environmental provisions: A double-edged sword

As countries aim to align their trade policies with global environmental standards, trade agreements with environmental provisions (EPs) are becoming more common, but their impact on trade has been mixed. Regional trade agreements (RTAs) generally increase trade by reducing barriers, and have been shown to boost global trade with a significant positive coefficient of 0.235. However, when EPs are included the marginal effect is negative (−0.118), indicating a reduction in trade flows due to increased compliance costs and regulatory burdens. However, certain types of EPs can promote trade growth. For example, Category I EPs, which focus on general environmental goals, show a

continued

Box 1.3, continued

positive impact with a coefficient of 0.067. Category III EPs, centered on judicial enforcement mechanisms, also have a positive effect with a coefficient of 0.083. In contrast, Category V EPs, which involve stringent environmental regulations like pollution controls, have a significant negative impact with a coefficient of -0.266 . Although MENA countries generally benefit less than other regions from RTAs, the impact of EPs is positive. The inclusion of EPs in RTAs enhances trade flows in MENA with a regional EP coefficient of 0.492. This suggests that stricter environmental standards could help MENA improve its global trade profile by enhancing its environmental performance.

Achieving energy sustainability is expected to lead to a net increase in jobs worldwide by 2030 compared to a business-as-usual counterfactual, largely due to renewable energy's greater labor intensity relative to fossil fuels. However, these gains will not be evenly distributed: While regions such as the Americas, Asia, and Europe are expected to experience net job creation, MENA may face net job losses estimated at -0.48 percent and -0.04 percent, respectively, if their economic structures remain unchanged. Policy interventions are thus essential to mitigate potential job losses and address negative impacts. For MENA countries, adopting policies to encourage the

transition to a low-carbon economy is necessary to ensure sustainable employment growth and reduce reliance on fossil fuels. Well-designed EPs and carbon-pricing mechanisms can balance environmental sustainability with economic and social objectives, ensuring that a low-carbon transition does not disproportionately affect vulnerable workers and that opportunities for retraining and reskilling foster a more inclusive green economy.

Several MENA countries are successfully implementing policies to accelerate the green transition. Under its Vision 2030 plan, Saudi Arabia aims to achieve net zero greenhouse gas emissions by 2030 by sourcing at least 50 percent of its total power generation from renewable energy and reducing its carbon dioxide equivalent emissions by 278 million tons each year. The plan includes projects under the Saudi Green Initiative that aims to facilitate the low-carbon transition across much of the public sector. In the United Arab Emirates, Dubai is advancing its transition by implementing sustainable policies and is on track to reach 27 percent clean energy by 2030, surpassing its short-term goal of 25 percent. These examples provide important lessons for other countries in the MENA region as they strive to align their policies while sustainably transitioning to a low-carbon economy.

Sources: Robertson and Lopez Acevedo 2024; Islam and Ali 2024.

NOTES

1. Besides oil and gas, countries like Algeria, Egypt, and Morocco have significant mineral resources such as phosphates, iron ore, gold, zinc, and copper. During the low-carbon transition, demand for critical minerals such as copper, lithium, nickel, and cobalt will increase and could represent an opportunity for the MENA region. Oman and the Islamic Republic of Iran are already exploiting their significant copper reserves and will likely be followed by Egypt and Saudi Arabia (lithium), Algeria and the Islamic Republic of Iran (copper), and Morocco (cobalt). The scope for diversification is discussed in this chapter, in the section titled "Fostering an Equitable Transition to a Low-Carbon Economy."
2. See growth incidence curves for MENA countries in the World Bank's Poverty and Shared Prosperity Platform. <https://pip.worldbank.org/>.

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2 Sharing Wealth Across Time

Natural resources can either be a curse or a blessing, depending on the policies in place. Poor fiscal management can lead to rent seeking, political violence, institutional decay, and economic stagnation—outcomes commonly associated with the “resource curse.” With effective policies in place, resource revenues can drive a nation’s transformation, funding investments in infrastructure, human capital, and the modernization of public institutions. This chapter explores how these policies can turn natural resource windfalls into engines for growth and development.

Decoupling fiscal spending from resource revenues is key to transforming natural wealth into positive development outcomes. As oil flows from the ground and fiscal revenues pour into official coffers, policy makers face important questions: How much of its revenues should the government spend and how much should it save? How should spending be allocated? What institutional mechanisms can guide sound fiscal decisions? Because the answers to these questions are driven by national development objectives and the effectiveness of different approaches is shaped by a range of factors, the optimal policy mix is country specific. This chapter reviews the main objectives of resource-related fiscal policy and the factors that influence its effectiveness in countries in the Middle East and North Africa (MENA).

MANAGING RESOURCE REVENUES FOR STABILIZATION AND SAVING

Fiscal revenues from nonrenewable natural resources are often volatile, and managing them effectively requires medium-to-long-term planning. Fiscal decisions around resource revenues are often driven by two major policy considerations: stabilization and saving. Volatile and/or procyclical fiscal policy can hamper private economic activity and constrain growth. Managing fluctuations in hydrocarbon revenues often requires stabilization mechanisms

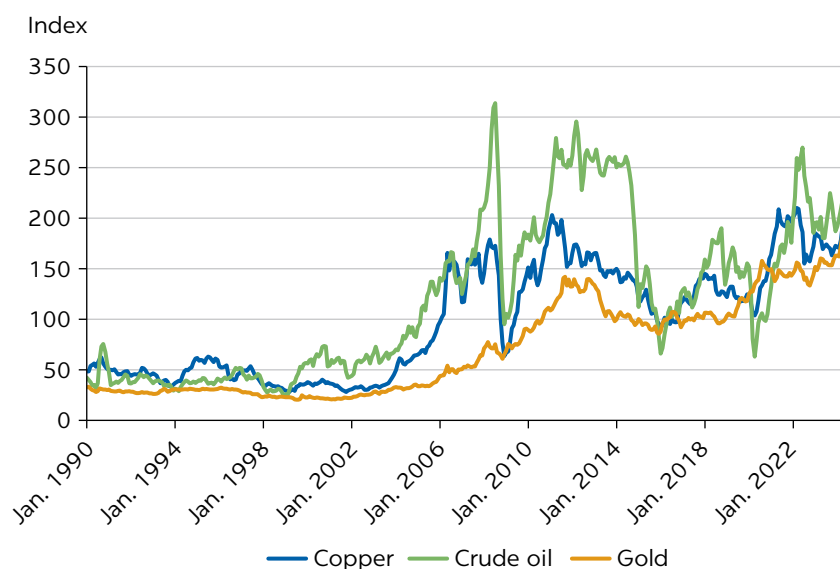
like fiscal buffers and fiscal rules. In addition, public institutions and public investment management systems have limited capacity to absorb and deploy funds effectively, and revenues that exceed their capacity may need to be held in reserve until impactful and well-managed projects can be developed and implemented. Moreover, near-term investments may not transfer wealth effectively across generations, thus making saving crucial for achieving intergenerational equity.

Stabilization

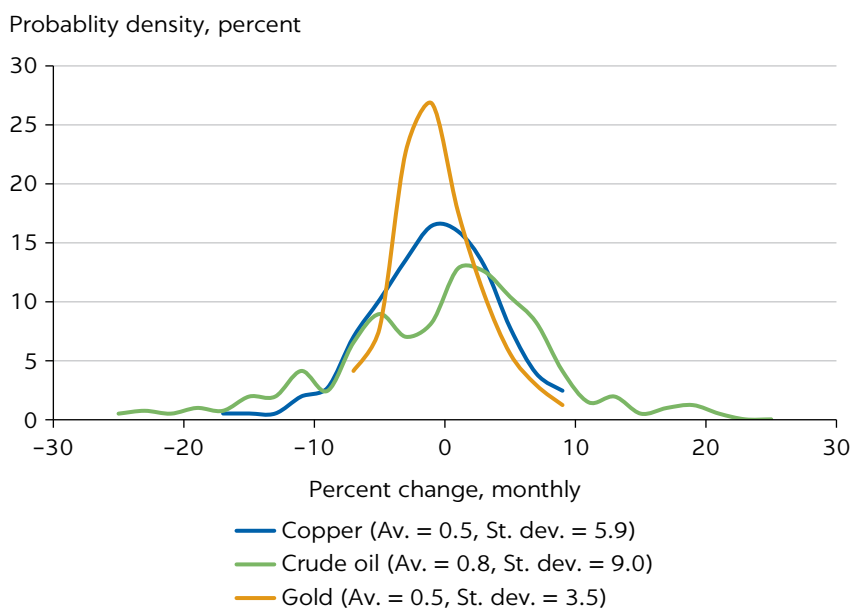
Hydrocarbon revenues are notoriously volatile. Most commodity prices are prone to significant fluctuations over time but hydrocarbons are among the most volatile (figure 2.1). Since 1990, on average, crude oil prices in Dubai have increased by about 0.8 percent per month.

While this rate exceeds the average for gold and copper, both at 0.5 percent per month, it comes with a significantly wider spread (figure 2.2). The standard deviation of monthly oil price changes is much greater for oil (9.0) than for gold (3.5) or copper (5.9). A thought experiment can help put these differences in perspective. Assuming a normal distribution for simplicity, the probability of a 10 percent price collapse in a given month would be 11.3 percent for oil versus 0.1 percent for gold and 3.8 percent for copper: Oil is a much riskier asset. However, for many MENA countries, oil accounts for a major part of government revenues, exports, and even GDP. As a result, oil price volatility is a major source of macroeconomic volatility.

FIGURE 2.1
Commodity price index, monthly, 1990–2024



Source: IMF 2024a.

FIGURE 2.2**Distribution of monthly price changes for key commodities, 1990–2024**

Source: IMF 2024a.

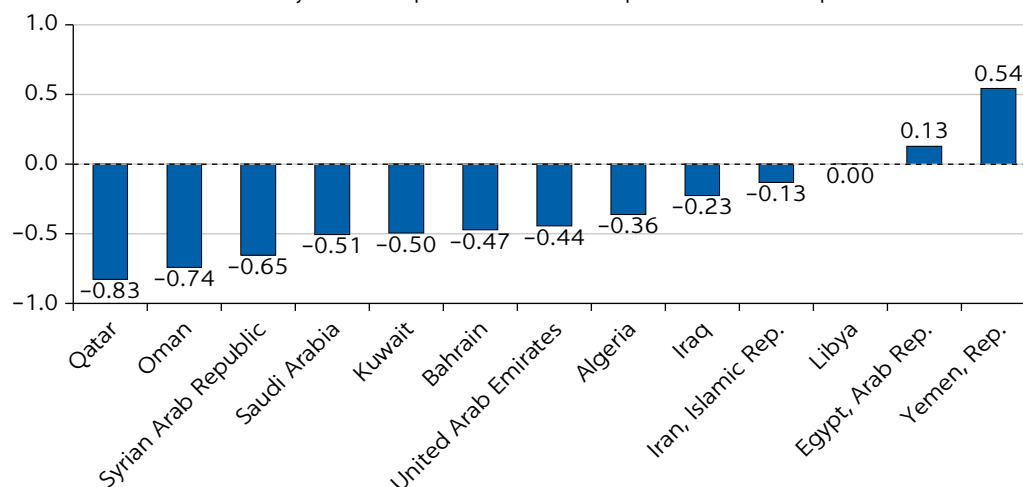
Note: Av. = average; St. dev. = standard deviation.

If channeled directly into fiscal spending, the volatility of resource revenues can destabilize the economy, with sizeable long-term effects. While macroeconomic volatility can create arbitrage opportunities for speculative financial flows, it also suppresses economic activity by depressing greenfield investment, among other things. While macroeconomic stability is a necessary but insufficient condition for growth, all other things being equal, the opportunity costs that come with risk aversion amid macroeconomic volatility can be substantial. In a policy experiment for resource-rich countries, Van der Ploeg and Poelhekke (2009) estimated that reducing macroeconomic volatility to the levels observed in the East Asian “tiger economies” would generate an average 3 percentage-point gain in annual growth rates.

Most oil-rich MENA countries have adopted a countercyclical stance against oil price dynamics, but countercyclicality is much weaker when measured against the broader business cycle. An analysis of the correlation between the cyclical components of fiscal spending and oil prices in MENA over the last two decades shows that most countries exhibit a countercyclical stance, with high oil prices coinciding with low public spending and vice versa (figure 2.3). The two outliers are the Republic of Yemen and the Arab Republic of Egypt, where fiscal spending patterns have been procyclical with respect to oil prices.

FIGURE 2.3**Expenditure cyclicality of oil prices in oil-rich MENA countries, 2000–22**

Correlation between the cyclical components of fiscal expenditure and oil price



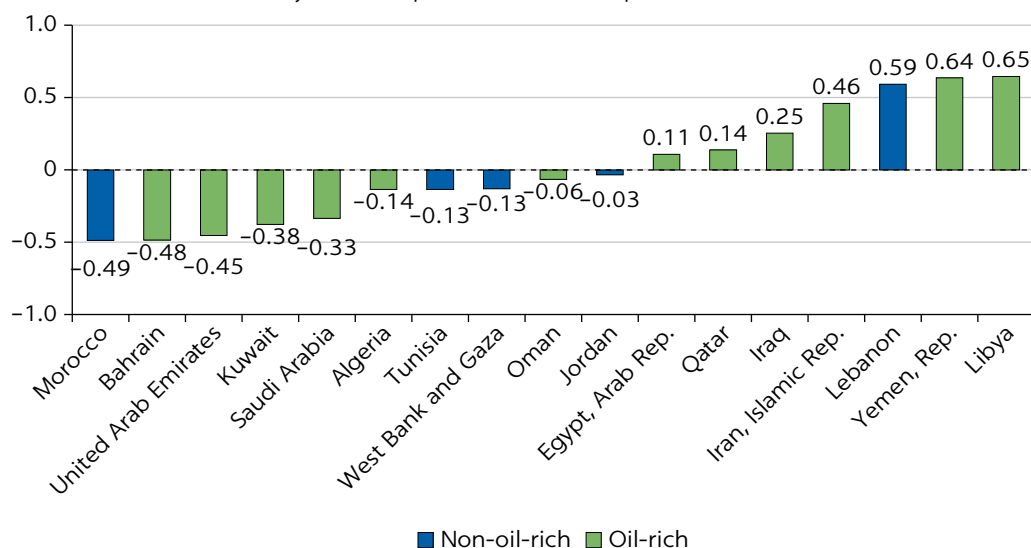
Sources: Data on general government total expenditure from the World Economic Outlook (International Monetary Fund); oil price (US\$ per barrel) from the US Energy Information Administration.

In contrast, more MENA countries exhibit fiscal procyclicality with respect to the business cycle (figure 2.4). These include conflict and post-conflict countries with relatively weak fiscal institutions and low levels of budget transparency such as Iraq, Lebanon, and the Republic of Yemen. This pattern suggests that while some degree of procyclicality is driven by structural factors such as fiscal rigidity (for example, large public sector wage bills and fossil fuel subsidies) and the absence of automatic stabilizers (for example, unemployment insurance), procyclicality is at least partially driven by policy and institutional factors.

In oil-rich MENA countries, policy and institutional weaknesses undermine efforts at fiscal stabilization. Discretionary countercyclical fiscal policies require an accurate understanding of the economy's cyclical position in real time—a challenging task. Figure 2.5 displays the discrepancy between two series across all countries between 1991 and 2023: (1) short-term GDP forecasts (vertical axis), which often correspond to the information available at the time of budget preparation, and (2) actual GDP growth (horizontal axis). If the predictions were good, scatterplot points would lie along the diagonal because predicted values would closely align with actual values. However, as the figure shows, the dispersion is very large. This is especially true for oil-rich MENA countries, which overestimate their GDP growth potential by an average of 1.06 percent per year. These countries have much larger forecast errors than non-MENA countries, with standard deviations of 9.26 versus 5.45, respectively. By comparison, non-oil-rich MENA countries outperform the rest of the world and overestimate GDP growth more modestly (0.52 percent versus 0.61 percent, respectively) and with smaller dispersions (standard deviation of 4.41).

