

**Updated Figures and Tables
for
*Political Economy of Iraq: Restoring
Balance in a Post-Conflict Society*
(Edward Elgar, 2013)**

18 January 2018

Frank R. Gunter PhD

Professor of Economics, Lehigh University
Senior Fellow, Foreign Policy Research Institute
Colonel of Marines (Retired)
frg2@lehigh.edu

Figure 2.1 Iraq Real Per Capita GDP (PPP)

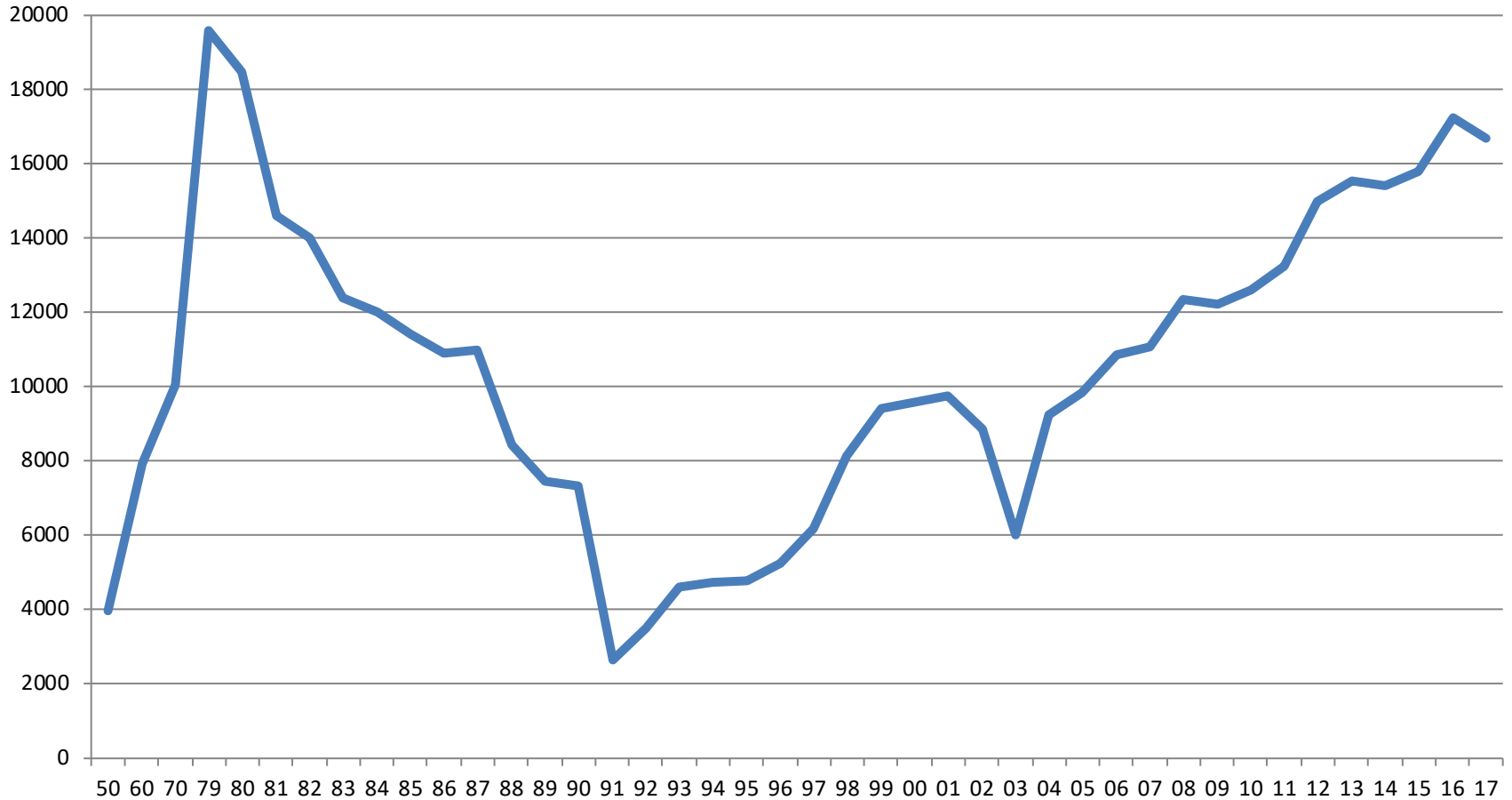


Table 2.1 Key macroeconomic variables

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016e
Real GDP Growth	46.5%	-0.7%	6.2%	1.5%	9.5%	4.2%	5.9%	8.6%	13.9%	7.6%	0.7%	4.8%	11.0%
Non-oil Real Growth	14.9%	12.0%	7.5%	-2.0%	5.4%	4.0%	9.7%	5.7%	15.0%	12.4%	-3.9%	-9.6%	-8.1%
Per Cap	\$951	\$1,124	\$1,720	\$1,926	\$2,845	\$2,087	\$4,278	\$5,529	\$6,693	\$7,021	\$6,517	\$4,869	\$4,533
Oil Pro	2.0	1.9	2.0	2.04	2.29	2.38	2.38	2.65	3.0	3.0	3.1	3.7	4.6
Oil X	1.4	1.4	1.4	1.59	1.82	1.88	1.91	2.17	2.4	2.4	2.6	3.4	3.8
Oil Price	\$31.60	\$43.90	\$55.60	\$63.00	\$91.50	\$55.60	\$74.20	\$103.6	\$106.70	\$102.90	\$96.50	\$45.90	\$35.60
Inflation	31.7%	31.6%	64.8%	4.7%	6.8%	-4.4%	3.3%	6.0%	3.6%	1.9%	2.2%	1.4%	0.4%
Core Inflation				12.3%	11.7%	6.1%	3.3%	5.0%					
ER	1453	1469	1467	1255	1193	1170	1170	1170	1166	1166	1166	1167	1182

Table 2.2 Employment and Unemployment

	Iraq	Baghdad	Age 15-19
Employed Full Time (30 hours or more)	36%	40%	20%
Employed Part Time (Less 30 hours)	12%	9%	8%
Employed Seasonally or Irregular	15%	12%	30%
Self-Employed	37%	39%	42%
Total Employed	100%	100%	100%
Unemployed (% of Labor Force)	18%	18%	27%
Underemployed (% of Labor Force)	33%	31%	55%

Table 3.1 Social Indicators of Development

	Iraq	MENA	LMIC	Data
Per capita Income (PPP)	\$14,900	\$18,800	\$6,400	2015
Life Expectancy (male/female)	67/72	71/75	66/69	2014
Malnutrition (less than 5 years old)	23%	NA	34%	2008-2014
Child mortality (per 1,000 births)	32	23	53	2015
Maternal mortality (per 100,000 live births)	50	81	251	2015
Tuberculosis (per 100,000 persons)	43	35	205	2014
Access to improved sanitation	86%	91%	52%	2015
Universal primary education (male/female)	90%/72%	NA	NA	2005-2014
