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Iraq in Transition: Governance, Politics, Economics, and Petroleum

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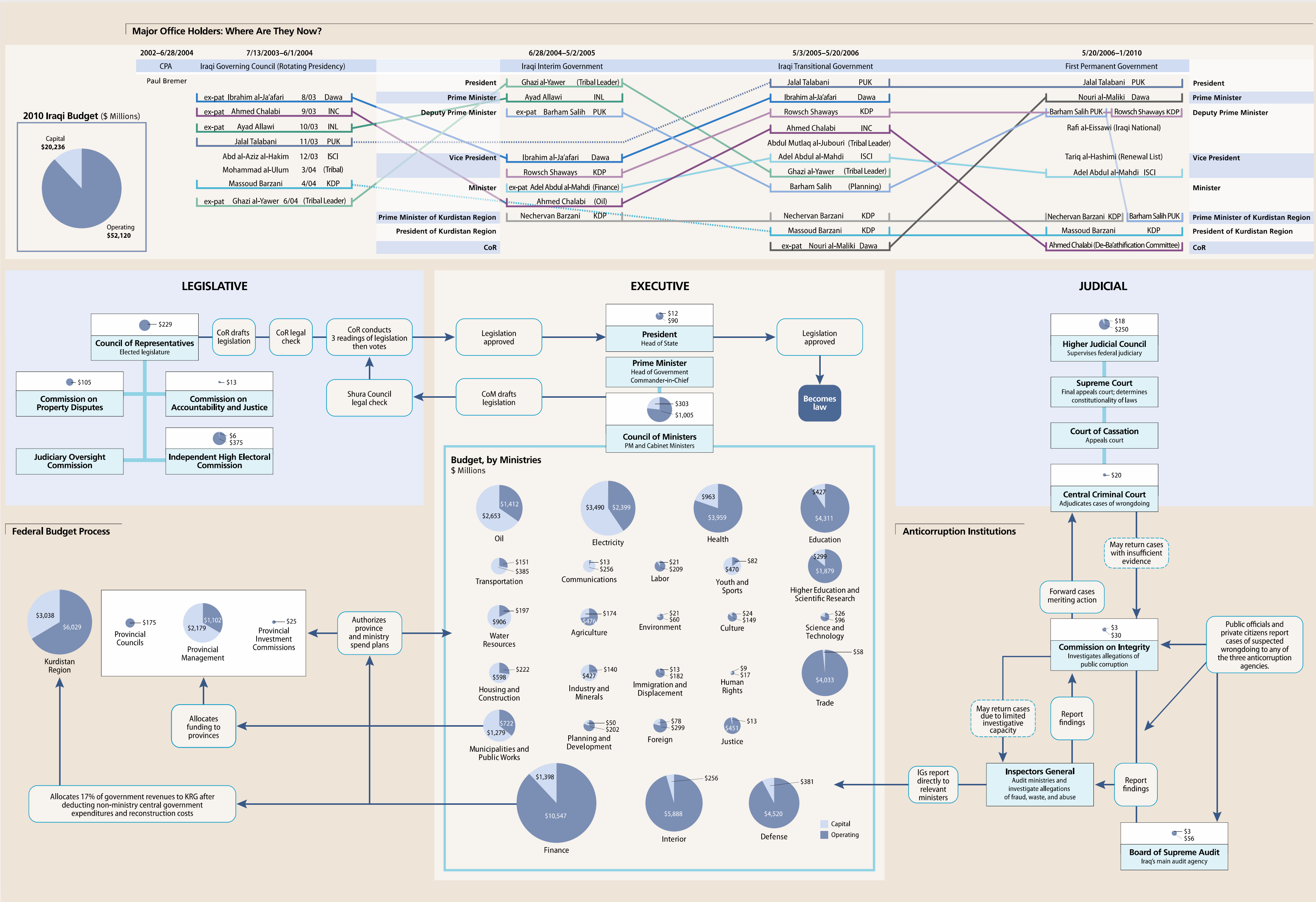
August 2, 2011

Iraqi Governance

Iraqi Governance: 2002-2010



Key Figures in Iraq

Ayad Allawi
Ethnicity/Religion: Arab/Shia Islam
Political Positions: Prime Minister of Iraq (2004–2005)
Party/Coalition: Iraqi National List/Iraqi National Movement (al-Iraqiya)
Note: Secular-leaning politician; former Ba'athist.

Massoud Barzani
Ethnicity/Religion: Kurd/Sunni Islam
Political Positions: President of the Kurdistan Region (2005–present)
Party/Coalition: Kurdish Democratic Party (KDP)/ Kurdistani Coalition
Note: Leader of the KDP; member of a prominent political family.

Ahmed Chalabi
Ethnicity/Religion: Arab/Shia Islam
Political Positions: Interim Oil Minister (2005), Deputy Prime Minister (2005–2006)
Party/Coalition: Iraqi National Congress/Iraqi National Alliance
Note: Early advocate for U.S. military action in Iraq; early favorite of the U.S. Administration.

Tariq al-Hashimi
Ethnicity/Religion: Arab/Sunni Islam
Political Positions: Vice President of Iraq (2006–present)
Party/Coalition: Renewal List/al-Iraqiya
Note: Moderate politician and leader of the Iraqi Islamic Party, which backed the Iraqi National Movement (al-Iraqiya, headed by Prime Minister Ayad Allawi) in the March 2010 elections.

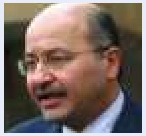
Ibrahim al-Ja'afari
Ethnicity/Religion: Arab/Shia Islam
Political Positions: Vice President of Iraq (2004–2005), Prime Minister of Iraq (2005–2006)
Party/Coalition: Islamic Dawa/Iraqi National Alliance
Note: Sayyid (descendent of prophet Mohammad); succeeded by al-Maliki as leader of the Dawa Party.

Baqir Jabr al-Zubeidi
Ethnicity/Religion: Arab/Shia Islam
Political Positions: Ministry of Interior (2005–2006), Minister of Finance (2006–present)
Party/Coalition: Islamic Supreme Council of Iraq (ISCI)/ Iraqi National Alliance
Note: In March 2010, sought re-election to parliament as a member of the Iraqi National Alliance, which includes ISCI and the Sadrist movement.

Adel Abdul al-Mahdi
Ethnicity/Religion: Arab/Shia Islam
Political Positions: Vice President of Iraq (2005–present)
Party/Coalition: Islamic Supreme Council of Iraq (ISCI)/ Iraqi National Alliance
Note: French-trained economist who was affiliated with Iraqi communists before aligning with Shia cleric Ayatollah Mohammad Bakir al-Hakim; lived in exile for more than 30 years before returning to Iraq in April 2003.

Nouri al-Maliki
Ethnicity/Religion: Arab/Shia Islam
Political Positions: Prime Minister of Iraq (2006–present)
Party/Coalition: Islamic Dawa/ State of Law
Note: Leader of Dawa Party since 2007; signed Saddam Hussein's death warrant in 2006.

Muqtada al-Sadr
Ethnicity/Religion: Arab/Shia Islam
Political Positions: None
Party/Coalition: Sadrist Movement/Iraqi National Alliance
Note: Influential religious figure; son of famous Iraqi cleric Grand Ayatollah Mohammad Sadeq al-Sadr; early critic of U.S. intervention in Iraq. His followers had several violent clashes with Coalition Forces.



Barham Salih
Ethnicity/Religion: Kurd/Sunni Islam
Political Positions: Deputy Prime Minister of Iraq (2004–2005), GOI Minister of Planning (2005), Deputy Prime Minister of Iraq (2006–2009), Prime Minister of Kurdistan Region (2009–Present)
Party/Coalition: Patriotic Union of Kurdistan/Kurdistan List
Note: Leader of the joint KDP/PUK Kurdistan List during July 2009 KRG election.

Grand Ayatollah Ali al-Sistani
Ethnicity/Religion: Shia Islam
Political Positions: None
Party/Coalition: None
Note: Highest-ranking Shia cleric in the world; advocate of restraint during times of violence. His *fatwas* encouraged Iraq's Shia population to participate in the democratic process.

Jalal Talabani
Ethnicity/Religion: Kurd/Sunni Islam
Political Positions: President of Iraq (2005–Present)
Party/Coalition: Patriotic Union of Kurdistan
Note: Founder/leader of the PUK.

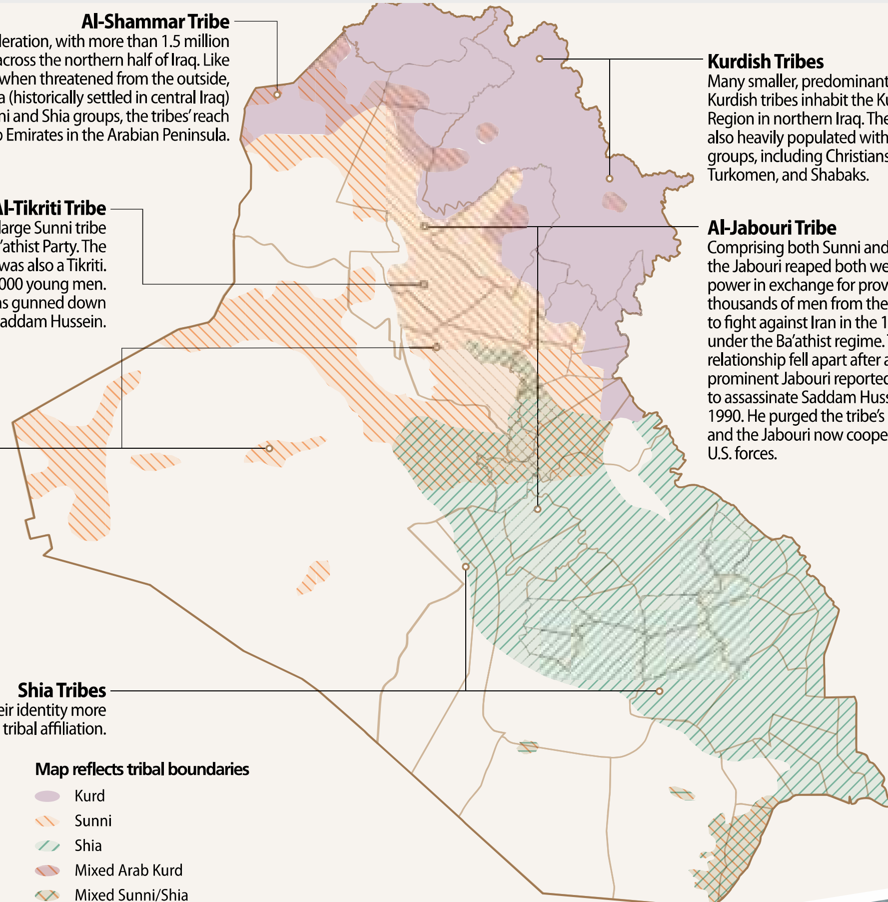
Major Sectarian, Ethnic, and Tribal Groups

Al-Shammar Tribe
The Shammar claim to be Iraq's biggest tribal confederation, with more than 1.5 million people concentrated in the northwest, but spread out across the northern half of Iraq. Like other big confederations, it has tended to be unified only when threatened from the outside, as in wartime. Shammar member tribes include the Toqa (historically settled in central Iraq) and the Jarba (centered in the north). Comprising Sunni and Shia groups, the tribes' reach extends from Yemen to the United Arab Emirates in the Arabian Peninsula.

Al-Tikriti Tribe
Saddam Hussein came from the Nassir branch of this large Sunni tribe located in central Iraq, which formed the core of the Ba'athist Party. The former President of Iraq, General Ahmad Hassan al-Bakr, was also a Tikriti. The Nassir sub-tribe is believed to include more than 350,000 young men. In July 2003, its leader, Abdullah Mahmoud al-Khattab, was gunned down in Tikrit, a few weeks after he publicly disavowed Saddam Hussein.

Al-Dulaimi Tribe
One of the largest Arab tribes, the majority-Sunni Dulaimis formed the nucleus of the insurgency against U.S. forces in Iraq, and many volunteered for suicide missions. Concentrated in Anbar and Samarra, in 2006, they participated in the Iraqi Awakening, or "Sahwa," and worked with Coalition forces against al-Qaeda groups. Many joined the Sons of Iraq.

Shia Tribes
Dozens of Shia tribes inhabit southern Iraq. They derive their identity more from religious affiliations than from tribal affiliation.



Kurdish Tribes
Many smaller, predominantly Sunni Kurdish tribes inhabit the Kurdistan Region in northern Iraq. The region is also heavily populated with minority groups, including Christians, Yazidis, Turkomen, and Shabaks.

Al-Jabouri Tribe
Comprising both Sunni and Shia, the Jabouri reaped both wealth and power in exchange for providing thousands of men from their tribe to fight against Iran in the 1980s under the Ba'athist regime. That relationship fell apart after a group of prominent Jabouri reportedly plotted to assassinate Saddam Hussein in 1990. He purged the tribe's leaders, and the Jabouri now cooperate with U.S. forces.

Sunni and Shia

Iraq's Sunni and Shia have coexisted for centuries, despite ancient religious rifts and Shia resistance to Sunni Ba'athist rule. Intermarriage between the sects is not uncommon. In the predominantly Shia south, however, rebels sought unsuccessfully throughout the 1970s, 1980s, and 1990s to overthrow successive Ba'athist regimes. The Iran-Iraq War (1980–1988) increased the Sunni-controlled government's distrust of Iraq's Shia population, and tens of thousands were expelled to Iran. At the same time, Iraq's Shia fought in the war against Iran. Socially and economically, Sunnis tended to benefit from largesse of the Ba'athist government, while Shia areas were often neglected, creating marked economic and social disparities between the two groups. In 2003, both Shia and Sunni groups joined Iraq's interim governments, and though a majority of Sunnis boycotted the 2005 CoR elections, both groups participated in the 2010 CoR elections.

Kurds

In 1974, a short-lived autonomy agreement between Iraq's Kurdish population and the Iraqi government collapsed, and war broke out, causing thousands of Kurds to flee to neighboring countries. Kurds fought the Iraqi government again in the 1980s—at one point eliciting support from Iran—and in 1988, Saddam Hussein's government dropped poison gas on the Kurdish village of Halabja, killing an estimated 5,000 people. In 1991, Kurds fled again to Iran and Turkey after staging a failed uprising against Saddam Hussein's regime following the Persian Gulf War, but later attained de facto self-rule and held parliamentary elections. Kurdish factions fought each other in a civil war in the mid-1990s, but since 2003, those factions have participated in Iraqi elections as well as separate elections to form the semi-autonomous Kurdistan Regional Government (KRG).

Government of Iraq – I : 4/21/2011

Government of Iraq, as of 4/21/2011

Presidency Council

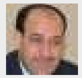
President: Jalal Talabani
Party: PUK

TBD — 1st Vice President: Party: TBD

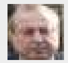
TBD — 2nd Vice President: Party: TBD

TBD — 3rd Vice President: Party: TBD

Prime Minister Office and Cabinet

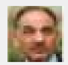


Prime Minister: Nuri al-Maliki
Party: Dawa



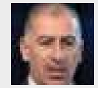
1st Deputy Prime Minister: Rowsch Shaways
Party: KDP

2nd Deputy Prime Minister: Hussein al-Shahristani
Party: Independent

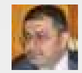


3rd Deputy Prime Minister: Salih al-Mutlaq
Party: Iraqi National Dialogue Front

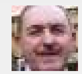
Council of Representatives



Speaker: Osama al-Nujaifi
Party: al-Hadba



1st Deputy: Qusay al-Suhail
Party: Sadrist Trend



2nd Deputy: Arif Tayfor
Party: KDP

National Council for Higher Policies

TBD — NCHP Chairman: Party: TBD

TBD — 1st Deputy: Party: TBD

TBD — 2nd Deputy: Party: TBD

TBD — 3rd Deputy: Party: TBD

Sovereign Ministries

- Minister of Defense: Nuri al-Maliki (acting) — Party: Dawa
- Minister of Interior: Nuri al-Maliki (acting) — Party: Dawa
- Minister of Foreign Affairs: Hoshyar Zebari — Party: KDP
- Minister of Oil: Abdul Kareem al-Luaibi — Party: Independent

Ministries

- Minister of National Security: Nuri al-Maliki (acting) — Party: Dawa
- Minister of Water Resources: Mohaned al-Sa'adi — Party: Iraqi National Dialogue Front, allied with the Sadrist Trend
- Minister of Justice: Hassan al-Shimari — Party: al-Fadhila
- Minister of Housing and Construction: Mohamad al-Daraji — Party: Sadrist Trend
- Minister of Higher Education and Scientific Research: Ali al-Adeib — Party: Dawa
- Minister of Youth and Sport: Jassim Mohamad Jaffar — Party: Islamic Union of Iraqi Turkoman
- Minister of Human Rights: Mohamad al-Sudani — Party: Dawa
- Minister of Electricity: Ra'ad al-Ani — Party: National Movement for Development and Reform
- Minister of Science and Technology: Abdul-Kareem al-Sammaraie — Party: Renewal List
- Minister of Health: Majid Amin Jamil — Party: PUK
- Minister of Displacement and Migration: Dindar Najman al-Doski — Party: Islamic Coalition
- Minister of Trade: Kheir-Allah Babakir — Party: KDP
- Minister of Finance: Rafi al-Eissawi — Party: National Future Gathering
- Minister of Planning: Ali Yousif al-Shukrie — Party: Sadrist Trend
- Minister of Labor: Nasar al-Rubaie — Party: Sadrist Trend
- Minister of Tourism and Antiquities: Liwa Smeisim — Party: Sadrist Trend
- Ministry of Municipalities and Public Works: Adel Radhi — Party: Sadrist Trend
- Minister of Transportation: Hadi al-Amiri — Party: ISCI
- Minister of Industy and Minerals: Ahmed al-Karbouli — Party: Renewal List
- Minister of Agriculture: Izzuldin al-Doula — Party: al-Hadba
- Minister of Education: Mohamad Tamim — Party: Iraqi National Dialogue Front
- Minister of Communication: Mohamad Tawfiq Allawi — Party: Iraqi National Accord
- Minister of Culture: Saadoun al-Dulaimi — Party: Constitution Party, associated with the INA
- Minister of the Environment: Sargon Sliwah — Party: Assryian Democratic Movement

State Ministries

- Minister of State for Women's Affairs: Ibtehal al-Zeiday — Party: Dawa
- Minister of State: Hassan al-Sari — Party: Hezbullah
- Minister of State for Tribal Affairs: Jamal al-Bateekh — Party: White Iraqiya Bloc
- Minister of State for Foreign Affairs: Ali al-Sajri — Party: Constitution
- Minister of State of CoR Affairs: Safa al-Safi — Party: Independent
- Minister of State: Abdul-Mahdi Mutairi — Party: Sadrist
- Minister of State at Large: Yassin Mohamad Ahmed — Party: ISCI
- Minister of State: Bushra Saleh — Party: Independent, associated with al-Fadhila
- Minister of State for Civil Society Affairs: Dakhil Qasem Hasoun — Party: KDP
- Minister of State and Government Spokesman: Ali Dabbagh — Party: Associated with Dawa
- Minister of State of National Reconciliation Affairs: Amer al-Khuza'ie — Party: Dawa
- Minister of State: Abdul Saheb Qahraman Issa — Party: KDP
- Minister of State: Diyah al-Asadi — Party: Sadrist Trend
- Minister of State: Salah al-Jabouri — Party: Iraqi National Dialogue Front
- Minister of State of Provincial Affairs: Turhan Abdullah — Party: Iraqi Turkoman Front

Coalition Affiliation
(at time of appointment)

State of Law	The State of Law Coalition is a Shia-Sunni political bloc led by PM Nuri al-Maliki.
Kurdistani Alliance	The Kurdistani Alliance is a coalition of the two main Kurdish parties: the Patriotic Union of Kurdistan (PUK) and the Kurdistan Democratic Party (KDP).
Al-Iraqiya	Al-Iraqiya is a largely secular, Sunni-dominated bloc led by former PM Ayad Allawi. It won the most seats in the March 2010 CoR elections.
Iraqi National Alliance	The Iraqi National Alliance is a Shia political bloc consisting primarily of the Islamic Supreme Council of Iraq (ISCI) and the Sadrist Trend.
Other/Independent	Includes members of various minor parties, who may from time to time ally themselves with the major blocs.