FIGURE 2.4**Expenditure cyclicality over the business cycle in oil-rich and non-oil-rich MENA countries/economies, 2000–22**

Correlation between the cyclical components of fiscal expenditures and GDP



Source: World Bank using the methodology from Bogetić and Naeher (2024), data on total general government expenditure from the World Economic Outlook (International Monetary Fund), and data on GDP from World Development Indicators database (World Bank).

FIGURE 2.5**GDP growth forecasting errors, 1991–2023**

GDP growth forecast, percent



Sources: World Economic Outlook, Fall Vintages (International Monetary Fund); World Bank staff calculations.

Note: St. dev. = standard deviation.

Saving

With volatile and finite resource-based revenue streams, oil-rich economies cannot solely rely on conventional fiscal targets such as balanced budgets. High levels of volatility resulting from large swings in oil prices and uncertainty regarding future resource revenues complicate implementation of sound macroeconomic policies in resource-rich economies. Aiming for a balanced budget cannot truly anchor the discretionary elements of fiscal policy because the level of expenditures needed to balance the budget would have to track a moving target (revenues) and aligning with them would transmit oil price volatility directly to the domestic economy. Moreover, although balancing the budget can keep debt dynamics under control, it can also lead to wasteful spending and inadequate intergenerational saving.

- *The growth impact of spending over the business cycle.* Fiscal multipliers tend to be greater during recessions and smaller during expansions.¹ For this reason, saving a portion of resource revenues to finance spending during subsequent downturns can increase their growth impact.
- *Investment management and capacity constraints.* With limited public investment management capacity, most developing countries cannot immediately allocate a sudden surge in revenues and maintain strong economic returns. Instead, a share of the revenues may be held in reserve until cost-effective projects can be developed and implemented.
- *Dutch disease.* Rapid and sizeable resource-revenue inflows can cause the misallocation of productive factors. As rising incomes drive an increase in domestic demand, the relative prices of nontradable sectors spike with wages, pulling labor and capital from other sectors. Public wages may also be adjusted to match the higher cost of living and reinforce the trend. This dynamic can erode competitiveness in tradable goods and Dutch disease can outlast the short-term resource windfall, leaving an economy dominated by nontradables in place for decades.
- *Intergenerational inequity.* Resource revenues can be used to build physical and human capital benefiting both current and future generations, and contributing to sustaining long-term growth. In practice, however, absorptive capacity constraints can result in wasteful spending. These constraints and investment needs influence the share of resources that are saved for the future.

Resource-rich countries require a forward-looking fiscal framework aimed at ensuring macroeconomic stability, adequate savings, and long-term growth. How much of its resource revenues each country should spend or save depends on a large number of country-specific factors. However, several useful benchmarks can guide policy makers:

- *Permanent income.* This approach hinges on identifying a sustainable level of long-term spending, which in resource-rich countries is equal to the permanent income annuity implied by the present value of resource wealth.

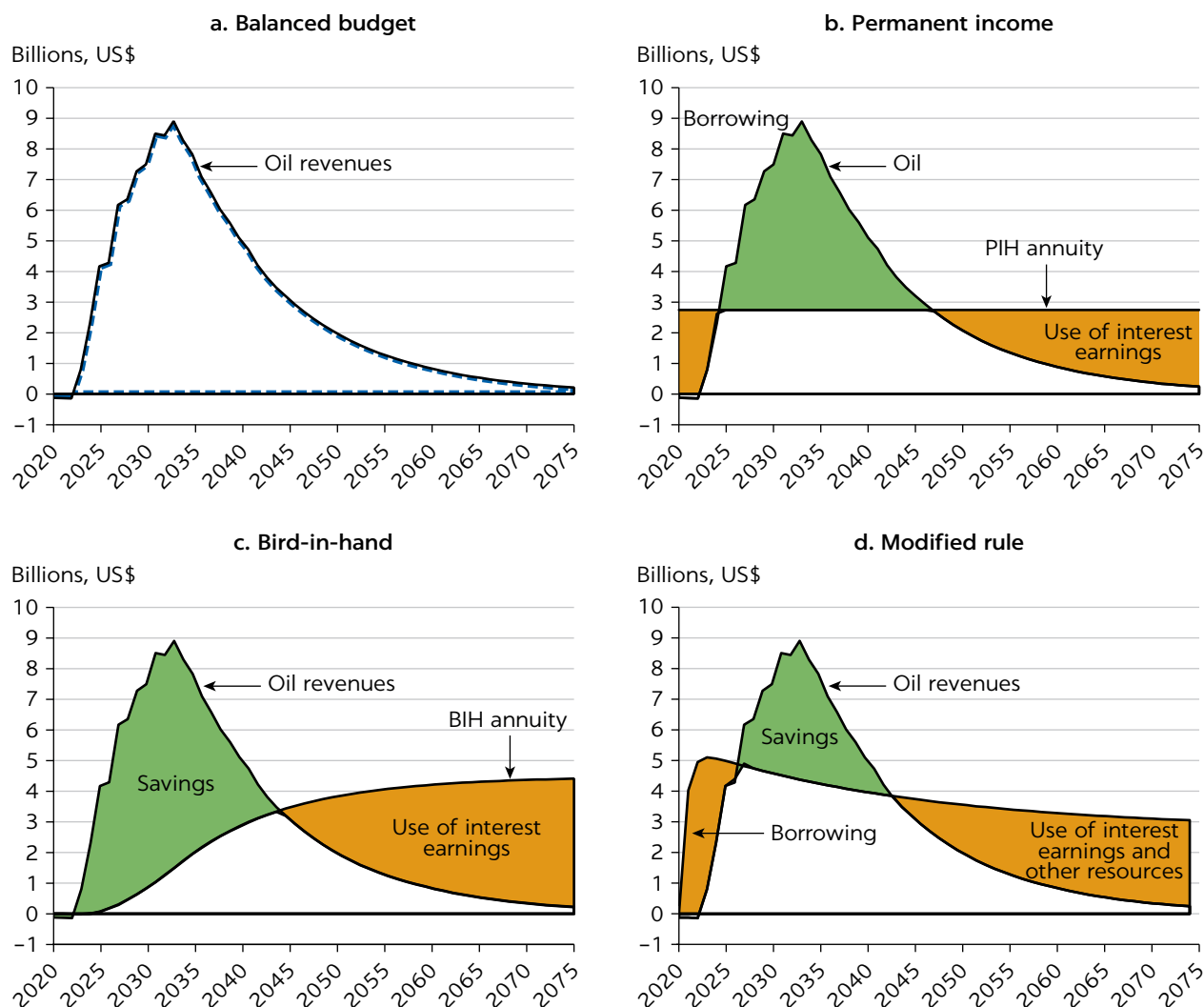
Consistent spending supports macroeconomic stability; saving resources that exceed the sustainable level helps increase intergenerational equity.

- *Bird-in-hand.* In this approach, all resource revenues are saved and only the interest from those savings (or returns on foreign investments) are used to finance fiscal spending. For many developing countries, which often face large short-term investment needs, this approach may be too stringent. However, it may be appropriate for very-oil-rich countries with high levels of per capita income.
- *Modified rule:* This approach is based on either permanent income or bird-in-hand but adjusts the spending path based on certain considerations such as immediate infrastructure gaps. A modified rule can promote long-term stability without excessively restricting public spending.

Figure 2.6 presents an example of hypothetical revenue flows and implied spending patterns under each rule, with the modified rule reflecting a permanent income approach with limited front-loading.

Spending in most oil-rich MENA countries significantly exceeds their respective permanent income benchmarks. Table 2.1 shows the non-oil fiscal deficits that would be consistent with spending benchmarks under the permanent income approach in oil-rich MENA countries. These were computed based on the permanent income annuity implied by each country's hydrocarbon wealth as of 2022. In most countries, the actual non-oil fiscal balances are wider than these estimates, with the notable exception of the Islamic Republic of Iran where the actual non-oil fiscal deficit (5.7 percent of GDP) is significantly smaller than the permanent income benchmark (11.5 percent of GDP). In the United Arab Emirates, the actual gap is only 0.2 percentage points wider than the permanent income benchmark (7.7 percent versus 7.5 percent). Libya and Kuwait exhibit the largest gaps between the actual and benchmark deficits at 21 percentage points and 25.5 percentage points, respectively. The permanent income approach is a conservative fiscal rule allowing less spending in the current period in order to leave more for future periods; the approach does not show the only sustainable fiscal positions for these countries in the medium to long term. However, the wide gaps observed cast doubt on the sustainability of their fiscal spending over the very long term.

While the indicative sustainability gap for oil-rich MENA countries has persisted over time, recent improvements are evident in the Gulf Cooperation Council (GCC). In recent decades, most oil-rich MENA countries have exhibited a substantial gap between their actual non-oil fiscal deficits and their permanent income benchmarks. In most GCC countries, however, there have been sizable improvements since the beginning of the COVID-19 pandemic. Oman's gap decreased from about 16 percentage points in 2019 to about 7 points in 2022, Saudi Arabia's from 11 percentage points to 4, and the United Arab Emirates' from 9 percentage points to 0.2. These improvements have been facilitated by a broad set of fiscal reforms, which have helped many GCC countries move from a procyclical to a countercyclical fiscal stance (Bogetić and Naeher 2024).

FIGURE 2.6**Revenue and expenditure flows under different rules: A hypothetical example**

Source: World Bank.

Note: BIH = bird-in-hand; PIH = permanent income hypothesis.

TABLE 2.1 Fiscal balances in selected MENA countries: Actual versus permanent income benchmark, 2022

COUNTRY	OIL AND GAS WEALTH		PERMANENT INCOME BENCHMARK NON-OIL FISCAL BALANCE		ACTUAL NON-OIL FISCAL BALANCE
	CONSTANT 2022 US\$, BILLIONS	% GDP	CONSTANT 2022 US\$, BILLIONS	% GDP	% GDP
Algeria	554	246	-16.1	-7.2	-18.6
Bahrain	88	197	-2.6	-5.8	-16.0
Iran, Islamic Rep.	1,628	394	-47.4	-11.5	-5.7
Iraq	1,597	557	-46.5	-16.2	-25.7

continued

TABLE 2.1 *continued*

COUNTRY	OIL AND GAS WEALTH		PERMANENT INCOME BENCHMARK NON-OIL FISCAL BALANCE		ACTUAL NON-OIL FISCAL BALANCE
	CONSTANT 2022		CONSTANT 2022		
	US\$, BILLIONS	% GDP	US\$, BILLIONS	% GDP	% GDP
Kuwait	1,014	555	–29.5	–16.2	–41.7
Libya	454	812	–13.2	–23.7	–44.7
Oman	432	376	–12.6	–10.9	–17.8
Qatar	688	292	–20.0	–8.5	–17.2
Saudi Arabia	3,723	336	–108.4	–9.8	–13.4
United Arab Emirates	1,307	258	–38.1	–7.5	–7.7

Source: World Bank, based on data from the US Energy Information Administration, World Bank Commodity Price Data, World Development Indicators (World Bank), World Bank Macroeconomic and Fiscal Model, World Economic Outlook (International Monetary Fund), and the statistical offices of Bahrain, the Islamic Republic of Iran, Kuwait, and Oman.

Note: The calculations are based on the methodology detailed and previously applied to the Russian Federation. A non-oil fiscal balance consistent with a “permanent income” from a country’s oil assets is calculated so that the country only spends as much of its oil income as it earns on its assets, leaving intact the asset value to ensure sustainability. A fiscal rule requiring more stable spending would also reduce the pressures on real exchange rate appreciation in oil-rich countries. See Bogetic et al. (2010).

Adopting a sustainable policy for managing resource revenues is necessary but insufficient: Following the right process is equally important. Experience has shown that the goodwill of policy makers and setting fiscal targets at the correct benchmark levels are not enough for a country to achieve its economic potential. Without strong institutions to support these processes, public policies can lack credibility. When policy makers cannot commit to a publicly known strategy that provides the required transparency and predictability, the voracity effect—competition to appropriate windfall revenues before other power groups do—can deepen.²

INSTITUTIONAL ARRANGEMENTS FOR MANAGING RESOURCE REVENUES ACROSS TIME

To effectively promote stabilization and saving, resource-rich countries could consider developing specialized mechanisms that govern the flow of funds. These mechanisms include sovereign wealth funds (SWFs), financial instruments that are owned by the state but managed by independent experts, and fiscal rules. SWFs receive and manage resource revenues, using them as buffers for macroeconomic stabilization, including by investing in foreign assets to avoid Dutch disease, as discussed previously, or saving them for future investments. SWFs are underpinned by a set of rules that govern the flow of revenues between the resource sector, the fiscal budget, and the fund itself. While these rules can allow for discretion, transparency and predictability are essential to preempt the voracity effect.

Sovereign wealth funds

SWFs in MENA generally focus on intergenerational wealth accumulation and less on fiscal stabilization. As these two functions reflect different objectives, risk and return profiles vary accordingly. Stabilization funds tend to be very liquid and accessible to the government for countercyclical interventions. Governments thus invest in low-risk assets and aim for a reasonable commercial return in the short to medium term. Savings or intergenerational funds tend to invest abroad and for the longer term, offering higher returns.

SWFs require transparency, oversight, and coordination with macroeconomic policies to be aligned with the country's development trajectory. In the absence of clear rules and strong governance frameworks as summarized in the Santiago Principles (box 2.1), SWF operations can quickly suffer from mission creep and fail to improve economic and fiscal outcomes because they are not typically subject to the checks and balances of the budget process. According to the Santiago Principles, SWFs are expected to disclose relevant information about their investment strategies, performance, and governance structures. This includes publishing annual reports, financial statements, and details about their investments. Clear lines of accountability can be established within each fund's governance framework, with robust risk-management mechanisms to identify, assess, and mitigate the risks associated with the investments.

Several SWFs in MENA are among the largest and oldest in the world. Six of the top 20 SWFs are in hydrocarbon-rich MENA countries, mostly in GCC states and the Islamic Republic of Iran. These SWFs are used to accumulate surplus oil and gas revenues and perform stabilization, saving, and investment functions. Smaller producers in the region either lack the excess revenues for a substantial SWF or their oil and gas production has been severely disrupted by conflict, as in the case of the Republic of Yemen. Some GCC SWFs were among the world's first, including the Kuwait Investment Authority (1953), the Saudi Public Investment Fund (1971), and the Abu Dhabi Investment Authority (1976).

While GCC SWFs have exhibited good governance practices, few SWFs elsewhere in MENA have performed well in terms of coordinating with macroeconomic policies. SWFs in GCC countries like Qatar and the United Arab Emirates have relatively high levels of transparency and sound institutional frameworks. They often publish detailed annual reports, provide information about their investment strategies, and have established governance structures. Fragile countries such as Libya, however, face significant challenges in meeting transparency and governance requirements. Political instability, weak institutions, and lack of capacity can hinder efforts to establish transparent and accountable SWFs. Moreover, not all SWFs are well coordinated with the country's fiscal budget. In several cases, discretionary domestic SWF investments (better known as strategic investment funds) have crowded out private and public investments, complicated public investment management, and undermined the role of the budget as the key instrument for public spending.

