

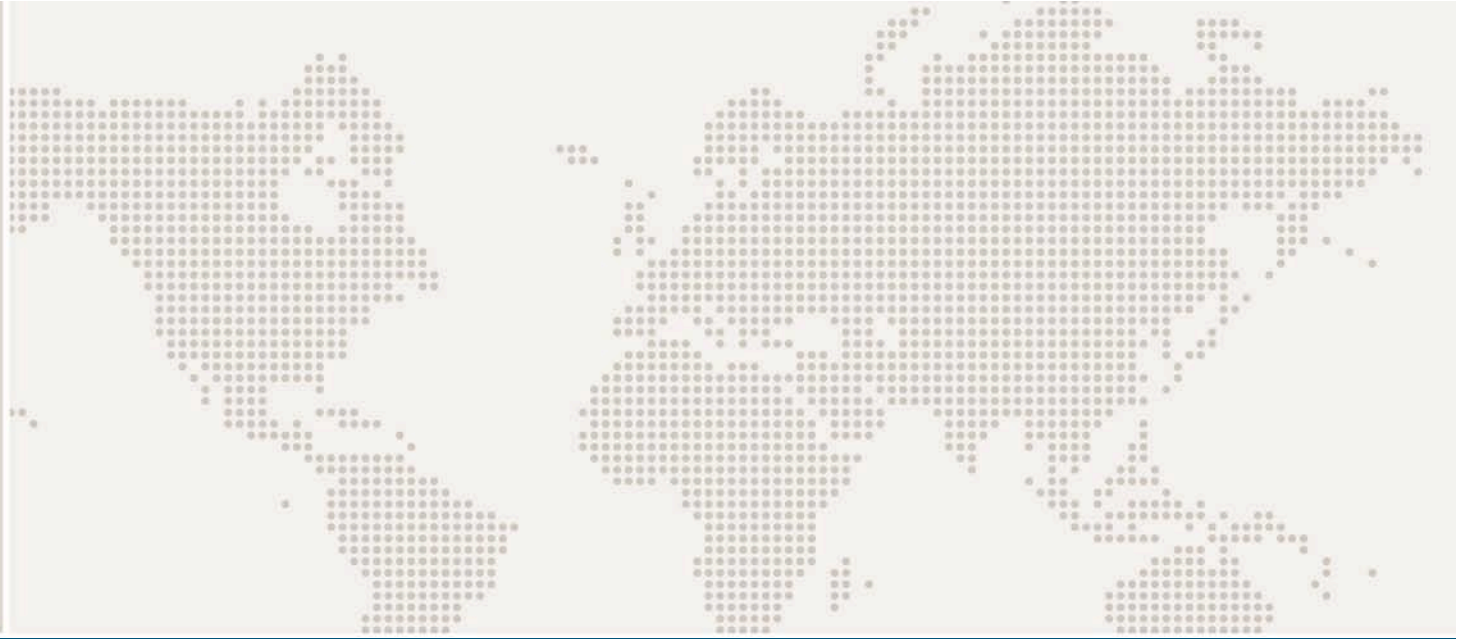
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Iraq After US “Withdrawal:” Critical Impact on World Oil Supplies

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in Strategy

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Continuing US Dependence on Oil Imports Through 2035

Even Under Best Case Assumptions, EIA Estimates that the US Remains Strategically Dependent on Imported Oil Thru 2035

“The net import share of U.S. liquid fuels consumption fell from 60 percent in 2005 to 57 percent in 2008 and about 54 percent in 2009.

“That trend continues in the projections, with the net import share falling to 45 percent in the Reference case and to 30 percent in the High Oil Price case in 2035. Increased domestic production of crude oil and biofuels reduces the need for imports of crude oil and petroleum products in the High Oil Price case, but the import share of total consumption is still substantial).

“In the Low Oil Price case, the net import share rises to 62 percent in 2035. With lower prices for liquid fuels, demand increases while domestic production decreases, and more imports are needed to meet demand.

“The above projections for net import shares are based on total U.S. consumption of all liquid fuels, including biofuels and other alternative fuels. When only petroleum consumption is considered (instead of total liquid fuels consumption), the net import share of petroleum declines from 57 percent in 2008 to 49 percent in 2035 in the Reference case.”

DOE-IEA, *Annual Energy Outlook 2010*, p. 77. This ignores indirect imports of oil through US imports of manufactured goods, and the fact the US economy is dependent on the health of a global economy dependent on its imports of oil

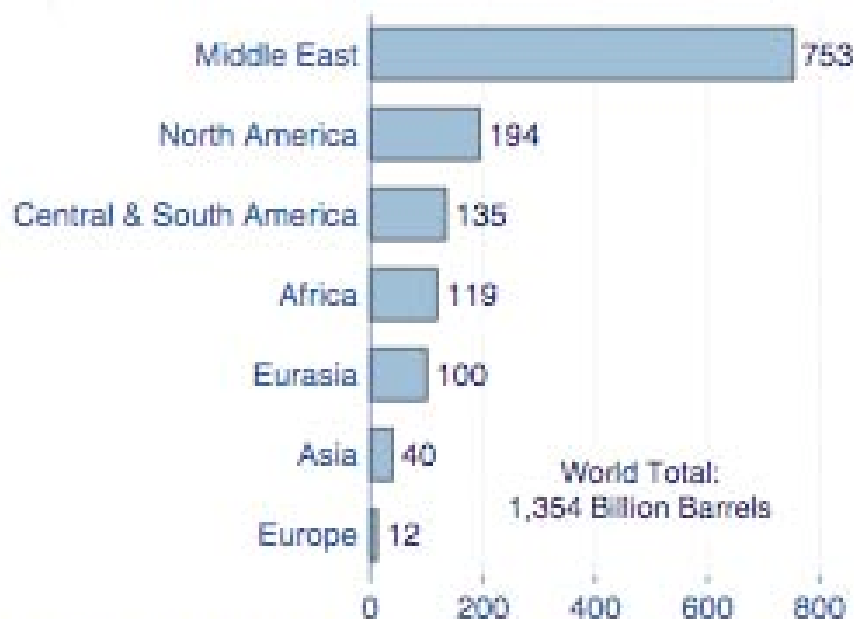
Net Import Share of U.S. Liquid Fuels Consumption, 1990-2035 (2010 Estimate) in Percent



Iraq's Changing Role in World Oil and Gas Supplies: 2008-2035

Iraq's Share of Proven World Oil Reserves

(In billions of barrels)



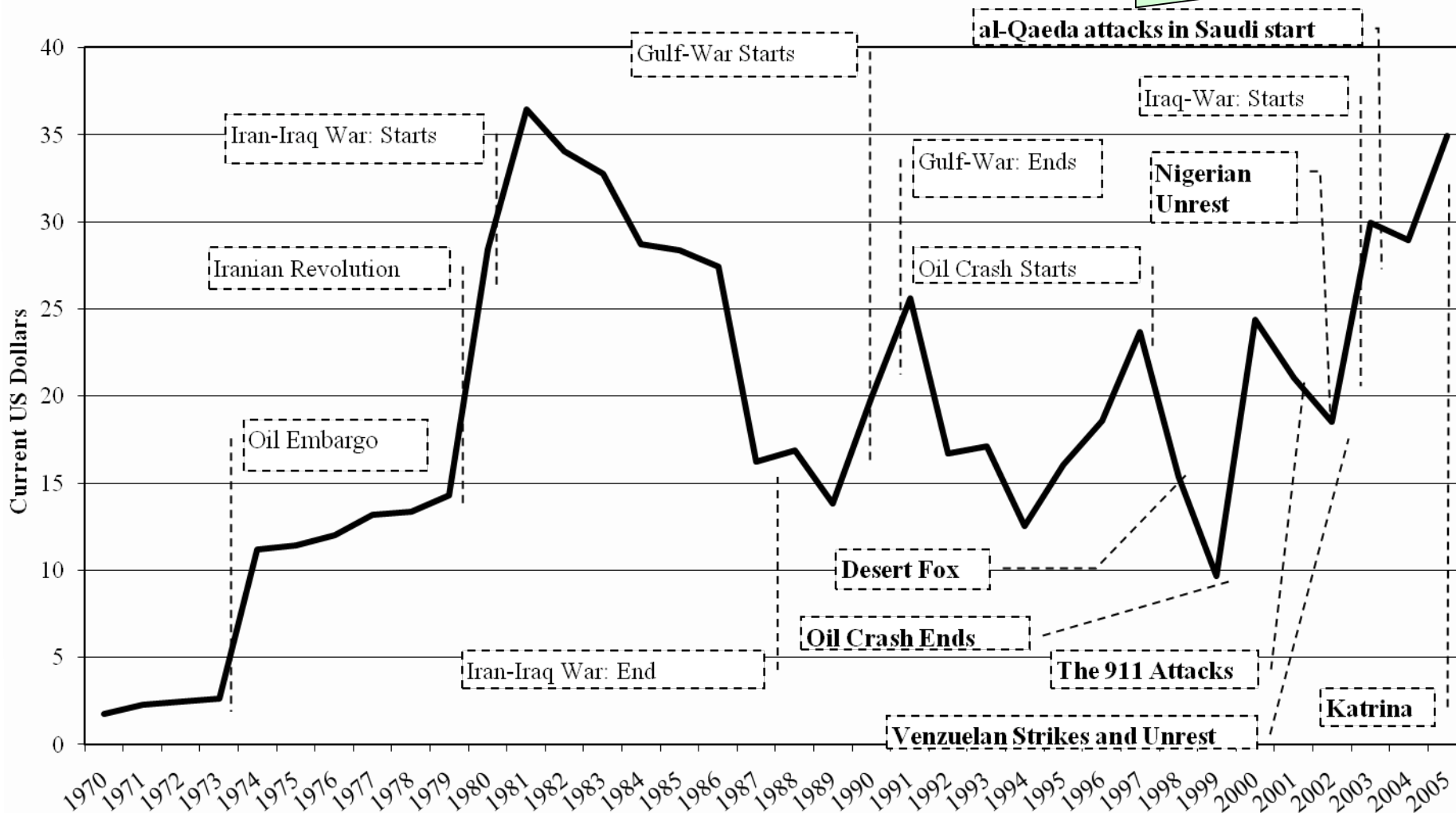
Source: Oil & Gas Journal.

Country	Oil reserves	Percent of world total
Saudi Arabia	259.9	19.20
Canada	175.2	12.94
Iran	137.6	10.16
Iraq	115.0	8.50
Kuwait	101.5	7.50
Venezuela	99.4	7.34
United Arab Emirates	97.8	7.22
Russia	60.0	4.43
Libya	44.3	3.27
Nigeria	37.2	2.75
Kazakhstan	30.0	2.22
Qatar	25.4	1.88
China	20.4	1.51
United States	19.2	1.42
Brazil	12.8	0.95
Algeria	12.2	0.90
Mexico	10.4	0.77
Angola	9.5	0.70
Azerbaijan	7.0	0.52
Norway	6.7	0.49
Rest of World	72.2	5.33
World Total	1,353.7	100.00

Source: Oil & Gas Journal.

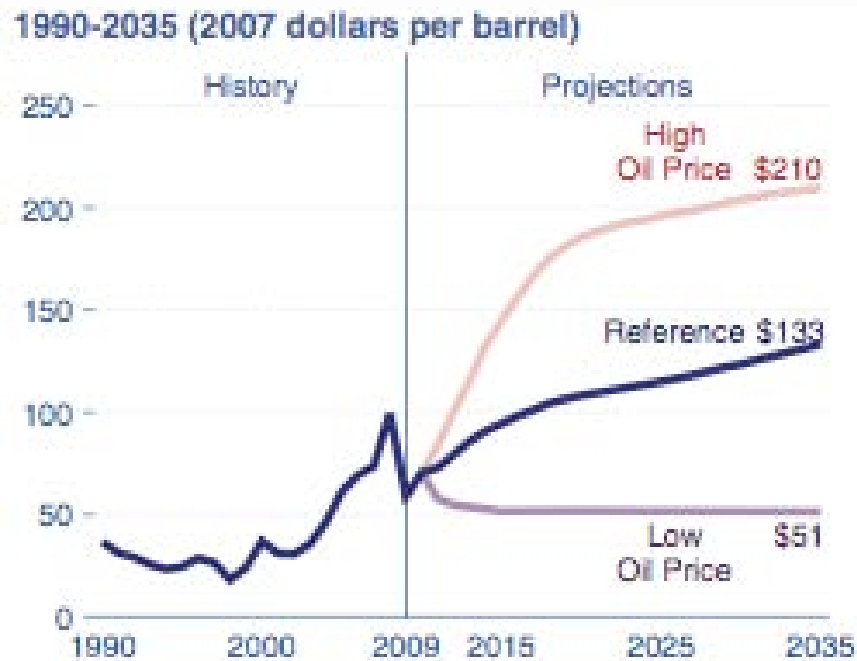
Repeating History: Gulf-Driven Oil Shocks Before \$100 Oil

Overtimes: more incidents, more frequent volatility, higher risk of asymmetric attacks, and more geopolitical uncertainties.