SIGIR, Quarterly Report, April 2011, p. 69

Government of Iraq – II: 4/21/2011

CoR Committee Chairs

Security & Defense Hassan Hamid Hassan Hadi al-Sineed	Integrity Bahaa Hussein Ali Kamal al-A'rajy	Oil & Energy Adnan Abdul-Mun'em Rashid al-Janaby	Finance
Agriculture, Water, and Marshes Hamed Mousa Ahmad Mousa al-Khudeiry	Legal Khaled Salam Sa'eed Shwani	Accountability & Justice Qays Shather Khamis Hussein	Foreign Relations Humam Baqer Abdul-Majid Hamoody
Labor & Social Affairs Yunadem Yousef Kanna Khoshaba (Rafidain)	Construction & Services Vian Dakhil Sa'eed Khudhur	Martyrs , Victims, and Political Prisoners Mohammad Kadhum Fayrouz al-Hindawi	Tourism & Antiquities Bakker Hama Sid'deeq Aaref Fattah (KIU)
Economic, Investment and Reconstruction Ahmad Suleiman Jamil Muthanna al-Alwani	Education Adel Fahad al-Shershab	Culture, Information, and Tourism and Antiquities Ali Fadhel Hussein Jawad Shilah	Tribes
Higher Education Abed Theyab Jazaa' Jum'aa al-Ajeily	Regions & Governorate Mohamad Kiyani Abdul-Rahman Hussein (Goran)	Religious Endowments and Religious Affairs Ali Hussein Ridha Haydar al-Allak	Women, Family and Children Intesar Ali Khudayer Mahmoud
Health & Environment Leqaa Jaa'far Murtadha Abdul Hussein al-Yasin	Human Rights Salim Abdullah Ahmad al-Juboury (Iraqi Accord Front)	Deportees, Immigrants, and Expatriates	Civil Society Organization Ali Muhsen Aasi Had'dal
		Youth & Sports Sa'eed Rasoul Hussein Rasoul Khoshnaw	Members Affairs & Parliamentary Development

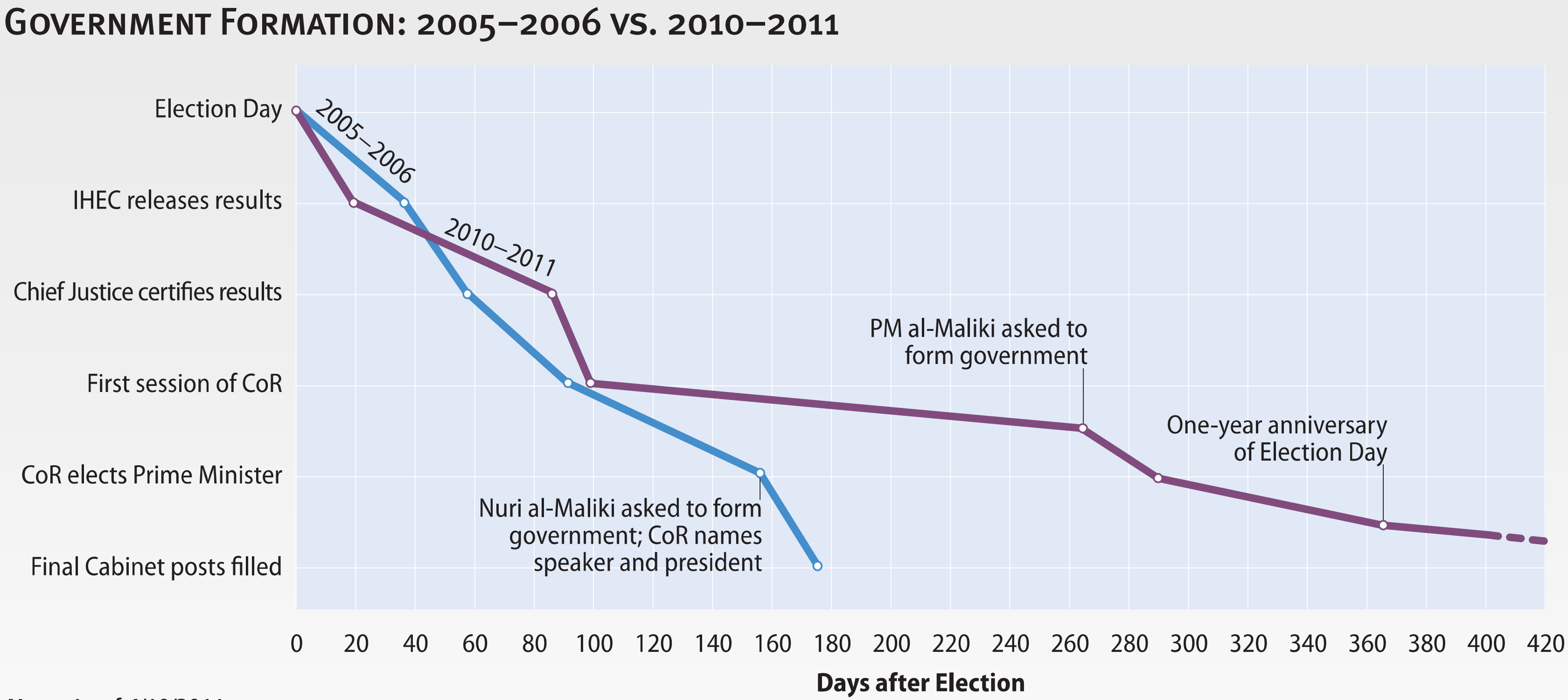
Coalition Affiliation
(at time of appointment)

National Alliance	The National Alliance comprises Prime Minister al-Maliki's State of Law bloc and the Iraqi National Alliance (ISCI and the Sadrist movement).
Kurdistani Alliance	The Kurdistani Alliance is a coalition of the two main Kurdish parties: the Patriotic Union of Kurdistan and the Kurdistan Democratic Party.
Al-Iraqiya	Al-Iraqiya is a largely secular, Sunni-dominated bloc led by former PM Ayad Allawi.
Other/Independent	Includes Goran, the Iraqi Accord Front, the Kurdistan Islamic Union (KIU), and Rafidain
N/A	Position not filled as of 4/20/2011

Sources: GOI, CoR, www.Parliament.iq/dirrasd/2010/sort.pdf; GOI, CoR, information provided to SIGIR, 4/11/2011.

SIGIR, Quarterly Report, April 2011, p. 70

Waiting for Godot: Iraqi Elections



Note: As of 4/10/2011.

Source: SIGIR analysis of GOI and U.S. government documents and open-source information in English and Arabic.

the GOI continued to take shape as more members of Iraq's Council of Ministers (CoM) were named and the Council of Representatives (CoR) passed its first laws of the session. But as of April 21, 2011, 3 positions in the 42-person cabinet remained in the hands of caretaker "acting" ministers, including the crucial security portfolios of Defense and Interior, which are now held on a temporary basis by Prime Minister al-Maliki.

The posts awaiting permanent occupants are:

- Minister of Defense
- Minister of Interior
- Minister for National Security

Until these ministerial positions are filled, it would be premature to declare an end to the gov ernment formation process.334 Figure 4.1 compares the aftermath of the 2005 national elections with that of the 2010 elections.

Stability by Province: 4/21/2011

Stability Development Roadmap, 1/2011–3/2011

Province	Basic Services	Government Effectiveness	Political Effectiveness	Economic Development	Rule of Law
Anbar	Very Unstable	Unstable	Unstable	Unstable	Moderately Stable
Babylon	Very Unstable	Unstable	Moderately Stable	Unstable	Unstable
Baghdad	Very Unstable	Unstable	Unstable	Unstable	Unstable
Basrah	Very Unstable	Unstable	Moderately Stable	Unstable	Unstable
Diyala	Very Unstable	Unstable	Moderately Stable	Moderately Stable	Moderately Stable
Kerbala	Very Unstable	Unstable	Moderately Stable	Moderately Stable	Unstable
Kurdistan Region	Unstable	Unstable	Unstable	Moderately Stable	Moderately Stable
Missan	Very Unstable	Unstable	Moderately Stable	Very Unstable	Unstable
Muthanna	Unstable	Unstable	Unstable	Unstable	Unstable
Najaf	Very Unstable	Unstable	Moderately Stable	Unstable	Moderately Stable
Ninewa	Very Unstable	Unstable	Unstable	Unstable	Very Unstable
Qadissiya	Very Unstable	Moderately Stable	Unstable	Very Unstable	Moderately Stable
Salah Al-Din	Very Unstable	Unstable	Unstable	Unstable	Unstable
Tameem	Very Unstable	Unstable	Unstable	Unstable	Moderately Stable
Thi-Qar	Very Unstable	Unstable	Moderately Stable	Unstable	Moderately Stable
Wassit	Very Unstable	Unstable	Unstable	Unstable	Unstable

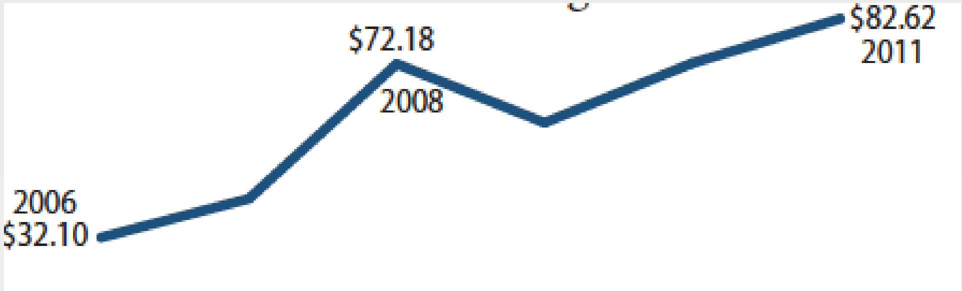
Very Unstable · Unstable · Moderately Stable · Stable · Very Stable

Note: Polling for the SDR this quarter occurred in January 2011, prior to the outbreak of unrest that swept through the Middle East.

Source: U.S. Embassy-Baghdad, response to SIGIR data call, 4/1/2011.

SIGIR, Quarterly Report, April 2011, p. 76

Rising Iraqi Budgets: 2006-2011



- On February 20, 2011, the CoR approved the 2011 GOI budget.
- This $82.6 billion budget appropriates $56.9 billion for GOI operating costs and $25.7 billion
- for capital expenditures.
- It estimates annual
- revenues at $69.2 billion, resulting in a projected
- deficit of $13.4 billion.
- The 2011 budget represents a 157% increase over the GOI's 2006 budget and a 14% increase over the 2008 budget

The budget projects $69.18 billion in revenue, based mostly on an estimated oil price of $76.50 per barrel and an estimated export rate of 2.20 million barrels per day (MBPD).

This is an increase of $14.00 (22%) per barrel in price and 0.10 MBPD (5%) in export volume over the estimates used to project the 2010 GOI budget. This differs slightly from the budget approved by the Council of Ministers—which was subsequently reviewed and amended by the CoR—on which SIGIR reported last quarter.

The budget projects $82.62 billion in expenditures, leaving a projected deficit of $13.44 billion.

According to the budget, this deficit will be covered by unspent 2010 budget allocations and from internal and external borrowing. Accordingly, the budget authorizes the Minister of Finance to borrow $4.5 billion from the International Monetary Fund (IMF), $2.0 billion from the World Bank, $1.8 billion in Special Drawing Rights (SDR) from the IMF, and an undefined amount of domestic
treasury transfers. In addition, the budget notes that a $500 million loan from the "British Oil Company" will also be used to help cover the defi cit.152

The GOI's final budget broadly categorizes expenditures as those related to operations ($56.92 billion) and capital investment ($25.70 billion).153 As of April 23, 2011, CoR-approved budget allocations to the ministries were not yet available.

During the first three months of 2011, the GOI received $16.31 billion in oil receipts, 32% more than the $12.32 billion during the first three months of 2010, and 6% more than the $15.36 billion projected in the 2011 GOI budget.1Over the course of 2011, Iraq has received an average of $91.94 per barrel of oil exported,155 well above the price of $76.50 per barrel used to project Iraqi oil revenues for 2011

SIGIR, Quarterly Report, April 2011, p. 3

Corruption in Iraq

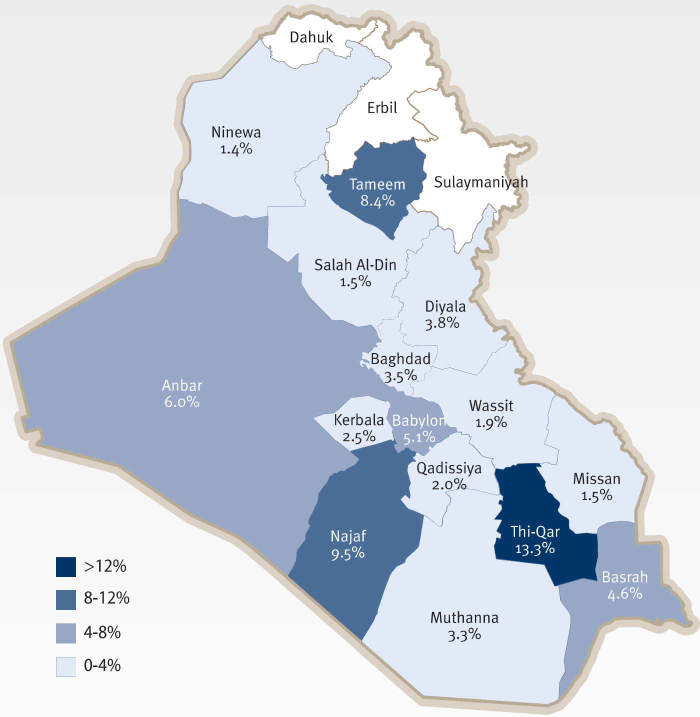
This quarter, the CoR's Integrity Committee, which has grown increasingly assertive, announced that it had forwarded for action to the appropriate agency about 9,000 documents relating to financial corruption cases. According to the chairman of the committee, these files, which include documents from 2003 to 2011, contained evidence of corruption in matters involving the MOI's purchase of non-functional bomb detectors, the ongoing rebuilding effort in Sadr City, and the purchase of civilian aircraft from foreign companies. New Focus on Most

In early March, the new Chairman of the CoR's Integrity Committee announced that he is priori- tizing investigations that target subjects at the four ministries that the committee considers to be most corrupt: Health, Trade, Defense, and Youth and Sports. Although the committee has the ability to summon ministers to provide testimony, it lacks the authority to arrest suspects and prosecute cases.

In early February, the COI announced that it had opened more than 17,000 cases in 2010, referring 2,322 cases valued at approximately $1.3 billion to Iraq's investigative judges (IJs) for adjudication. Of the 2,844 suspects named in these cases, 197 held the rank of Director General or above. The minis- tries whose employees had the greatest number of warrants issued for their arrest were the Ministry of Defense (13.4% of all warrants obtained by COI in 2010), the MOI (7.3%), and the Ministry of Municipalities and Public Works (6.2%).466

In February 2011, the COI released the latest results in its ongoing attempt to measure the prevalence of bribery in Iraq's public sector. The COI distributed survey forms to GOI employees in 379 offices in 15 of Iraq's provinces (exclud- ing Dahuk, Erbil, and Sulaymaniyah). According to the survey, the Ministry of Oil, MOJ, and the Baghdad municipal government offices reported the highest bribery rates in February 2011.

Bribery Rates as Measured by the COI, 2/2011



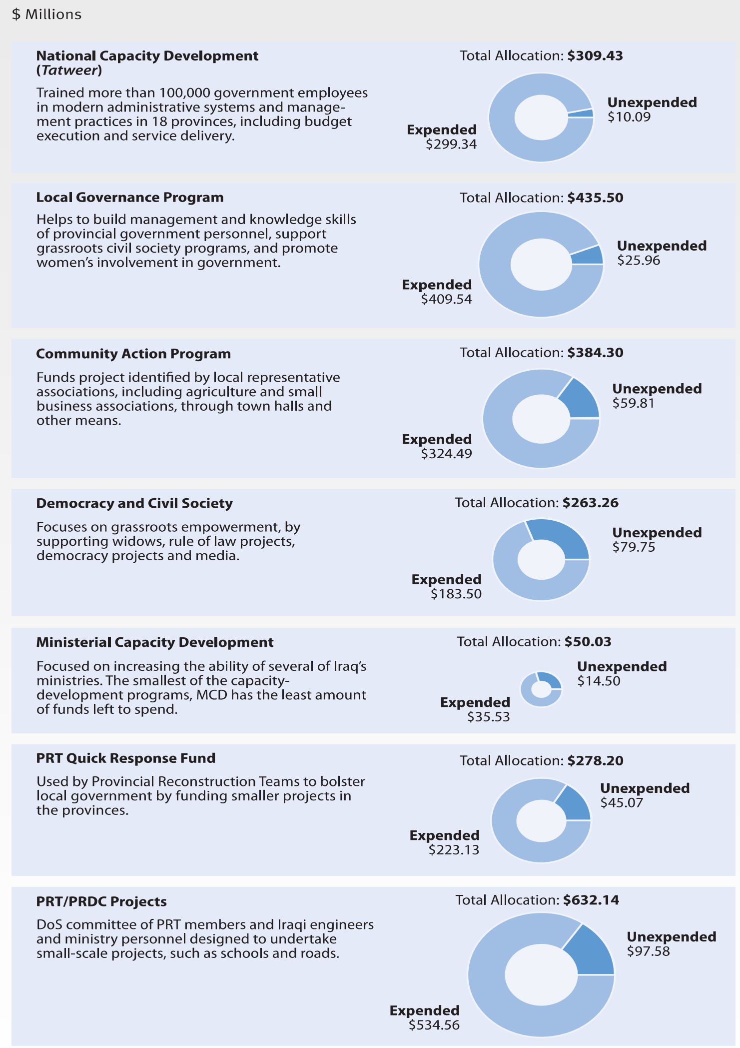
Note: Data not available for the Dahuk, Erbil, and Sulaymaniyah provinces.

Source: COI, *National Bribery Survey*, 2/2011.

Government Capacity Development Programs

As of March 30, 2011, the United States had obligated $5.56 billion and expended $5.14 billion in support of these programs, mainly through the Economic Support Fund (ESF).

The three USAID-funded programs are scheduled for completion by September 2012, while some DoS-funded projects will continue through December 2013.



Sources: USAID, response to SIGIR data call, 4/4/2011; U.S. Embassy-Baghdad, response to SIGIR data call, 4/1/2011; DoS, DRL, response to SIGIR data call, 3/31/2011; NEA-I, responses to SIGIR data call, 3/25/2011, 3/28/2011, 4/5/2011, and 4/12/2011; USACE, response to SIGIR data call, 4/5/2011.