Box 2.1

The Santiago Principles

The Santiago Principles are a set of voluntary guidelines for sovereign wealth funds (SWFs) developed by the International Working Group of Sovereign Wealth Funds and agreed on in Santiago, Chile, in October 2008. The Santiago Principles aim to (1) promote a stable global financial system by ensuring that SWFs operate transparently and accountably, (2) ensure compliance with regulatory requirements in the countries where they invest, (3) promote sound investment practices based on economic and financial considerations, and (4) enhance transparency and accountability by encouraging public disclosure of governance, objectives, investment policies, and risk management practices.

The principles cover three key areas:

Legal framework, objectives, and coordination with macroeconomic policies

- Emphasize the importance of a sound legal framework for SWFs
- Clearly define policy purposes
- Coordinate with domestic fiscal and monetary authorities

Institutional framework and governance structure

- Sound governance framework
- Clearly divided roles and responsibilities
- Operational independence and accountability

Investment and risk management framework

- Clear investment policy
- Risk-adjusted financial returns
- Robust risk-management framework

Source: "The Santiago Principles," International Forum of Sovereign Wealth Funds, <https://www.ifswf.org/santiago-principles-landing/santiago-principles>.

Fiscal rules

In MENA, the management of resource revenues over time has been discretionary. In most cases, budgets in the hydrocarbon-rich countries have not been anchored by fiscal rules, reflecting a strong preference for discretion and flexibility. Also, while the internal governance of some SWFs has been transparent, policy decisions that determine the flow of funds between the resource sector, budget, and the SWF are discretionary. This approach allows for adaptation in response to changing business conditions but reduces predictability and transparency. SWFs have been more successful in countries with sound records of responsible macroeconomic management and strong commitment to fiscal discipline, for example, Norway (Fasano-Filho 2000). The lack of a legal and regulatory framework that clearly defines the conditions under which revenues can flow in and out of the fund can render an SWF vulnerable to pressures to underwrite unjustified projects.

When effectively implemented by a government with adequate institutional capacity, well-designed fiscal rules can help promote efficient medium- and long-term fiscal positions in resource-rich MENA countries. Fiscal rules can help align a country's fiscal position with its long-term macroeconomic

dynamics by setting self-imposed and explicit limits to fiscal aggregates. These rules can establish parameters for expenditures, revenues, budget balances, or aggregate debt levels. They can specify the share of hydrocarbon revenues that can be spent, saved, or invested, as well as how those revenues should be allocated across geographic areas. Well-designed fiscal rules reflect the country's ability to effectively utilize funds, avoid waste and misuse, and track expenditures. International experience has shown that effective fiscal rules share several characteristics. A useful framework for the desirable characteristics of fiscal rules (Kopits and Symansky 1998) emphasizes the following principles:

- *Clarity.* The target instrument, coverage of the rule, and institutional responsibilities should be well-defined and explicit. In oil-rich countries, the amount of oil revenue transferred to the fiscal budget can provide a good target instrument. The rule should clearly set the trajectory of transfers, independent of short-term price movements. Moreover, a legal framework that defines the flow of funds between government agencies, responsibilities, and decision-making criteria should be in place.
- *Transparency.* Operations and actions to ensure compliance with the rule should be transparent, including by means of disclosure. The public should be able to understand the rules in broad terms and the relevant decision-making criteria—and should be informed about the flow of funds.
- *Simplicity.* Related to transparency, the rule should be easily understood, and its implementation should be straightforward. Fixed-transfer rules, such as those based on backward-looking benchmarks, are relatively simple to communicate.
- *Adequacy.* The fiscal rule should be sufficient to achieve the designated targets. If the rule aims to accumulate savings and promote macroeconomic stabilization, then transfers to the budget should be disconnected from short-term fluctuations in oil prices. Rules based on permanent income can perform these functions as long as they are not frequently reevaluated.
- *Consistency.* The rule should be consistent with designated targets and aligned with other economic policies. The chosen mechanisms should avoid conflicts between stabilizing the fiscal rule and the sustainability targets. This can be accomplished by anchoring the reference oil prices to more stable indicators, such as long-term moving averages (structural prices).
- *Flexibility.* A fiscal rule can include contingency provisions to facilitate long-term compliance without causing a breach. The fiscal rule should allow for a degree of flexibility to cope with extraordinary circumstances such as the 2008 global financial crisis or the 2014–15 oil price collapse. However, this flexibility should be limited to rare events, with the procedures that trigger and terminate such escape clauses clearly defined.
- *Enforceability.* Clear mechanisms are needed to enforce compliance with the fiscal rule. Conflicts of interest among the implementing agencies should be identified and political and economic pressures minimized.

MENA countries have very few explicit fiscal rules: Fiscal discretion is the norm. In that sense, the region does not score well on rules-based fiscal management, including these criteria, to help macroeconomic stability and longer-term saving. As discussed in more detail in the broad international overview of revenue-sharing mechanisms in chapter 3, MENA countries, especially those that are hydrocarbon-rich, could benefit from greater use of explicit fiscal rules based on the principles outlined above.

POLICY IMPLICATIONS

Optimal saving and spending decisions are shaped by country-specific factors. For example, absorptive capacity constraints can limit the scope for converting resource wealth into physical and human capital in the near term. Likewise, saving a share of resource revenues can mitigate the risk of Dutch disease. Conversely, factors that amplify fiscal multipliers such as a cyclical downturn or a large infrastructure gap may favor increased spending.

There is often a trade-off between the management of natural resource wealth over time and its allocative management. This trade-off is similar to the efficiency–equity balance observed in other economic decisions. For example, immediate spending to address social grievances may increase current equity but reduce economic efficiency over time. This trade-off does not always apply, however: When immediate spending helps reduce the voracity effect or prevents conflict, it can increase the resources available for future savings. In such cases, efficiency and equity are complementary—rather than conflicting—objectives.

This analysis yields several conclusions for MENA policy makers:

- Expanding the use of fiscal rules and countercyclical policy mechanisms can improve the impact of resource revenues on long-term growth. In oil-rich MENA countries, the ability to manage natural resource revenues effectively over time has been limited, both in terms of stabilization and of saving. Countries with lower institutional quality have largely followed procyclical policies and overspent resource revenues. Expanding the use of fiscal rules and countercyclical policy mechanisms can improve the impact of resource revenues on long-term growth.
- In recent years, GCC countries have enhanced their ability to counter volatility and more closely aligned fiscal spending with the long-term dynamics of resource revenues. They have also governed SWFs better. Other MENA countries could strengthen their fiscal frameworks so that they promote fiscal stability and saving by following GCC's example and also learning from other countries.
- In most MENA resource-rich countries, resource revenue management is highly discretionary and poorly coordinated with macroeconomic policies. Introducing explicit and transparent frameworks to govern the flow of revenues between the resource sector, budget, and SWFs would help strengthen fiscal management.

NOTES

1. See Auerbach and Gorodnichenko (2011) for a technical analysis.
2. The voracity effect is a concept in economic theory that describes the phenomenon of powerful interest groups or factions in a country that aggressively compete for a share of windfall gains, such as those from natural resource discoveries or other sudden increases in national wealth. This competition often leads to the inefficient and excessive appropriation of resources, which can harm the country's overall economic growth and stability.

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3 Sharing Wealth Across Space

This chapter examines how hydrocarbon-rich countries across the world and in the Middle East and North Africa (MENA) distribute their resource wealth across geographical space; that is, among subnational territories and levels of government. The chapter includes a review of the international literature and an assessment of current practices in MENA and draws lessons for improving the developmental impact of wealth sharing.

REVENUE SHARING AROUND THE WORLD

In most hydrocarbon-rich countries, the central government controls subsoil resources and related revenues. In these countries, the central authorities are responsible for the legal, planning, and fiscal aspects of resource management. The government often establishes one or more state-owned enterprises (SEOs) to implement sectoral development plans, operate oil and gas fields, and sell hydrocarbon products. The central government also collects and distributes resource revenues among different stakeholders. In federal systems, the central government usually retains direct ownership rights over offshore assets and resources on federal land, while subnational governments may have some degree of control over resources within their jurisdictions. The policy and regulatory frameworks governing resource management are often complex, involving both national and subnational laws and institutions. While central governments typically control resources, the ways in which resource revenues are shared varies widely across countries and is closely linked with intergovernmental fiscal relations: They include fiscal decentralization, devolution, and deconcentration.

In some countries, the central government distributes resource revenues by channeling them through the government budget. Revenues from oil and gas flow into the budget along with taxes, customs duties, and other revenue streams, and collectively finance fiscal expenditures in an approach known as indirect revenue

sharing. Major oil- and gas-producing countries, such as Denmark, Norway, and the United Kingdom, tend to follow this model. Natural-resource revenue sharing in these countries may be implemented through policies aiming for overall inclusive growth in the country—or policies, intergovernmental transfers, social transfers to individuals, investments, and the like that target specific income groups and geographic locations.

In other countries, the distribution of natural resource revenues is governed by specific rules and procedures that are separate from the standard budget process. This approach, known as direct revenue sharing, often entails the central government allocating a portion of resource revenues to subnational governments via intergovernmental transfers. In some countries, subnational governments are empowered to collect revenue directly from extraction activities in their jurisdiction, or the central government collects revenues but allocates a fixed share to the regions where the extractive industries are located—a modality known as the derivation-based approach. Still other countries use a formula based on various indicators to allocate revenues across subnational jurisdictions regardless of where resources are produced. This is the indicator-based approach.

The derivation-based approach encompasses two models: fixed revenue sharing and overlapping revenue. In the fixed revenue-sharing model, such as the one used in Indonesia, the central government collects resource revenues and transfers a predetermined share to the producing regions, which are often underdeveloped—frequently aiming to reduce tensions and mitigate the risk of conflict. In the overlapping revenue model, such as the one used in the Canadian province of Alberta, the central and subnational governments levy concurrent taxes on local extractive industries.

In the indicator-based model, resource revenues are distributed to subnational governments using a formula based on local population size, poverty levels, or other indicators. This approach, used in Mongolia and Nigeria, for example, aims to distribute wealth across the country in an equitable and efficient manner. Formulas can be complex and data intensive, and they may be subject to competing views regarding fairness and the accuracy of the underlying data. That can undermine the credibility of the mechanism. Having a formula for intergovernmental transfers is considered a best practice in literature on fiscal decentralization. It helps ensure that the allocation of resources is done in a transparent, predictable, and equitable manner, thus reducing the influence of political discretion and potential biases. This approach can improve the efficiency and effectiveness of public spending, enhance accountability, and promote fairness among different regions or local governments. Even if the data used in the formula are not perfect, the benefits of having a systematic and rules-based approach generally outweigh the drawbacks of relying on ad-hoc or politically driven decisions (Cheema and Rondinelli 2007). For details and examples of different sharing models based on an in-depth literature review and review of constitutional and legal arrangements, see table 3.1.

TABLE 3.1 Revenue-sharing models

	INDIRECT REVENUE SHARING	DIRECT SHARING		
		DERIVATION-BASED		INDICATOR-BASED
		FIXED SHARE	OVERLAPPING REVENUE	
Model type	This model is characterized by a centralized fiscal structure with limited autonomy for subnational governments, albeit with some structural variations.	The derivation-based model shares resource revenues with the regions where extraction occurs, which can ease disparities and reduce regional tensions.	This approach aims to distribute wealth nationally—not just to resource-producing areas. But distribution formulas can be complex and data intensive.	
Advantages	Manages volatility at the central level Needs-based resource distribution when done through indicator-based intergovernmental equalization approaches	The model acknowledges local resource rights and helps compensate for the socioeconomic and environmental impacts of resource extraction.	This approach distributes resource revenue equitably if the formula is designed well and reliable data are readily available.	
Disadvantages	Can exacerbate social tensions if producing regions do not receive adequate benefits Potentially complex formula may be difficult to implement	This approach may transmit revenue volatility to subnational governments in resource-producing areas. It can also result in an overreliance on unpredictable revenue allocations and may encourage rent-seeking behavior. Coordination needed to implement countercyclical policies and mitigate volatility Transfers may be unpredictable	Limited impact on volatility if subnational governments are able to collect revenues that are not directly linked to commodity prices (for example, land fees or property taxes)	Data-intensive methodology An excessively complex formula may be difficult to implement

continued

TABLE 3.1 *continued*

INDIRECT REVENUE SHARING		DERIVATION-BASED		DIRECT SHARING	INDICATOR-BASED
	FIXED SHARE	OVERLAPPING REVENUE			
Examples	Countries with significant offshore hydrocarbon production, such as <i>Denmark, Norway, the United Kingdom</i>, and unitary states in MENA, often adopt this model. - Norway channels resource revenues into an SWF to mitigate the risk of Dutch disease. - The United Kingdom hydrocarbon revenues are absorbed into the national budget without any SWF.	Indonesia Its revenue-sharing model was introduced as part of a broader system of fiscal federalism designed to quell dissatisfaction in underdeveloped but resource-rich provinces. The allocation of revenues is determined by law, with different percentages for different resources. General intergovernmental transfers complement this system to promote an equitable distribution of revenues across the country. However, Indonesia's approach has had mixed results over the last 20 years, with corruption and limited capacity at the local level leading to uneven development outcomes similar to those in <i>Brazil, Colombia, and Peru</i>.^a	Canada The federal government shares its resource tax base with provincial governments. For example, Alberta collects royalties from oil companies and shares them with the federal government, which imposes corporate taxes on the companies. The federal government then uses the revenues for equalization payments to less-affluent provinces. This approach has spurred debate and driven a trend toward fiscal recentralization at the same time that Alberta has faced fiscal challenges due to oil price volatility. The provincial government has established savings funds to address volatility. But managing expenditure growth remains a challenge worldwide: Striking a balance between local and national interests in revenue sharing is a complex and contentious issue.	Mongolia The government established a Local Development Fund (LDF) in 2012 to support community and local investment projects based on local priorities. The LDF resources are a percentage of central government revenues. The LDF is mainly formula-based general local development transfer (GLDF) transfers that are distributed to provinces based on a formula with three equally weighted criteria: population, a local development index, and a composite index of the land area and its distance from the capital city. The formula was refined to improve predictability and equity, taking into consideration such factors as disbursement timing and results achievement.^b Besides GLDF formulas, the LDF makes smaller direct transfers of mining royalties to select localities. Nigeria To distribute oil revenues, Nigeria employs a combination of derivation- and indicator-based models: 13% of oil revenue is allocated to producing states, with the remaining 87% distributed to the federal government (52.68%), state governments (26.72%), and local governments (20.6%). Distribution among all subnational governments is based on a formula that takes into account population, geographic size and terrain, social development indicators, and the states' own-source revenue capacity. The formula aims to ensure an equitable distribution of oil revenue among subnational governments.	

continued

TABLE 3.1 *continued*

INDIRECT REVENUE SHARING		DIRECT SHARING		
		FIXED SHARE	DERIVATION-BASED OVERLAPPING REVENUE	INDICATOR-BASED
Macroeconomic stabilization	The central government is solely responsible for implementing countercyclical policies.	Requires coordination between central and subnational governments or mechanisms to limit the volatility of intergovernmental transfers	Depends on the stability of the sources of subnational revenue	Requires a complementary countercyclical fiscal policy
Compensation for damage	Must be achieved through public policy	The derivation approach directly compensates resource-producing subnational governments.		
Addressing regional disparities and development needs	Depends on policy decisions by the central government, including about the design of intergovernmental transfer schemes. Addressing disparity would also depend on the ability of subnational governments to use resources effectively and thus hinge on many factors, including capacity, financial audit, and incentives.	It depends on the ability of subnational governments to use resources effectively and thus depends on many factors, including capacity, financial audit, and incentives.		Allocation formulas must be well designed, and subnational governments must use resources effectively. It thus depends on many factors, including capacity, financial audits, and incentives.
Predictability of subnational revenues	Transfers are predictable.	Transfers are unpredictable.	Depends on the revenue source	
Conflict management	No evidence	Limited evidence	Limited evidence	Mixed evidence

Source: World Bank.