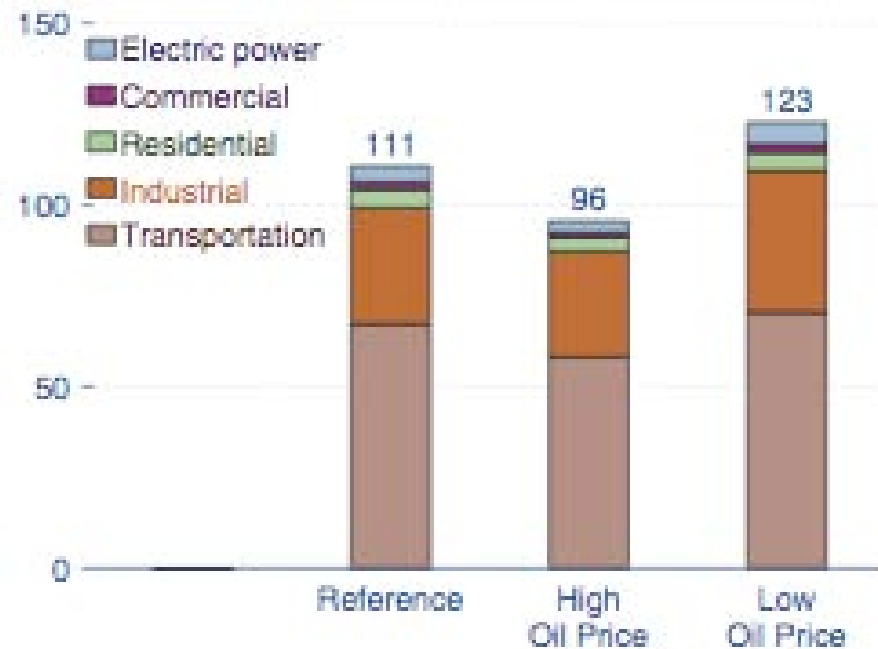


Source: EIA, "Crude Prices by Selected Type 1970-2005," <http://www.eia.doe.gov/emeu/aer/txt/ptb1107.html>.
 Note: These prices are averages of several types: Saudi Light, Iranian Light, Libyan Es Sider, Nigerian Bonny Light, Indonesian Minas, Venezuelan Tia Juana light Mexico Maya, and UK Brent blend

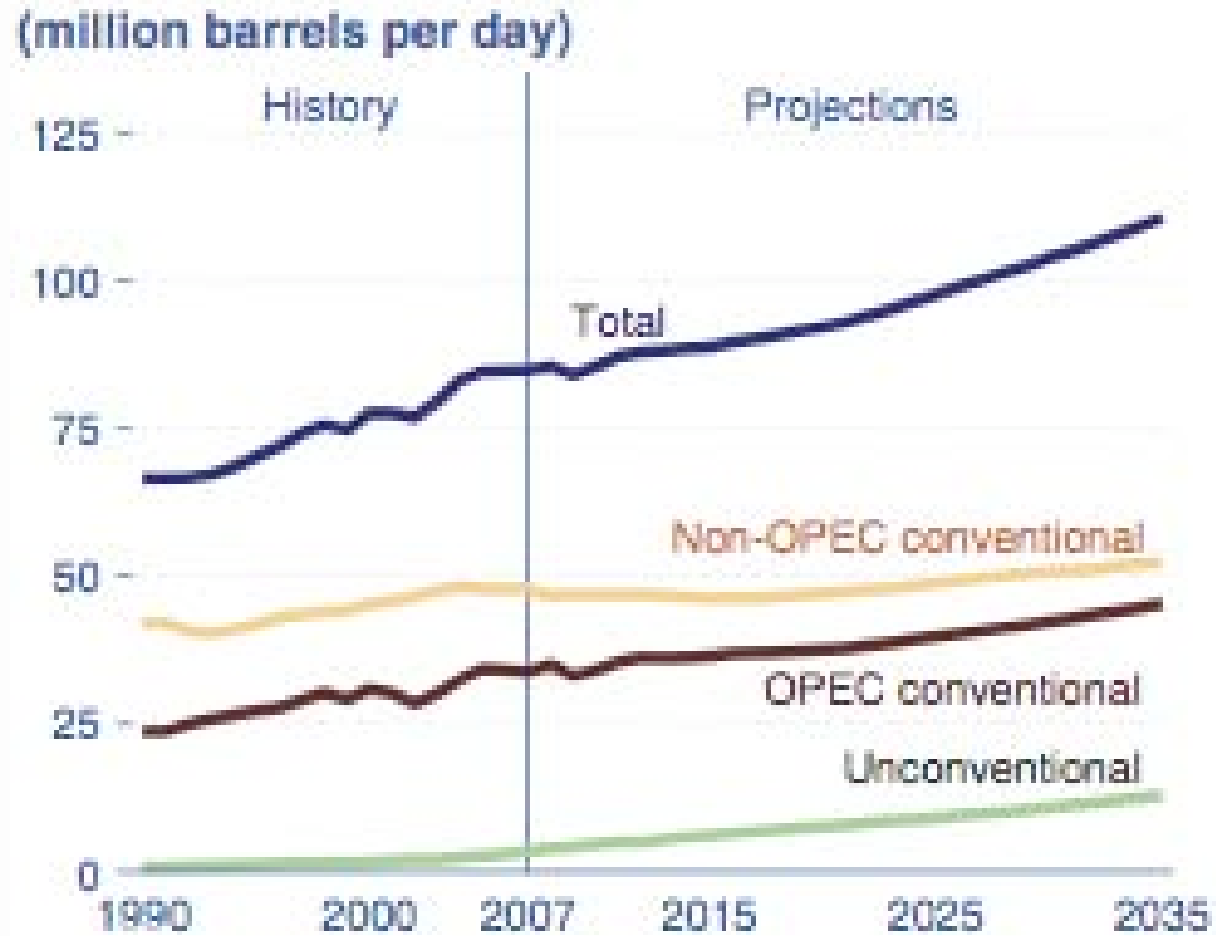
An Equally Uncertain Future: EIA Estimates of Future World Oil Prices & Consumption



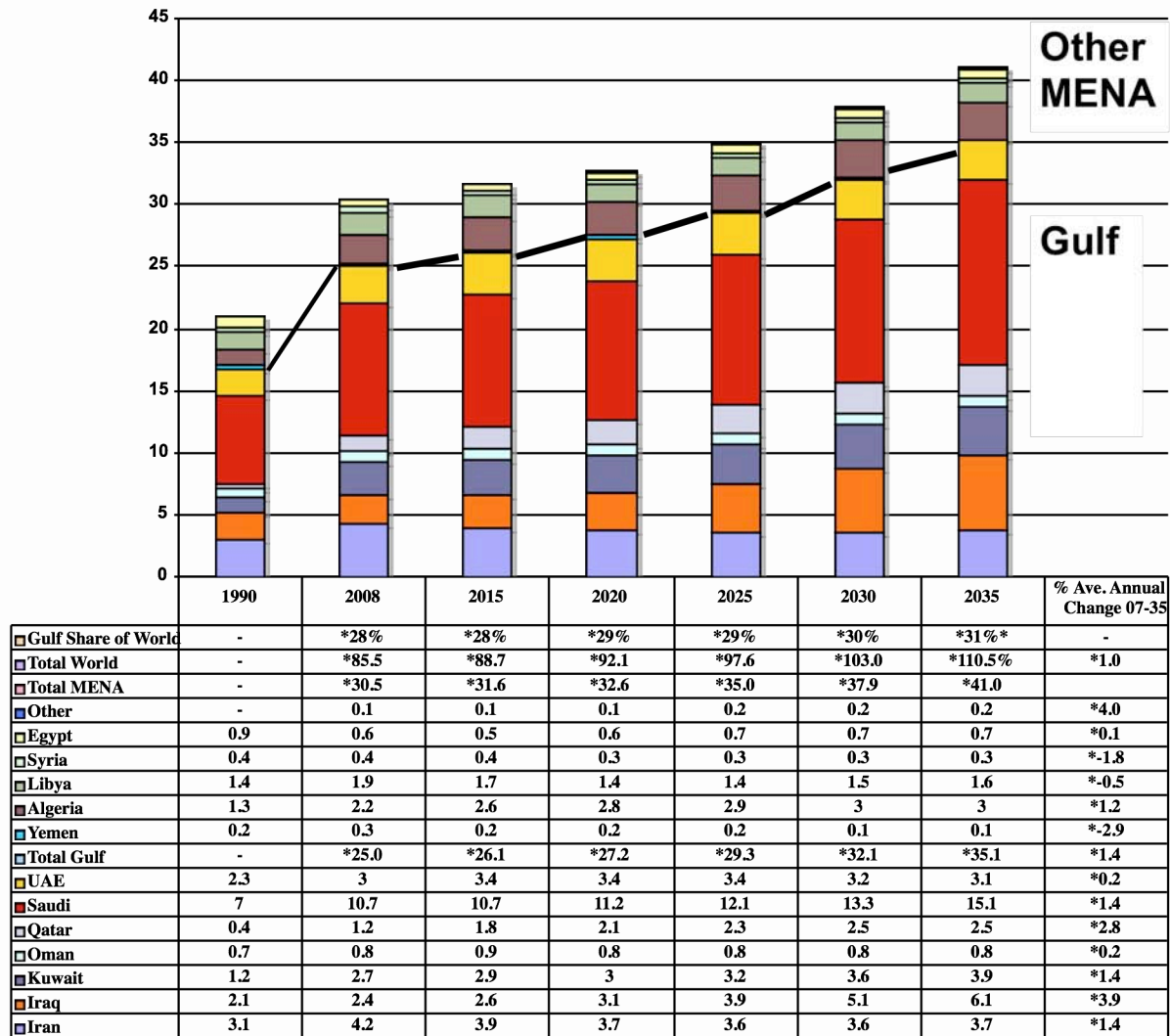
World Liquids Consumption in 2035 in MMBD



But, Still Steadily Rising Global Dependence on Gulf Oil



EIA Projections of Gulf/ME Liquids Production By Country 1990-2035: In Millions of Barrels Per Day

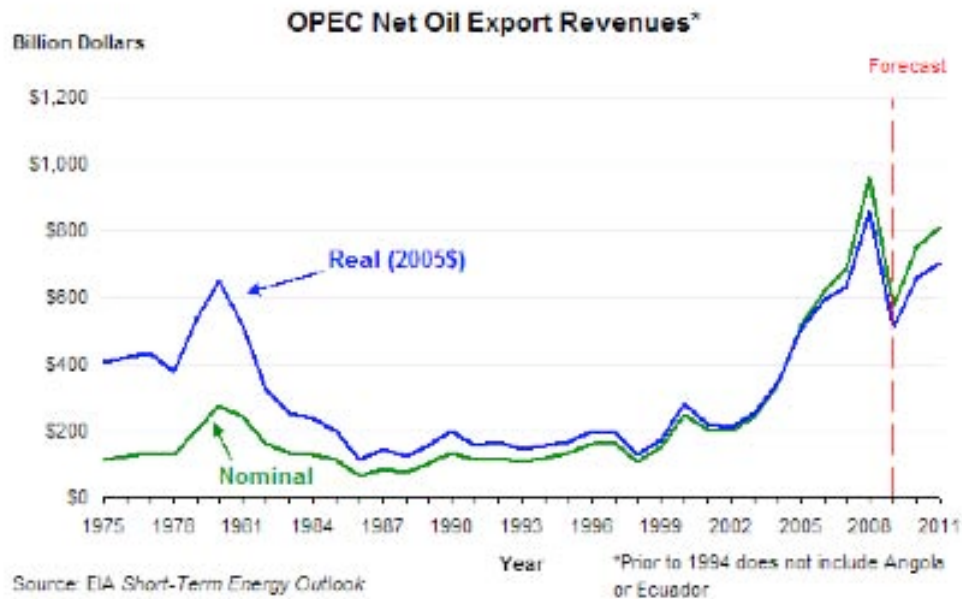


Source: Adapted from EIA, *World Energy Outlook*, 2010, p. 225 and *World Energy Outlook*, 2010, p. 260

EIA Projections of Gulf/ME Liquids Production By Country 1990-2035 In Millions of Barrels Per Day