SIGIR, Quarterly Report, April 2011, p. 98, 100, 102

Selected Iraqi Political Protests: 2/2011-4/2011

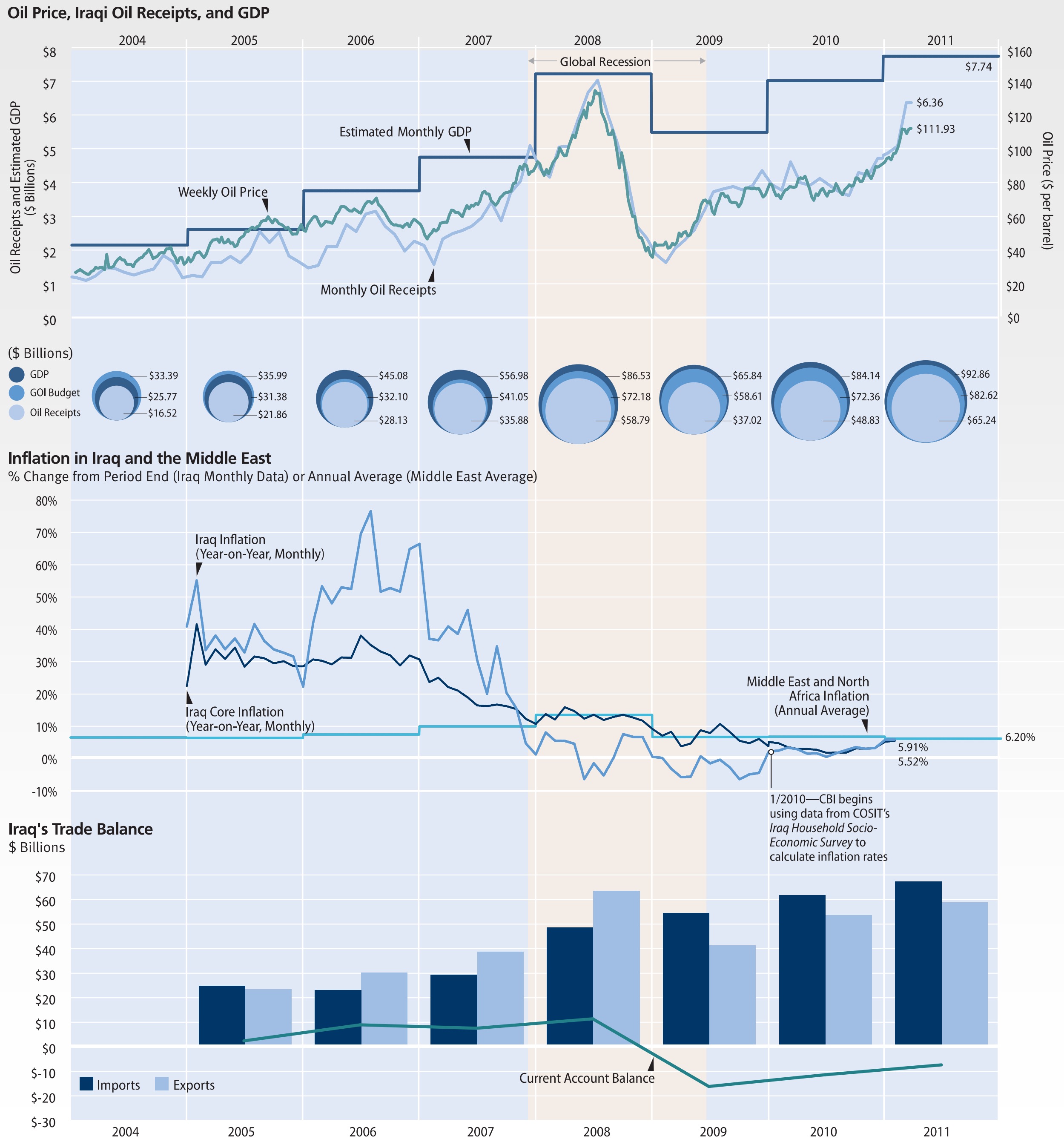
Note: The graphic above is not meant to be a comprehensive tally of all demonstrations that occurred this quarter.

Source: SIGIR analysis of GOI and U.S. government documents and open-source information in Arabic and English.

SIGIR, Quarterly Report, April 2011, p. 5

Iraqi Economy

Iraqi Economy: 2004-2011

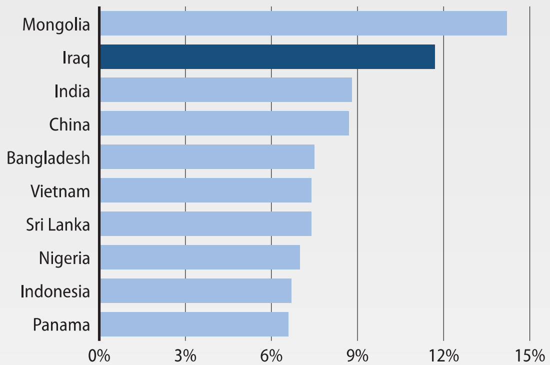


Note: Data not audited. Numbers affected by rounding. Daily oil price represented by Weekly Iraq Kirkuk netback price at U.S. Gulf. All dollar values are in current prices. GDP figures from 2009–2011 and oil receipts for 2011 are estimates.

SIGIR, Quarterly Report, April 2011, p. 99

Iraq's Economic Ranking

Top 10 Countries by Annual Projected Year-on-Year GDP Growth, 2010–2015



Note: GDP adjusted for purchasing power parity (PPP) as of 2010.

Source: Citigroup Global Markets, *Global Growth Generators*, 2/21/2011, p. 41.

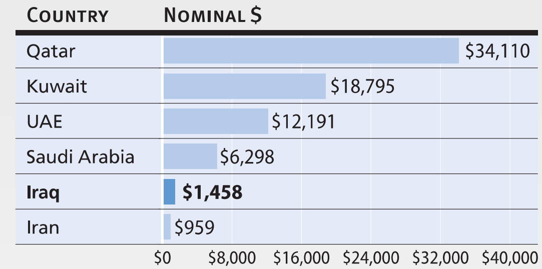
Ease of Doing Business Ranking, Selected Middle East Countries

Country	Rank
Saudi Arabia	11
Bahrain	28
UAE	40
Qatar	50
Kuwait	74
Egypt	94
Jordan	111
Lebanon	113
Iran	129
Syria	144
Iraq	166

Note: Ranking among 183 countries.

Source: The World Bank and International Finance Corporation, *Ease of Doing Business Index*, www.doingbusiness.org/rankings, accessed 3/16/2011.

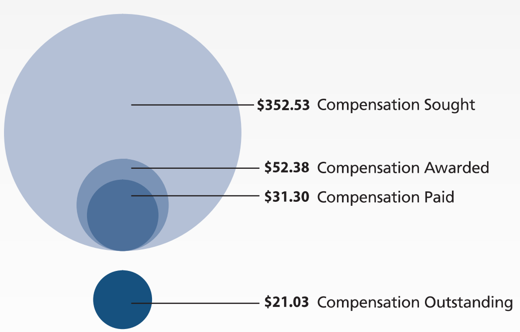
2010 Net Oil Export Revenues per Capita, Selected Middle East Countries



Source: EIA, "OPEC Revenues Fact Sheet Energy Data, Statistics and Analysis," www.eia.doe.gov/cabs/OPEC_Revenues/Factsheet.html, accessed 4/7/2011.

Status of Processing and Payment of International Claims against Iraq

$ Billions



Note: Total "Compensation Awarded" includes corrections to awards pursuant to article 41 of the provisional rules for claims procedure. Total "Compensation Paid" represents amounts made available and paid to the claimant governments and submitting entities but are net of all paid but undistributed funds returned to the United Nations Compensation Commission (UNCC). Total "Compensation Outstanding" does not include a net amount of $48.9 million, which is no longer payable to the claimant governments and other submitting entities—mainly because the claimants were not located by the deadline of September 30, 2006, set by the Governing Council for the location of claimants and the submission of requests for the payments.

Source: UNCC, "Status of Processing and Payment of Claims," 1/27/2011, www.uncc.ch/status.htm, accessed 3/24/2011.

Selected Economic Comparisons, Iraq vs. United States

	Iraq	United States
Per capita income, per month	$150	$3,200
Police salary, per month	$360	$3,800
Teacher salary, per month	$700	$2,450–$3,900
Elected leader salary, per month (Iraq—Member of Parliament; U.S.—Member of Congress; leadership positions command higher salaries)	$8,450	$14,500–$18,625
Household income, per month	$815	$5,150
Percentage of household expenditures spent on housing (including utilities, fuel, furnishings, and supplies)	35%	34%
Percentage of household expenditures spent on food	36%	13%
Hours of power, daily	8	24
Price of 1 gallon of gas	$0.16	$2.82
Price of 1 pound of rice	$0.42–$0.55	$0.42–$0.64
Price per kWh of electricity from grid	$0.001	$0.12

SIGIR, Quarterly Report, April 2011, p. 98, 100, 102, and other reporting as of April 2010.

Iraq's International Ranking in 2010

Macro Indicators: Iraq vs. Selected Countries

GDP ($ Billions)	
$14,260.00	UNITED STATES
$876.00	IRAN
$581.30	SAUDI ARABIA
$448.10	PAKISTAN
$148.70	KUWAIT
$112.00	**IRAQ**
$102.50	SYRIA
$33.06	JORDAN
$23.35	AFGHANISTAN
$0.33	ZIMBABWE

External Debt (as a % of GDP)	
5,228.1%	LUXEMBOURG
94.3%	UNITED STATES
44.9%	**IRAQ**
21.9%	KUWAIT
20.3%	JORDAN
12.5%	SAUDI ARABIA
11.6%	PAKISTAN
11.6%	AFGHANISTAN
7.4%	SYRIA
2.1%	IRAN
0.0%	BRUNEI

Military Spending (as a % of GDP)	
11.4%	OMAN
10.0%	SAUDI ARABIA
8.6%	**IRAQ**
8.6%	JORDAN
5.9%	SYRIA
5.3%	KUWAIT
4.1%	UNITED STATES
3.0%	PAKISTAN
2.5%	IRAN
1.9%	AFGHANISTAN
0.0%	ICELAND

Adult Literacy Rate (% aged 15 and above)	
99.7%	SLOVENIA
99.0%	UNITED STATES
94.5%	KUWAIT
91.1%	JORDAN
85.0%	SAUDI ARABIA
83.1%	SYRIA
82.3%	IRAN
74.1%	**IRAQ**
54.2%	PAKISTAN
28.0%	AFGHANISTAN
26.2%	MALI

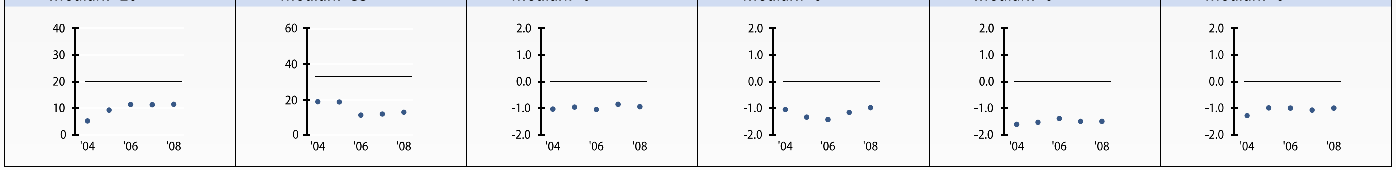
Infant Mortality (per 1,000 live births)	
2.3	SINGAPORE
6.2	UNITED STATES
9.0	KUWAIT
11.6	SAUDI ARABIA
16.7	SYRIA
17.4	JORDAN
35.8	IRAN
44.7	**IRAQ**
67.4	PAKISTAN
153.1	AFGHANISTAN
180.2	ANGOLA

Population Growth Rate	
3.7%	UAE
3.5%	KUWAIT
2.6%	AFGHANISTAN
2.5%	**IRAQ**
2.2%	JORDAN
2.0%	SYRIA
1.8%	SAUDI ARABIA
1.6%	PAKISTAN
1.0%	UNITED STATES
0.9%	IRAN
-0.8%	BULGARIA

Millennium Challenge Corporation Scorecard

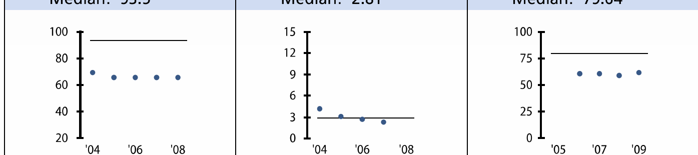
Ruling Justly

Political Rights (Freedom House)	Civil Liberties (Freedom House)	Control of Corruption (World Bank Institute)	Government Effectiveness (World Bank Institute)	Rule of Law (World Bank Institute)	Voice and Accountability (World Bank Institute)
Iraq: 11 (24%)	Iraq: 13 (6%)	Iraq: -0.94 (0%)	Iraq: -0.99 (0%)	Iraq: -1.51 (0%)	Iraq: -1.00 (15%)
Median: 20	Median: 33	Median: 0	Median: 0	Median: 0	Median: 0



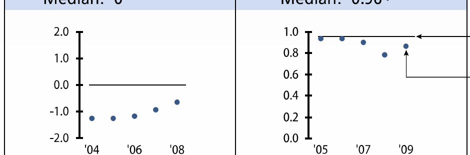
Investing in People

Immunization Rates (World Health Org)	Health Expenditures (World Health Org)	Natural Resource Management (CIESIN/YCELP)
Iraq: 65.5 (3%)	Iraq: 2.32 (41%)	Iraq: 61.89 (23%)
Median: 93.5	Median: 2.81	Median: 79.64



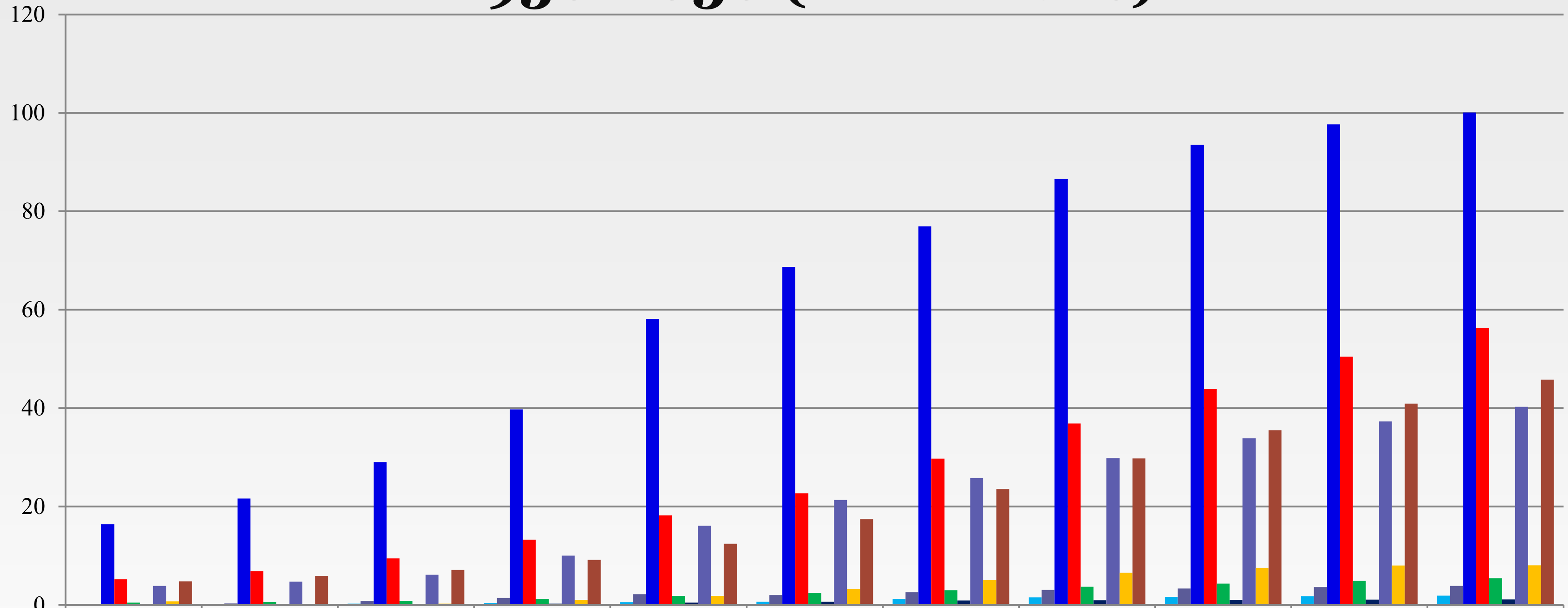
Economic Freedom

Regulatory Quality (World Bank Institute)	Business Start-up (IFC)
Iraq: -0.66 (24%)	Iraq: 0.869 (6%)
Median: 0	Median: 0.96



Iraq's score
Percentile ranking within income group
Median score for income group
Current year's median score
Iraq's score

Iraqi & Gulf Massive Demographic Pressure : 1950-2050 (In Millions)



	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
Bahrain	0.115	0.157	0.22	0.348	0.506	0.655	1.18	1.505	1.639	1.758	1.847
Kuwait	0.145	0.292	0.748	1.37	2.131	1.972	2.543	2.994	3.331	3.623	3.863
Iran	16.367	21.6	28.994	39.709	58.1	68.632	76.923	86.543	93.458	97.685	100.045
Iraq	5.163	6.822	9.414	13.233	18.14	22.679	29.672	36.889	43.831	50.459	56.316
Oman	0.489	0.601	0.783	1.185	1.794	2.432	2.968	3.635	4.305	4.879	5.402
Qatar	0.025	0.046	0.115	0.237	0.446	0.627	0.841	0.905	0.971	1.04	1.116
Saudi Arabia	3.86	4.718	6.109	10.022	16.061	21.312	25.732	29.819	33.825	37.25	40.251
UAE	0.715	0.103	0.249	1	1.826	3.219	4.976	6.495	7.484	7.948	8.019
Yemen	4.777	5.872	7.098	9.133	12.416	17.407	23.495	29.727	35.473	40.901	45.781

ce: U.S. Census Bureau: *International Database*, *http://www.census.gov/ipc/www/idb/informationGateway.php*, accessed 21/4/2011.