Note: SWF = sovereign wealth fund.

a. Studies conducted in Brazil, Colombia, and Peru indicated that neither economic growth nor housing, education, or health outcomes improved following receipt of large oil or mineral revenue windfalls by subnational governments. In Brazil, local services deteriorated (NRGI and UNDP 2016). Empirical analysis by Ardanaz and Tolsa (2016) finds that in Colombia the level of corruption is positively correlated with subnational government revenues from natural resources. For Indonesia, see Yunan, Freyens, and Vidyattama (2025).

b. Shiilegmaa et al. 2015.

REVENUE SHARING IN MENA

Revenue-sharing mechanisms in MENA exhibit some common characteristics. They operate within highly centralized government structures that dominate decision-making. They are predominantly indirect and discretionary, and only a few countries subject resource revenues to explicit and quantitative rules. Access to basic information about hydrocarbon production and revenues is limited, contributing to the perceived opacity of revenue sharing in the region. However, important differences exist within MENA, especially between the wealthy Gulf Cooperation Council (GCC); non-GCC countries with weaker institutions; and countries affected by fragility, conflict, and violence (FCV). An analysis of good practices in the region, informed by lessons from international experience, can provide positive examples for policy makers seeking to improve revenue-sharing mechanisms and enhance the impact of resource revenues on development outcomes.

UNITARY STATES

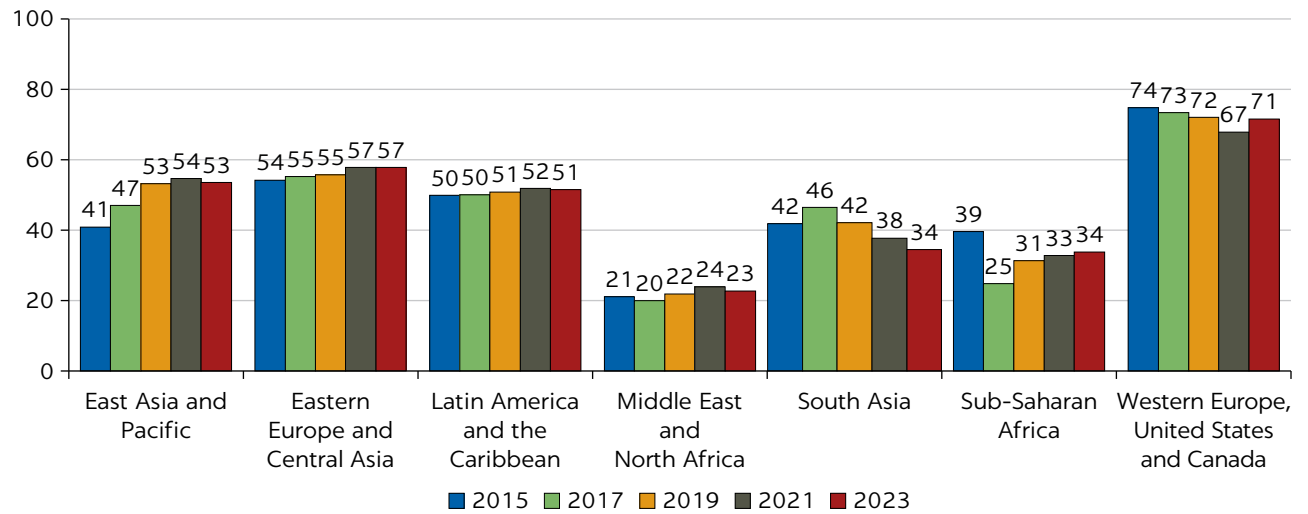
The public financial management systems in MENA's unitary states are highly centralized. Most countries use indirect revenue sharing, and subnational governments typically have limited fiscal autonomy. All the unitary states in MENA—except the Islamic Republic of Iran, which has a highly centralized approach to wealth sharing—take an indirect approach to revenue sharing. Oil and gas revenues are apportioned no differently from other revenues in the national budget, although some countries use an SWF to earmark part of their oil and gas revenues for strategic purposes.

In wealthy GCC countries, oil and gas revenues have boosted income levels and improved living standards. Resource revenues have also provided huge employment and income opportunities to migrants from less wealthy countries of the region and beyond. At the same time, however, generous fuel subsidies have disproportionately benefited the affluent, as discussed in chapter 1. Development outcomes tend to be lower outside the GCC and in non-GCC countries with significant oil and gas wealth. As discussed in chapter 1, most middle-income MENA countries continue to struggle with the middle-income trap, and many others face conflict and fragility (World Bank 2024).

Although some countries have made significant progress, budget transparency remains a key issue in MENA. The region has the world's lowest scores in the Budget Transparency Index (Frank et al. 2023) (figures 3.1 and 3.2). Little information is available regarding the criteria used to determine resource allocations at the subnational level, and very limited public finance data are disclosed to the public. The Arab Republic of Egypt, Jordan, Morocco, and Saudi Arabia have made important improvements over the past decade, but elsewhere in the region budget transparency is far below both global and MENA averages (figure 3.3).

FIGURE 3.1**Budget transparency by world region**

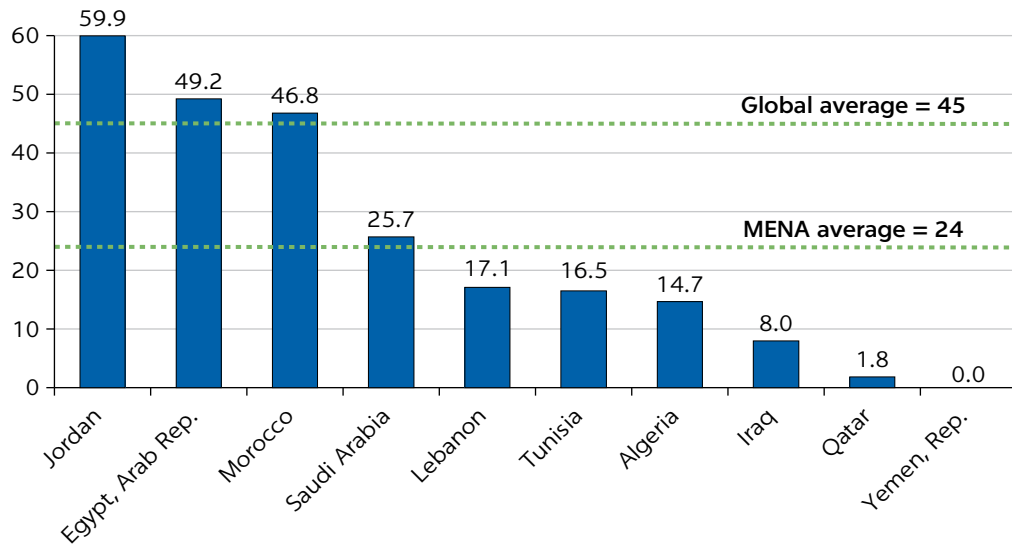
Open budget index score



Source: International Budget Partnership 2023.

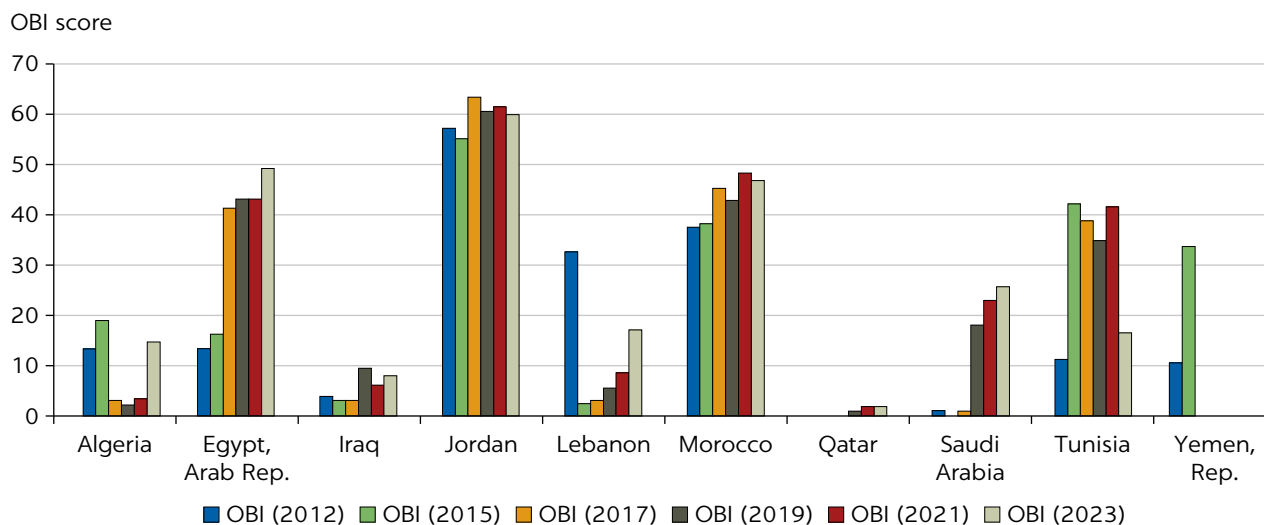
FIGURE 3.2**Budget transparency in MENA**

Country rankings by OBI score



Source: International Budget Partnership 2023.

Note: OBI = open budget index.

FIGURE 3.3**Evolution of budget transparency in MENA, 2012–23**

Source: International Budget Partnership 2023.

Note: OBI = open budget index.

Public information about resource production is often limited in countries with weak institutions, especially states suffering from FCV. When production is opaque, revenue-allocation transparency does not necessarily translate into improved management. In FCV-affected countries, the lack of transparency and accountability have exacerbated perceptions that natural resource revenues are mismanaged or used to enrich elites at the expense of the public (Mills and Alhashemi 2018).

These issues have created dissatisfaction with service delivery, social tensions, and unrest—especially in resource-producing areas and among young people demanding more and better jobs. Disputes have arisen between central and subnational governments over the allocation of oil and gas revenues. Some MENA countries have witnessed protests that illustrate the nature of these tensions (Ghanem 2021) and their role in contributing to vulnerability, fragility, and conflict.

FEDERATIONS

Public financial management systems and resource-sharing mechanisms differ significantly between MENA's two federal states, the United Arab Emirates and Iraq.

The United Arab Emirates

The fiscal federalism of the United Arab Emirates grants each emirate autonomy over its fiscal policies, with modest, annually determined contributions to the federal government. Since 2018, federal taxes like value-added tax and corporate income tax have been introduced to diversify revenue. Abu Dhabi and Dubai, the main oil producers, share their significant resource revenues with the federal government to support services in less prosperous emirates in a discretionary wealth-sharing system that has contributed to stable public finances and high living standards. Efforts to address economic disparities include targeted investments, particularly by Abu Dhabi, to boost development in the northern emirates, although disparities remain.

Iraq

In 2005, Iraq was reestablished as a federal state consisting of 18 governorates. Fifteen governorates are administered by provincial governments and three by the semiautonomous Kurdistan Regional Government (KRG). However, the terms of revenue distribution were not clearly stipulated in the constitution, leading to disputes between the federal government and the KRG. Heightened legislative uncertainty and security risks have hindered foreign investment in Iraq's most profitable sector.

Public finances in Iraq remain highly centralized. Most fiscal revenue flows to the central government in Baghdad. The central government then allocates budgets to governorates and district governments, which have little fiscal autonomy (Wahab et al. 2022). In accordance with the 2019 Public Finance Law, the federal government collects and distributes all oil and gas revenues, which account for 90 percent of total public revenue.

The experience of the United Arab Emirates and Iraq, as well as resource-rich countries across MENA and the world, highlights the extent to which wealth-sharing arrangements depend on the quality of the institutional context in which they operate. International best practices and the empirical literature on revenue sharing emphasize the crucial importance of institutional transparency, accountability, and inclusivity in converting resource wealth into sustainable development, as well as the criticality of institutions (boxes 3.1 and 3.2).

Box 3.1

The empirical relationship between transparency, accountability, and development

Introduction

Empirical evidence emphasizes the crucial role of transparency and accountability in fostering economic development, particularly in oil-rich countries. Overall, higher levels of transparency and accountability are associated with stronger economic growth. Enhanced transparency and accountability mechanisms can mitigate the challenges arising from resource wealth by improving the efficiency of resource allocation and public spending, thereby fostering a conducive environment for economic activity and investment (Mauro 1995; Treisman 2000).

Transparency and accountability in oil-rich countries

Resource-rich countries often suffer from high levels of corruption and rent seeking. Transparency initiatives can help reduce corruption by making information on resource revenues publicly available and holding governments accountable for their management (Bhattacharyya and Hodler 2010; Arezki and Brückner 2011). Transparency and accountability are also important for preventing social instability and conflict (Fearon and Laitin 2003; Ross 2012). In oil-rich MENA countries, the transparent management of resource revenues can attenuate grievances arising from spatial disparities and wealth inequality, promoting social cohesion and helping forestall the worst manifestations of the “resource curse” (Mehlum, Moene, and

Torvik 2006; Arezki and Brückner 2011).

Transparent governance also ensures that resource revenues are allocated efficiently to finance public services like education and healthcare that build human capital (Glaeser et al. 2004; Hanushek and Woessmann 2012). Multiple strategies are available for leveraging natural resource wealth to foster broad-based economic development.

Policy implications for MENA

- *Transparency initiatives.* Rigorously implementing international best practices, such as those endorsed by the Extractive Industries Transparency Initiative, helps citizens hold governments accountable for properly managing and allocating natural resource wealth.
- *Anti-corruption measures.* Developing and enforcing anti-corruption laws and establishing independent bodies to oversee compliance can help expose and reduce rent-seeking behaviors.
- *Fiscal accountability and tax systems.* Developing broad-based tax systems and improving public financial management practices can reduce reliance on oil and gas revenues while enhancing transparency and accountability. For example, governments can adopt modern public financial management systems that track expenditures and revenues in real time and make this information accessible to the public.

Box 3.2

The empirical relationship between institutions and development

Introduction

Institutions are the formal and informal rules that govern economic, political, and social interactions (North 1990). An extensive body of economic literature underscores the crucial role of institutions in shaping economic development using various channels, including affecting transaction costs, influencing incentives, and reducing uncertainty. Countries with inclusive institutions that protect property rights and encourage investment tend to achieve higher levels of economic growth and development than countries with institutional power and wealth concentrated in the hands of a small elite (Knack and Keefer 1995; Acemoglu, Johnson, and Robinson 2001; Easterly and Levine 2003; Rodrik, Subramanian, and Trebbi 2004; Acemoglu et al. 2019).

Institutions and economic development in oil-rich countries

The empirical literature underscores the importance of strong institutions in managing the challenges and opportunities associated with natural resource wealth in oil-rich countries, including those in the MENA region. Large revenue inflows from resource extraction can lead to increased corruption and rent-seeking behavior, meaning that ensuring transparency, accountability, and the rule of law is vital for effectively managing resource wealth and avoiding the resource curse (Mehlum, Moene, and Torvik 2006; Caselli and Cunningham 2009; Arezki and Brückner 2011). Weak institutions may not

distribute resource revenues equitably, leading to social tensions and political instability; effective institutions can mitigate such risks (Fearon and Laitin 2003; Malik and Awadallah 2013). Strong institutions are also essential for creating a policy framework that encourages diversification from the resource sector, thereby reducing vulnerability to commodity price fluctuations and fostering sustainable development by enhancing human capital (Glaeser et al. 2004; Van der Ploeg 2011; Hanushek and Woessmann 2012).