	1990	2008	2015	2020	2025	2030	2035	% Ave. Annual
Iran	3.1	4.2	3.9	3.7	3.6	3.6	3.7	*1.4
Iraq	2.1	2.4	2.6	3.1	3.9	5.1	6.1	*3.9
Kuwait	1.2	2.7	2.9	3	3.2	3.6	3.9	*1.4
Oman	0.7	0.8	0.9	0.8	0.8	0.8	0.8	*0.2
Qatar	0.4	1.2	1.8	2.1	2.3	2.5	2.5	*2.8
Saudi	7	10.7	10.7	11.2	12.1	13.3	15.1	*1.4
UAE	2.3	3	3.4	3.4	3.4	3.2	3.1	*0.2
Total Gulf	-	*25.0	*26.1	*27.2	*29.3	*32.1	*35.1	*1.4
Yemen	0.2	0.3	0.2	0.2	0.2	0.1	0.1	*-2.9
Algeria	1.3	2.2	2.6	2.8	2.9	3	3	*1.2
Libya	1.4	1.9	1.7	1.4	1.4	1.5	1.6	*-0.5
Syria	0.4	0.4	0.4	0.3	0.3	0.3	0.3	*-1.8
Egypt	0.9	0.6	0.5	0.6	0.7	0.7	0.7	*0.1
Other	-	0.1	0.1	0.1	0.2	0.2	0.2	*4.0
Total MENA	-	*30.5	*31.6	*32.6	*35.0	*37.9	*41.0	
Total World	-	*85.5	*88.7	*92.1	*97.6	*103.0	*110.5	%
Gulf Share of -W		*28%	*28%	*29%	*29%	*30%	*31%*	-

Trends in Gulf Oil Revenues: 1975-2011



OPEC Net Oil Export Revenues

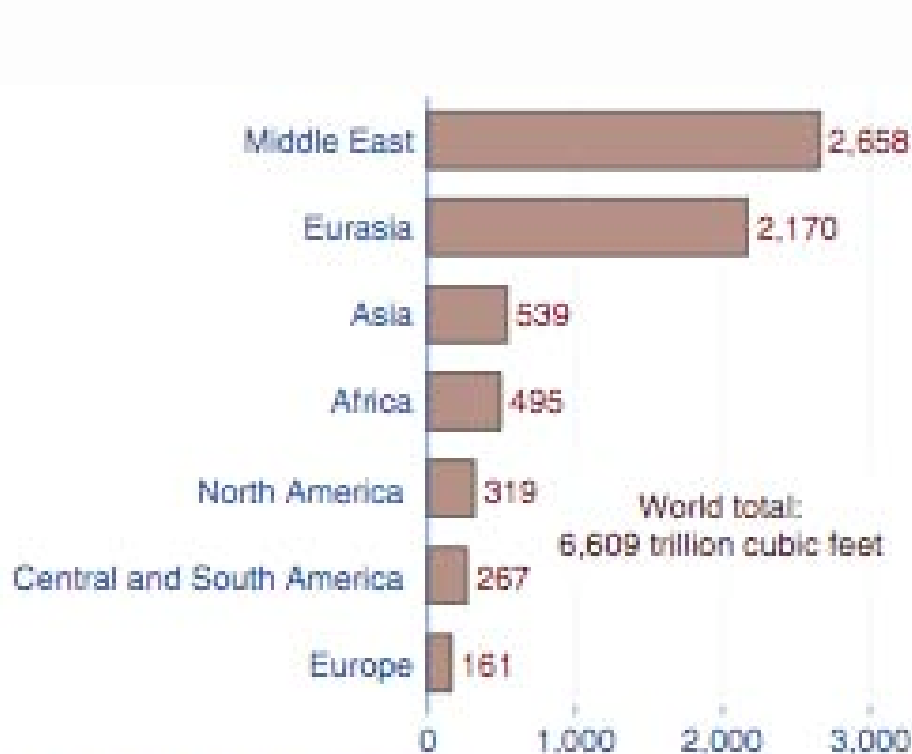
Country	Nominal (Billion \$)			Real (Billion 2005\$)				
	2009	2010	2011	Jan-Jun 2010	2009	2010	2011	Jan-Jun 2010
Algeria	\$42	--	--	\$27	\$38	--	--	\$24
Angola	\$42	--	--	\$29	\$38	--	--	\$26
Ecuador	\$6	--	--	\$3	\$5	--	--	\$3
Iran	\$53	--	--	\$35	\$48	--	--	\$31
Iraq	\$38	--	--	\$24	\$34	--	--	\$21
Kuwait	\$45	--	--	\$29	\$40	--	--	\$26
Libya	\$34	--	--	\$22	\$31	--	--	\$19
Nigeria	\$46	--	--	\$32	\$41	--	--	\$28
Qatar	\$24	--	--	\$17	\$21	--	--	\$15
Saudi Arabia	\$153	--	--	\$100	\$137	--	--	\$88
UAE	\$53	--	--	\$33	\$47	--	--	\$29
Venezuela	\$33	--	--	\$19	\$30	--	--	\$17
OPEC	\$571	\$751	\$813	\$371	\$510	\$661	\$703	\$327

OPEC Per Capita Net Oil Export Revenues

Country	Nominal (\$)			Real (2005\$)				
	2009	2010	2011	Jan-Jun 2010	2009	2010	2011	Jan-Jun 2010
Algeria	\$1,243	--	--	\$781	\$1,110	--	--	\$690
Angola	\$3,292	--	--	\$2,224	\$2,940	--	--	\$1,963
Ecuador	\$411	--	--	\$243	\$367	--	--	\$214
Iran	\$804	--	--	\$528	\$719	--	--	\$466
Iraq	\$1,305	--	--	\$824	\$1,166	--	--	\$728
Kuwait	\$16,684	--	--	\$10,463	\$14,907	--	--	\$9,236
Libya	\$5,418	--	--	\$3,353	\$4,841	--	--	\$2,960
Nigeria	\$326	--	--	\$223	\$291	--	--	\$196
Qatar	\$25,205	--	--	\$17,710	\$22,516	--	--	\$15,633
Saudi Arabia	\$5,339	--	--	\$3,439	\$4,770	--	--	\$3,036
UAE	\$10,955	--	--	\$6,686	\$9,788	--	--	\$5,902
Venezuela	\$1,238	--	--	\$708	\$1,106	--	--	\$625
OPEC	\$1,547	\$2,001	\$2,125	\$993	\$1,382	\$1,761	\$1,838	\$876

Source: Adapted from Energy Information Agency (EIA), Department of Energy, *OPEC Revenues Fact Sheet*, July 2010,

Iraq's Share of Proven World Gas Reserves (In trillions of cubic feet)



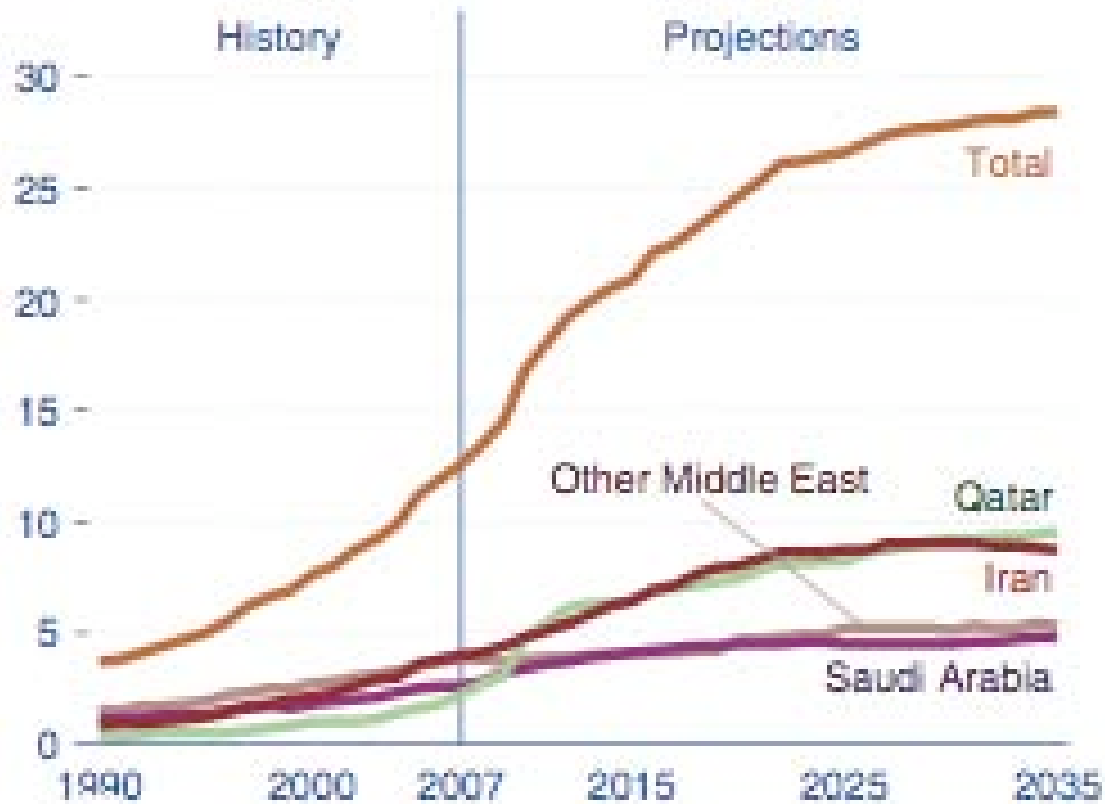
Source: *Oil & Gas Journal*.

Country	Reserves (trillion cubic feet)	Percent of world total
World	6,609	100.0
Top 20 Countries	6,003	90.8
Russia	1,680	25.4
Iran	1,046	15.8
Qatar	899	13.6
Turkmenistan	265	4.0
Saudi Arabia	263	4.0
United States	245	3.7
United Arab Emirates	210	3.2
Nigeria	185	2.8
Venezuela	176	2.7
Algeria	159	2.4
Iraq	112	1.7
Australia	110	1.7
China	107	1.6
Indonesia	106	1.6
Kazakhstan	85	1.3
Malaysia	83	1.3
Norway	82	1.2
Uzbekistan	65	1.0
Kuwait	63	1.0
Canada	62	0.9
Rest of World	606	9.2

Source: *Oil & Gas Journal*.

Iraqi & Middle East Gas Production

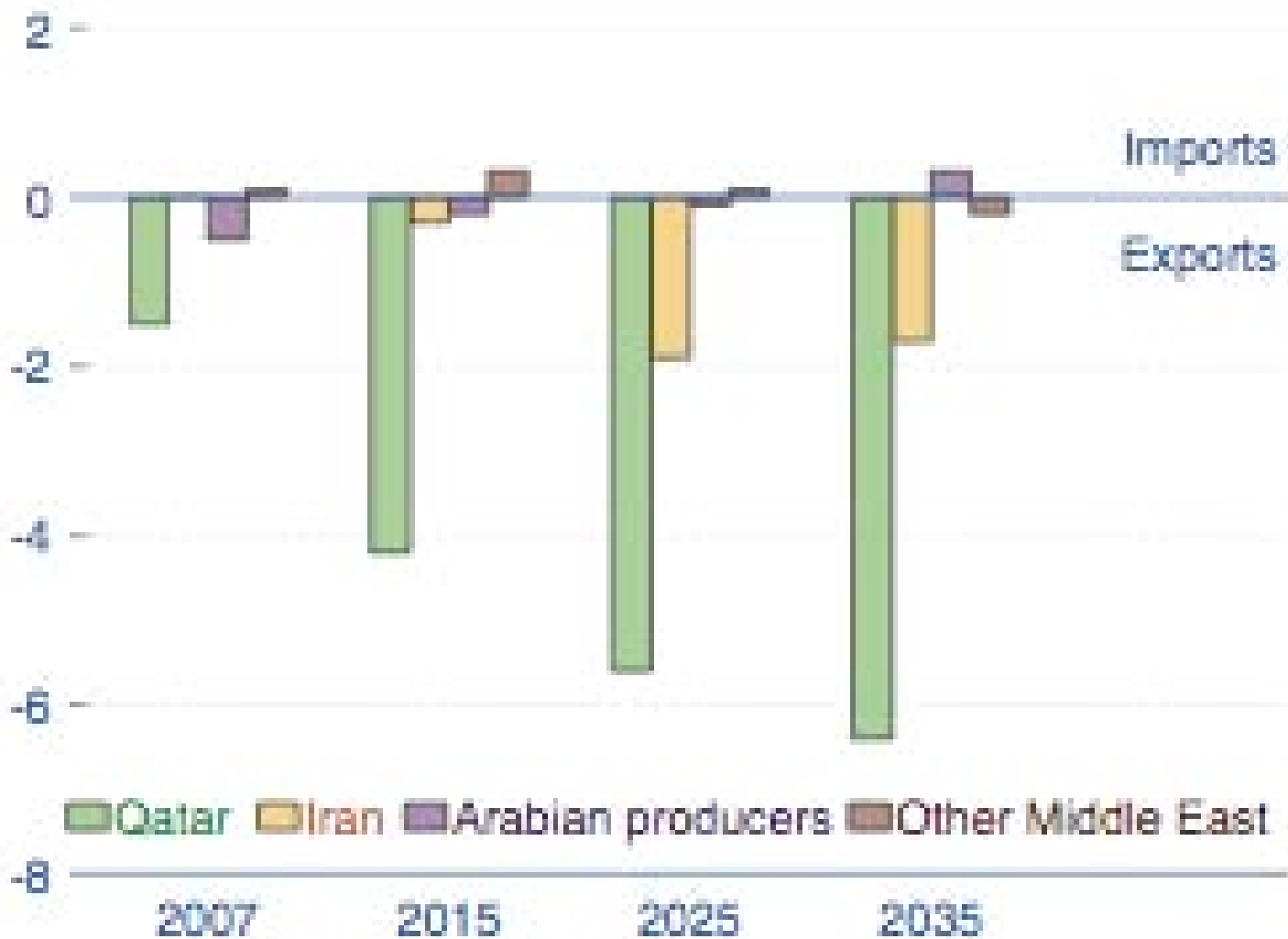
(In trillions of cubic feet)