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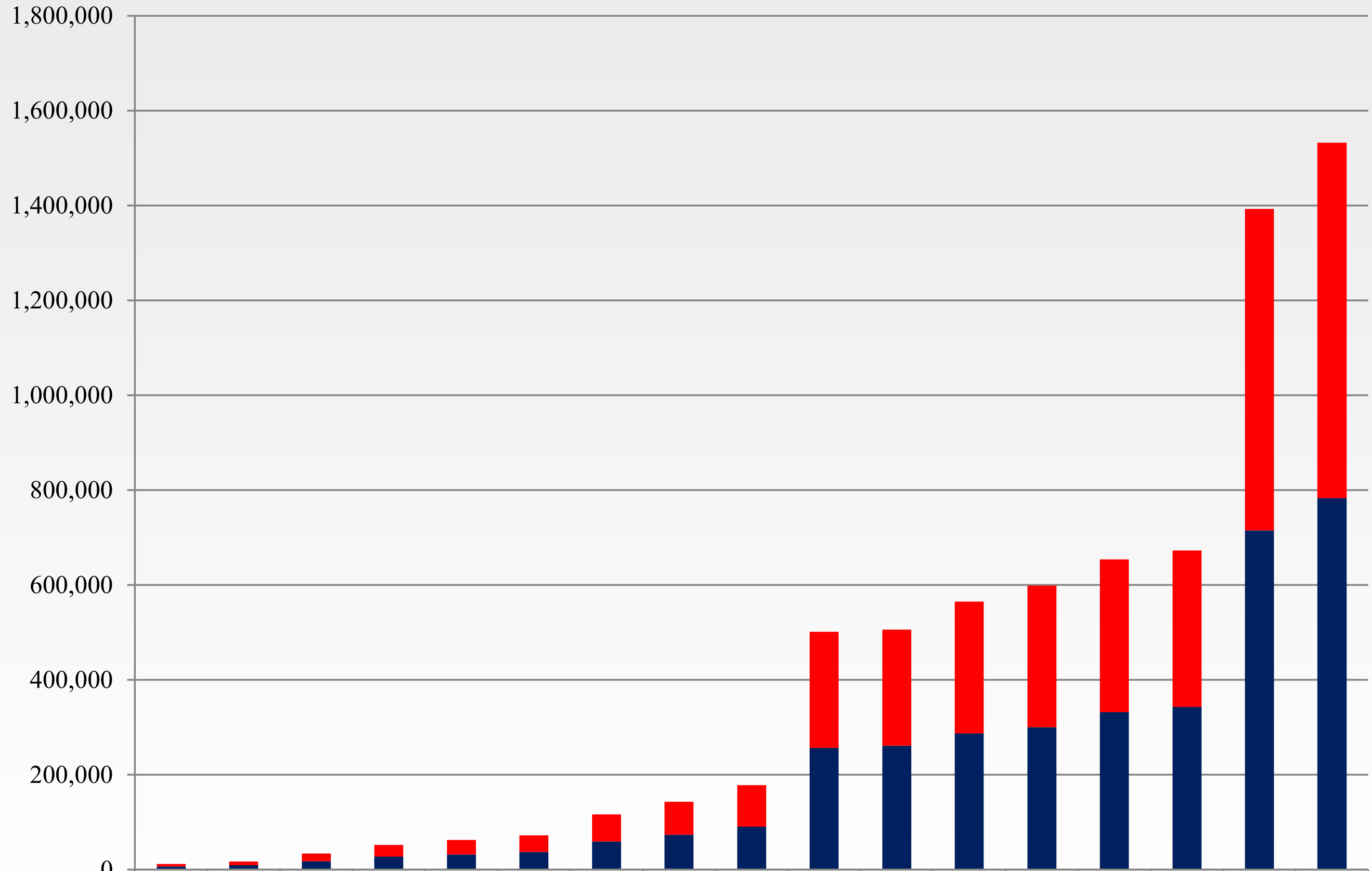
Iraq's Youth Buldge: Young Persons Entering Labor Force Each Year



	Qatar	Bahrain	Kuwait	UAE	Oman	Lebanon	Libya	Jordan	Tunisia	Syria	Saudi Arabia	Yemen	Morocco	Iraq	Algeria	Iran	Egypt
Women Entering Labor Force Annually	5,162	8,117	16,232	24,419	30,264	35,121	57,070	69,420	87,346	244,712	244,763	277,612	298,366	322,010	330,098	677,372	748,647
Men Entering Labor Force Annually	6,429	8,988	17,653	27,439	31,959	36,856	59,547	73,574	90,436	256,698	261,105	287,141	300,327	332,194	342,895	715,111	783,405
New Women as a % of the Total Existing Labor Force	0.41%	1.33%	0.75%	0.62%	3.12%	1.42%	3.30%	4.04%	2.28%	4.43%	3.34%	4.06%	2.57%	3.79%	3.34%	2.64%	2.87%
New Men as a % of the Total Existing Labor Force	0.51%	1.47%	0.82%	0.70%	3.30%	1.49%	3.44%	4.28%	2.36%	4.64%	3.56%	4.20%	2.58%	3.91%	3.47%	2.78%	3.00%

Source: CIA World Factbook, 2011

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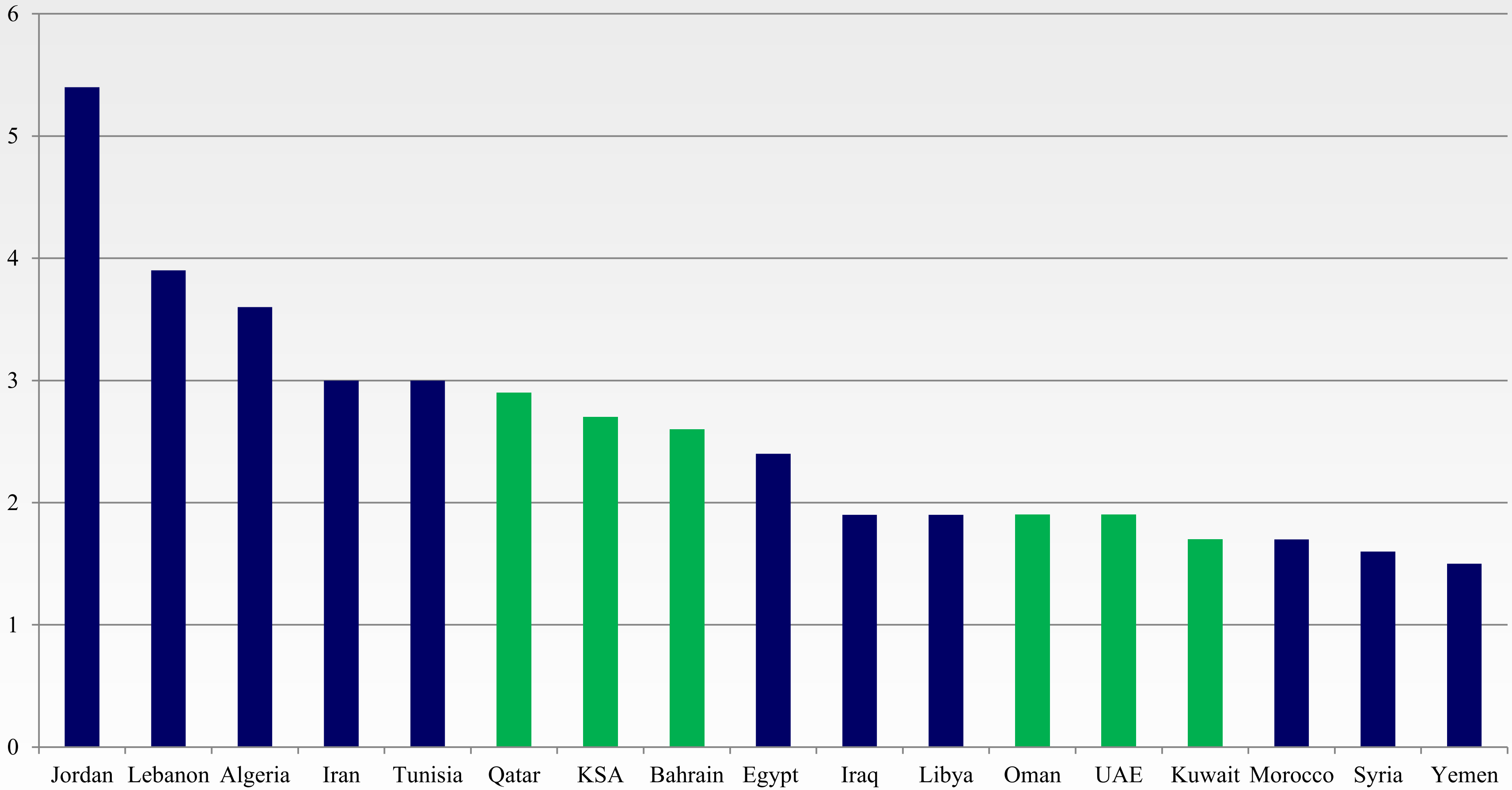
Health Expenditure (% of GDP)



Source: UNDP Human Development Report 2010

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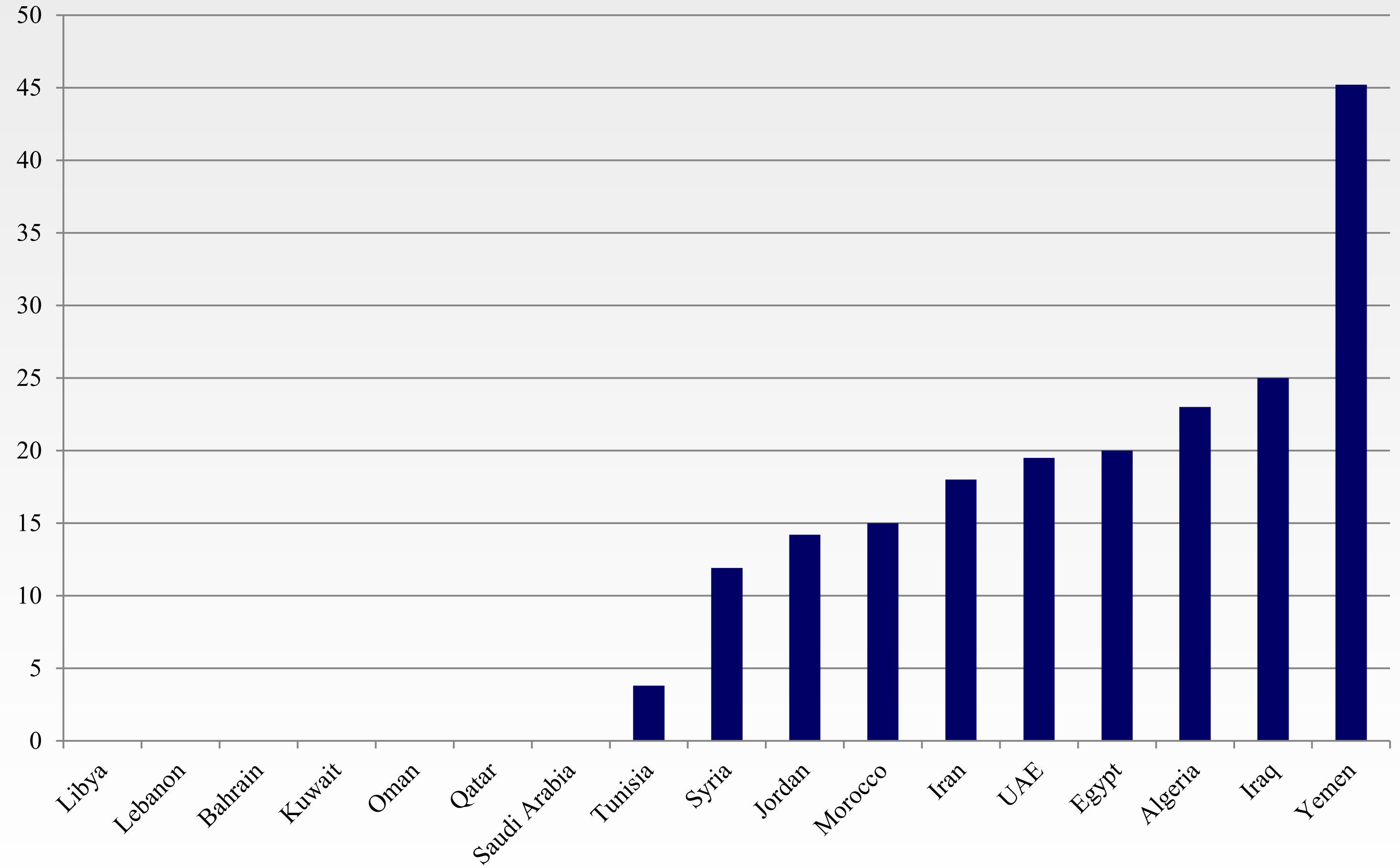
Population Below Poverty Line

(In Percent)



Source: CIA, World Factbook, 2011
Note: Not all poverty figures are available.

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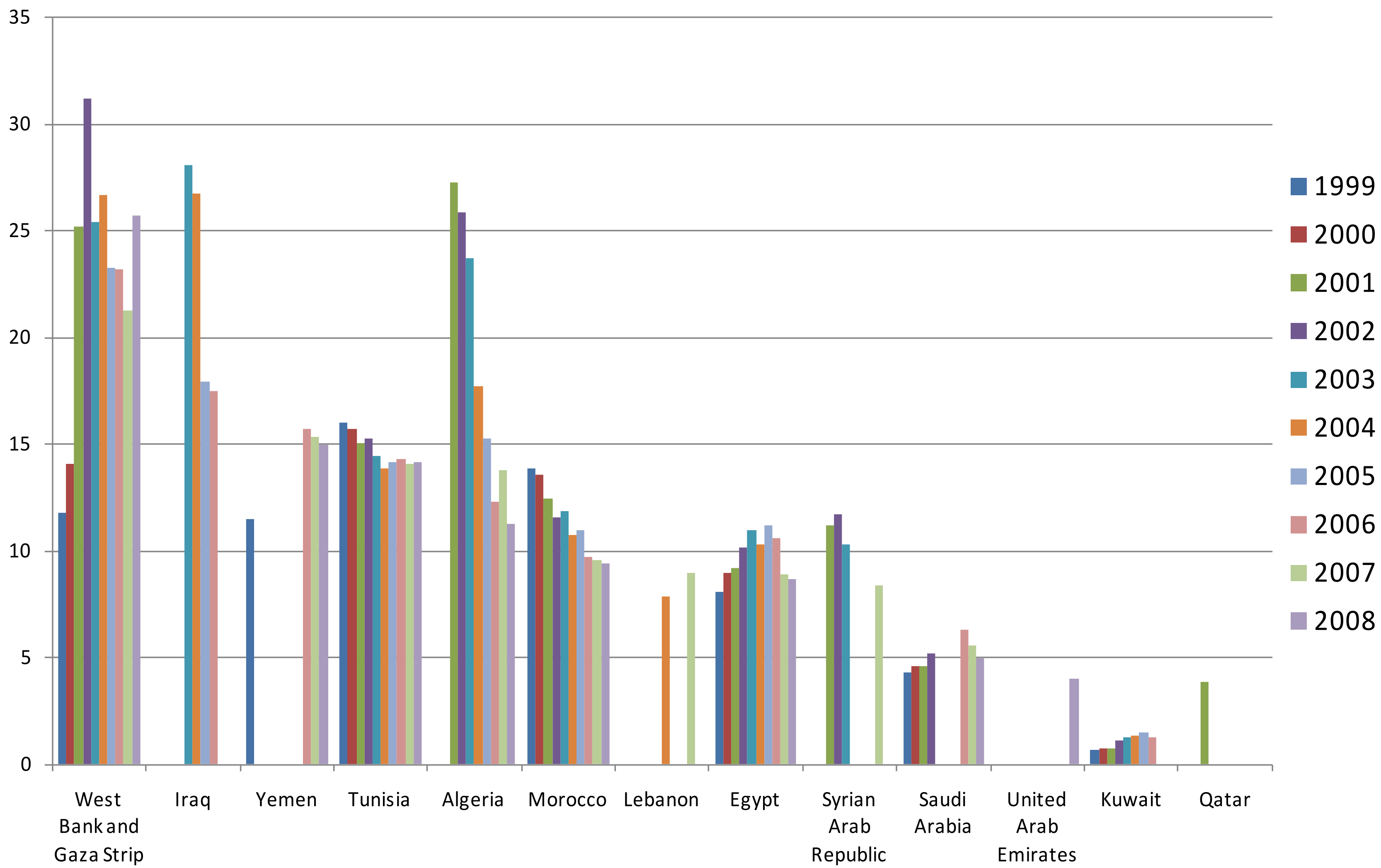
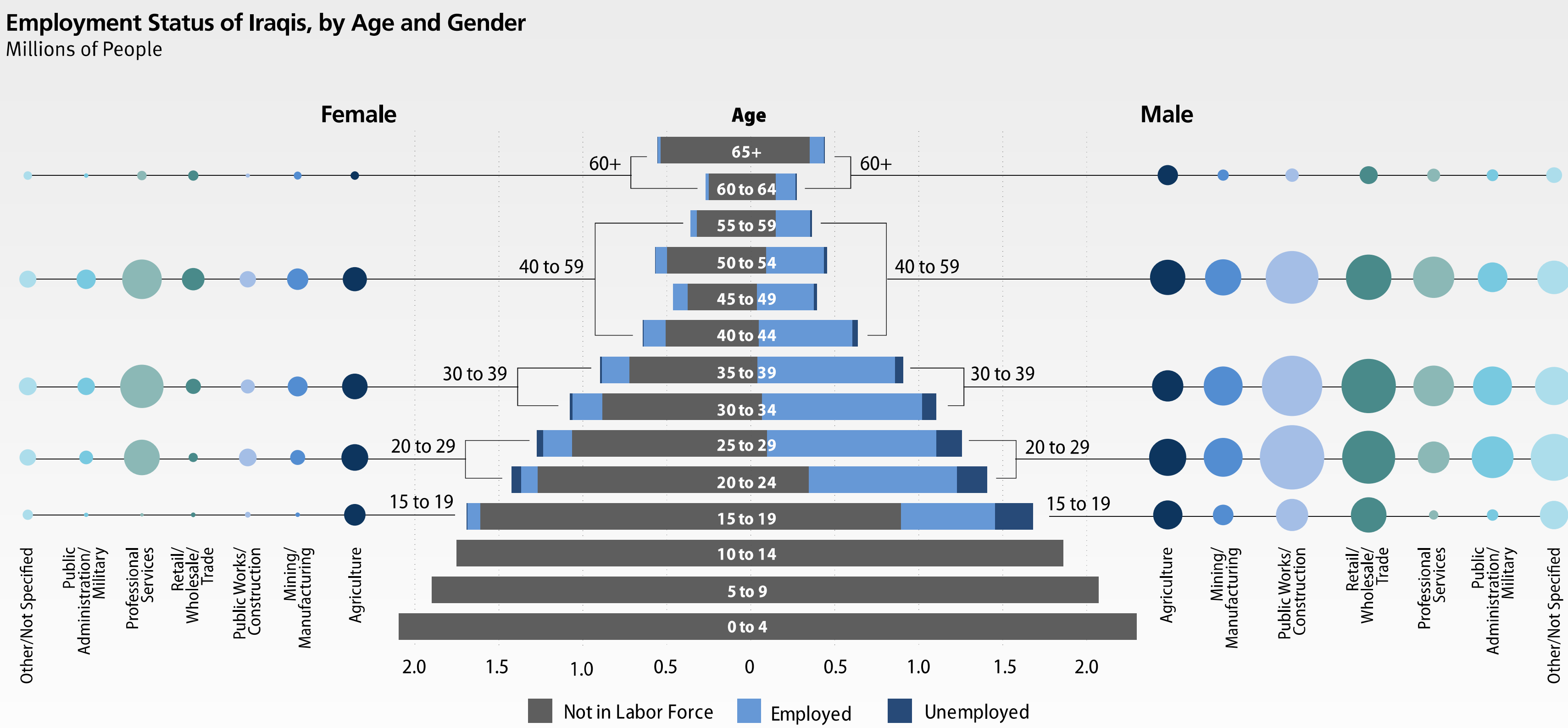
Bad Even at Official Unemployment Rates



Source: CIA World Factbook

Demographics and Employment: Official Statistics Ignoring Underemployment and Disguised Unemployment



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Iraqi Poverty vs. Gulf GDP Per Capita Wealth

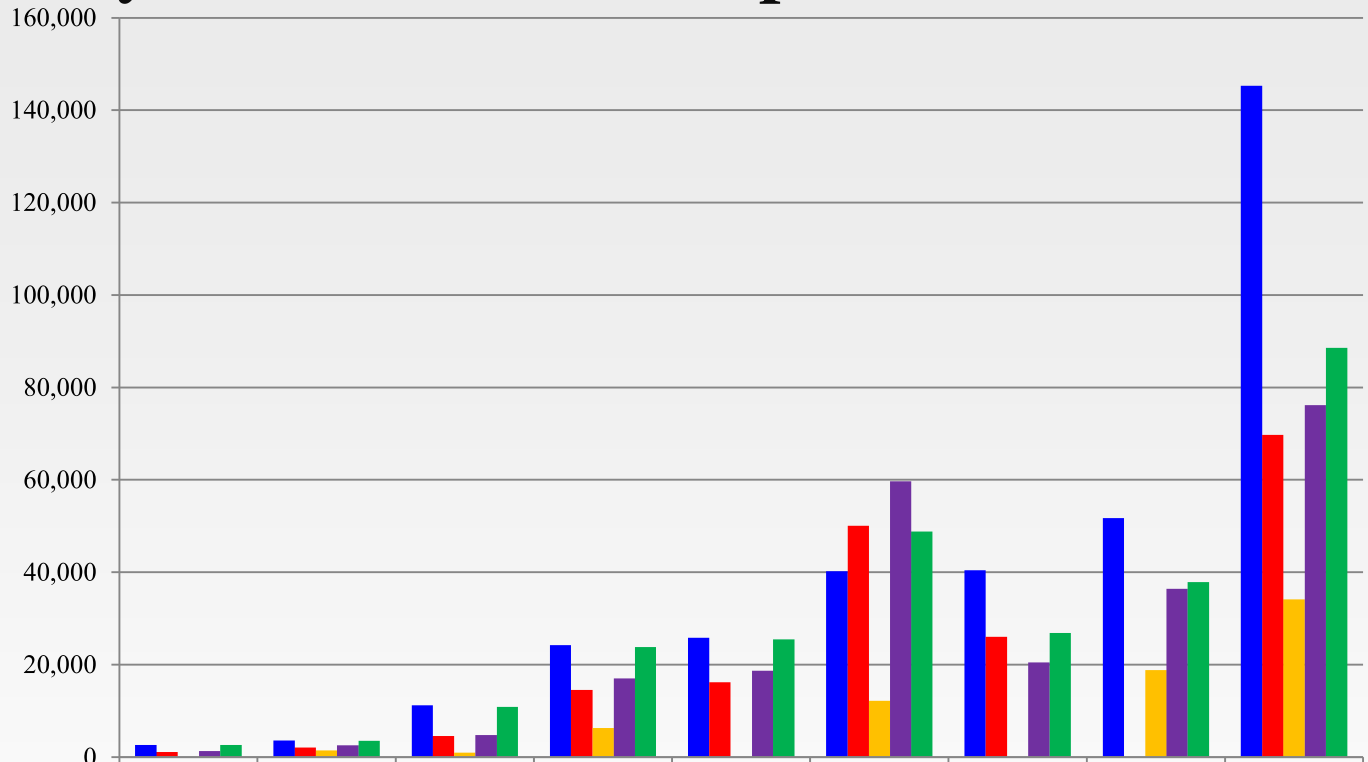
CIA Estimate of Global Ranking (6/11)