Policy implications for MENA

1. *Strengthening institutions.* Building robust, transparent, and accountable institutions is crucial to the effective and equitable management of resource wealth. Ensuring transparency in resource management, reducing corruption, improving the rule of law, establishing sovereign wealth funds or other dedicated institutions, and implementing fair taxation systems are key to avoiding the “resource curse.”
2. *Inclusive governance.* Political reforms that increase public participation in decision-making processes related to resource management can foster inclusive governance that represents the interests of all societal groups—reducing grievances and enhancing social stability.
3. *Human capital.* Increasing funding for inclusive, high-quality education and healthcare systems is crucial for sustainable development.

POLICY IMPLICATIONS

There is no single ideal revenue-sharing model, but robust governance is critical in all cases

Around the world, mechanisms for managing and distributing resource wealth vary substantially, and no single approach is ideal. Most countries distribute

resource revenues indirectly through a standard budget process. However, some countries separate resource revenues from other revenue sources and apportion them among stakeholders under a separate set of rules, as do Nigeria, the United States, and Canada (NRGI and UNDP 2016). This approach is typically motivated by the desire to address specific (and often multiple) objectives, such as fostering an equitable distribution of wealth, reducing spatial disparities, and (in some but not all countries) preventing conflict.

Improving data quality, transparency, inclusivity, and accountability

While approaches to distribution vary, robust governance is crucial for sustainable and inclusive wealth sharing. High-quality data production and validation, participatory oversight, and fiscal transparency and accountability are three pillars of good governance in the resource sector. Adopting Extractive Industries Transparency Initiative (EITI) standards can strengthen each of the three pillars, with EITI principles key to increasing the transparency of the revenue accounts of SEOs and the budgets of beneficiaries of revenue-sharing agreements. Generating resource wealth for sustainable improvements in economic and social outcomes can be facilitated by good governance in the resource sector when it is matched by robust transparency and accountability in the broader public sector.

Data production and validation can be enhanced. While there are exceptions, data quality is a serious challenge for non-FCV and FCV-affected countries in the MENA region. Greater disclosure and the validation of information on resource wealth and revenue generation can help mitigate the risk of elite capture at the source. Triangulating data from various public- and private-sector sources can address tax evasion and other wealth-diverting mechanisms. A greater focus on statistical analysis and revenue auditing, and more extensive national and international cooperation can enhance the triangulation process. The institutional setup for such validation will vary from country to country but could include audit institutions, private audits, or oversight by central finance institutions like ministries of finance or economy.

Participatory oversight underpinned by consistency is crucial to ensure accountability both in indirect and direct revenue-sharing models. For example, Nigeria's Revenue Mobilization and Allocation and Fiscal Commission, composed of state representatives, is designed to promote inclusive decision-making. But the revenue-sharing formula is not consistently implemented in the distribution process with the federal government.

Balancing volatility and horizontal and vertical equity

Direct-resource revenue sharing, using both derivation- and indicator-based models, may need to be combined with mechanisms that address volatility. Without such mechanisms, revenue sharing can transfer the volatility of resource

revenues to the national budget (under the direct model) or to the budgets of subnational governments (under the indirect model). The experiences of Nigerian states and the Canadian province of Alberta highlight the challenge of containing expenditure growth at times of large windfalls, even given strong public institutions. A well-managed SWF can mitigate revenue volatility, as can other mechanisms that de-link spending and intergovernmental transfers from fluctuations in annual resource revenues. For example, local authorities may collect and retain revenues from property taxes, land-use fees, or other ancillary revenue streams from extractive companies operating in their jurisdiction. These revenue streams tend to be more stable and predictable than resource revenues and can help insulate subnational governments from boom-and-bust cycles.

Indirect revenue sharing gives a central government flexibility to target less-developed regions, thereby avoiding potential grievances that may lead to conflict. Strong institutions are necessary to enable the central government to effectively allocate budgetary resources based on local needs. Indicator-based systems can only target expenditures to underdeveloped areas and reduce horizontal inequalities if they are simple, transparent, and not subject to political interference (NRGI and UNDP 2016). To illustrate how indicator-based sharing can function effectively in direct and indirect sharing models, appendix A presents an intuitive revenue-sharing tool that allows for various vertical and horizontal revenue-sharing scenarios based on socioeconomic indicators. By making key country data, indicators, and revenue shares explicit, this approach can enhance transparency and build trust around fiscal management.

Explicit derivation-based revenue sharing acknowledges local rights to resources in the regions that produce them, but equitable distribution remains necessary to reduce social tensions and prevent conflict. To date, Indonesia's Aceh province is the only known case of successful conflict resolution in which the explicit sharing of resource revenues was part of a broader peace agreement; a similar approach in West Papua failed. Conflict resolution is a complex, long-term process. Country context and political economy factors are important in conflict resolution because each conflict has its own unique causes and dynamics. Revenue sharing is not a standalone solution to conflict but can be an integral part of a comprehensive approach that promotes good governance, effective resource management, and inclusive and sustainable development at the country level (see chapter 4).

Evidence suggests that derivation-based wealth sharing has exacerbated conflict and violent disputes in Colombia, Nigeria, and Peru (NRGI and UNDP 2016). In Nigeria, although resource-sharing arrangements are designed to support a political settlement in a regionally, ethnically, and developmentally fractured state, both the derivation and fiscal equalization formulas are subject to significant contestation. Over the long term, effective management of resource revenues can promote equitable national development with widely

shared benefits, but in the short term the distribution of resources is zero-sum. As a result, contestation is a risk in all sharing mechanisms, and no single arrangement can satisfy all stakeholder interests. Indeed, the introduction of revenue sharing could incentivize regional actors to compete for resource revenues and escalate tensions between national and local interests. Striking the right balance through discussions, negotiations, confidence building, transparency, and accountability is an ongoing challenge in many countries. Moreover, revenue-sharing arrangements are not static and may evolve over time in response to changes in the intergovernmental, regional, and political-economy context. Some countries, such as Colombia and the Russian Federation, have modified their revenue-sharing mechanism over the last decade to recentralize resource revenues.

Tailoring revenue-sharing mechanisms to country contexts

Each country needs to develop a resource-sharing approach that aligns with successful international practices and its own unique development goals and circumstances. Even under derivation-based sharing models, nationwide initiatives can improve all underdeveloped areas, including those rich in resources, and address broader spatial inequalities. While international experience can offer valuable insights, there is no global standard for sharing resource revenues. Each nation needs to adopt an approach that balances various goals—such as macroeconomic stability, savings, intergenerational equity, income equality, transparency, and accountability—within its own political and economic context.

GCC countries may continue to benefit from the indirect revenue-sharing model given their mostly centralized government structures, with the important exception of the United Arab Emirates. But they have scope for improvement. For example, more accessible and transparent subnational data on oil and gas flows, revenues, and development outcomes and greater policy emphasis on equity across areas and household income levels could strengthen social and subnational cohesion, contributing to national stability and security. The efforts of the United Arab Emirates and Saudi Arabia to diversify their economies, adopt new technologies, and promote inclusive growth and spatial equity could offer lessons for other countries. Over the long term, MENA countries seeking to promote productivity and broad-based prosperity may need to rebalance and diversify their assets—including natural resources, physical and human capital, and economic institutions—benefiting from international experience (World Bank 2014). Fiscal reforms in Oman could offer lessons on reducing procyclicality and bolstering long-term fiscal sustainability. Oman has implemented several fiscal reforms recently to address its economic challenges and improve fiscal sustainability. Key reforms in Oman include the Medium-Term Fiscal Balance Plan 2020–24, public wage bill reforms, rationalizing subsidies and transfers, and revenue reforms (World Bank 2022a, 2022b, and 2023). A greater emphasis on horizontal equity in revenue sharing could boost development across the region.

Middle-income hydrocarbon-producing countries and FCV-affected countries could consider adopting rules-based mechanisms for sharing natural resource wealth, ideally underpinned by broad and inclusive participation. Many of these countries suffer from lack of data, transparency, and trust regarding resource management. To diffuse tensions between competing interests, accurate data on resource production and revenues must be produced, audited, and made public. Revenue-sharing arrangements could be developed through a cooperative and inclusive process that strikes a balance between the needs of the central and subnational governments and/or specific regional groups. In the absence of transparency and cooperation, it will be difficult to convert MENA's vast wealth into lasting peace and prosperity.

One key policy implication from regional and international experience is that, regardless of how countries distribute resource wealth to their populations, robust governance mechanisms are vital to inclusive and sustainable wealth sharing. The success of any revenue-sharing model increases with strong transparency and accountability mechanisms in place. Citizens would benefit from knowing how resource wealth is distributed and how the decisions are made. Stakeholders could be part of an inclusive process designed to build consensus around the transparent sharing of oil and gas wealth, both within and across regions and levels of government. Introducing disclosure mechanisms could help foster public trust and empower citizen engagement. In parallel, efforts may be stepped up to improve the effectiveness and efficiency of government expenditures and strengthen public financial management, including the management of volatile resource revenues.

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4 Sharing Wealth for Peace and Stability

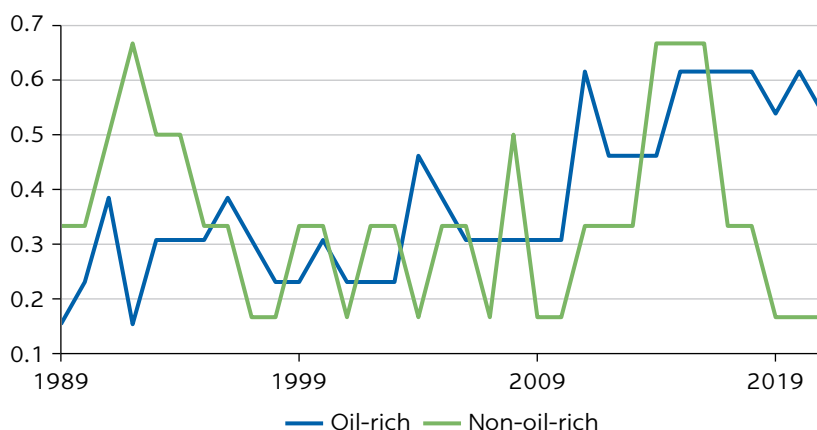
THE ROLE OF NATURAL RESOURCE REVENUES IN COUNTRIES AFFECTED BY FRAGILITY, CONFLICT, AND VIOLENCE IN THE MIDDLE EAST AND NORTH AFRICA

In recent decades, conflicts in hydrocarbon-rich countries in the Middle East and North Africa (MENA) have become deadlier. Over the past 30 years, both hydrocarbon-rich and non-hydrocarbon-rich MENA countries have been exposed to deadly violence, with conflicts becoming increasingly widespread and severe among the former (figures 4.1 and 4.2). Although there is no clear correlation between resource wealth and instability (Phillips 2024), control over oil and gas resources is a key point of contention in multiple ongoing armed conflicts in the region, underscoring the importance of revenue-sharing mechanisms in peace processes.

FIGURE 4.1

Share of oil-rich and non-oil-rich countries with conflict-related deaths in MENA

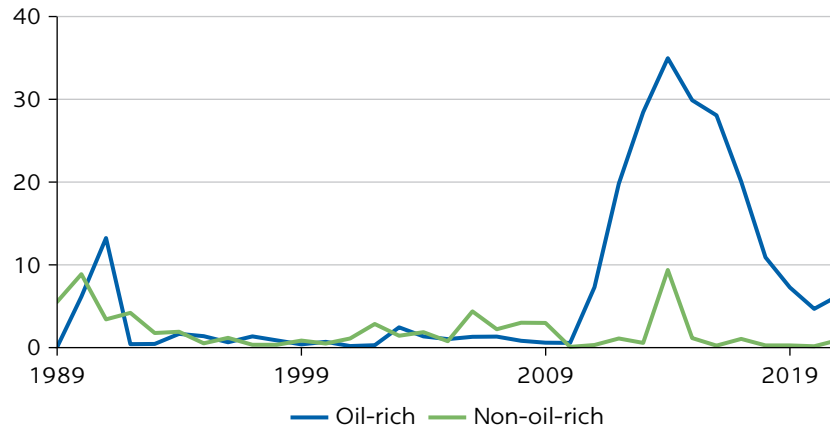
Share of countries with conflict-related deaths



Sources: Based on conflict deaths from the Uppsala Conflict Data Program (2023) and oil/gas rents (percent of GDP) from World Bank database.

FIGURE 4.2**Number of conflict-related deaths in oil-rich and non-oil-rich MENA countries**

Conflict-related deaths per 100,000 people



Sources: Based on World Bank data on conflict deaths from the Uppsala Conflict Data Program 2023 and oil/gas rents (as percent of GDP).

Resource control disputes fuel ongoing conflicts across MENA countries affected by fragility, conflict, and violence (FCV), such as the Syrian Arab Republic, Libya, Iraq, and the Republic of Yemen. Competition over resources and resource revenues reflects conflicting claims for domestic and international legitimacy among conflict actors. Competing factions have attempted to establish separate oil companies and financing mechanisms both to enhance their control over resource revenues and to assert their legitimacy as exporters recognized on international markets (Ahram 2020).

Conflicts over resources often reflect bigger contests over constitutional rights, the structure of government, and the allocation of resources among levels of government. Typically, constitutional provisions only attempt to frame resource control by “stating that the central state, the government or ‘the people’ own the respective country’s natural resources, including those significant to the extractive sector” (International IDEA 2024). Such statements are too vague to help address competing claims for resource control. In Iraq, the Republic of Yemen, and Libya, institutional arrangements, including key elements of fiscal decentralization and intergovernmental relations, are the subject of ongoing contestation. In the Republic of Yemen, the 2015 draft constitution established fundamental principles for resource control and revenue sharing, but these have not been agreed on by the parties, which have also failed to reach a consensus on the basic structure of the state. In Libya, the 2011 transitional constitution does not include any provisions on oil resource management and is still contested. As mentioned in chapter 3, the provisions regarding oil revenue sharing in the Iraq constitution of 2005 remain contested.

In most FCV-affected MENA countries, contention over the control of resources also involves foreign countries and international markets. External state and nonstate actors are involved in ongoing conflicts in the region through military interventions, sanctions (including boycotts of oil exports and oil-sector investments), as trade and investment partners, or as access points to international markets. In a few MENA countries, foreign powers have swapped military support for exploration licenses to oil and gas fields, some of them claimed by neighboring countries, which can threaten regional infrastructure projects (Narbone 2020). International involvement affects conflict dynamics, including the tacit or explicit recognition of different actors' claims to resource ownership and political legitimacy (Ahram 2022).