Iraqi natural gas production rises from 0.1 TCF in 2008, to 0.2 TCF in 2015, 0.5 TCF in 2020, 0.7 TCF in 2025, 0.7 TCF in 2030, and 1.1 TCF in 2035 in EIA Reference Case

Middle East Gas Exports

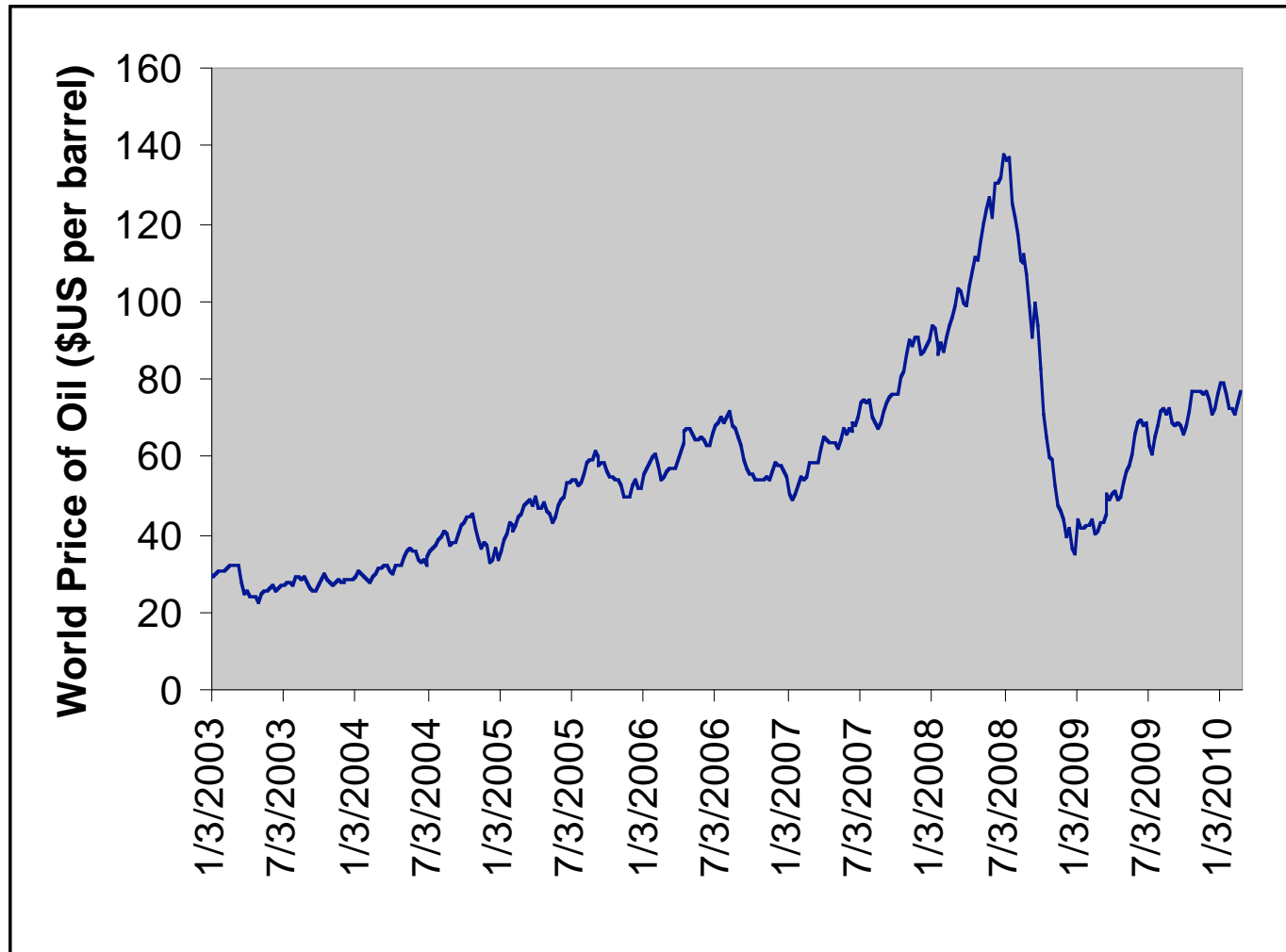
(In trillions of cubic feet)



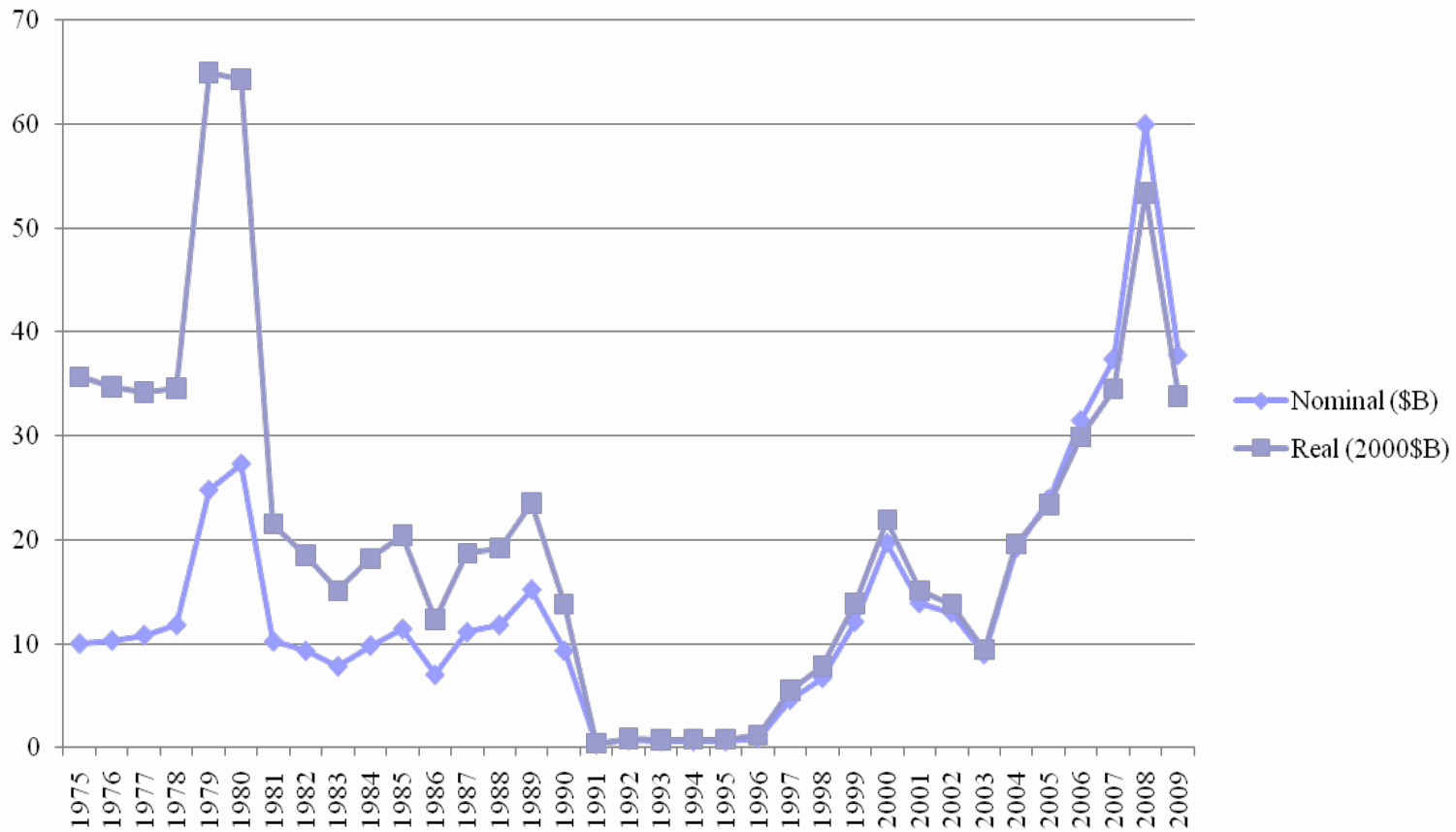
Source: EIA, *IEO 2010*, p. 55

Iraq's Current Critical Over- Dependence on Oil Exports

Uncertain World Price of Oil (\$US/per barrel) 2003-2010



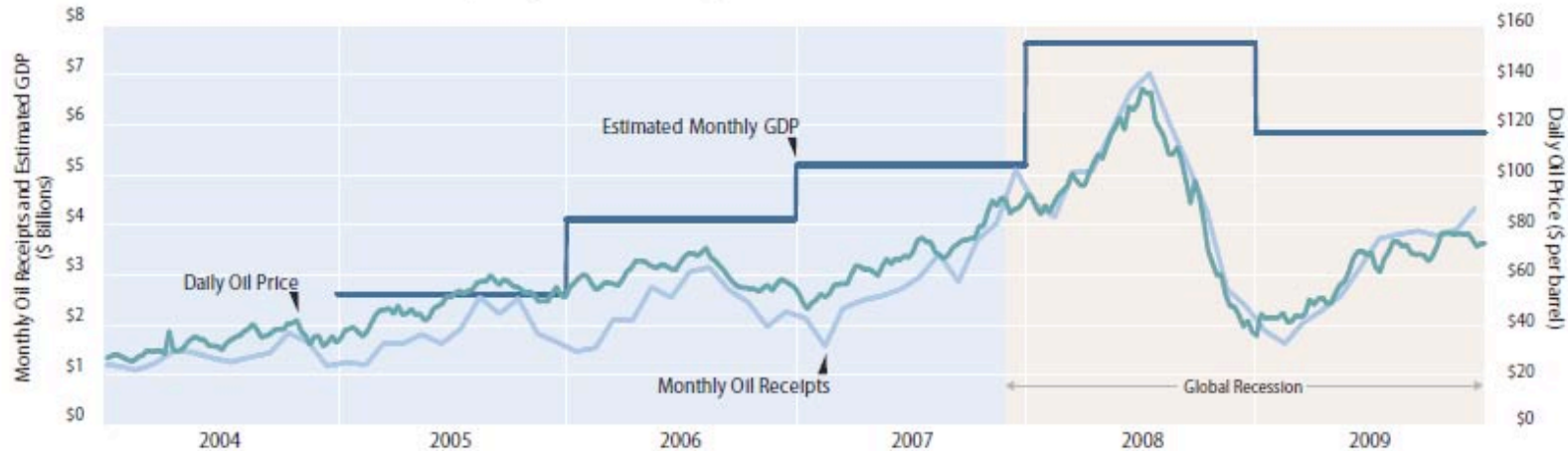
Net Oil Export Revenues in Iraq (1975-2009)



Data source: http://www.eia.doe.gov/cabs/OPEC_Revenues/Factsheet.html, July 29, 2010.