Bahrain: 21st
Iran: 105th

Iraq: 161st

Kuwait: 10th
Oman: 53rd
Qatar: 1st
Saudi Arabia: 55th
UAE: 9th

US: 11th



	Yemen	Iraq	Iran	Saudi Arabia	Oman	UAE	Bahrain	Kuwait	Qatar
■ CIA GDP Per Capita Estimates (US$)	2,600	3,600	11,200	24,200	25,800	40,200	40,400	51,700	145,300
■ World Bank GDP Per Capita Estimates (US$)	1,118	2,090	4,540	14,540	16,207	50,070	26,021		69,754
■ EIA OPEC Member State GDP Per Capita Estimates (US$)		1,458	959	6,298		12,191		18,795	34,110
■ IMF Estimates GDP Per Capita, current prices (US$)	1,282	2,564	4,741	16,996	18,657	59,717	20,475	36,412	76,168
■ IMF Estimates GDP Per Capita PPP (international dollar)	2,598	3,538	10,865	23,826	25,439	48,821	26,852	37,849	88,559

Sources: U.S. EIA OPEC Per Capita Net Oil Export Revenues, December 2010, http://www.eia.doe.gov/cabs/OPEC_Revenues/pdf.pdf,
Contact: cabs@eia.org
World Bank Indicators: GDP Per Capita, http://data.worldbank.org/indicator/NY.GDP.PCAP.CD
CIA World Factbook, March 2010, https://www.cia.gov/library/publications/the-world-factbook/
International Monetary Fund, http://www.imf.org

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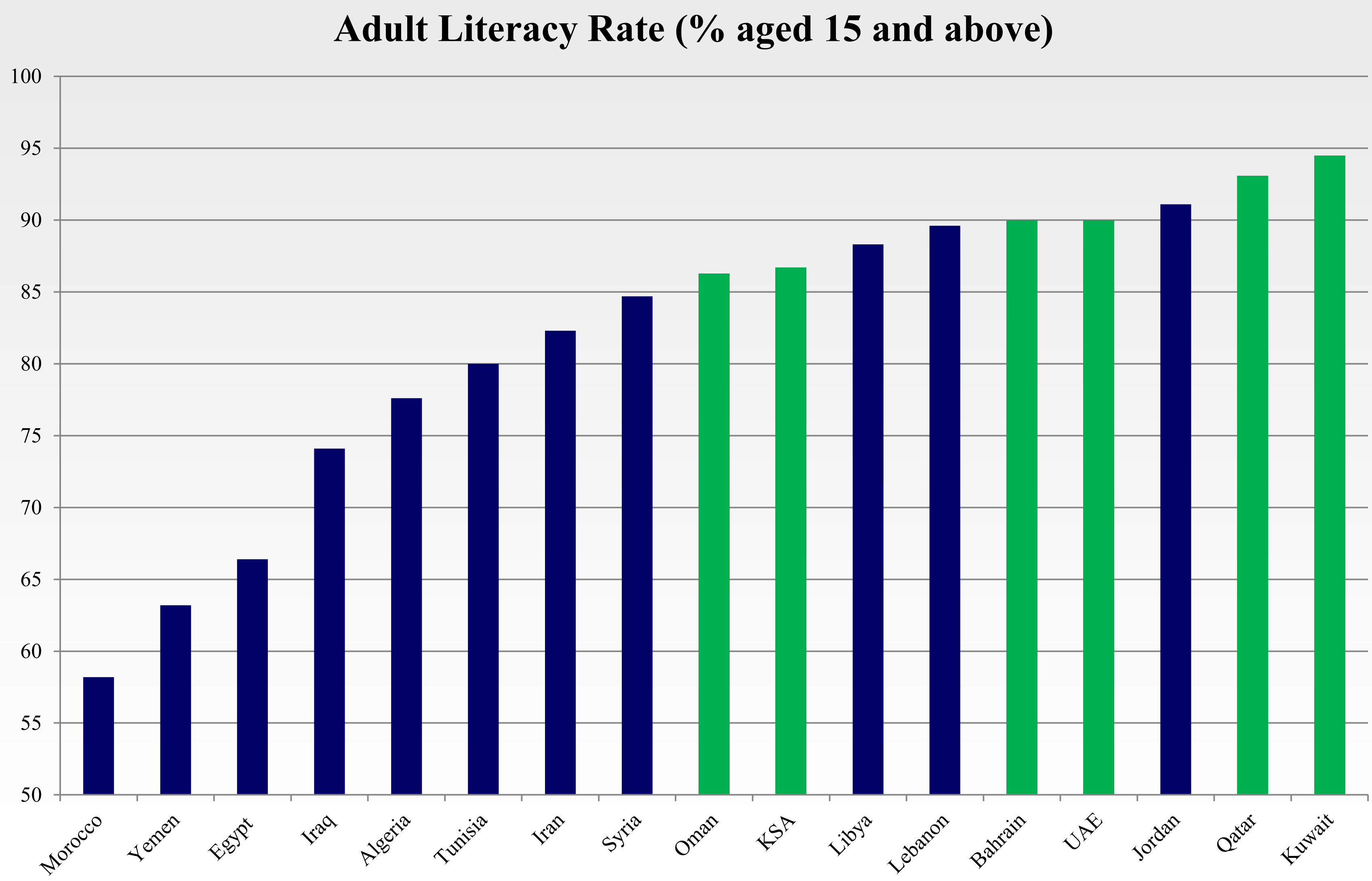
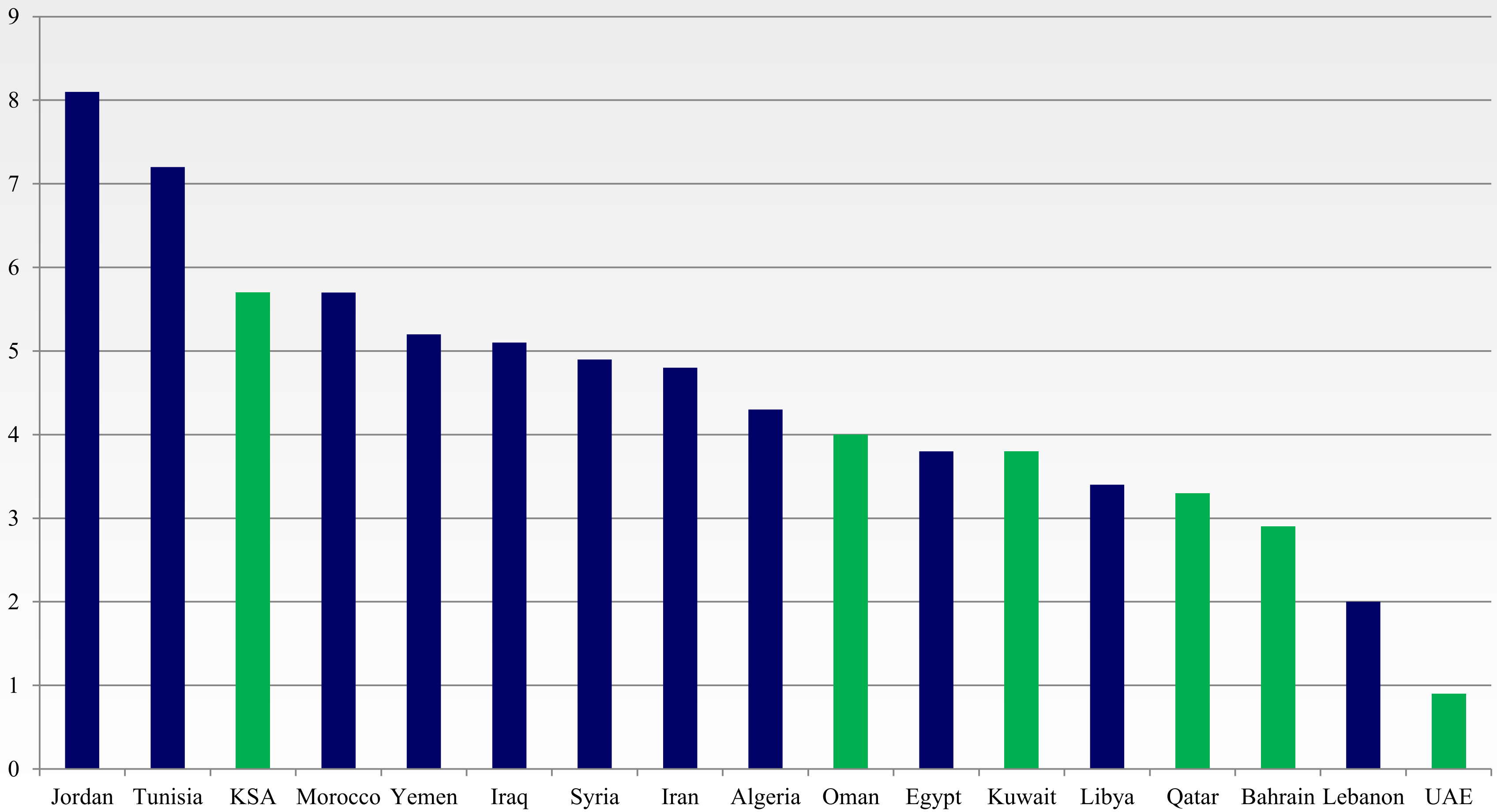
Middling Iraqi Literacy Levels



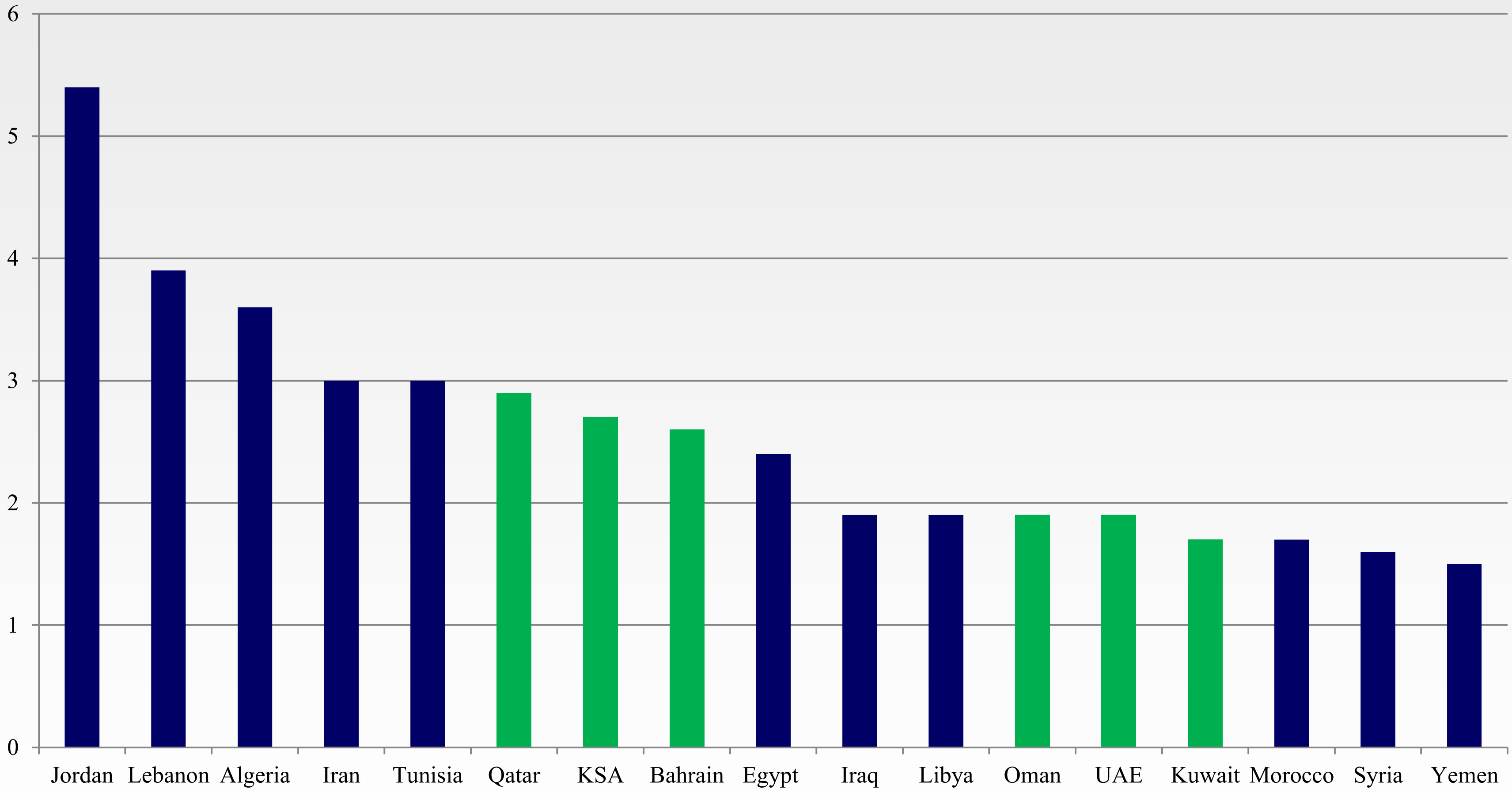
Source: UNDP, Human Development Indicators, 2010.

High Iraqi Education Expenditure (% of GDP)



Source: UNDP Human Development Report 2010

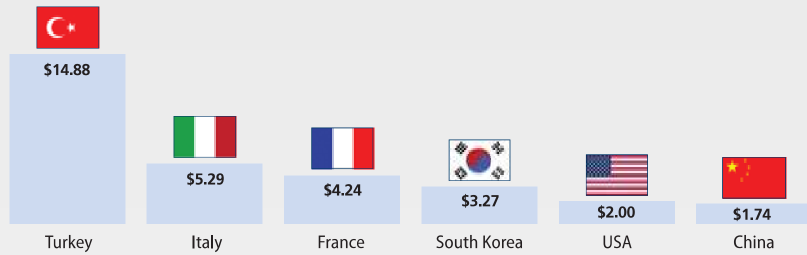
Low Iraqi Health Expenditure (% of GDP)



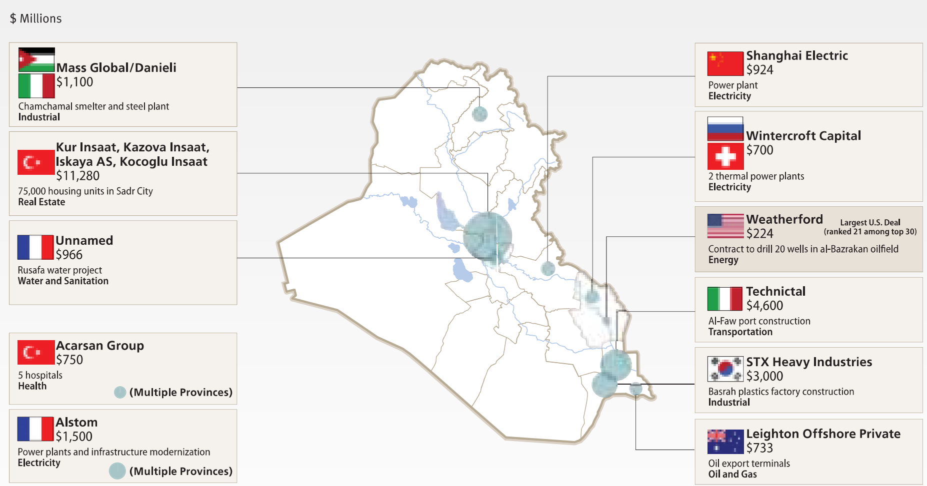
Source: UNDP Human Development Report 2010

Foreign Investment and Top 10 Deals

COUNTRIES WITH THE LARGEST COMMERCIAL ACTIVITY IN IRAQ, 2010
$ Billions



Source: Dunia Frontier Consultants, "Foreign Commercial Activity in Iraq: 2010 Year in Review," 2/2011, p. 9.



Source: Dunia Frontier Consultants, "Foreign Commercial Activity in Iraq: 2010 Year in Review," 2/2011, pp. 21–22.

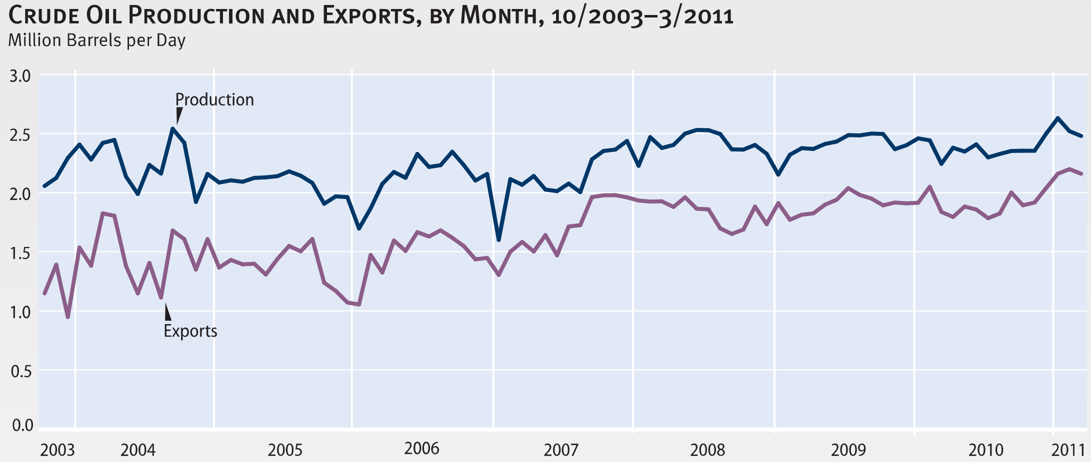
According to a report by Dunia Frontier Consultants, the volume of new foreign commercial activity in Iraq rose from $28.7 billion in 2009 to $42.67 billion in 201.

In a more narrowly focused definition, the GOI projects private investment could triple to $30 billion in 2011. However, the level of investment growth will likely depend on the GOI's ability to further improve—and ultimately resolve—the security issue.

SIGIR, Quarterly Report, April 2011, p. 106.

Iraqi Petroleum

Iraq's Petroleum Status



Sources: NEA-I, responses to SIGIR data calls, 6/4/2010, 7/6/2010, 1/11/2011, and 4/5/2011.