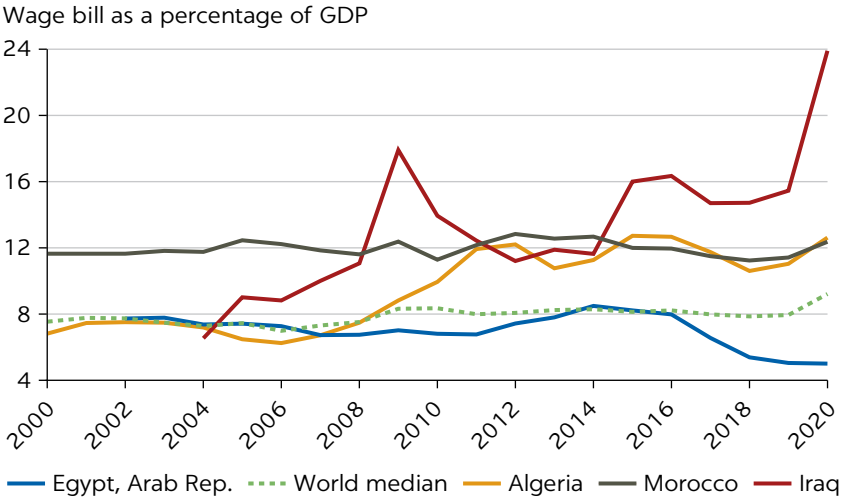
WEALTH SHARING FOR SUSTAINABLE PEACE IN FCV COUNTRIES: BIG PROMISE, LIMITED SUCCESS

In FCV-affected countries worldwide, explicit revenue-sharing frameworks are often contested—even in the relatively few cases where they have been established. Fiscal equalization and derivation formulas are often disputed by stakeholders. Reconciling them is also challenging because fiscal equalization aims to achieve distributional equity, whereas derivation aims to compensate oil-producing areas for the externalities of resource production. As a result, revenue-sharing frameworks have often failed to address grievances and foster peace and stability. This is the case in the MENA region and the rest of the world. In Nigeria, for instance, the 1999 constitution underpins revenue sharing across the federation, but state governments claim that the federal government receives far more than its legally specified share of revenue because it owns the national oil company. Furthermore, discontent about the social and environmental externalities of oil production in the Niger Delta has fueled insurgencies, contributing to the large-scale theft and trafficking of oil products (Perouse de Montclos 2024). In Indonesia, where the 2005 peace agreement introduced a derivation of 70 percent of its generated oil and gas revenue to the province of Aceh for eight years, asymmetric fiscal transfers have raised claims from non-oil producing provinces and have not fully addressed local grievances about the economic inequalities that triggered the conflict (Sustikarini 2019).

Across FCV-affected countries, wealth-sharing frameworks often aim at short-term conflict resolution at the expense of sustainable, equitable long-term growth and development. Power-sharing agreements underpinned by revenue-sharing frameworks have contributed to political stabilization in some FCV-affected countries.¹ However, these frameworks often result in elite capture and corruption, and exacerbate social tensions, distrust, and political alienation.

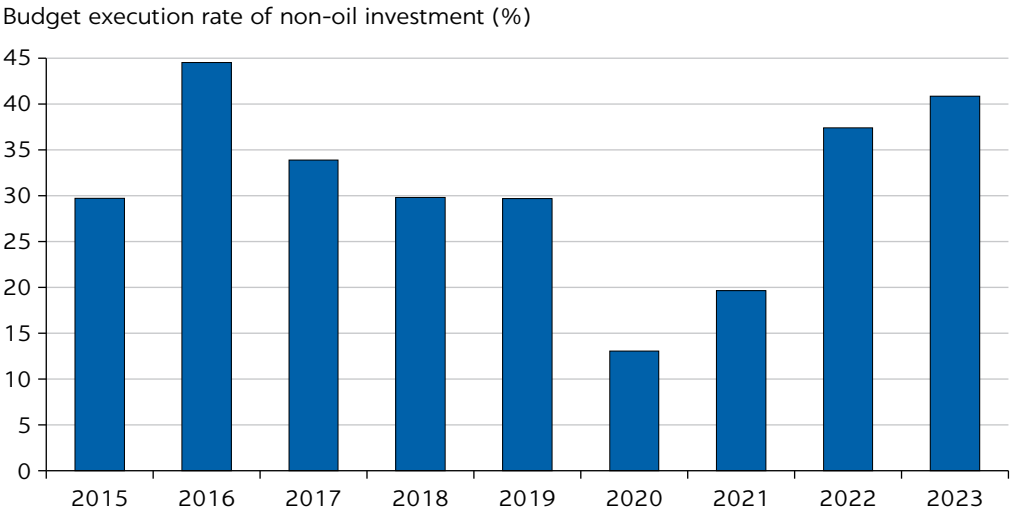
Embedding long-term savings, macro-fiscal management, intergenerational equity, and spatial equity considerations in revenue-sharing arrangements undertaken as part of a peace process has proven highly challenging: Revenue-sharing arrangements often focus on short-term rent allocation as reflected by the bloating of the wage bill at the expense of productive expenditure, fiscal sustainability, and savings, including intergenerational transfers (figures 4.3 and 4.4).

FIGURE 4.3
The wage bill as a share of non-oil GDP in selected MENA countries



Sources: Worldwide Bureaucracy Indicators and the Iraqi Ministry of Finance.

FIGURE 4.4
The execution rate of non-oil capital expenditures in Iraq



Sources: Worldwide Bureaucracy Indicators and the Iraqi Ministry of Finance.

This is done to preserve a fragile status quo rather than to promote inclusive growth and development. Libya's oil revenue in 2024 is estimated to have fallen by 20 percent below its 2020 level. Capital spending is also expected to drop to 8.6 percent of total spending, while the wage bill is anticipated to increase from 32.1 percent of total spending in 2021 to 44.5 percent in 2024 (IMF 2024). Iraq's federal wage and pension bill is estimated to have increased from 10 percent of the budget to over 40 percent since 2004, and from 12 to 27.8 percent of non-oil gross domestic product (GDP) (IMF 2023b). This reflects a sharp increase both in the number of government employees (from 1.2 million to over 3 million) and a widening of the public sector's wage premium over the private sector (Al-Mawlawi 2019). Capital investment dropped from over 25 percent of total federal expenditures in 2013 to less than 10 percent in 2021, and in effect, the wage bill is reducing spending on reconstruction programs in areas affected by the Islamic State insurgency (Al-Mawlawi 2020).

Wealth-sharing arrangements in FCV-affected countries cannot be successfully implemented without long-term peace settlements and sustained political commitment. Peace agreements are rarely underpinned by the establishment of transparency and accountability mechanisms or the adoption of good resource management principles. They also rarely define arrangements for intergovernmental fiscal relations and often fail to establish adequate monitoring, reporting, and evaluation mechanisms with respect to wealth-sharing frameworks. A quid pro quo among conflicting parties on revenue sharing is not enough to support the sustainable management of resource revenues. International and regional experience shows that agreed-on frameworks for revenue sharing are often ignored, circumvented, or gamed due to a lack of shared acceptance of their rationale and insufficient trust in their implementation. To be effective, regular monitoring, review, and evaluation of wealth-sharing arrangements should be underpinned by a robust and credible governance framework (that is, one resting on adequate oversight mechanisms). An agreement on revenue sharing cannot substitute for a political settlement: It is at best only a technical solution and at worst, a potential driver of conflict and fragility.

Accurate, transparent data, and effective mechanisms to oversee implementation are key to a successful wealth-sharing agreement, but all the parameters of such an agreement are vulnerable to contestation and gaming by stakeholders who do not support its core objectives. In many FCV-affected countries, the oversight institutions, monitoring systems, and data-validation mechanisms are weak or deficient. Auditing resource-revenue management requires technical capacity and investigative prerogatives, including oversight of the oil companies' accounts, which many supreme audit institutions lack. In Nigeria, auditing oil revenues by three different domestic and external bodies led to three very different sets of findings regarding the sources and magnitude of revenue leakages—leaving policy makers unable to decide the best course of action (Okonjo-Iweala 2020).

The Revenue-Sharing Tool presented in appendix A can be used to transparently analyze the implications of various distributive arrangements by drawing on key socioeconomic indicators to inform the revenue-sharing formula. The tool could help technical staff analyze the impact and implications of alternative indicator-based sharing arrangements. Especially in post-conflict situations where data are scarce, simple and transparent tools can point the way to alternative sharing arrangements and support the process of building trust and accountability.

International initiatives such as the Extractive Industries Transparency Initiative (EITI) have significantly helped improve the public disclosure of relevant data, but in most cases information about the management and distribution of resource revenues remains limited. For instance, with respect to the Iraq initiative to help effectively mitigate fraud and corruption, stakeholders recommend that the scope of information disclosure be significantly broadened with respect to beneficial ownership in the oil and gas sector, the reporting of politically exposed persons, auditing of state-owned enterprises, and adoption of an open data policy to enable the public to access the information (Natural Resources Transparency Commission 2023).

Inadequate data validation is an especially important deficiency in revenue-sharing arrangements to be addressed through institutional capacity building. In Nigeria, there is still no mandatory automatic metering of production across oil production sites. Because of the lack of adequate and reliable information about oil and gas production levels and the magnitude of estimated underreporting and consequent revenue leakages, the government was forced to launch an automated tracking system of crude oil and natural gas flows. However, there are no measurable results yet.

Transparency and accountability mechanisms would ideally also cover the whole resource value chain: from oil and gas production to revenue allocation and public spending. EITI is useful but insufficient to ensure effective oversight: It must be complemented by data validation across the value chain. Fiscal transparency applied across government entities and all tiers of government would facilitate full accountability regarding the distribution and use of resource revenues. Fiscal accountability through financial, compliance, or forensic auditing can increase social accountability by allowing for public scrutiny of resource-funded public expenditures through performance auditing and fiscal incidence analysis.

POLICY IMPLICATIONS

Critical shortcomings of wealth-sharing frameworks in FCV-affected countries have been identified above. These include (1) focus on the short-term stabilization of conflicts as opposed to long-term peace and development; (2) the lack of robust legal, institutional, and governance underpinnings; (3) unsteady political commitment to implementation over time; and (4) weak

transparency and accountability, monitoring, and evaluation mechanisms. Those challenges call for the following changes.

Negotiated wealth-sharing arrangements should aim beyond immediate conflict resolution toward equitable development. Both direct and indirect revenue-sharing models can be used to improve equity, but their impact on equitable development needs to be adequately monitored and evaluated. Under the direct-sharing approach, formula-based models would be subject to impact assessments of their economic and social outcomes, including their effect on regional disparities. In addition to fiscal transfers to subnational governments, cash transfer programs, social allowances, and inclusive economic policies can help maximize the impact of resource revenues on household welfare while strengthening the social contract. The latest 2023 EITI Standard recommends, among other issues, that EITI multistakeholder groups report on how extractive revenues earmarked for specific programs or investments at the subnational level are managed, and on actual disbursements. Simulations can be made to determine if a wealth-sharing formula strikes the intended balance between redistribution to create equity and help the resource-producing areas develop economically. Even formulas based on sound principles and underpinned by consensus around parameters and enforcement mechanisms can fail to achieve fiscal equalization or address disparities in regional development because the issues may be attributable to other factors.² Indirect wealth sharing through the general budget can also achieve the degree of equity desired but requires robust public expenditure management, which may not be feasible in FCV contexts. Whichever model is applied, an appropriate level of horizontal and vertical equity should be attempted.

Wealth-sharing arrangements can be more effective when underpinned by robust governance implementation frameworks. The credibility of a wealth-sharing formula hinges on resource revenues being thoroughly accounted for and protected from waste, fraud, and corruption. This requires mitigating the high risks of wealth diversion and capture at the source.³ Greater scrutiny of resource management may challenge a range of both domestic and external vested interests, and international cooperation may be needed to counter tax avoidance and transfer-pricing issues by multinational corporations, smuggling, and illicit sales. Revenue auditing, which can be highly effective in this regard, remains underused. In post-conflict situations, even oversight institutions may be embroiled in disputes and regarded as biased, which weakens their credibility. They may also try to avoid the highly sensitive issue of wealth sharing and not engage. Wealth-sharing mechanisms can aim to improve growth and development outcomes both at the national and subnational levels, but must be informed by in-depth economic analysis and modeling (Daflon and Vaillancourt 2020). Wealth-sharing arrangements must do more than distribute wealth among constituencies to maximize wealth creation and intergenerational equity by investing in physical and human capital (World Bank 2014). Strengthening accountability institutions and mechanisms can leverage resource wealth to support positive development outcomes.

Although wealth-sharing arrangements can help ease tensions in FCV-affected countries, domestic stakeholders must agree on a development agenda funded by resource revenues.

Political commitment should not be exclusively about rent sharing; it should also bear on fiscal efficiency. Fiscal rules can help mitigate revenue volatility by keeping spending at sustainable levels and saving excess revenues to compensate both for future short-term downturns and for the long-term depletion of the resource base (IMF 2023a). Expenditure rules can also help ensure that sufficient funds are devoted to capital spending, economic competitiveness, and diversification. A wealth-sharing formula would ensure the predictability of medium-term financial flows to subnational governments and other recipients. The ideal formula is stable, owned by the stakeholders, and grounded in legislation and not determined through the annual budget process.

Political commitment can be sustained by bolstering the social contract through wealth-sharing mechanisms. Complementing wealth sharing across sectors and levels of government with direct transfers to households and financing that is earmarked for development expenditures can help strengthen the social contract and build trust in the wealth-sharing framework. Cash transfers integrated into the tax system can also help mitigate the risk of elite capture and may also improve tax morale (Devarajan and Quy-Toan 2023). Electronic transfer systems using biometrics and mobile platforms can help overcome governance challenges in FCV-affected countries and further safeguard against corruption and waste. Whichever approach is deemed most appropriate, mechanisms for distributing resource wealth must be integrated into a transparent revenue-sharing formula to mitigate the risk of elite capture and optimize social and economic development.

Transparency and accountability mechanisms should extend to the whole value chain of resource revenue to build trust in wealth-sharing arrangements. Stakeholders must be confident that the wealth-sharing formula covers all the revenue that is intended to be shared, and is effectively used to finance growth and equitable development and helps address the grievances that fuel conflicts. This calls for significantly strengthening oversight institutions, stakeholders' access to information, and international cooperation.

NOTES

1. According to the World Bank, “While the long-term effects of power sharing on peace and stability are hard to discern, a substantial body of evidence suggests that power sharing helps to prevent recurrence of violent conflict and is associated with greater stability overall,” but “power-sharing agreements have also been shown to help to ensure that groups that lose an election nevertheless have meaningful representation in government, access to state resources, and some degree of autonomy. However, such power-sharing agreements, often struck between elites to manage a specific crisis, can undermine popular will and trust in the political system.” (World Bank 2018).

2. In Nigeria, where the revenue allocation formula across states is mostly based on area and population, the 1996 population census triggered a legal dispute between the federal state and a lower-tier government, which contributed to the census being delayed until 2023.
3. In Libya, it is estimated that one-third of oil products are diverted through smuggling (Ahmad and Larsen 2021); in the Republic of Yemen, “regions are holding on to whatever revenues are generated within their jurisdictions,” including oil revenue (Ahmad 2024).

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APPENDIX A

The Revenue-Sharing Tool: Technical Note

ENHANCING FISCAL POLICY ANALYSIS THROUGH THE REVENUE-SHARING TOOL: A STRATEGIC APPROACH FOR EQUITABLE RESOURCE ALLOCATION

Objectives, purpose, and potential use of the Revenue-Sharing Tool

The Revenue-Sharing Tool (RST) presented here is designed to help governmental technicians analyze and optimize the distribution of natural resource revenues, particularly in the oil and gas sectors. By offering a transparent and easy-to-use framework for evaluating and implementing various revenue-sharing scenarios, the tool streamlines and simplifies the complex calculations normally required for revenue allocations. This capability enables policy makers to make well-informed and timely decisions that support equitable regional growth and the efficient management of natural resources. By boosting time-and-resource-use efficiency, the tool can also enhance transparency and accountability and inform broader decision-making processes about revenue sharing.

One of the tool's key strengths is its simplicity and flexibility in allowing modifications to revenue-sharing mechanisms and government fiscal allocations. It operates effectively with limited but accessible datasets and follows clear policy parameters, thereby ensuring transparency and ease of use. This approach makes it possible to generate a wide range of revenue distribution scenarios and enhances the tool's practicality. Its adaptability makes it a dynamic platform for exploring various fiscal distribution simulations. This is particularly useful for detailed policy discussions within finance ministries, specifically concerning the complexities of revenue allocation.