Iraq: The Cost-Benefit of Oil Dependence

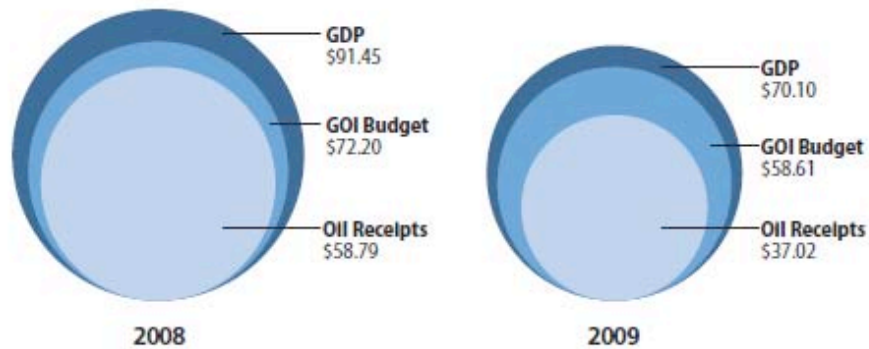
RELATIONSHIP BETWEEN PRICE OF OIL, IRAQI OIL RECEIPTS, AND GDP



OPEC Oil Export Revenues, 2009

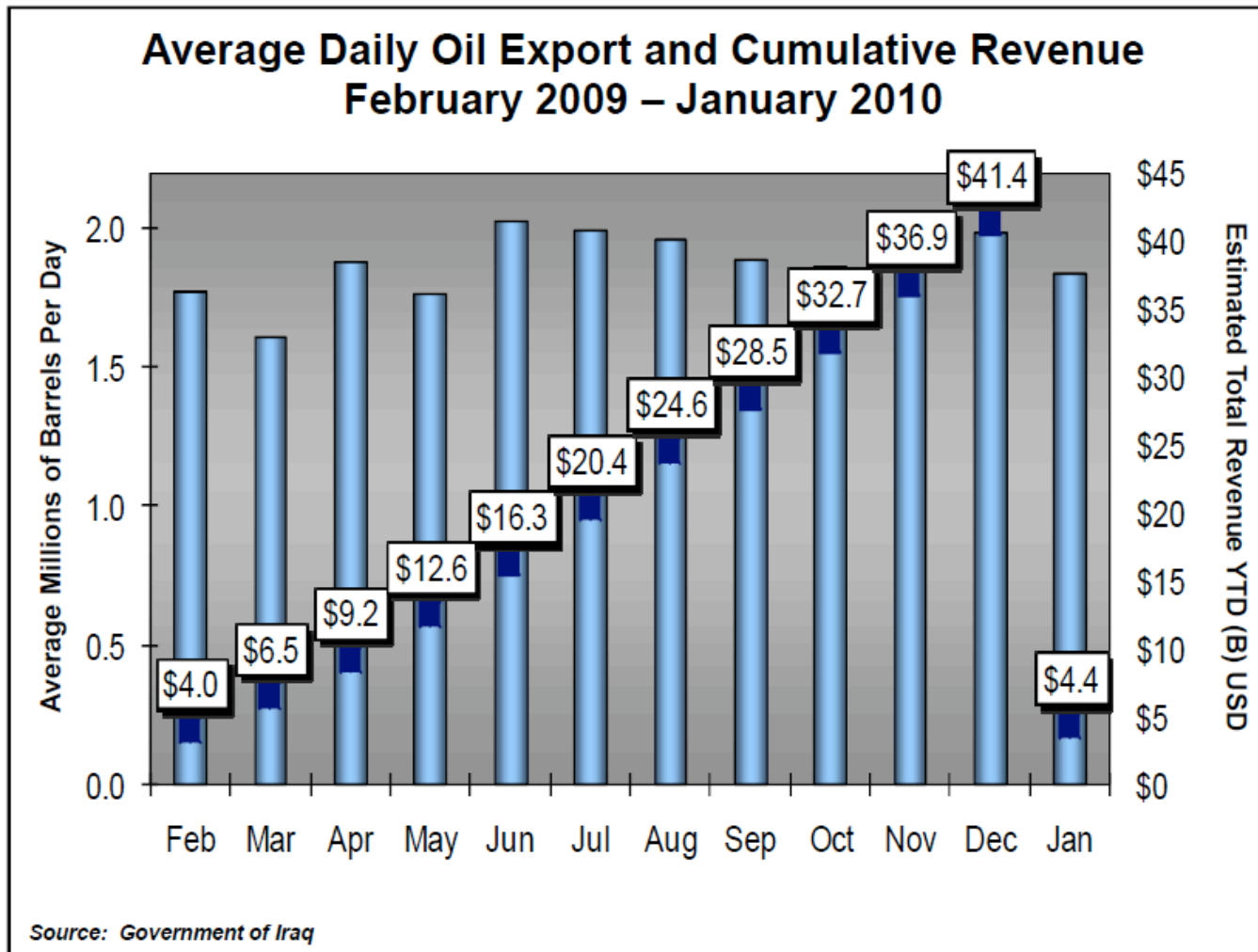
	NET (\$ BIL)	PER CAPITA (\$)	% OF GDP
Angola	42.2	3,294	61%
Libya	34.3	5,421	57%
Iraq	37.2	1,284	53%
Saudi Arabia	154.2	5,368	41%
Kuwait	46.0	17,061	40%
Algeria	42.7	1,250	32%
Nigeria	46.1	325	28%
Qatar	24.0	25,221	26%
UAE	52.2	10,863	23%
Iran	54.6	821	16%
Ecuador	5.8	411	10%
Venezuela	33.3	1,239	9%
OPEC	572.6	1,553	28%

Iraqi Oil Receipts, Budget, and GDP, 2008–2009
\$ Billions



Notes: Weekly Iraq Kirkuk netback price at U.S. Gulf used for all oil price descriptions, depictions, and analysis. All dollar values in current prices. Iraqi GDP is not available from the IMF for 2004; GDP figures from 2007–2009 are estimates. Data not audited. Numbers affected by rounding.

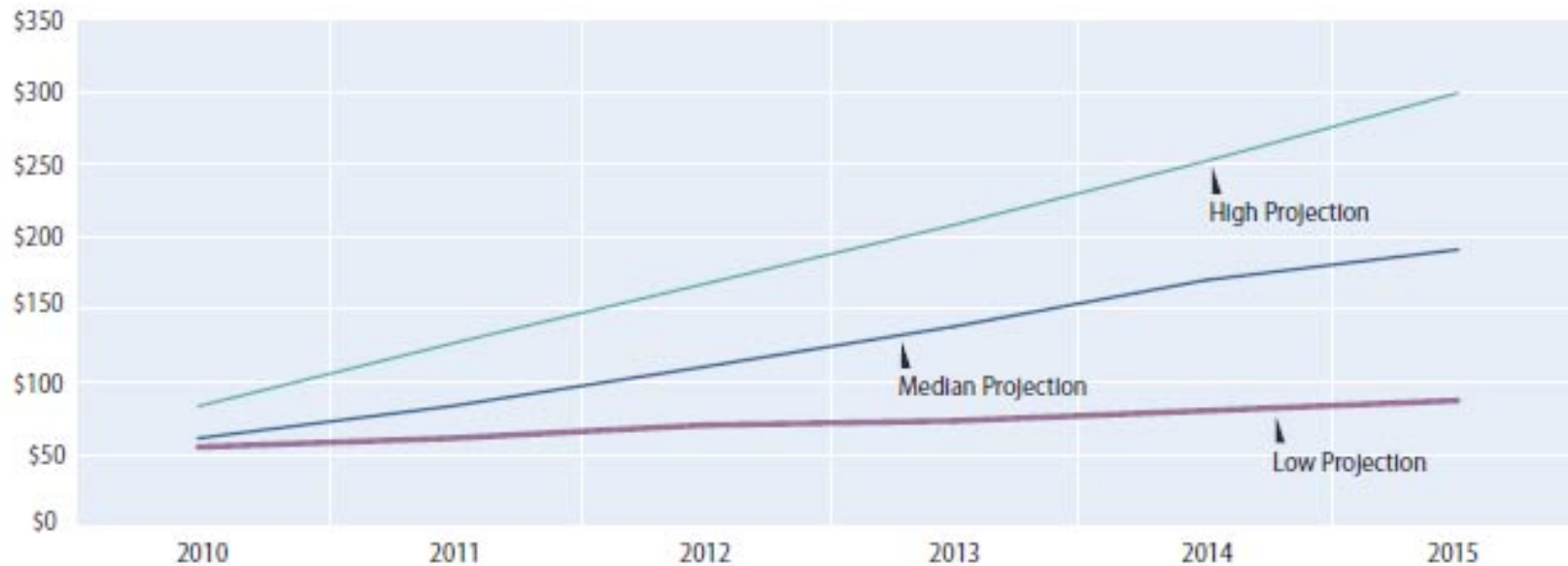
Iraqi Oil Revenues: 2009 - 2010



Uncertain Oil Export Revenue Will Dominate Iraqi GNP and Budget: 2010-2015

PROJECTIONS OF POTENTIAL IRAQI OIL EXPORT REVENUES

\$ Billions

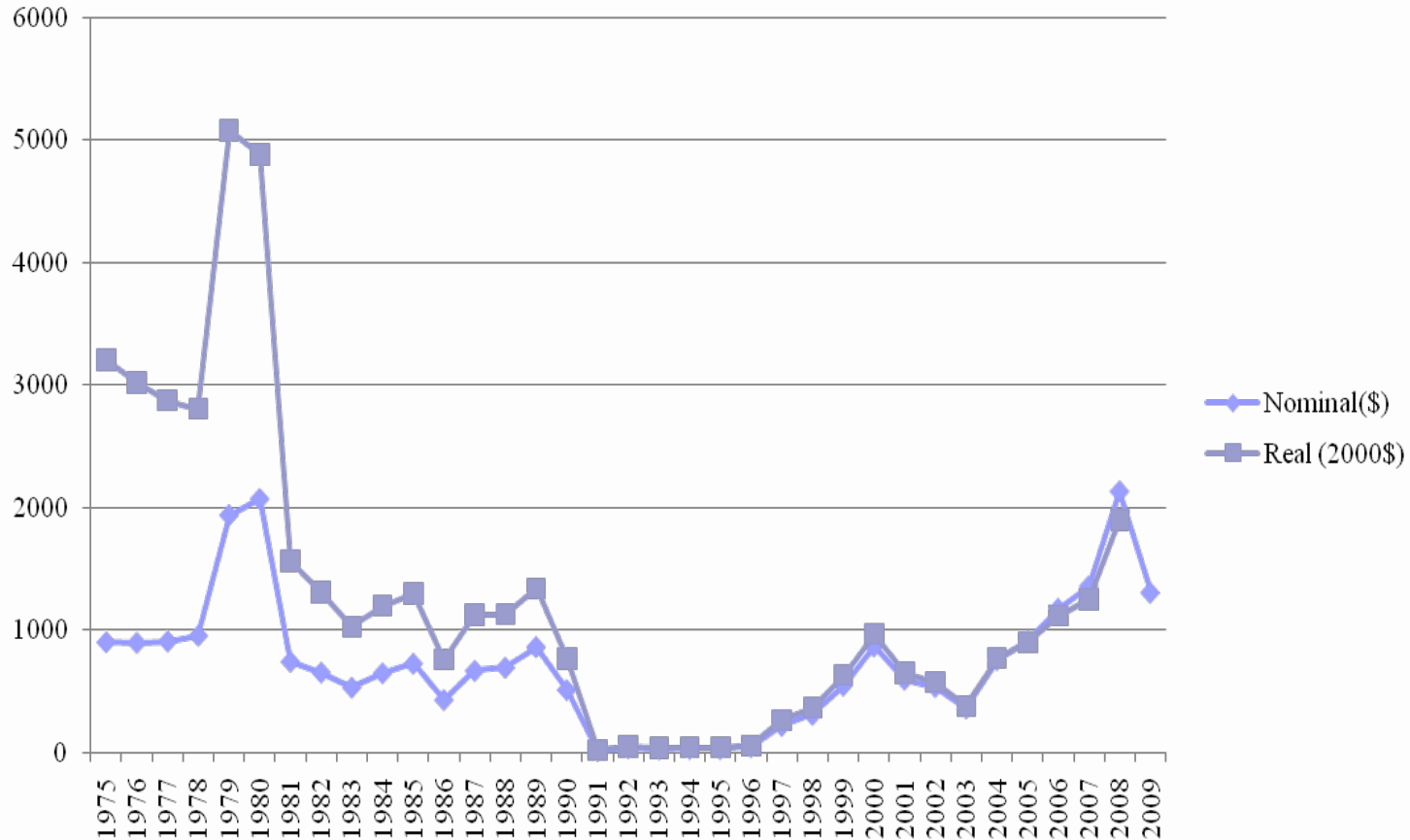


Note: This graphic represents but three of countless possible scenarios. Oil export quantity and price are treated as independent variables. The low projection assumes a slow increase in oil export volume and stable oil prices. The median projection assumes a moderate increase in oil export volume and increased oil prices. The high projection assumes a rapid increase in oil export volume and increased oil prices.