The GOI projected production would average 2.75 MBPD during 2011—a level that would represent a 16% increase from 2010 and keep Iraq OPEC's third-largest oil producer.534 GOI leaders involved in crude oil production tended not to repeat earlier predictions that Iraq's production would reach 12 MBPD by 2017. A Ministry of Oil plan announced this quarter projects gradually rising production to 6.5 MBPD by the end of 2014. Speaking at a conference in Geneva, Deputy Prime Minister Hussein al-Shahristani told attendees that achieving 5 MBPD to 6 MBPD over the next decade constituted an immense challenge, but one that was possible to meet. A study released this quarter conducted by Shell International BV concurred that a doubling of Iraq's current crude oil production over the next decade was possible in a climate of "reasonable stability and security."7

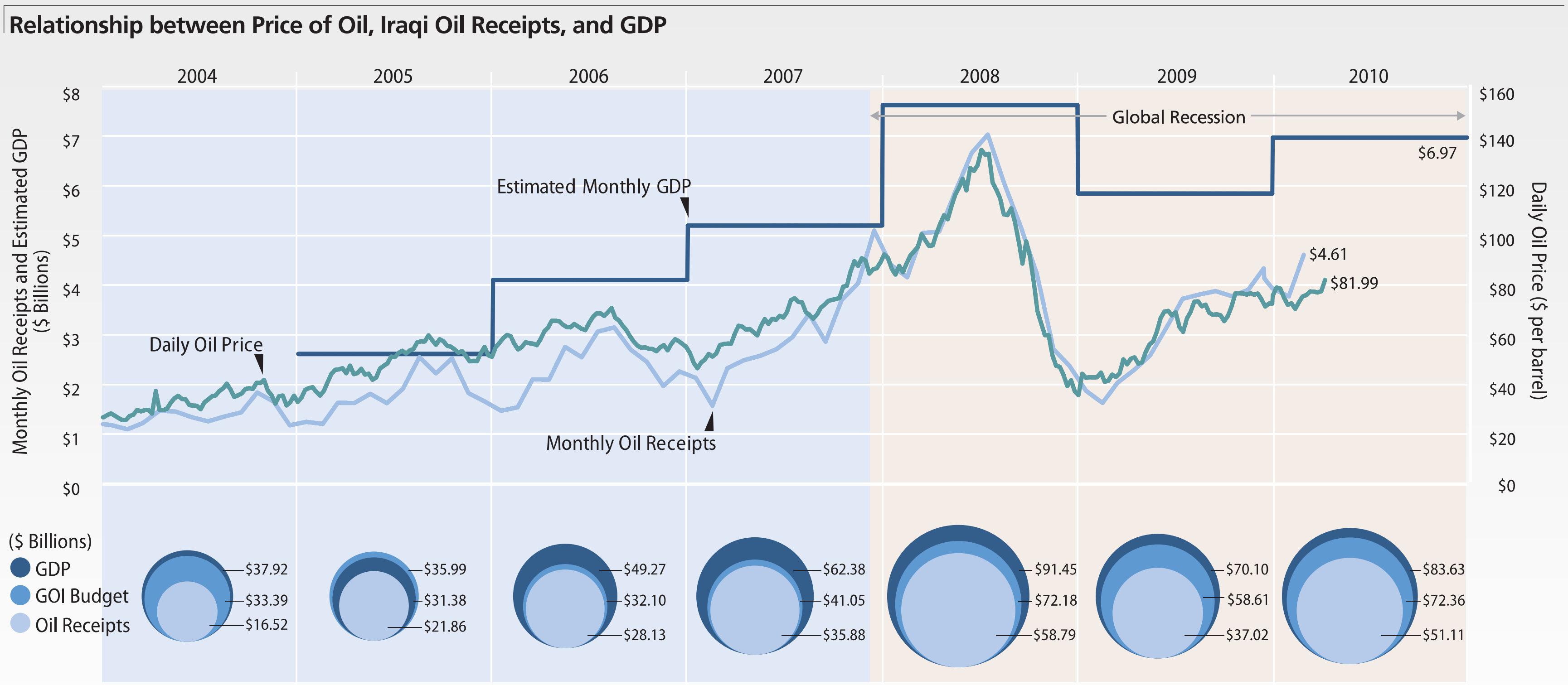
In the larger southern fields, international oil companies this quarter continued to expand production:

- At al-Zubair field, an ENI-led consortium raised average daily production to 275,000 BPD, an increase of 16% over the average output reported last quarter.
- At West Qurna Phase-1, ExxonMobil and partners Royal Dutch Shell and South Oil Company of Iraq announced production had risen to 285,000 barrels per day, more than the 10% increase above initial production rates necessary under the terms of their contract to begin recov- ering investment costs.539 Exxon also awarded Halliburton a contract this quarter to drill 15 wells at this field.540
- At al-Rumaila field, the BP-led consortium increased output to 1.275 MBPD, about 20% above the 1.066 MBPD production rate agreed in 2009.541 The consortium also awarded a conceptual design contract in excess of $100 million to the Australian-based company, WorleyParsons for further expanding production at the field.542
- At the Majnoon field, Royal Dutch Shell and operating partner Petronas formally announced a $240 million-plus contract award to the British company Petrofac that began in mid-2010 to develop a new early production system at the field as well as to revive and upgrade existing abandoned or underused facilities. The contract is part of an effort to reach the production level of 175,000 barrels per day, the level at which the operators can begin to recover their costs.543 Shell is also planning to build a port along the nearby Shatt al-Arab waterway solely to serve the Majnoon field.

Crude oil exports also reached a post-invasion high this quarter, averaging 2.18 MBPD.550 The level was a 12% increase over the previous quarter and over the same quarter in 2010.551 In early March, the Ministry of Oil increased its estimate of exports for 2011 to an average of 2.4 MBPD—200,000 BPD higher than assumed in the 2011 budget approved just one month earlier.552 The increase followed a GOI-KRG agreement to resume crude oil exports from the Kurdistan Region for the first time since 2009;553 however, the two sides continued to discuss a deal that would set more permanent conditions. Record production and export levels are reportedly pushing Iraq's aging infrastructure to its limits. Combined loading capacity in the south of about 1.8 MBPD at al-Basrah Oil Terminal (ABOT) and Khawr al-Amaya Oil Terminal (KAAOT) was just enough to handle the 1.78 MBPD produced by the southern fields during the first half of February. At their present capacity, the two terminals would be unable to handle increases projected during the course of the year by companies operating at these fields. Although there is spare capacity in the northern export pipeline, it has no connection with the southern fields.555 The first of three offshore single-point mooring stations (SPMs), part of a $733 million expansion of ABOT, is scheduled for completion before the end of 2011 and should ease the export bottleneck. The two remaining SPMs are scheduled for completion in 2012. Engineering, procurement, and construction (EPC) bids for a further expansion of the southern oil terminals—known as Phase 2 export expansion— were opened April 18, with the project scheduled for completion between 2013 and 2015.557 Work has begun to add 2.9 million barrels of new crude oil storage capacity on al-Faw Peninsula.

SIGIR, Quarterly Report, April 2011, p. 98, 100, 102

Oil, Oil Receipts, and GDP



Iraqi Petroleum Facilities: Map

DOE, EIA, http://www.eia.gov/emeu/security/esar/esar_bigpic.htm

US Aid and Iraqi Oil Production: 1970-2009

SIGIR Oversight Reports on U.S. Oil-related Programs and Projects

Title	Report Type	Date Issued	Report #
Pipeline River Crossing, Al Fatah, Iraq	Assessment	1/27/2006	SA-05-001
Kirkuk Canal Crossing, Kirkuk, Iraq	Assessment	3/7/2006	PA-05-011
Al Fatah Pipe River Crossing, Al Fatah, Iraq	Assessment	3/7/2006	PA-05-010
Al Fatah River Crossing Tie-Ins, Al Fatah, Iraq	Assessment	3/15/2006	PA-05-012
Review of Task Force Shield Programs	Audit	4/28/2006	06-009
Kirkuk-to-Baiji Pipeline Project	Assessment	7/31/2006	PA-06-063, PA-05-013, PA-05-014
Unclassified Summary of SIGIR's Review of Efforts To Increase Iraq's Capability To Protect Its Energy Infrastructure	Audit	9/27/2006	06-038
Al Basrah Oil Terminal, Basrah, Iraq	Assessment	4/26/2007	PA-06-080
Kirkuk-to-Baiji Pipeline Exclusion Zone–Phase 3, Kirkuk, Iraq	Assessment	7/24/2008	PA-08-137
Cost, Outcome, and Oversight of Iraq Oil Reconstruction Contract with Kellogg Brown & Root Services, Inc.	Audit	1/13/2009	09-008

Cumulative Value of U.S. Oil & Gas Projects in Iraq

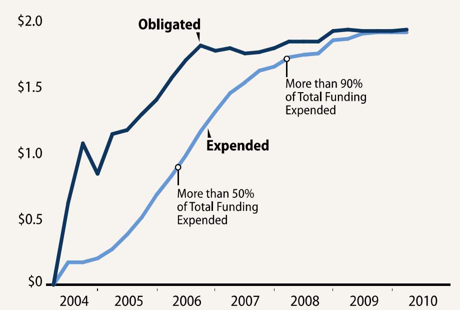
$ Millions

Project Category	Completed	Ongoing	Total
Misc. Facilities	935.54	0.66	**936.19**
Capacity Building	373.52	-	**373.52**
Infrastructure Security	245.47	2.85	**248.31**
LPG/LNG Plant Rehabilitation	151.55	-	**151.55**
Water Injection Pump Stations	33.47	-	**33.47**
Dedicated Power	26.47	-	**26.47**
Other	10.88	-	**10.88**
Total	**1,776.89**	**3.50**	**1,780.39**

A U.S-funded $90 million project to rehabilitate 80 oil wells in southern Iraq has added several billion dollars per year in Iraqi oil revenue since early 2007.

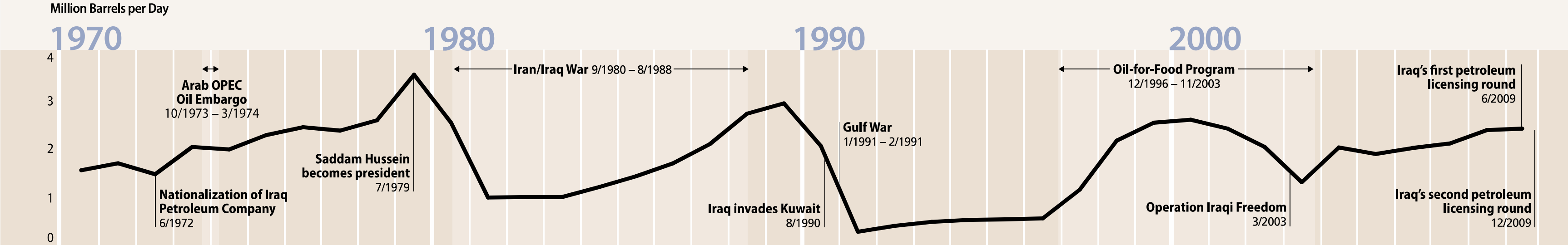
U.S. Funding for Iraqi Oil and Gas Projects

$ Billions

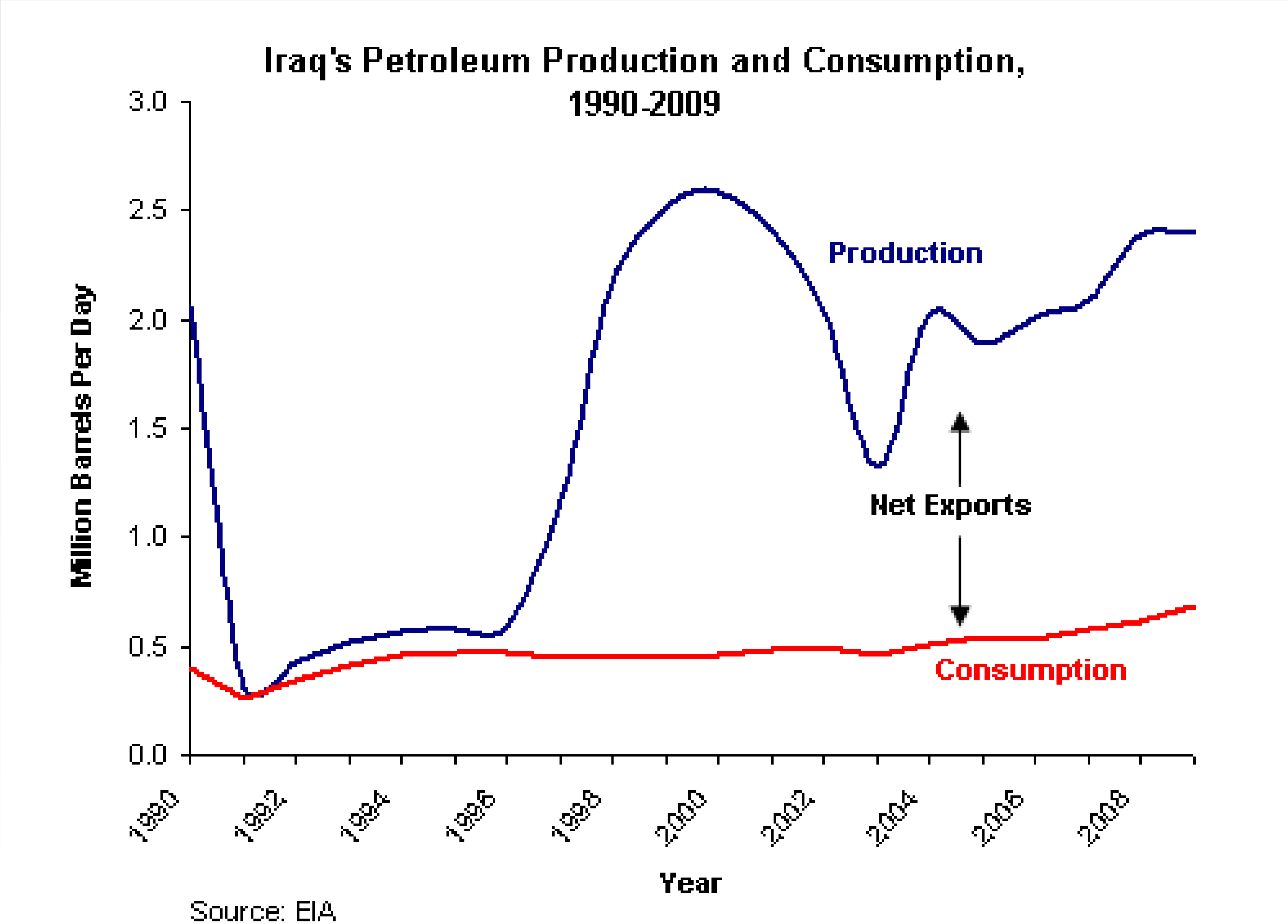


Crude Oil Production, 1970–2009

Million Barrels per Day

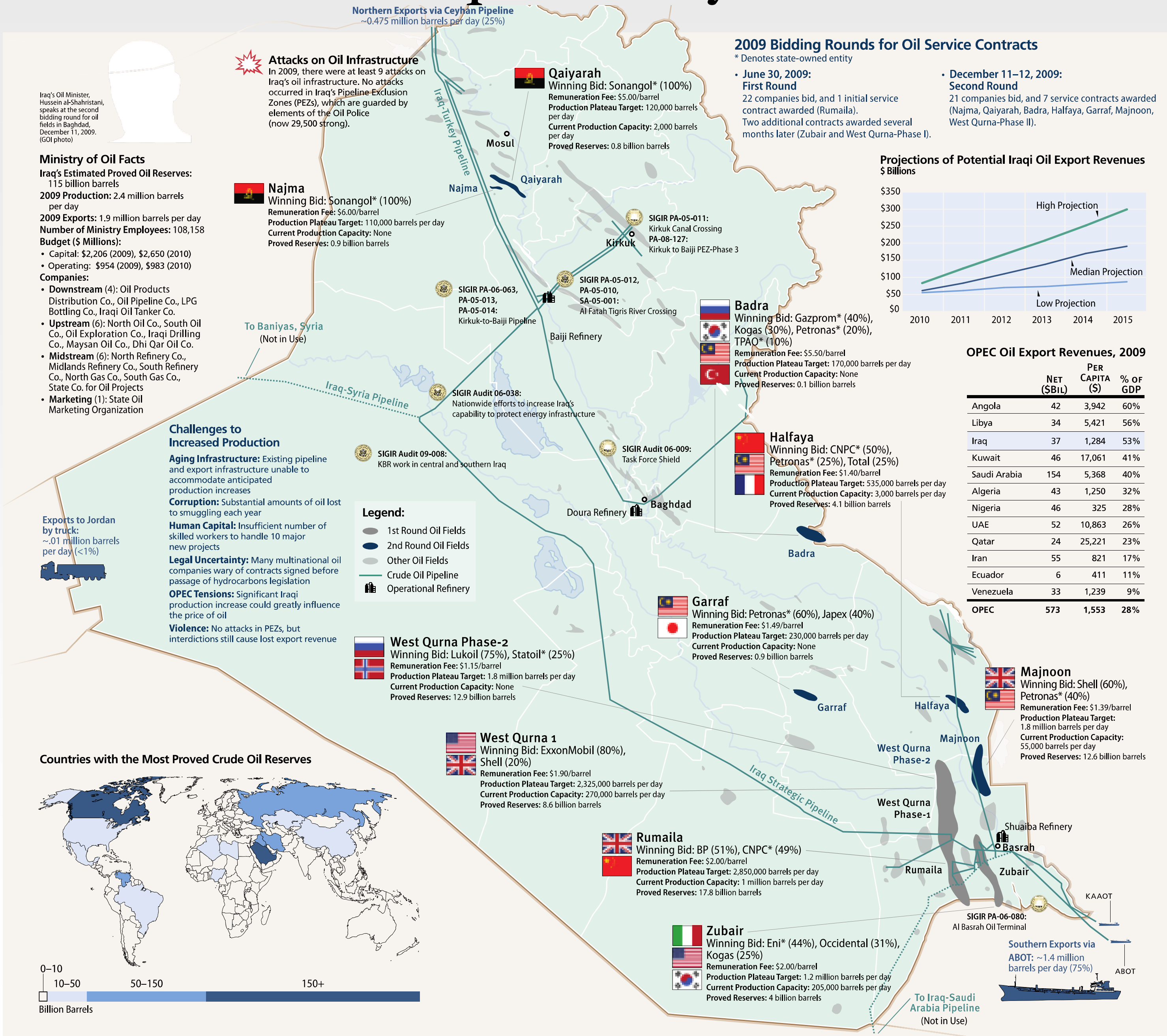


Iraqi Petroleum Production, Exports, and Consumption: 1990-2009

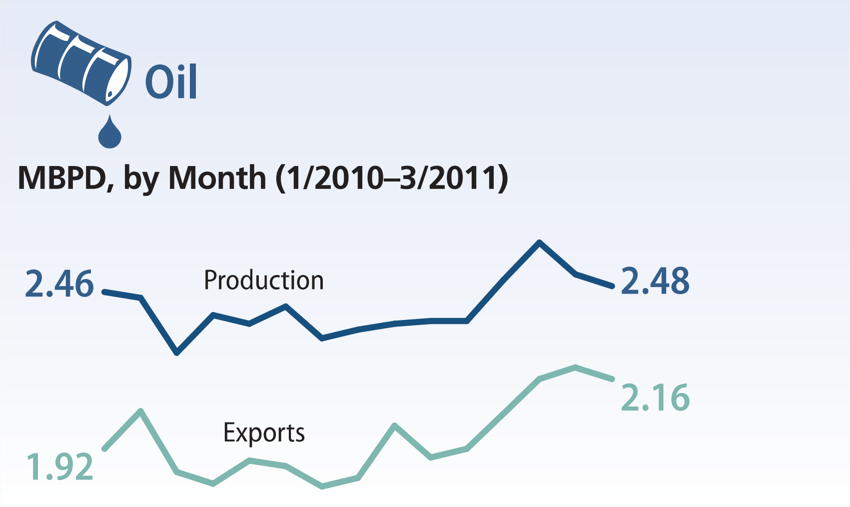


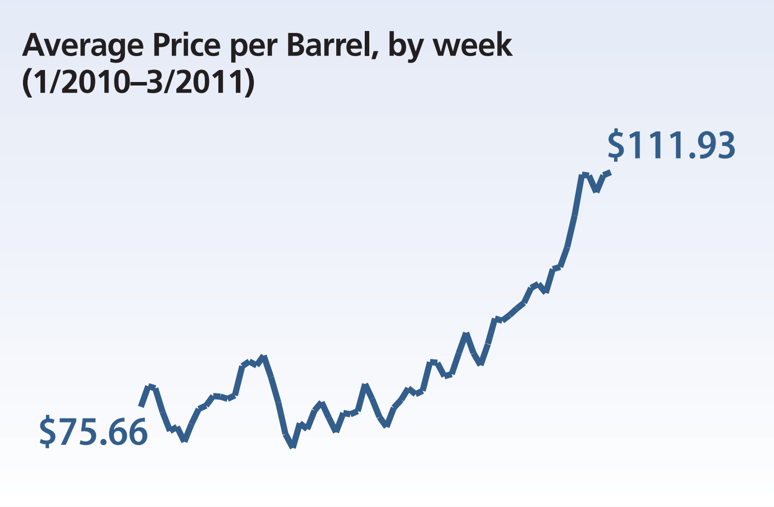
DOE, EIA, http://www.eia.gov/countries/cab.cfm?fips=IZ