In fragile and conflict-affected environments, the tool can support technical considerations of alternative revenue-sharing formulas based on a small number of widely understood and available indicators. It allows for exploring various revenue-sharing options as integral components of broader

revenue-sharing agreements, potentially contributing to peace talks. The tool can be used within broad frameworks of both direct and indirect revenue-sharing arrangements.

Structure of the Revenue-Sharing Tool

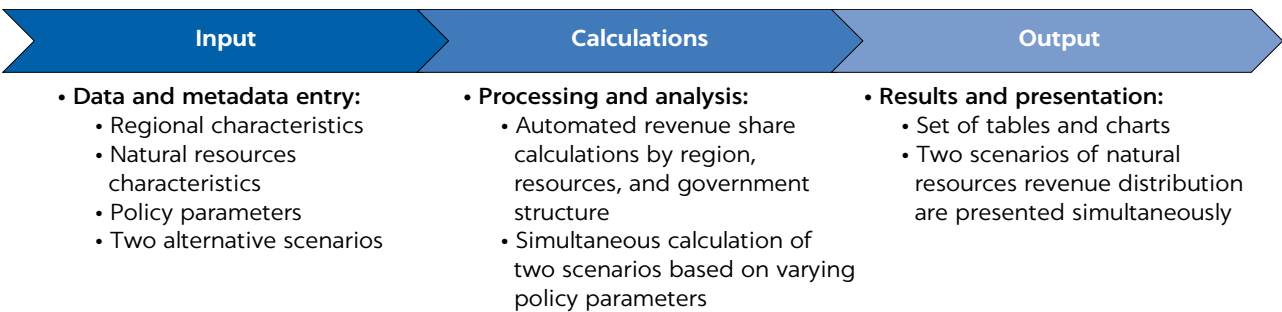
The current version of the Revenue-Sharing Web Tool (RSWT) is a substantive enhancement over MENA Macroeconomics, Trade and Investment (Version 1.0), the original Excel-based RST. By transitioning to a web-based platform with JavaScript¹ integration, the RSWT improves accessibility and user experience. For illustrational purposes, this presentation assumes a generic country; in practice the tool is calibrated with specific country data for country simulations.

As shown in figure A.1, the RSWT process follows a structured order, beginning with the input phase, followed by calculations, where data is processed according to predefined algorithms, and concluding with output, where the results are generated and presented. This consecutive approach ensures that data is systematically processed, creating accurate and reliable outputs.

Users enter distribution shares and socioeconomic data in the input section, where the tool automatically processes the information, makes calculations, and seamlessly transfers the results to the output section. Automation minimizes manual errors and streamlines the analysis.

The tool also supports the simultaneous analysis of two revenue-sharing scenarios, allowing users to adjust government account distributions in input. It accommodates calculations based on either the value or the volume of natural resources, making it possible to account for regional characteristics.

FIGURE A.1
The structure of the Revenue-Sharing Tool



Source: Original figure for this publication.

The output section presents the analytic results in a combination of tables, charts, and descriptive statistics. These visualizations enable users to easily interpret the impact of revenue sharing on government accounts and regions.

Designed for intuitive use, the tool features an interconnected structure with built-in checks and conditional alerts to ensure consistency and accuracy throughout the analysis. This promotes an efficient and automated workflow, from initial data entry to final output, making the RSWT a reliable and user-friendly resource for creating complex revenue-sharing analyses.

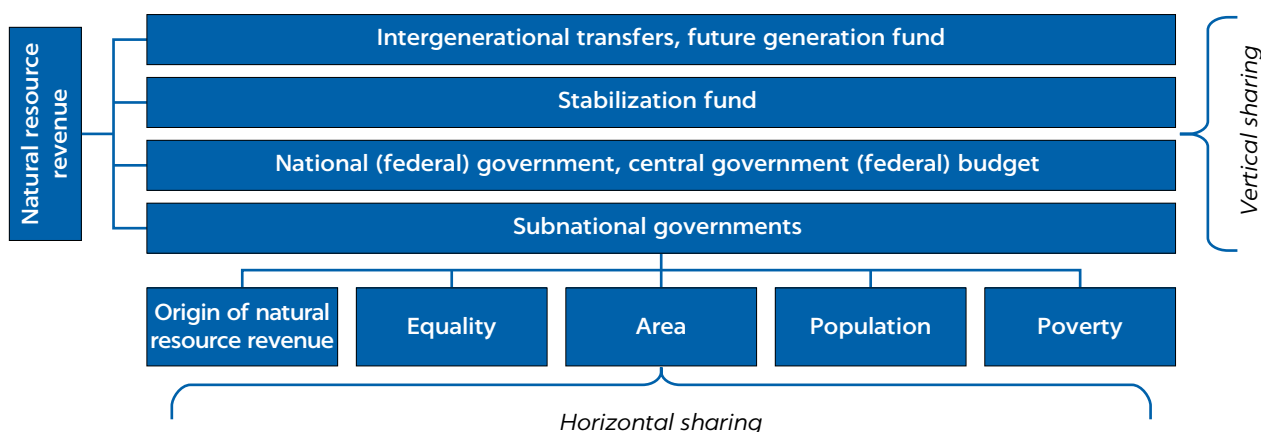
Methodology and calculations

The methodology is designed to allocate fiscal revenue across regions using a two-pronged approach. The vertical allocation ensures that resources are distributed appropriately across different levels of government, in line with the overall fiscal framework; the horizontal allocation considers each region's specific characteristics and economic conditions, allowing for distributions that address regional disparities. This balanced approach ensures that revenue distribution is both theoretically robust and responsive to the needs of different regions.

To operationalize this methodology, the RST is structured to facilitate detailed assessments of revenue sharing, both vertically between government levels and horizontally across regions (figure A.2). It leverages predefined distribution shares alongside socioeconomic data to provide a comprehensive review of fund allocations. The tool also allows users to compare alternative distribution scenarios for total natural resource revenues, thereby offering a more robust and user-friendly platform for in-depth analysis.

FIGURE A.2

Levels of government and distribution criteria across subnational governments



Source: Original figure for this publication.

The allocation mechanism operates by allowing users to determine the percentage distribution across four principal government levels (intergenerational transfers, stabilization fund, national government, and subnational government). Since the total share across these levels equals 100 percent, the national government's share is automatically adjusted as a residual to maintain this balance. The subnational government portion is further divided horizontally across regions using predefined parameters such as the origin of natural resources, equality, poverty, area, and population. This process ensures a mathematically consistent and contextually adaptive distribution of fiscal resources that align policy objectives with regional economic conditions.

An additional advantage of the tool is a user-friendly design that enables straightforward modifications to two separate scenarios involving policy parameters and regional and national resource characteristics. Its flexibility ensures that the analysis remains adaptable and pertinent in dynamic country contexts.

The calculations feature automates the complex task of distributing revenue shares across two distinct policy frameworks (fiscal management and resource allocation), eliminating the need for manual input. By employing advanced algorithms, the tool minimizes the potential for human error, ensuring precise and efficient analyses. This streamlined approach adheres to best practices in fiscal management and guarantees both accuracy and efficiency in resource allocation.

Definition and notation

- *Natural resource revenue sources (NR)*. Defines the total revenue from up to 10 individual oil and gas natural resources as $NR = \{NR_1, NR_2, NR_3, \dots, NR_{10}\}$, where NR_i represents the revenue from i^{th} source, for $i = 1$ to 10.
- *Regions (R)*. Ten regions, defined as $R = \{R_1, R_2, R_3, \dots, R_{10}\}$, where R_k represents a geographic or administrative area in the country, for $k = 1$ to 10.
- *Vertical characteristics—government levels (G)*. Four levels of government are defined as $G = \{G_1, G_2, G_3, G_4\}$, where each government level G_j corresponds to a specific predefined percentage revenue allocation for $j = 1$ to 4.
- *Horizontal characteristics (H)*. Represents G_4 (subnational governments) further distributed by five key socioeconomic characteristics and defined as $H = \{H_1, H_2, H_3, \dots, H_{10}\}$, employed to guide the horizontal distribution of revenues among the regions. Each characteristic H_m represents a specific criterion that influences the distribution for $m = 1$ to 5.

Allocation parameters

- *Vertical sharing percentages (V).* $V = \{v_1, v_2, v_3, v_4\}$, where v_j determines the percentage of total revenue allocated to each government level G_j .
- *Horizontal allocation percentages (P).* P_{km} defines the percentages based on the horizontal characteristics H_m for distributing funds among regions R_k , tailoring the allocation to the specific regional needs or characteristics.

Revenue distribution methodology

1. *Vertical allocation among government levels.* Allocation of the aggregated revenue from all government/level sources according to vertical sharing percentages:

$$G_{allocation_j} = \sum_{i=1}^5 NR_i + \frac{v_j}{100}; \quad [\text{Equation A.1}]$$

where $G_{allocation_j}$ represents the revenue allocated to government level G_j .

2. *Allocation based on horizontal characteristics.* The revenue allocated to G_4 further distributed by the horizontal characteristics H_m :

$$H_{allocation_{4m}} = G_{allocation_4} \times \frac{H_m}{100}; \quad [\text{Equation A.2}]$$

where $H_{allocation_{4m}}$ represents G_4 's revenue allocated for each characteristic H_m .

3. *Regional allocation.* Allocation of the revenue to regions R_k based on specific characteristics H_m :

$$R_{allocation_{km}} = \sum_{m=1}^5 H_{allocation_{4m}} \times \frac{P_{km}}{100}; \quad [\text{Equation A.3}]$$

where $R_{allocation_{km}}$ represents revenue allocated to region R_k for characteristic H_m .

Inputs and outputs

All data and metadata must only be entered in the input tabs,² following specified steps to simulate and analyze the distribution of NR revenues. The input sheet controls predefined shares and other critical data needed to make a detailed analysis, including regional characteristics, natural resource attributes, and policy parameters. Users input the required information in six steps.

Steps 1 and 2 concern general inputs.

Step 1. Basic details such as country name, simulation year, regional names and numbers, and natural resources.

Step 2. Horizontal parameters for regional characteristics with options to add additional parameters.

Steps 3 and 4. Define policy choice parameters for revenue distribution. The sheet makes it possible to simultaneously analyze two scenarios by adjusting the vertical and horizontal revenue distribution percentages.

Step 3. Vertical revenue sharing among accounts such as intergenerational transfers, future generation fund, stabilization fund, national government, and subnational governments.

Step 4. Horizontal revenue sharing among regions based on factors like origin of natural resource (NR), equality, area, population, and poverty.

In Steps 5 and 6, descriptive statistics data for regional and natural resource characteristics are entered. These can be customized for each country.

Step 5. Regional descriptive statistics data, including name, area, population, equality, and regional poor/total poor.

Step 6. Natural resources data (oil and gas), including field, region, and production value and volume. The value (US\$) or volume (barrels per day) of natural resource revenues for oil and gas, if applicable.

After all the required data are entered, clicking the validate inputs button triggers an automated system validation. If the inputs fulfill the criteria, the compute function becomes active; if not, a system message details the errors and suggests corrections. Activating compute unlocks access to the results pages: The inputs report is generated and options to view detailed results, including tables and figures, are enabled, allowing a complete analysis of the outputs.

Based on the outputs from the tables and charts tabs, policy makers can conduct comprehensive assessments of various revenue-sharing scenarios. The outputs are categorized into three primary report types:

1. *Input Reports*. These provide overall, foundational country-level descriptive statistics and selected policy parameters.
2. *Result Tables*. These offer detailed regional and natural resource statistics, structured into two segments:
 - Part 1 summarizes descriptive statistics across regions and natural resources, including five tables (structure of NR by regions, structure by NR, structure of government share of production by natural resources, percentage distribution of production revenue by government accounts, and natural resources characteristics).
 - Part 2 analyzes the distribution of revenue shares and contains two figures (Regional Share of NR Revenue by Origin and Sharing Criteria: Scenario 1 and Scenario 2).

3. *Result Figures*. Presented in four sections, these figures provide visual representations that fully reflect the information detailed in figures A.3 to A.6, including regional characteristics, natural resource production by region and type, and the allocation of revenue across government accounts, both vertically and horizontally.

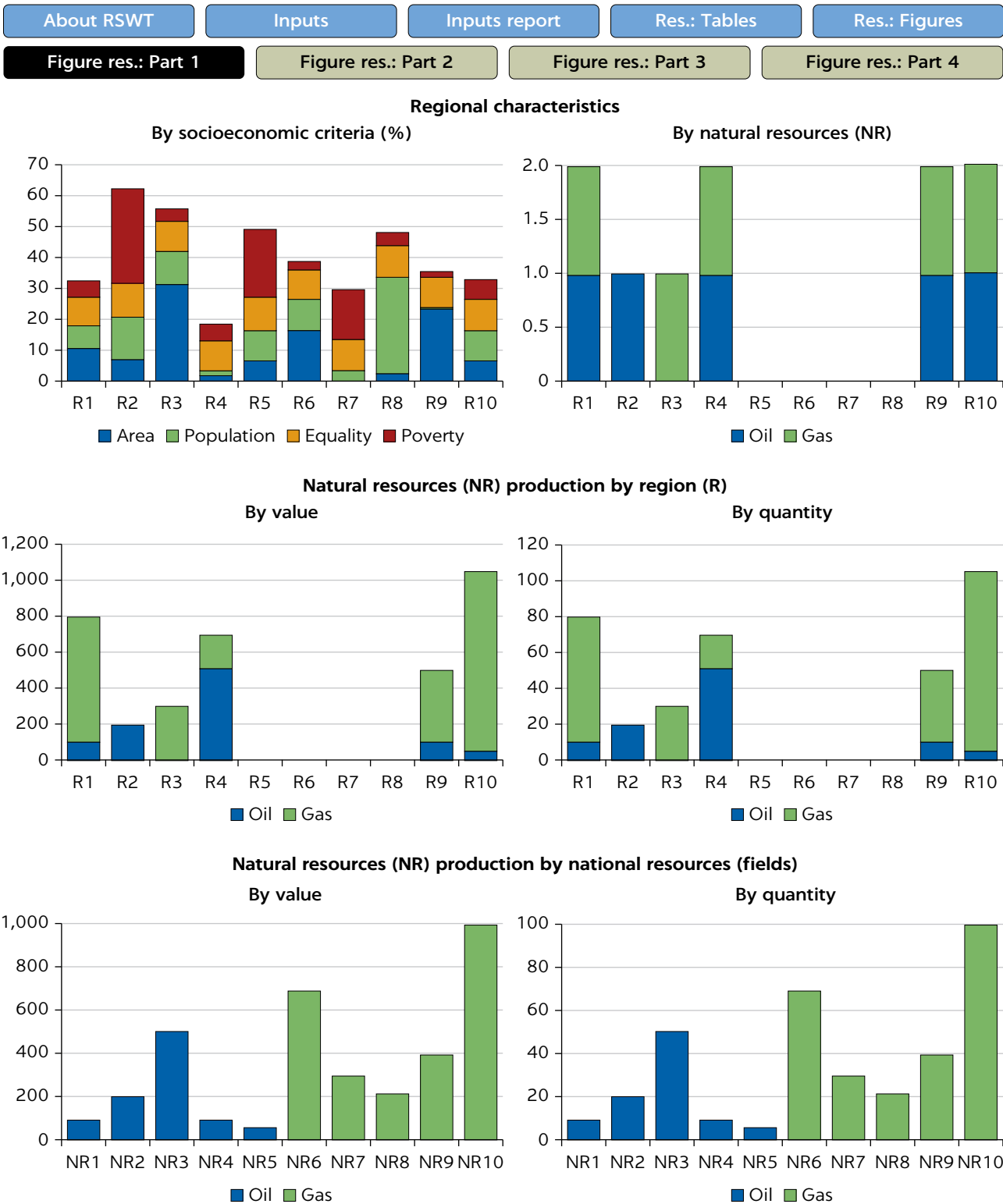
By consistently visualizing two scenarios in parallel, each report enables a robust and nuanced analysis of revenue-sharing mechanisms and ensures clarity and precision about the fiscal implications of different policy choices.