As of December 31, 2009, nearly \$141.49 billion had been made available for the relief and reconstruction of Iraq. These funds came from three main sources:³⁶

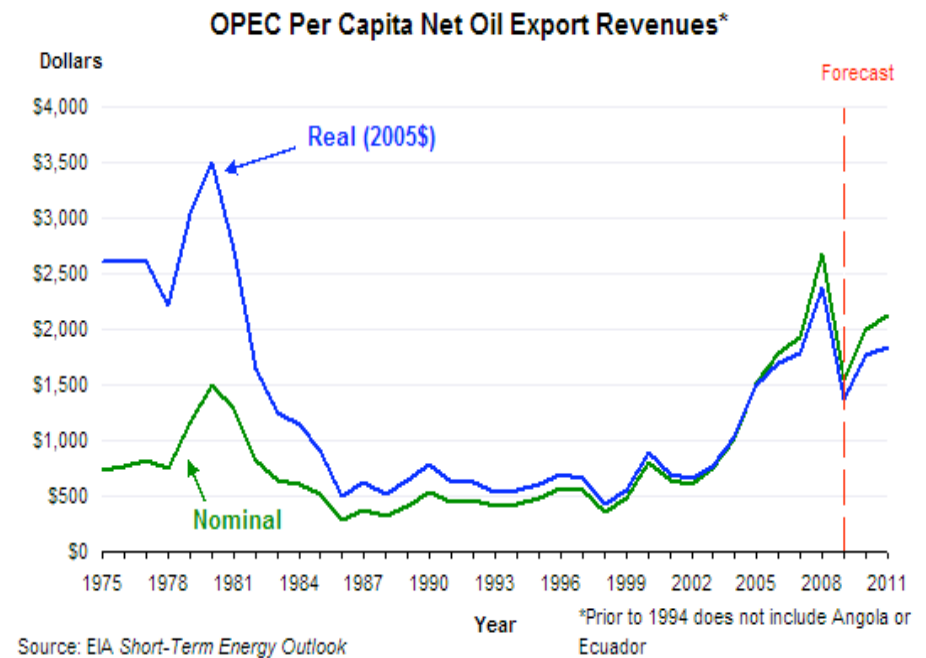
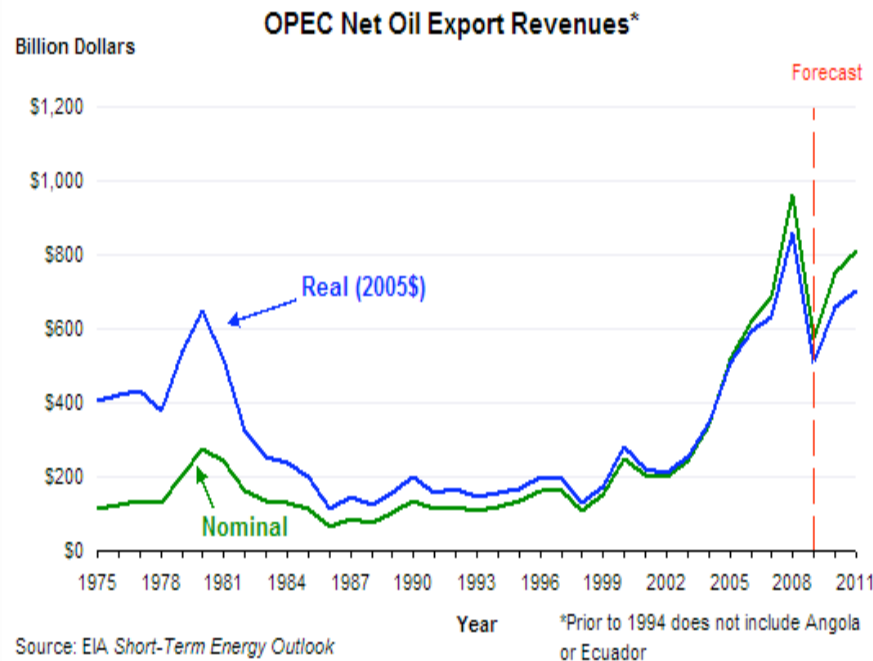
- Iraqi funds that were overseen by the Coalition Provisional Authority (CPA) and Iraqi capital budgets—\$71.19 billion
- International pledges of assistance from non-U.S. sources—\$17.01 billion
- U.S. appropriations—\$53.30 billion CPA Era

Iraqi Per Capita Net Oil Revenues Are Not “Oil Wealth:” 1975-2009



Data source: http://www.eia.doe.gov/cabs/OPEC_Revenues/Factsheet.html, July 29, 2010.

Broader OPEC Trends: 1975-2011



Source: http://www.eia.doe.gov/cabs/OPEC_Revenues/Factsheet.html, July 29, 2010.

Recent Trends in Iraqi Oil Production, Exports, and Revenues

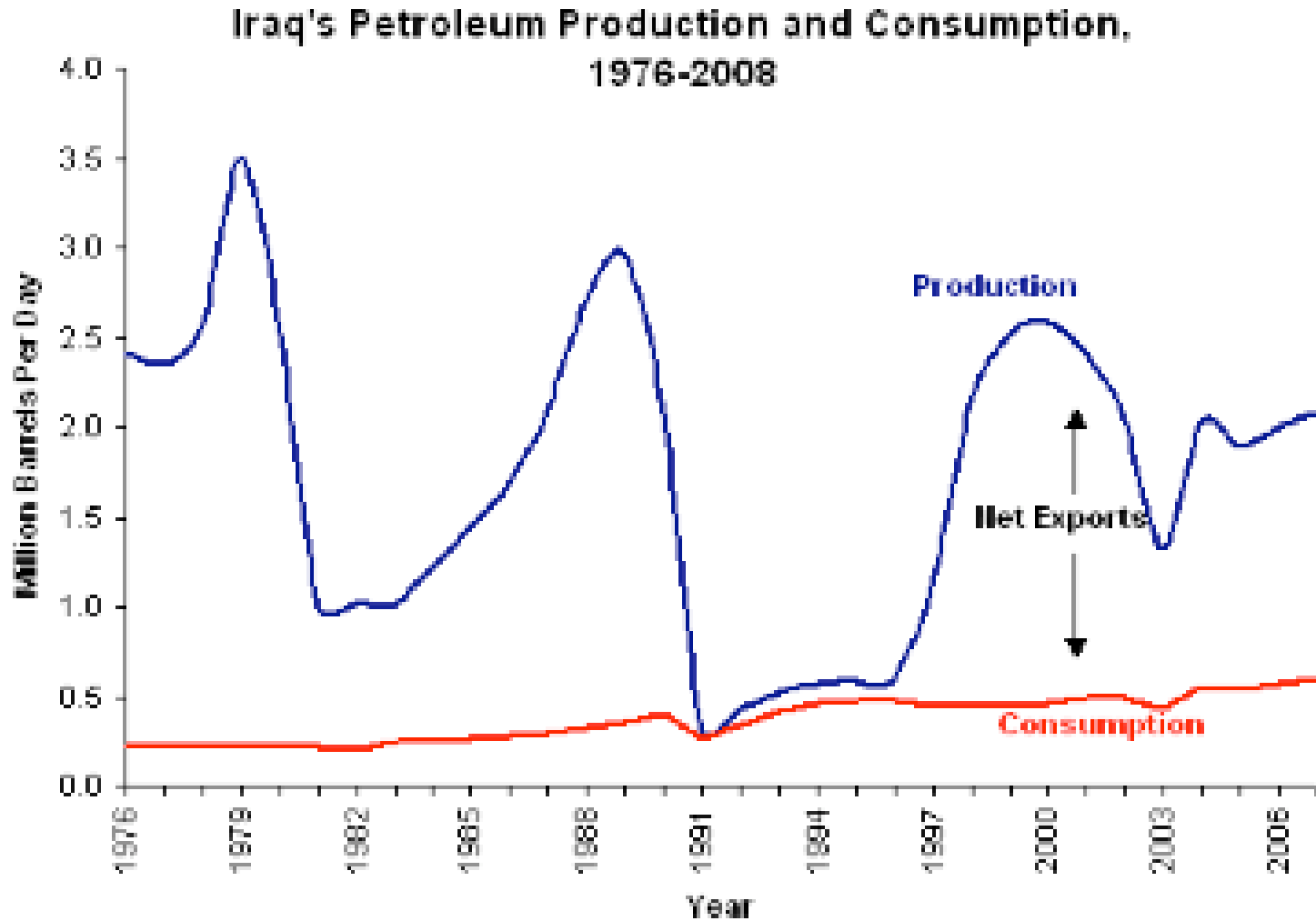
Iraqi Oil Fields and Facilities: 2010

GAS AND OIL INFRASTRUCTURE BY GOVERNORATE
Source: CIA Country Profile Map



Source: Adapted from EIA, *Iraq Country Analysis*, June 2009, p. 11.

Iraqi Oil Exports vs. Domestic Consumption: 1976-2007



Iraqi Oil Production and Exports: 2003 - 2/2010



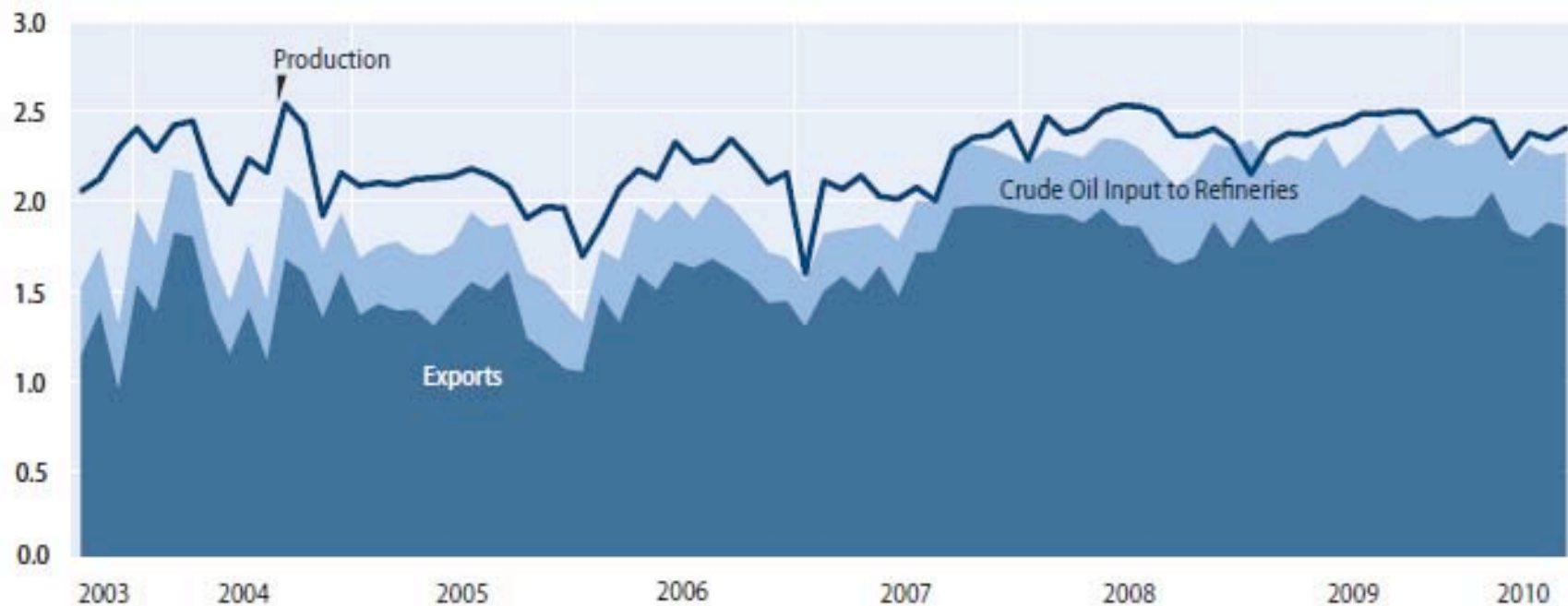
	Millions of barrels/day	
	Crude oil production	Crude oil exports
April	2.88	1.74
May	2.35	1.88
June	2.41	1.88