SIGIR: The Iraqi Oil Story in 2010



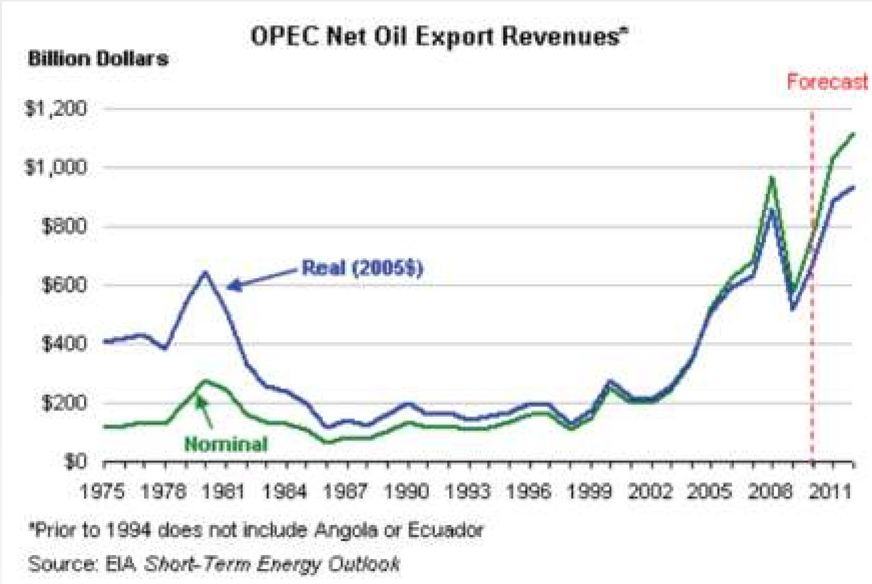
Oil Output vs. Prices: 1/2010-3/2011





SIGIR, Quarterly Report, April 2011, p. 16

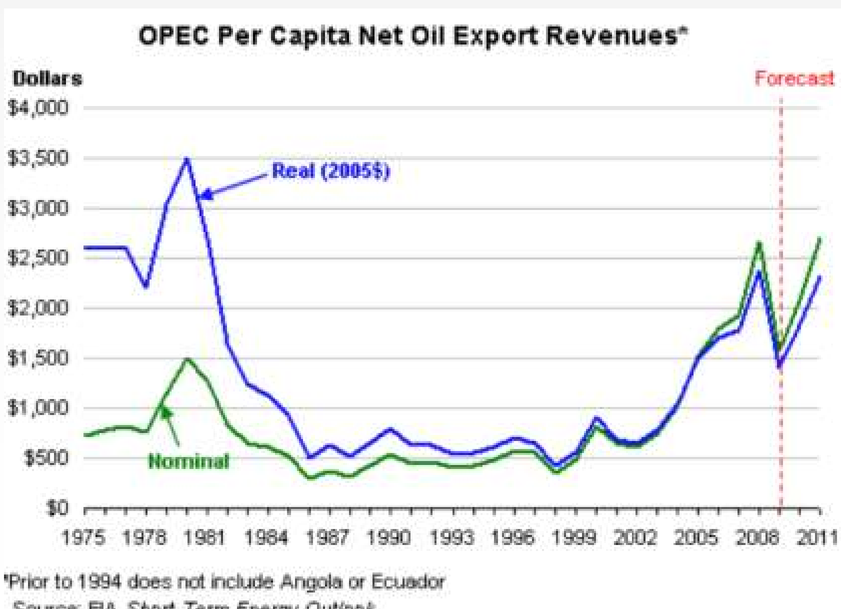
Oil Export Earnings: Total and Per Capita



OPEC Net Oil Export Revenues

Country	Nominal (Billion $)				Real (Billion 2005$)			
	2009	2010	2011	Jan-Nov 2010	2009	2010	2011	Jan-Nov 2010
Algeria	$42	--	--	$50	$38	--	--	$44
Angola	$42	--	--	$50	$38	--	--	$44
Ecuador	$6	--	--	$6	$5	--	--	$6
Iran	$53	--	--	$64	$48	--	--	$57
Iraq	$38	--	--	$43	$34	--	--	$38
Kuwait	$45	--	--	$52	$40	--	--	$46
Libya	$34	--	--	$39	$31	--	--	$35
Nigeria	$46	--	--	$60	$41	--	--	$53
Qatar	$24	--	--	$33	$21	--	--	$29
Saudi Arabia	$153	--	--	$184	$137	--	--	$162
UAE	$53	--	--	$61	$47	--	--	$53
Venezuela	$33	--	--	$37	$30	--	--	$33
OPEC	$571	$750	$847	$680	$510	$660	$731	$599

View entire series (1975-2011): nominal or real



OPEC Per Capita Net Oil Export Revenues

Country	Nominal ($)				Real (2005$)			
	2009	2010	2011	Jan-Nov 2010	2009	2010	2011	Jan-Nov 2010
Algeria	$1,243	--	--	$1,449	$1,110	--	--	$1,276
Angola	$3,291	--	--	$3,825	$2,940	--	--	$3,369
Ecuador	$411	--	--	$446	$367	--	--	$392
Iran	$804	--	--	$959	$719	--	--	$845
Iraq	$1,305	--	--	$1,458	$1,166	--	--	$1,284
Kuwait	$16,683	--	--	$18,795	$14,907	--	--	$16,552
Libya	$5,418	--	--	$6,124	$4,841	--	--	$5,393
Nigeria	$326	--	--	$415	$291	--	--	$365
Qatar	$25,204	--	--	$34,110	$22,515	--	--	$30,034
Saudi Arabia	$5,339	--	--	$6,298	$4,770	--	--	$5,546
UAE	$10,955	--	--	$12,191	$9,788	--	--	$10,736

Adapted from http://www.eia.gov/cabs/OPEC_Revenues/Factsheet.html

Oil Reserves and Regional Politics

Distribution of Oil Reserves				
Operating Area	Fields	Reserves (billion bbl)	2010 Production (1,000 bbl/d)	Potential Production (1,000 bbl/d)
KRG	6	2	15	375
North Oil Company	32	21	770	1,300
Midlands Oil Company	27	13	10	680
Missan Oil Company	10	8	110	820
South Oil Company	25	69	1,455	10,050
Total	100	113	2,360	13,225

Reserves

According to the Oil and Gas Journal, Iraq's proven oil reserves are 115 billion barrels, although these statistics have not been revised since 2001 and are largely based on 2-D seismic data from nearly three decades ago. Geologists and consultants have estimated that relatively unexplored territory in the western and southern deserts may contain an estimated additional 45 to 100 billion barrels (bbls) of recoverable oil. Iraqi Oil Minister Hussain al-Shahristani said that Iraq is re-evaluating its estimate of proven oil reserves, and expects to revise them upwards.

A major challenge to Iraq's development of the oil sector is that resources are not evenly divided across sectarian-demographic lines. Most known hydrocarbon resources are concentrated in the Shiite areas of the south and the ethnically Kurdish north, with few resources in control of the Sunni minority.

The majority of the known oil and gas reserves in Iraq form a belt that runs along the eastern edge of the country. Iraq has 9 fields that are considered super giants (over 5 billion bbls) as well as 22 known giant fields (over 1 billion bbls). According to independent consultants, the cluster of super-giant fields of southeastern Iraq forms the largest known concentration of such fields in the world and accounts for 70 to 80 percent of the country's proven oil reserves. An estimated 20 percent of oil reserves are in the north of Iraq, near Kirkuk, Mosul and Khanaqin. Control over rights to reserves is a source of controversy between the ethnic Kurds and other groups in the area.

Production

In 2009, Iraq's crude oil production averaged 2.4 million barrels per day (bbl/d), about the same as 2008 levels, and below its pre-war production capacity level of 2.8 million bbl/d in 2003. About two-thirds of production comes from the southern fields, with the remainder from the north-central fields near Kirkuk. At present, the majority of Iraqi oil production comes from just three giant fields: North and South Rumaila in southern Iraq, and Kirkuk.

Currently, the Ministry of Oil has central control over oil and gas production and development in all but the Kurdish territory through its three operating entities, the North Oil Company (NOC), the South Oil Company (SOC), and the Missan Oil Company (MOC), which was split off from the South Oil Company in 2008. According to the NOC's website, their concession and jurisdiction extends from the Turkish borders in the north to 32.5 degrees latitude (about 100 miles south of Baghdad), and from Iranian borders in the east to Syrian and Jordanian borders in the west. The company's geographical operation area spans the following governorates: Tamim (Kirkuk), Nineveh, Irbil, Baghdad, Diyala and part of Babil to Hilla and Wasit to Kut. The remainder falls under the jurisdiction of the SOC and MOC, and though smaller in geographical size, includes the majority of proven reserves. MOC's oil fields hold an estimated 30 billion barrels of reserves. They include Amara, Halfaya, Huwaiza, Noor, Rifaee, Dijaila, Kumait and East Rafidain.

Kurdistan Regional Government Issues

The Kurdistan Regional Government (KRG), the official ruling body of a federated region in northern Iraq that is predominantly Kurdish, passed its own hydrocarbons law in 2007. Despite the lack of a national Iraqi law governing investment in hydrocarbons, KRG has signed oil production sharing, development and exploration contracts with several foreign firms, and began exporting its own oil briefly. Norway's DNO and Sinopec/Addax are currently producing, and volumes could be ramped up to 100,000 bbl/d and reach 200,000 bbl/d within a year, according to the KRG natural resources ministry. The KRG ceased oil exports after four months in 2009, but its intention to resume exports has been a source of contention with the national government. The Iraqi Oil Ministry has been adamant that oil produced in the KRG will have to be shipped via SOMO, Iraq's oil exporting arm.

DOE, EIA, http://www.eia.gov/countries/cab.cfm?fips=IZ

Result of Oil Bidding Rounds to Date

Results of Oil Field Bidding Rounds					
First Bidding Round (brownfields)	**Operators**	**2009 Prod. 1,000 bbl/d**	**Target Prod. 1,000 bbl/d**	**Target Incr. 1,000 bbl/d**	**Reserves (billion bbl)**
Rumaila	BP, CNPC, SOMO	1,000	2,850	1,850	17.8
West Qurna, Phase I	ExxonMobil, Shell, NOC	270	2,325	2,055	8.6
Zubair	Eni, Occidental, Kogas, Misan Oil	205	1,200	995	4.0
First Round Total (billion barrels)		**1,475**	**6,375**	**4,900**	**30**
Second Bidding Round (greenfields)					
West Qurna, Phase II	LUKOil, Statoil, Oil Exploration CO.	0	1,800	1,800	12.9
Majnoon	Shell, Petronas, Misan Oil	55	1,800	1,745	12.6
Halfaya	CNPC, Petronas, Total, South Oil	3	535	532	4.1
Gharaff	Petronas, JAPEX, North Oil	0	230	230	0.8
Badra	Gazprom, KOGAS, Petronas, TPAO, Midlands	0	170	170	0.1
Qayarah	Sonangol, Nineveh	2	120	118	0.9
Najmah	Sonangol, Nineveh	0	110	110	0.9
Second Round Total (billion barrels)		**60**	**4,765**	**4,705**	**32**
Totals - Rounds 1 & 2		1,535	11,140	9605.0	62.7

Passage of the proposed Hydrocarbons Law, which would provide a legal framework for investment in the hydrocarbon sector, remains a main policy objective. Despite the absence of the Hydrocarbons Law, the Iraqi Ministry of Oil signed 12 long-term contracts between November 2008 and May 2010 with international oil companies to develop 14 oil fields. Under the first phase, companies bid to further develop 6 giant oil fields that were already producing with proven oil reserves of over 43 billion barrels. Phase two contracts were signed to develop oil fields that were already explored but not fully developed or producing commercially. Together, these contracts cover oil fields with proven reserves of over 60 billion barrels, or more than half of Iraq's current proven oil reserves.

As a result of these contract awards, Iraq expects to boost production by 200,000 bbl/d by the end of 2010, and to increase production capacity by an additional 400,000 bbl/d by the end of 2011. When these fields are fully developed, they will increase total Iraqi production capacity to almost 12 million bbl/d, or 9.6 million bbl/d above current production levels. The contracts call for Iraq to reach this production target by 2017.
Infrastructure Constraints

Iraq faces many challenges in meeting this timetable. One of the most significant is the lack of an outlet for significant increases in crude oil production. Both Iraqi refining and export infrastructure are currently bottlenecks, and need to be upgraded to process much more crude oil. Iraqi oil exports are currently running at near full capacity in the south, while export capacity in the north has been restricted by sabotage, and would need to be expanded in any case to export significantly higher volumes.

Production increases of the scale planned will also require substantial increases in natural gas and/or water injection to maintain oil reservoir pressure and boost oil production. Iraq has associated gas that could be used, but it is currently being flared. Another option is to use water for re-injection, and locally available water is currently being used in the south of Iraq.

However, fresh water is an important commodity in the Middle East, and large amounts of seawater will likely have to be pumped in via pipelines that have yet to be built. ExxonMobil has coordinated initial studies at water injection plans for many of the fields under development. According to their estimate, 10 -15 million bbl/d of seawater could be necessary for Iraq's expansion plans, at a cost of over $10 billion.

Furthermore, Iraq's oil and gas industry is the largest industrial customer of electricity, with over 10 percent of total demand. Large-scale increases in oil production would also require large increases in power generation. However, Iraq has struggled to keep up with the demand for power, with shortages common across Iraq. Significant upgrades to the electricity sector would be needed to supply additional power.
Iraq also plans to sign delineation agreements on shared oil fields with Kuwait and Iran. Iraq would like to set up joint committees with its neighbors on how to share the oil.

DOE, EIA, http://www.eia.gov/countries/cab.cfm?fips=IZ

Existing and Planned Refineries

Existing Refineries in Iraq			
Refinery	**Location**	**Capacity (bbl/d)**	**Notes**
Baiji	North-Central Iraq	310,000	Improvements in operational issues
Basrah	Near Basrah	150,000	Considering adding 70,000 bbl/d distillation tower
Daura	Baghdad	110,000	Considering adding 70,000 bbl/d distillation tower
Erbil	Erbil	40,000	
K-3 Haditha, Kirkuk, Khanaqin, Muftiah, Najaf, Nassiriyah-Samawah, Qaiyarah-Mosul	Scattered	< 20,000 each	Topping plants making low-grade diesel and kerosene

Planned New Refineries in Iraq			
Refinery	**Capacity (bbl/d)**	**Investment**	**Front end engineering and design contract**
Nassiriyah	300,000	$8 billion	Foster Wheeler
Kirkuk	150,000	$5 billion	Shaw Group
Misan	150,000	$5 billion	Shaw Group
Kerbala	140,000	$5 billion	Technip
Total	**740,000**		

Estimates of Iraqi nameplate refining capacity vary, from 637,500 bbl/d according to the *Oil and Gas Journal* to 790,000 bbl/d according to the Special Inspector General for Iraqi Reconstruction. Iraqi refineries have antiquated infrastructure and only half run at utilization rates of 50 percent or more.

Despite improvements in recent years, the sector has not been able to meet domestic demand of about 600,000 bbl/d, and the refineries produce too much heavy fuel oil and not enough other refined products. As a result, Iraq relies on imports for 30 percent of its gasoline and 17 percent of its LPG.

To alleviate product shortages, Iraq's 10-year strategic plan for 2008-2017 set a goal of increasing refining capacity to 1.5 million bbl/d, and is seeking $20 billion in investments to achieve this target. Iraq has plans for 4 new refineries, as well as plans for expanding the existing Daura and Basrah refineries.

DOE, EIA, http://www.eia.gov/countries/cab.cfm?fips=IZ

Iraqi Gas Resources and Development

Third Bid Round - Natural Gas Fields	
Fields	**Reserves (trillion cubic feet)**
al-Mansuriyah	3.0
Akkas	4.5
Sibba	0.1
Third Round Total	**7.6**

Reserves
According to the Oil and Gas Journal, Iraq's proven natural gas reserves are 112 trillion cubic feet (Tcf), the tenth largest in the world. An estimated 70 percent of these lie in Basra governorate (province) in the south of Iraq. Probable Iraqi reserves have been estimated at 275-300 Tcf, and work is currently underway by several IOCs and independents to accurately update hydrocarbon reserve numbers. Two-thirds of Iraq's natural gas resources are associated with oil fields including, Kirkuk, as well as the southern Nahr (Bin) Umar, Majnoon, Halfaya, Nassiriya, the Rumaila fields, West Qurna, and Zubair. Just under 20 percent of known gas reserves are non-associated; around 10 percent is salt dome gas. The majority of non-associated reserves are concentrated in several fields in the North including: Ajil, Bai Hassan, Jambur, Chemchemal, Kor Mor, Khashem al-Ahmar, and al-Mansuriyah.

Production
Iraqi natural gas production rose from to 81 billion cubic feet (Bcf) in 2003 to 522 Bcf in 2008. Some is used as fuel for power generation, and some is re-injected to enhance oil recovery. Over 40 percent of the production in 2008 was flared due to a lack of sufficient infrastructure to utilize it for consumption and export, although Royal Dutch Shell estimated that flaring losses were even greater at 1 Bcf per day. As a result, Iraq's five natural gas processing plants, which can process over 773 billion cubic feet per year, sit mostly idle.
To reduce flaring, Iraq has been working on an agreement with Royal Dutch Shell to implement a 25-year project to capture flared gas and provide it for domestic use. Iraq's cabinet gave preliminary approval for the $17 billion deal covering development of 25 – 30 Tcf of associated natural gas reserves in Basra province through a new joint venture, Basra Gas Company. The agreement, which originally was to cover all of Basra province, has been modified to include only the associated gas from the Rumaila, Zubair, and West Qurna Phase I projects. Implementation of this agreement is necessary for the new oil development projects to go forward.

Upstream Development
Iraq has planned an upstream bidding round in late 2010 for three non-associated natural gas fields with combined reserves of over 7.5 Tcf. This will be the third hydrocarbon bidding round conducted by Iraq, following two earlier rounds that were held to develop Iraq's oil fields. All of the companies that prequalified to bid in the two earlier rounds will be invited. Iraq has committed to purchasing 100 percent of the gas.

Export Plans
Plans to export natural gas remain controversial due to the amount of idle and sub-optimally-fired electricity generation capacity in Iraq - much a result of a lack of adequate gas feedstock. Prior to the 1990-1991 Gulf War, Iraq exported natural gas to Kuwait. The gas came from Rumaila through a 105-mile, 400-MMcf/d pipeline to Kuwait's central processing center at Ahmadi. In 2007, the Ministry of Oil announced an agreement to fund a feasibility study on the revival of the mothballed pipeline.
Iraq has eyed northern export routes such as the proposed Nabucco pipeline through Turkey to Europe, and in July 2009 Prime Minister Nouri al-Malikie suggested that Iraq could be exporting 530 Bcf per year to Europe by 2015. A second option is the Arab Gas Pipeline (AGP) project. The proposed AGP pipeline would deliver gas from Iraq's Akkas field to Syria and then on to Lebanon and the Turkish border sometime in 2010, and then on to Europe. Other proposals have included building LNG exporting facilities in the Basra region.