Extensions and adjustment of the tool

Suggestions for improving the RST focus on enhancing its efficiency and adaptability. In the realm of automation, one improvement would be to integrate diverse internal World Bank datasets that cover over 200 countries—thereby significantly broadening the tool’s global applicability and data richness.

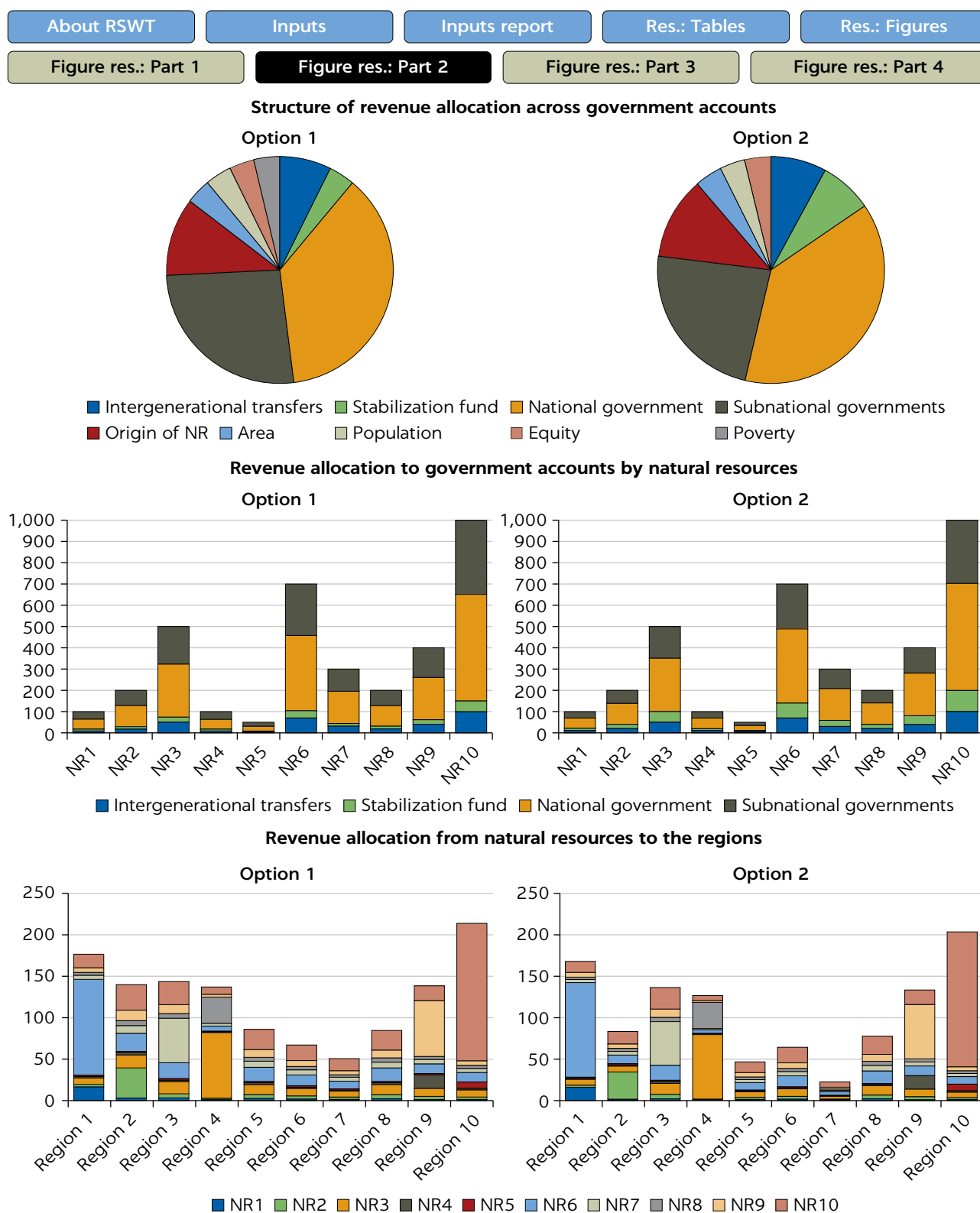
It would also be possible to increase the RST’s flexibility—perhaps by enabling data substitution in cases where comparative information is unavailable to ensure that the tool remains functional and relevant. The tool could also be expanded to include additional criteria tailored to the unique needs of individual countries, such as infrastructure development, climate impacts, and the presence of refugees. These enhancements would broaden the tool’s analytic scope, allowing it to address a wider range of socioeconomic variables and policy considerations.

FIGURE A.3
Example of simulations



Source: The data employed in this tool is simulated and does not reflect empirical or historical observations; it has been generated exclusively for illustrative and conceptual demonstration purposes.

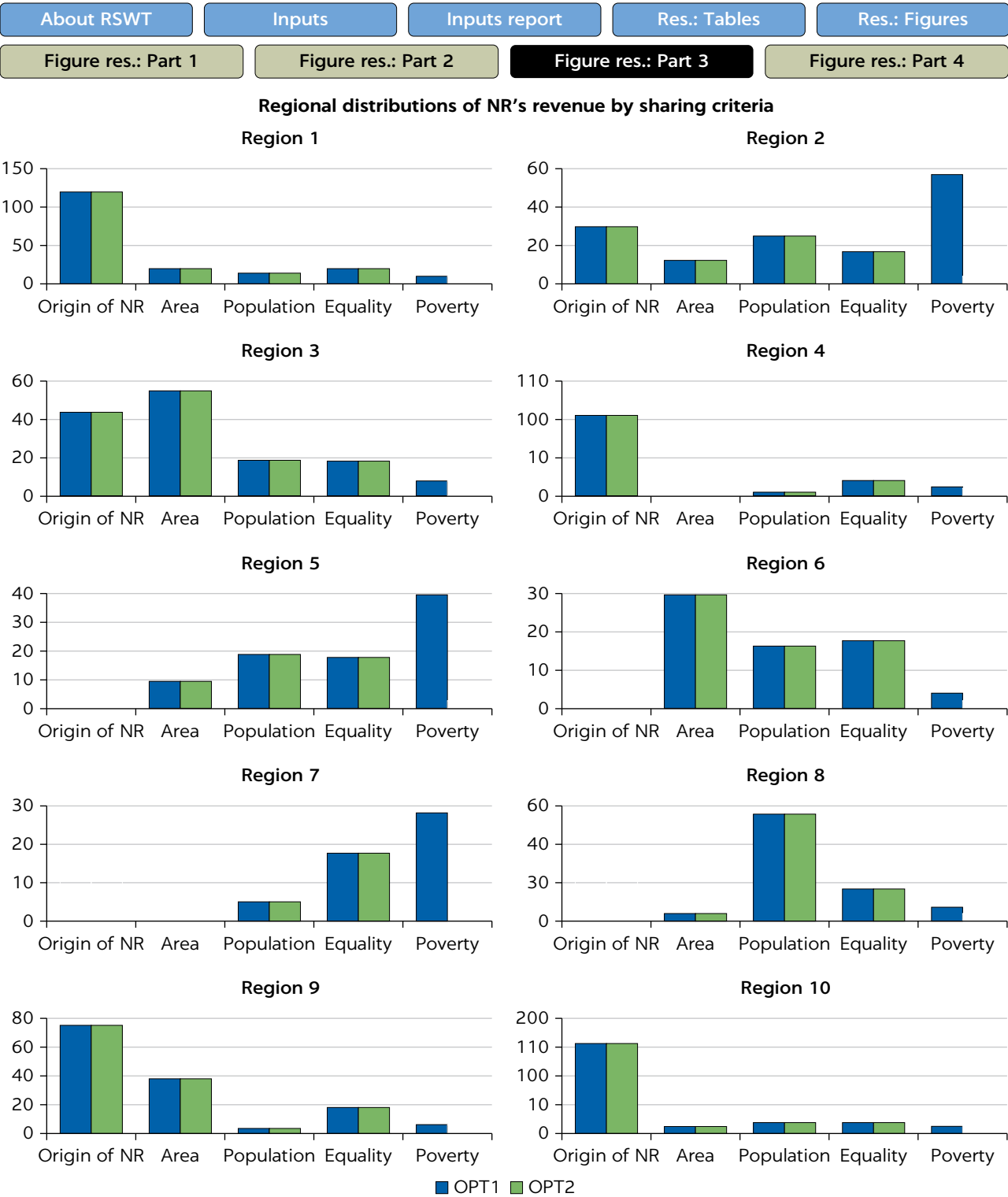
Note: NR = natural resources; RSWT = Revenue-Sharing Web Tool.

FIGURE A.4**Example of simulations: Structure of government revenue allocations**

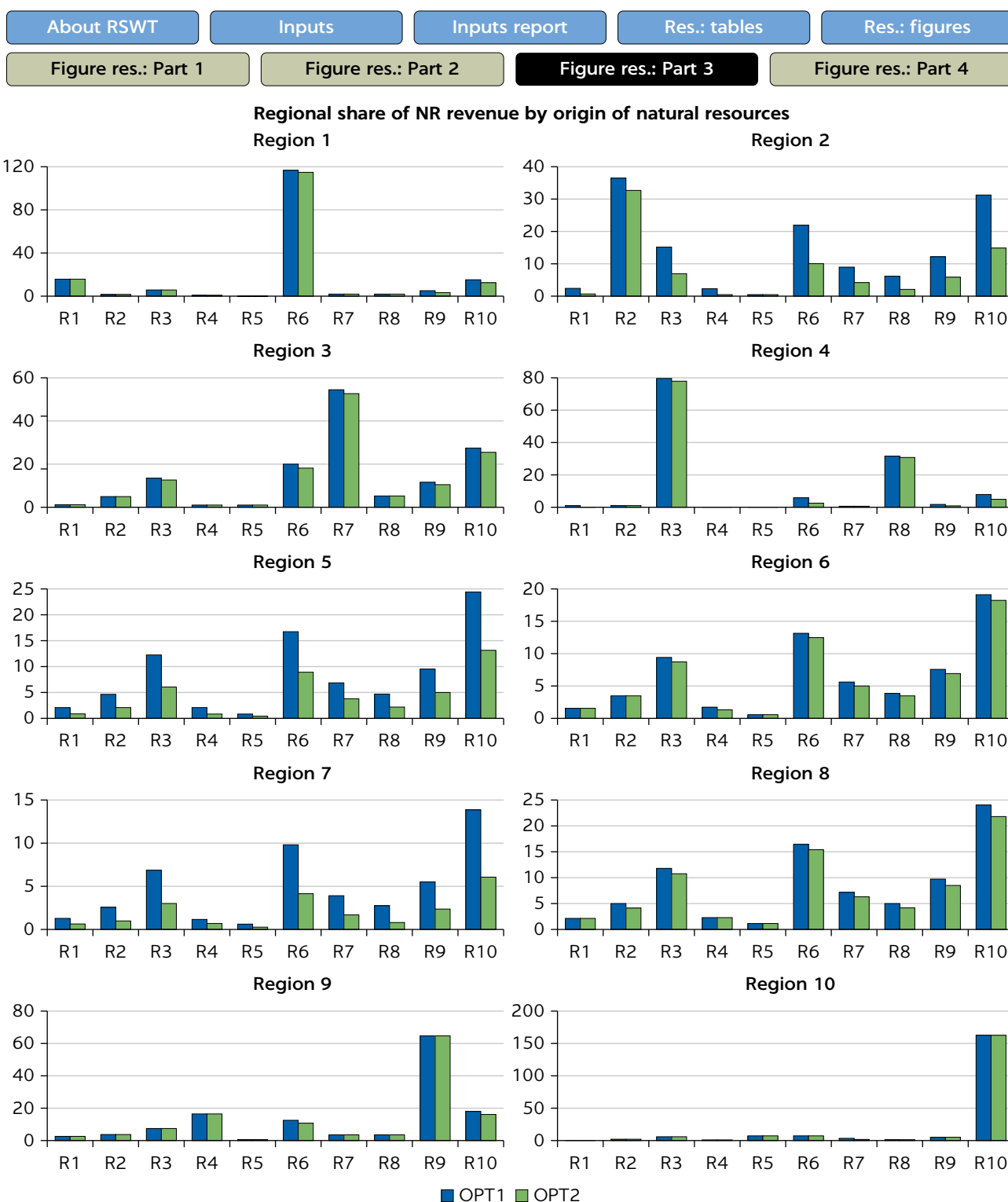
Source: The data employed in this tool is simulated and does not reflect empirical or historical observations; it has been generated exclusively for illustrative and conceptual demonstration purposes.

Note: NR = natural resources; RSWT = Revenue-Sharing Web Tool.

FIGURE A.5
Example of simulations: Regional distribution of revenues by sharing criteria



Source: The data employed in this tool is simulated and does not reflect empirical or historical observations; it has been generated exclusively for illustrative and conceptual demonstration purposes.
Note: NR = natural resources; OPT = option; RSWT = Revenue-Sharing Web Tool.

FIGURE A.6**Example of simulations: Regional share of natural resource revenue by origin of resources**

Source: The data employed in this tool is simulated and does not reflect empirical or historical observations; it has been generated exclusively for illustrative and conceptual demonstration purposes.

Note: NR = natural resources; OPT = option; RSWT = Revenue-Sharing Web Tool.

NOTES

1. JavaScript was chosen because it is widely used in both client-side and server-side development and offers rich libraries, frameworks, and strong community support. Furthermore, its ability to handle asynchronous programming ensures efficient performance.
2. Input information can be saved on the local drive of a personal computer and later be reopened to load all previously inserted inputs.

ECO-AUDIT

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The Middle East and North Africa (MENA) region, rich in hydrocarbons, has experienced both prosperity and challenges due to its vast oil and gas reserves. The region holds more than half of the world's oil reserves and 40 percent of its gas reserves. While these resources have propelled some countries to high-income status and supported regional economic growth through jobs, remittances, and investments, they have also been associated with economic instability and overreliance on a narrow range of commodity exports, as well as resource contests and conflict. *Prosperity Unearthed: Wealth-Sharing Mechanisms for Peace and Equitable Growth in the Middle East and North Africa* delves into the varying development outcomes and wealth-sharing practices in the MENA region and proposes strategies for fostering inclusive prosperity and peace.

The book examines wealth sharing through three lenses: time, space, and fragility and conflict. It assesses how policymakers have managed resource distribution over time (saving versus spending) and across geographical areas (concentrating versus distributing). The findings highlight that deviations from best practices in these dimensions have contributed to the region's unmet development potential, particularly in fragile and conflict-affected areas.

Key recommendations include decoupling fiscal spending from volatile hydrocarbon revenues to ensure macroeconomic stability and long-term sustainability, implementing transparent and accountable governance mechanisms, and adopting rules-based policies for equitable resource distribution. The book emphasizes the importance of inclusive economic policies, robust transparency arrangements, and strong institutions in achieving sustainable development.

By leveraging hydrocarbon resources effectively, MENA countries can build sustainable, inclusive prosperity. The book underscores the need for strong fiscal management, regional cooperation, transparent governance, and inclusive growth strategies to transform resource wealth into improved physical infrastructure, human capital, and economic institutions. These efforts are crucial for fostering peace, stability, and equitable growth in the region.

This book was prepared by a multidisciplinary team from the Prosperity Department of the World Bank's Middle East and North Africa Region. Its findings will be of particular interest to policymakers, as well as researchers and development practitioners.



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ISBN 978-1-4648-2218-6



SKU 212218