Iraqi Oil Production and Exports: 2003 - 7/2010

FIGURE 2.26

CRUDE OIL PRODUCTION AND EXPORTS, BY MONTH, 10/2003–6/2010

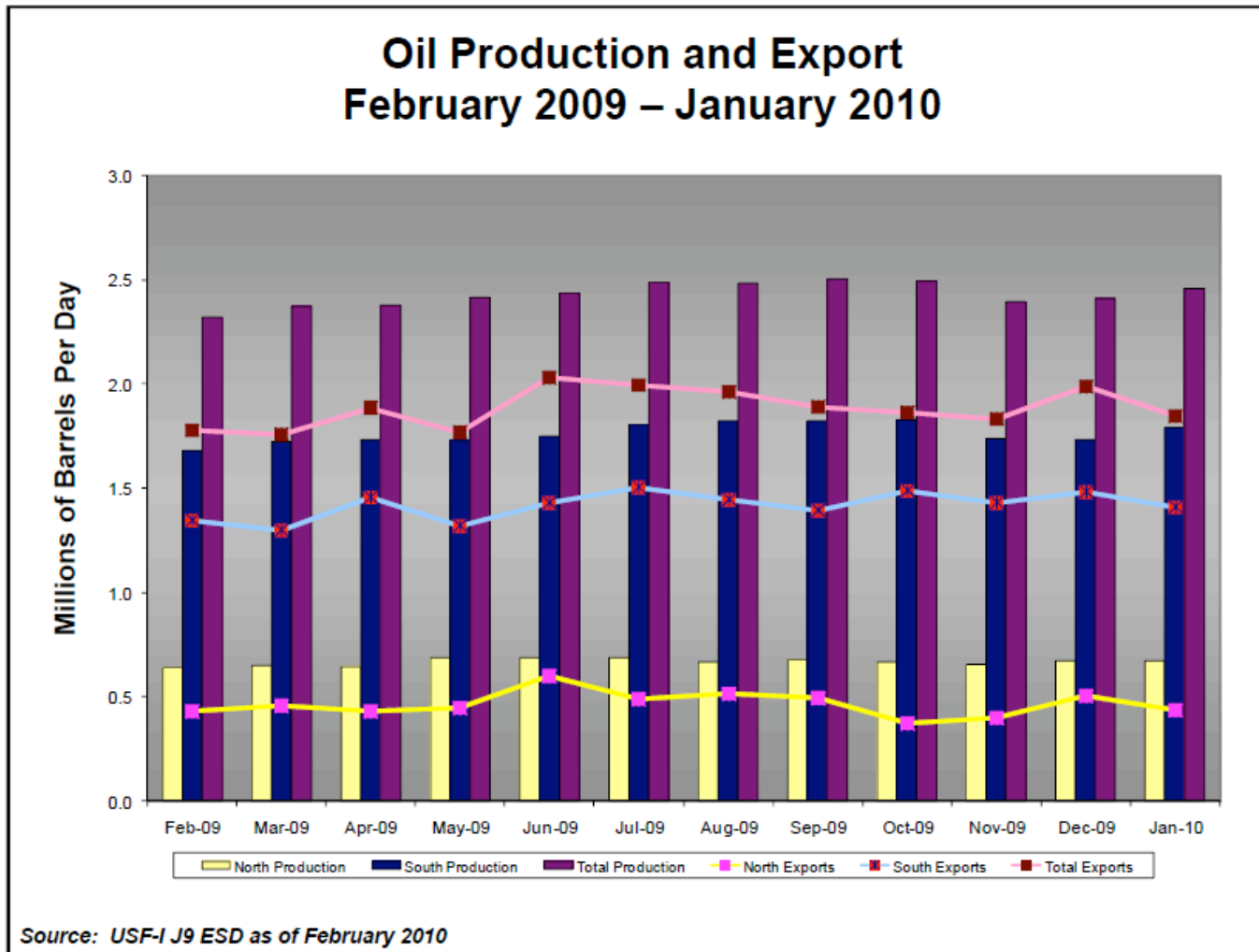
Million Barrels per Day



Note: Most crude oil produced in Iraq is either exported or refined into petroleum products. The remainder is consumed in power plants, put in storage, or unaccounted for.

Sources: NEA-I, responses to SIGIR data call, 6/4/2010 and 7/6/2010.

Iraqi Oil Production and Exports by Region



Trends in Iraq: Oil Production and Exports

EIA Projections of Iraqi Oil Exports

Iraq increases its liquids production by 3.9 percent per year in the IEO2010 Reference case.. the projection assumes that political, legislative, logistical, investment, and security uncertainties in Iraq will be resolved in the long term, and that OPEC constraints and resource availability will be the factors with the strongest influence on Iraq's willingness and ability to increase production.

In addition to political and legislative uncertainty, import and export infrastructure are also expected to limit production growth in Iraq to 0.5 million barrels per day from 2007 to 2015. If the country is able to achieve long-term political and economic stability and expand the capacity of import and export routes as projected in the Reference case, investment in production capacity could rise by an average of 5.2 percent annually from 2015 and 2030 before slowing to a more modest 3.8 percent per year from 2030 to 2035.

The fact that Iraq has the resources necessary to support such growth in the long run, yet produced only 2.1 million barrels per day in 2007, illustrates the significant impacts that the political environment and other above-ground constraints can have on production projections. In 2035 varies by 2.7 million barrels per day across the IEO2010 projections, from 2.6 million barrels per day in the High Oil Price case to 5.3 million barrels per day in the Low Oil Price case.

EIA analysis suggests that, even in a stable political and security climate, it would be extremely difficult to raise production by nearly 10 million barrels per day over such a short period. ...The proposed pace and scale of Iraq's planned production expansion defy historical precedents and ignore a long list of logistical and political impediments.

The uncertainty associated with the evolution of Iraq's upstream oil sector is reflected in the range of projections for liquids production in 2035. In the Reference case, the political and security situation in Iraq stabilizes, and a few of the operating companies overcome, in some measure, the obstacles they face. In this case, Iraq's total liquids production rises to 2.8 million barrels per day in 2017 and 6.1 million barrels per day in 2035.

In the IEO2010 Low Oil Price case, Iraq's total liquids production reaches 8.3 million barrels per day by 2035, reflecting greater success in addressing the considerable difficulties facing oil industry expansion.

In the High Oil Price case, liquids production reaches only 4.2 million barrels per day in 2035, because companies to a great extent are unable to reduce the difficulties they face in their attempts to increase production.

Oil Factors

- **Much depends on the decisions of the new government**

In the interim:

- **Council of Representatives Issued 35% tax on Foreign oil companies operating in Iraq**
- **GOI finalized service contracts to foreign firms.**
- **Ministry of Oil also reached an agreement with the Chinese to develop three more fields in the Missan Province – estimated to contain about 2.6 Million barrels of crude oil.**
- **Iraq to create fourth state owned oil company – Midland Oil Company**
- **Development Fund for Iraq (DFI) –GOI to assume control of it towards the end of the year seems feasible, and therefore would be disestablished by the end of the year**
- **Iraqi Oil exports will now refer to ASCI price index as a benchmark due to the fact that the ASCI price index more accurately responds to global price fluctuations**
- **The New Iraqi National Development Plan assumes that it will generate \$334 billion in revenue between 2010 and 2014, based on an average oil price per barrel of \$60 in 2010, \$63 in 2011, and \$68 in 2012-2014. (SIGIR Report, July 30, 2010. p. 5.)**
- **Iraq's Minister of Oil reiterated plans to increase Iraq's crude oil production nearly fivefold by 2017 from about 2.5 MBPD to 12 MBPD. (SIGIR Report, July 30, 2010. p. 10.)**
- **Export dropped 5% from last quarter to an average of 1.85 MBPD. (SIGIR Report, July 30, 2010. p. 11.)**
- **A Sino-Turkish consortium contracted with the GOI to expand production in the three Missan province oil fields. (SIGIR Report, July 30, 2010. p. 11.)**
- **Private oil services firms, including many with substantial U.S. ties, are increasing their presence in Iraq to support the bid-winning consortiums. (SIGIR Report, July 30, 2010. p. 11.)**
- **This past quarter, there were three attacks on the oil pipelines in the Pipeline Exclusion Zone (PEZ). (SIGIR Report, July 30, 2010. p. 11.)**
 - **One of the attacks prevented the Doura refinery in Bagdad from receiving 20, 000 BPD for several days.**

Bidding for Oil - Who Got What: 2009

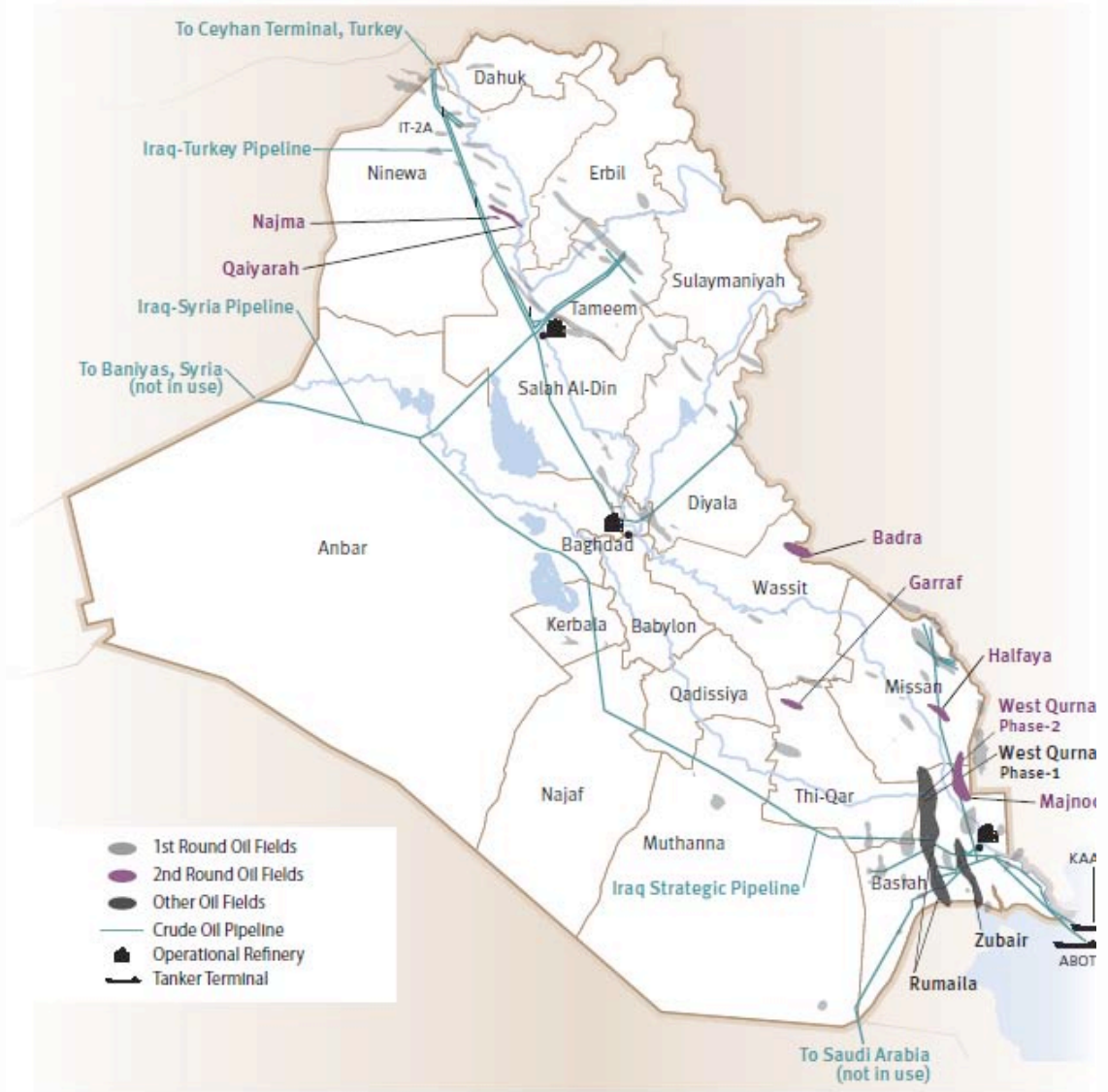
OIL FIELD	BIDDING CONSORTIUM ^a	PROVED RESERVES (BILLION BARRELS)	CURRENT PRODUCTION (BARRELS/DAY)	REMUNERATION FEE (\$/BARREL)	PLATEAU PRODUCTION COMMITMENT (BARRELS/DAY)	PRODUCTION PLATEAU PERIOD (YEARS)	SIGNATURE BONUS ^b (\$ MILLIONS)
Project Round 1							
Rumaila	BP (51%), CNPC (49%)	17.8	1,000,000	2.00	2,850,000	7	500
West Qurna 1	ExxonMobil (80%), Shell (20%)	8.6	270,000	1.90	2,325,000	7	400
Zubair	Eni (44%), Oxy (31%), Kogas (25%)	4	205,000	2.00	1,200,000	7	300
Project Round 2							
Majnoon	Shell (60%), Petronas (40%)	12.6	55,000	1.39	1,800,000	10	150
Halfaya	CNPC (50%), Petronas (25%), Total (25%)	4.1	3,000	1.40	535,000	13	150
Qaiyarah	Sonangol (100%)	0.8	2,000	5.00	120,000	9	100
West Qurna 2	Lukoil (75%), Statoil (25%)	12.9	0	1.15	1,800,000	13	150
Badra	Gazprom (40%), Kogas (30%), Petronas (20%), TPAO (10%)	0.1	0	5.50	170,000	7	100
Garraf	Petronas (60%), Japex (40%)	0.9	0	1.49	230,000	13	100
Najma	Sonangol (100%)	0.9	0	6.00	110,000	9	100
Total		62.7	1,535,000		11,140,000		2,050

Note: Numbers affected by rounding.