DOE, EIA, http://www.eia.gov/countries/cab.cfm?fips=IZ

Exports and Infrastructure

Export Pipelines

To the North: Iraq has one major crude oil export pipeline, the Kirkurk-Ceyhan (Iraq-Turkey) pipeline, which transports oil from the north of Iraq to the Turkish Mediterranean port of Ceyhan. This pipeline has been subject to repeated disruptions this decade, limiting exports from the northern fields. Iraq signed an agreement with Turkey to extend the operation of the 1.6 million bbl/d pipeline, as well as to upgrade its capacity by 1 million bbl/d.

In order for this pipeline to reach its design capacity, Iraq would need to receive oil from the south via the Strategic Pipeline, which was designed to allow flows of crude oil from the south of Iraq to go north via Turkey, and vice-versa. Iraq has proposed building a new strategic line from Basra to the northern city of Kirkuk, with the line consisting of two additional crude oil pipelines.

To the West: The Iraq-Syria-Lebanon Pipeline has been closed and the Iraqi portion reported unusable since the 2003 war in Iraq. Discussions were held between Iraqi and Syrian government officials to re-open the pipeline, which had a design capacity of 700,000 bbl/d, although actual volumes never reached this level. The Russian company Stroytransgaz accepted an offer to fix the pipeline in December 2007, but no follow-up was made. Iraq and Syria have discussed building several new pipelines, including a 1.5 million bbl/d pipeline carrying heavy crude oil, and a 1.25 million bbl/d pipeline for carrying light crudes.

To the South: The 1.65 million bbl/d Iraq Pipeline to Saudi Arabia (IPSA) has been closed since 1991 following the Persian Gulf War. There are no plans to reopen this line.

Iraq has also held discussions to build a crude oil pipeline from Haditha to Jordan’s port of Aqaba.

Ports

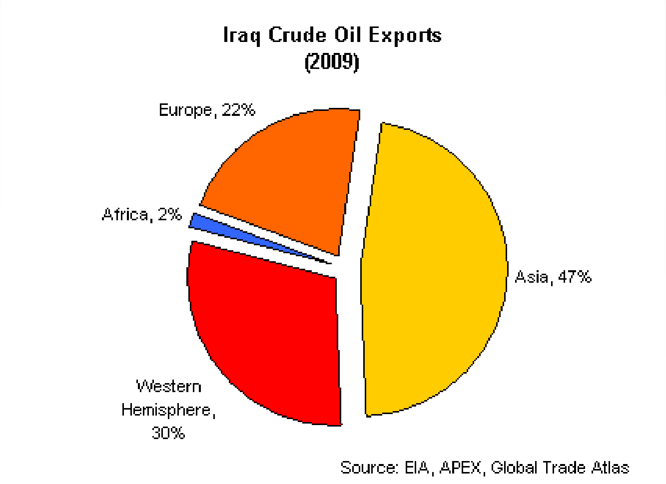
The Basra Oil Terminal (formerly Mina al-Bakr) on the Persian Gulf has an effective capacity to load 1.3 million bbl/d and support Very Large Crude Carriers. In February 2009, the South Oil Company commissioned Foster Wheeler to carry out the basic engineering design to rehabilitate and expand capacity of the terminal by building four single point mooring systems with a capacity of 800,000 bbl/d each. According to former Minister of Oil Issam al-Chalabi, it would take at least until 2013 to complete the project if financing is found.

There are five smaller ports on the Persian Gulf, all functioning at less than full capacity, including the Khor al-Amaya terminal.

Overland Export Routes

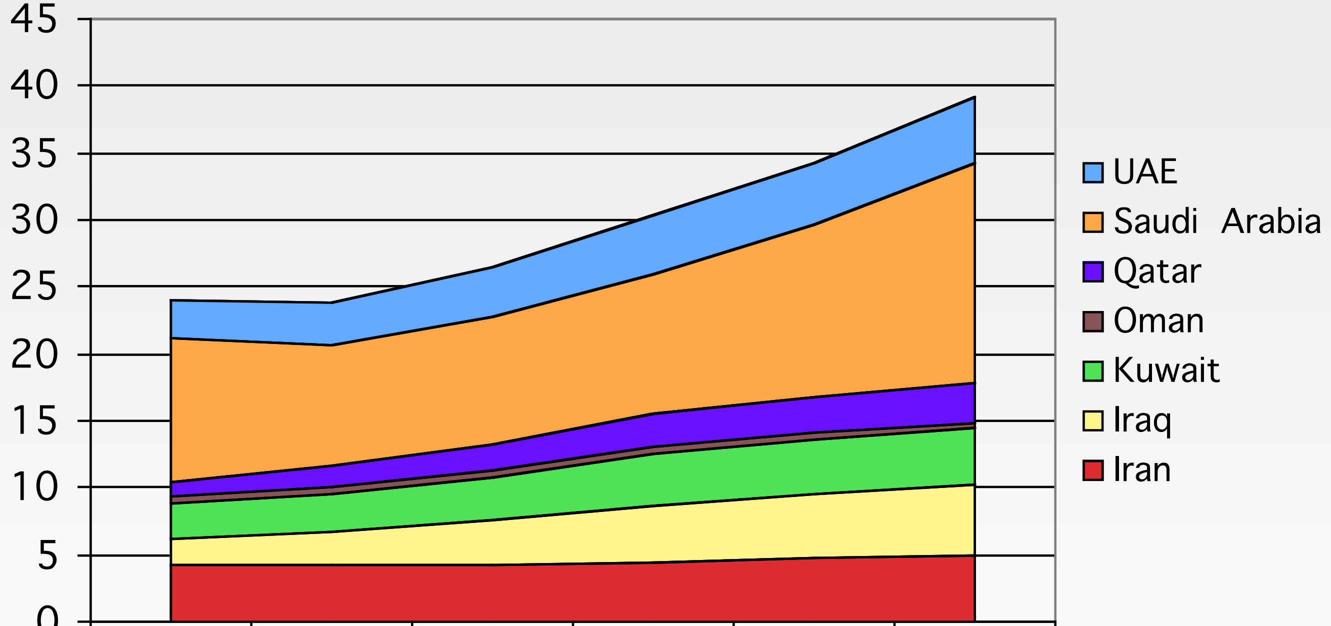
Overland routes are used to export limited amounts of crude from small fields bordering Syria. In addition, Iraq has resumed shipping oil to Jordan’s Zarqa refinery by road tankers at a rate of 10,000 bbl/d.

Oil Infrastructure				
Ports	**Upgrades**	**Status**	**Capacity (Thousand bbl/d)**	**Effective Capacity (Thousand bbl/d)**
Basra	developing plans to add at least 3.2 million bbl/d	operational	1,600	1,300
Khor al-Amaya		operational	700	200
Export Pipelines	**Route**	**Status**	**Capacity (Thousand bbl/d)**	**Effective Capacity (Thousand bbl/d)**
IPSA	Iraq-Saudi Arabia	closed	1,650	0
Iraq-Turkey	Kirkuk-Ceyhan	operational	1,600	1,000
Heavy Oil via Turkey	Majnoon-Turkey	proposed	1,500	0
Iraq-Syria	Haditha -Syria	proposed	1,250	0
Iraq-Turkey	Haditha-1T1A depot-Turkey	proposed	1,000	0
Iraq-Syria-Lebanon	Kirkuk-Banias-Tripoli	closed	700	0
Iraq-Jordan	Haditha-Aqaba	proposed	500	0
Internal Pipelines	**Route**	**Status**	**Capacity (Thousand bbl/d)**	**Effective Capacity (Thousand bbl/d)**
Strategic	Haditha-Rumaila-Basra	limited usage	800	200



Iraq and Gulf Gulf Oil Production: 2005-2030

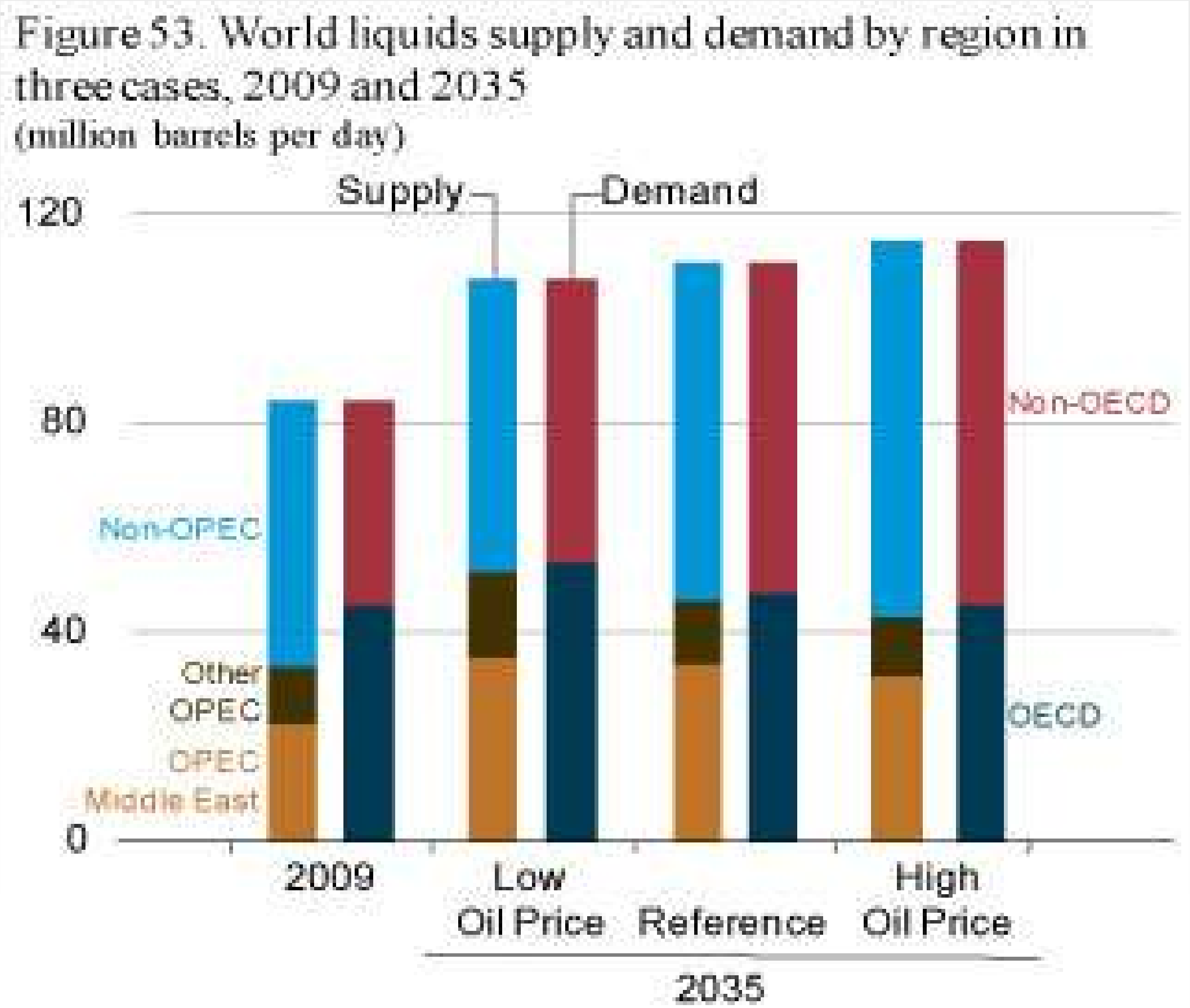
(In MMBD in EIA/DOE Reference Case in IE0 2007)



	2005	2010	2015	2020	2025	2030
UAE	2.8	3.3	3.8	4.5	4.7	4.9
Saudi Arabia	10.7	8.9	9.4	10.4	12.9	16.4
Qatar	1.1	1.6	2	2.4	2.6	2.9
Oman	0.6	0.6	0.5	0.5	0.5	0.5
Kuwait	2.7	2.8	3.2	3.9	4	4.1
Iraq	1.9	2.5	3.3	4.2	4.8	5.3
Iran	4.2	4.2	4.3	4.5	4.8	5

Average world oil prices in 2030 are $36, $59, and $100 per barrel in 2030

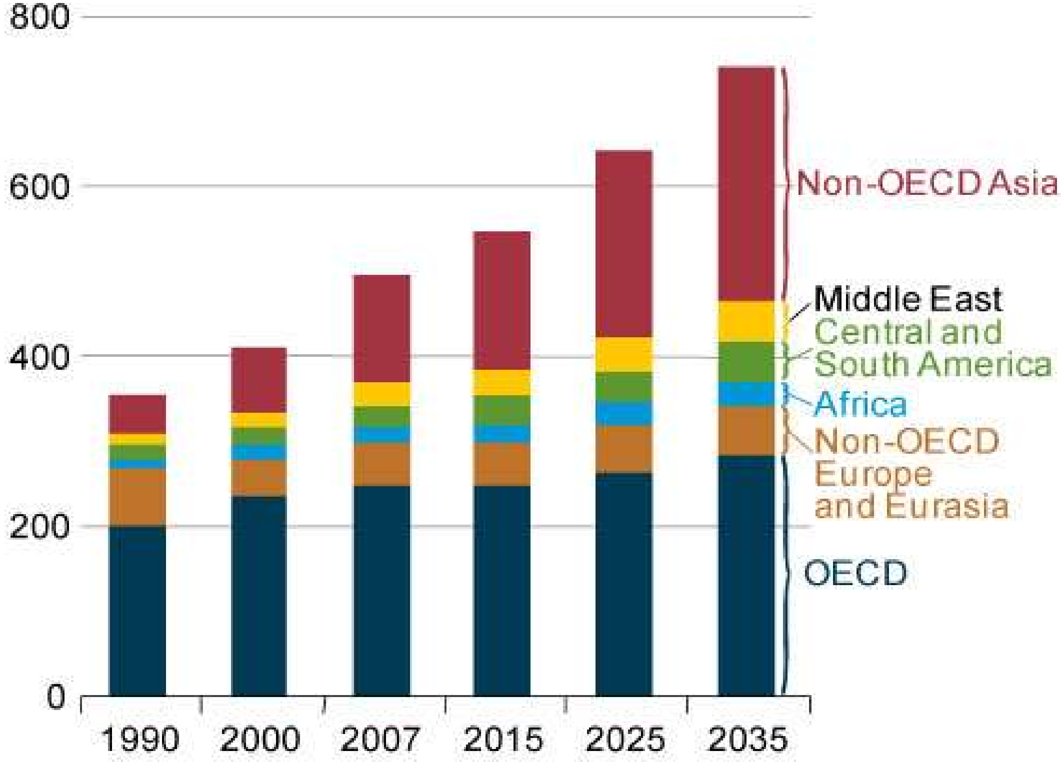
Global Economy Remains Critical Dependent on Oil Rising Oil Exports Through 2035



EIA, April 2011, http://www.eia.gov/forecasts/aeo/MT_intl.cfm

Strategic Importance of Iraqi Oil: Developing Nations Make Massive Increases in Energy Use

Figure 50. World energy consumption by region, 1990-2035 (quadrillion Btu)

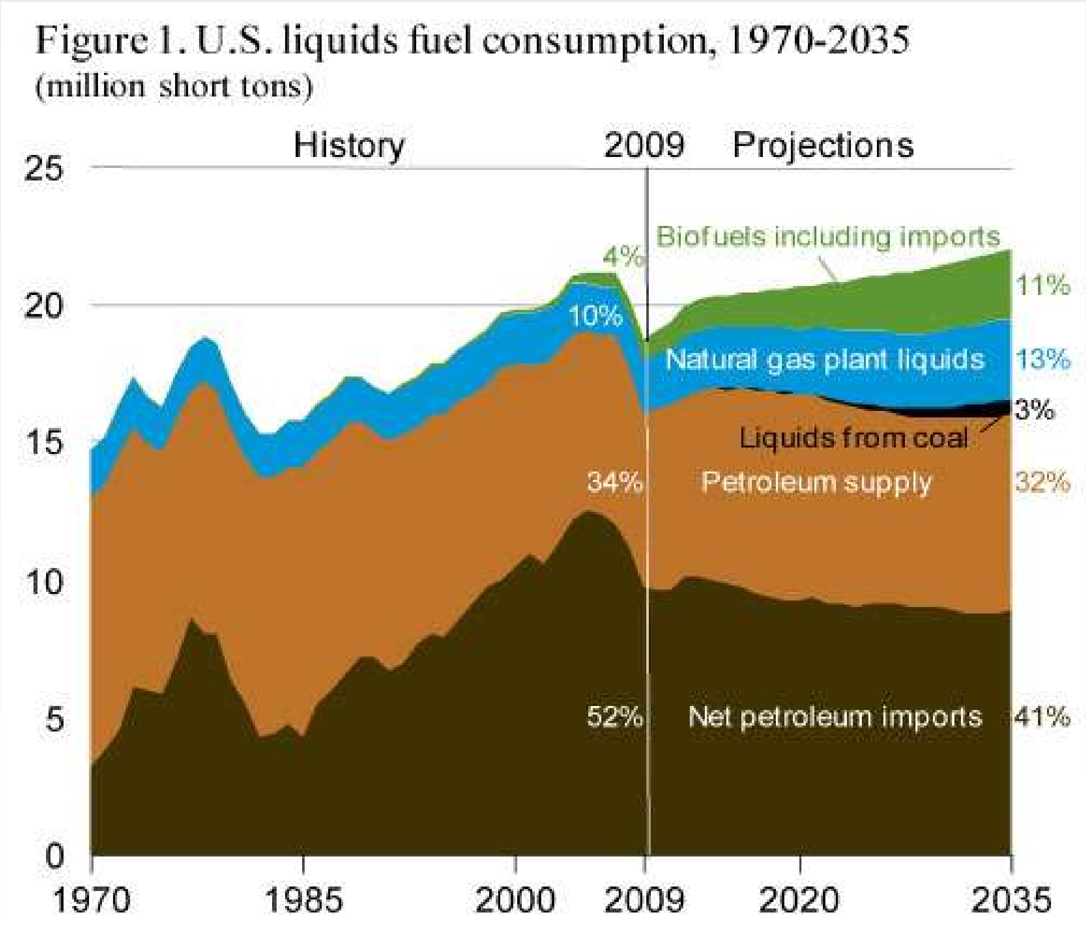


EIA's *International Energy Outlook* shows world marketed energy consumption increasing strongly over the projection period, rising by nearly 50 percent from 2009 through 2035 (Figure 50). Most of the growth occurs in emerging economies outside the Organization for Economic Cooperation and Development (non-OECD), especially in non-OECD Asia. Total non-OECD energy use increases by 84 percent in the Reference case, compared with a 14-percent increase in the developed OECD nations.

Energy use in non-OECD Asia, led by China and India, shows the most robust growth among the non-OECD regions, rising by 118 percent over the projection period. However, strong growth is also projected for much of the rest of the non-OECD regions: 82 percent growth in the Middle East, 63 percent in Africa, and 63 percent in Central and South America. The slowest growth among the non-OECD regions is projected for non-OECD Europe and Eurasia (including Russia), where substantial gains in energy efficiency are achieved through replacement of inefficient Soviet-era capital equipment.

Worldwide, the use of energy from all sources increases over the projection. Given expectations that oil prices will remain relatively high, petroleum and other liquids are the world's slowest-growing energy sources. High energy prices and concerns about the environmental consequences of greenhouse gas emissions lead a number of national governments to provide incentives in support of the development of alternative energy sources, making renewables the world's fastest-growing source of energy in the outlook.

Strategic Importance of Iraqi Oil: US Petroleum Import Dependence Remains High Thru 2035



The net import share of total U.S. energy consumption in 2035 is 17 percent, compared with 24 percent in 2009. (The share was 29 percent in 2007, but it dropped considerably during the 2008-2009 recession.)

Much of the projected decline in the net import share of energy supply is accounted for by liquids.

Although U.S. consumption of liquid fuels continues to grow through 2035 in the Reference case, reliance on petroleum imports as a share of total liquids consumption decreases.
Total U.S. consumption of liquid fuels, including both fossil fuels and biofuels, rises from about 18.8 million barrels per day in 2009 to 21.9 million barrels per day in 2035 in the Reference case.
The import share, which reached 60 percent in 2005 and 2006 before falling to 51 percent in 2009, falls to 42 percent in 2035