^a Key to acronyms and national affiliation: BP = Royal British Petroleum (United Kingdom), CNPC = China National Petroleum Corporation (China), ExxonMobil (United States), Shell = Royal Dutch Shell (United Kingdom), Eni (Italy), Oxy = Occidental Petroleum (United States), Kogas = Korea Gas Corporation (Korea), Petronas (Malaysia), Total (France), Sonangol (Angola), Lukoil (Russia), Statoil (Norway), Gazprom (Russia), TPAO = Turkish Petroleum Corporation (Turkey), Japex = Japan Petroleum Exploration Company (Japan).

^b A signature bonus is a non-recoverable sum of money that the winning bidder agrees to pay to the GOI upon award of the contract.

Bidding for Oil by Field: 2009



Note: These second-round fields or projects received no bids: East Baghdad (north and central); Middle Furat (Kifi, West Kifi, Merjan); and Eastern Fields (Gilabat, Khashem Al-Ahmar, Nau Doman, Qumar).

Results of Iraqi Bidding Rounds: 7/2010

Field	Consortium operator	Plateau production target (million barrels per day)	Remuneration fee (dollars per barrel)	Plateau production target duration (years)	Current production (million barrels per day)	Planned production increase (million barrels per day)
First bid round						
Rumaila	BP	2.85	2.00	7	1.00	1.85
West Qurna (Phase 1)	ExxonMobil	2.33	1.90	7	0.27	2.06
Zubair	Eni	1.20	2.00	7	0.21	1.00
Second bid round						
Majnoon	Royal Dutch Shell	1.80	1.39	10	0.06	1.75
Halfaya	CNPC (PetroChina)	0.54	1.40	13	0.00	0.53
Qaiyarah	Sonangal	0.12	5.00	9	0.00	0.12
West Qurna (Phase 2)	Lukoil	1.80	1.15	13	—	1.80
Garraf	Petronas	0.23	1.49	13	—	0.23
Bedra	Gazprom	0.17	5.50	7	—	0.17
Najmah	Sonangal	0.11	6.00	9	—	0.11
Total					1.54	9.61

Source: IHS Global Insight, Energy Country Profiles, "Iraq: Oil & Gas Upstream" (last updated March 31, 2010), web site www.ihsglobalinsight.com (subscription site).

^aIHS Global Insight, "Country Summary—Iraq" (updated April 30, 2010), web site www.ihsglobalinsight.com (subscription site).

^b"Worldwide Look at Reserves and Production," *Oil & Gas Journal*, Vol. 107, No. 47 (December 21, 2009), pp. 20-21, web site www.ogj.com (subscription site).

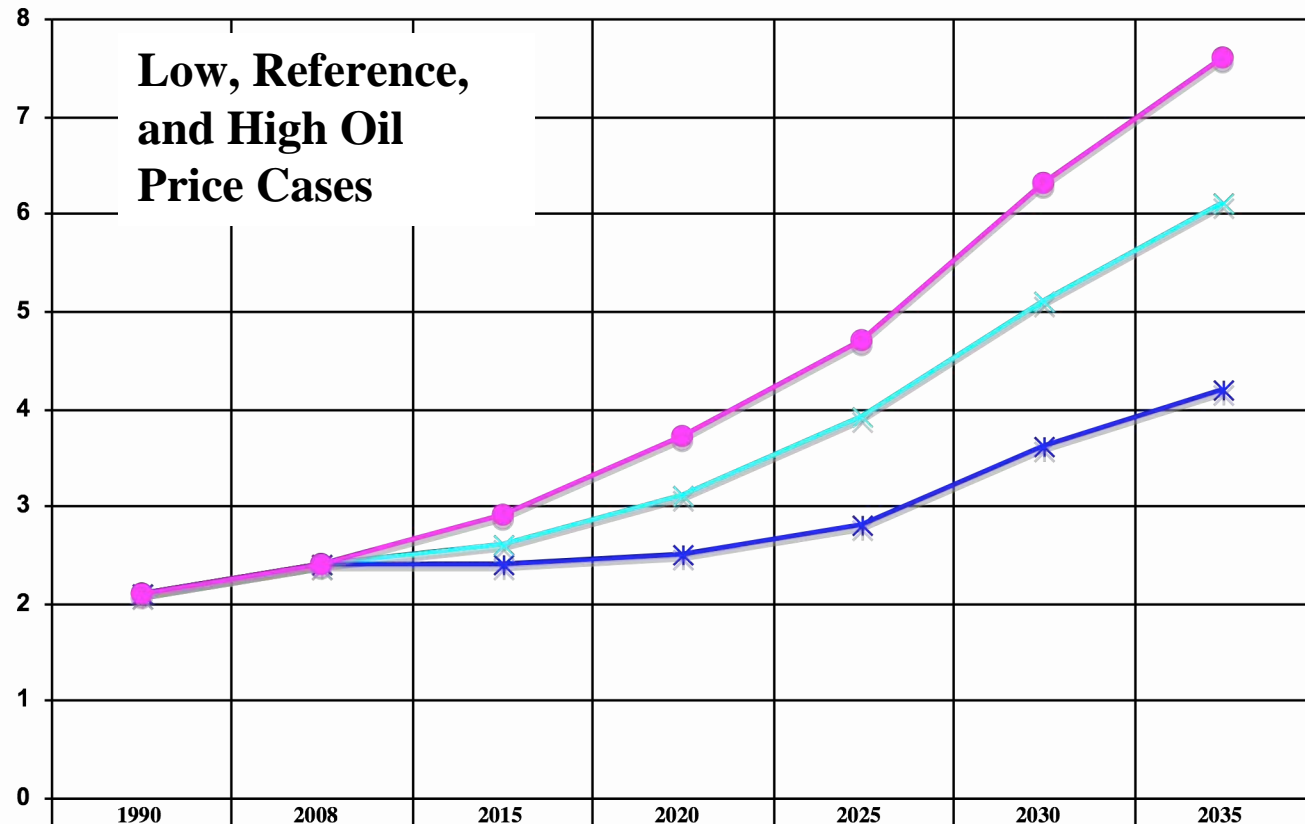
^cIHS Global Insight, "Country Summary Upstream—Iraq" (updated March 31, 2010), web site <http://myinsight.ihsglobalinsight.com> (subscription site).

Provincial Oil Revenues Issues

- **Provincial incentives can potentially cause friction between various provinces and the GOI.**
 - A provision of \$1 towards the government of a province for each barrel of oil produced in that province.
 - A provision of \$1 towards the government of a province who has the ability to refine each barrel of oil.
 - A provision of \$20 towards the government of a province whose holy sites attract tourists.
- **Anbar has none of these attributes, and thus may find these measures unduly favoring other provinces.**
- **In June 2010, the Ministry of Oil announced a package of incentives aimed at attracting investment to support the construction of new refineries.**
 - **The refineries would be privately owned or structured as a public-private partnership. (SIGIR Report, July 30, 2010. p. 11.)**

EIA Projections of Iraqi Liquids Production By Country 1990-2035

In Millions of Barrels Per Day



	1990	2008	2015	2020	2025	2030	2035
Total Gulf	-	*25.0	*26.1	*27.2	*29.3	*32.1	*35.1
Total MENA	-	*30.5	*31.6	*32.6	*35.0	*37.9	*41.0
Total World	-	*85.5	*88.7	*92.1	*97.6	*103.0	*110.5%
Gulf Share of World	-	*28%	*28%	*29%	*29%	*30%	*31%*
IRAQ- REFERENCE CASE	2.1	2.4	2.6	3.1	3.9	5.1	6.1
Iraq-High Oil Price Case	2.1	2.4	2.4	2.5	2.8	3.6	4.2
Iraq-Low Oil Price Case	2.1	2.4	2.9	3.7	4.7	6.3	7.6

Source: Adapted from EIA, *World Energy Outlook*, 2009, p. 225 and *World Energy Outlook*, 2009, p. 2605

EIA Estimate of Real World Iraqi Production Rises - I

Iraq holds a considerable portion of the world's conventional oil reserves, but has been unable to increase oil production substantially in recent years due to conflict and geopolitical constraints. As violence in Iraq has lessened, there has been a concerted effort to increase the country's oil production, both to bolster government revenues and to support wider economic development. Recently, Iraq offered prequalified foreign oil companies two opportunities to bid on designated fields under specific terms of investment. The success of the bidding rounds and the level of interest from foreign companies have raised hopes that oil production could increase substantially over a short period of time, with some Iraqi government officials stating that the country could increase its production to 12 million barrels per day by 2017.

Although Iraq has the reserves to support such growth, it will need to overcome numerous challenges in order to raise production to even a fraction of that goal. Iraq has an estimated 115 billion barrels of proven conventional oil reserves, the third largest in the world after Saudi Arabia (260 billion barrels) and Iran (138 billion barrels).^b However, Iraqi oil production was significantly affected not only by the U.S.-led invasion in 2003 and subsequent armed conflict, but also by neglect of the oil industry infrastructure and restrictions on investment resulting from United Nations sanctions imposed during the Saddam Hussein regime before the invasion. Oil production capacity has not increased substantially since the recent abatement of hostilities, and Iraq's current total production is about 2.5 million barrels per day—still below the peak annual average of 2.9 million barrels per day in 1989.

Between June 2009 and January 2010, Iraq awarded development service contracts for 10 oil projects to foreign companies, the majority of which were consortia formed to share the responsibility, risk, and, ultimately, returns on each of the projects. Originally, the Iraqi Ministry of Oil had expected the development of the fields up for bidding to raise Iraq's production capacity to 6 million barrels per day, in line with the Ministry's strategic goal. However, heavy competition and high expectations for the fields led bidding companies to propose production levels that were significantly higher than expected. As a result, rather than raising the country's total production to 6 million barrels per day, the proposed production from all awarded fields suggests that Iraq's total production could increase to 12 million barrels per day in 2017.

EIA analysis suggests that, even in a stable political and security climate, it would be extremely difficult to raise production by nearly 10 million barrels per day over such a short period. The two recent historical examples of massive production capacity expansion are those of Russia, where production increased by 3.8 million barrels per day over a 10-year period, and Saudi Arabia, where production increased by 2.0 million barrels per day over a 5-year period. The proposed pace and scale of Iraq's planned production expansion defy historical precedents and ignore a long list of logistical and political impediments.

EIA Estimate of Real World Iraqi Production Rises - II

EIA analysis suggests that, even in a stable political and security climate, it would be extremely difficult to raise production by nearly 10 million barrels per day over such a short period. The two recent historical examples of massive production capacity expansion are those of Russia, where production increased by 3.8 million barrels per day over a 10-year period, and Saudi Arabia, where production increased by 2.0 million barrels per day over a 5-year period. The proposed pace and scale of Iraq's planned production expansion defy historical precedents and ignore a long list of logistical and political impediments.

The IEO2010 Reference case expects significant delays in current production plans because of limitations on Iraq's service sector; import difficulties; likely constraints on the number of operating rigs and skilled personnel available; and limitations on the export infrastructure, with current pipelines able to only support marginal increases in flows. There are also security threats from current and past conflicts, with pipelines still at risk of being attacked, field surfaces populated with unexploded ordnance, and land mines that must be cleared. Finally, there is legislative uncertainty, particularly related to the Kurdistan region. The prospects for long-term growth, however, are bright.

The uncertainty associated with the evolution of Iraq's upstream oil sector is reflected in the range of projections for liquids production in 2035. In the Reference case, the political and security situation in Iraq stabilizes, and a few of the operating companies overcome, in some measure, the obstacles they face. In this case, Iraq's total liquids production rises to 2.8 million barrels per day in 2017 and 6.1 million barrels per day in 2035. In the IEO2010 Low Oil Price case, Iraq's total liquids production reaches 8.3 million barrels per day by 2035, reflecting greater success in addressing the considerable difficulties facing oil industry expansion. In the High Oil Price case, liquids production reaches only 4.2 million barrels per day in 2035, because companies to a great extent are unable to reduce the difficulties they face in their attempts to increase production.