Youth literacy (male/female)	83%/81%	95%/90%	89%/83%	2005-2013
Contraception (among married women)	53%	61%	52%	2008-2015

Table 3.2 Education and Gender

Maximum education (2013) for persons 15 years or older	Male	Female
Illiterate	14.1%	31.0%
Read only	2.6%	3.2%
Read and Write	14.5%	15.0%
Primary (6-11 years)	30.9%	24.4%
Intermediate (12-14 years)	15.5%	11.7%
Secondary (15-17 years)	9.0%	6.0%
Vo Tech diploma	6.1%	4.5%
Bachelor (College)	6.7%	3.9%
Master and PhD (University)	0.5%	0.2%

Table 3.4 Education, Gender and Unemployment

Unemployment (2012) for persons 15 years or older	Male	Female	All
Illiterate	12.8%	8.8%	12.0%
Read and Write	11.5%	14.3%	11.8%
Primary (6-11 years)	10.7%	22.9%	11.7%
Intermediate (12-14 years)	7.5%	39.1%	10.4%
Secondary (15-17 years)	6.8%	25.3%	9.6%
Vo Tech diploma	7.5%	23.7%	13.0%
Bachelor (College)	7.3%	30.3%	14.8%

New Table 4.0 Corruption: The Second Insurgency

Iraq is one of the most corrupt countries: 166th (tied with Venezuela)
 Corruption ranges from the grand (Ministry of Defense) to petty (PDS)

- Anti-corruption Strategy
1. Improve governance
 2. Enforce laws
 3. Change culture
 4. Reduce economic incentives

Most Corrupt Iraqi Institutions	Perceived Corruption	Paid Bribes (12 mos)
Political Parties	47%	
Legislative Bodies	34%	
Civil Servants	32%	
Land Services		39%
Registry and Permits		27%
Tax Services		17%
Utilities		14%
Police	30%	35%
Medical Services	28%	23%
Judiciary	26%	22%

Table 4.3 Relative Ease of Doing Business

2017 Relative Rank (190 th is the worst)	Iraq	MENA Range	USA
Starting a business	154 th	31 st to 169 th	49 th
Getting credit	186 th	20 th to 186 th	2 nd
Trading across borders	179 th	41 st to 189 th	36 th
Closing a business	168 ^{th*}	63 rd to 168 th	3 rd

* Tied with 22 other countries for last place in the world

New Table 5 ISIS, the KRG, and Baghdad Controlled Territories, December 2014

	Territory	Population	Recent Oil Exports	Estimated Oil Reserves
ISIS Controlled	~40%	25%-35%	0%	~11%
KRG Controlled	~10%	15%-20%	~16%	~9%
Baghdad Controlled	~50%	45%-60%	~84%	~80%

Challenges:

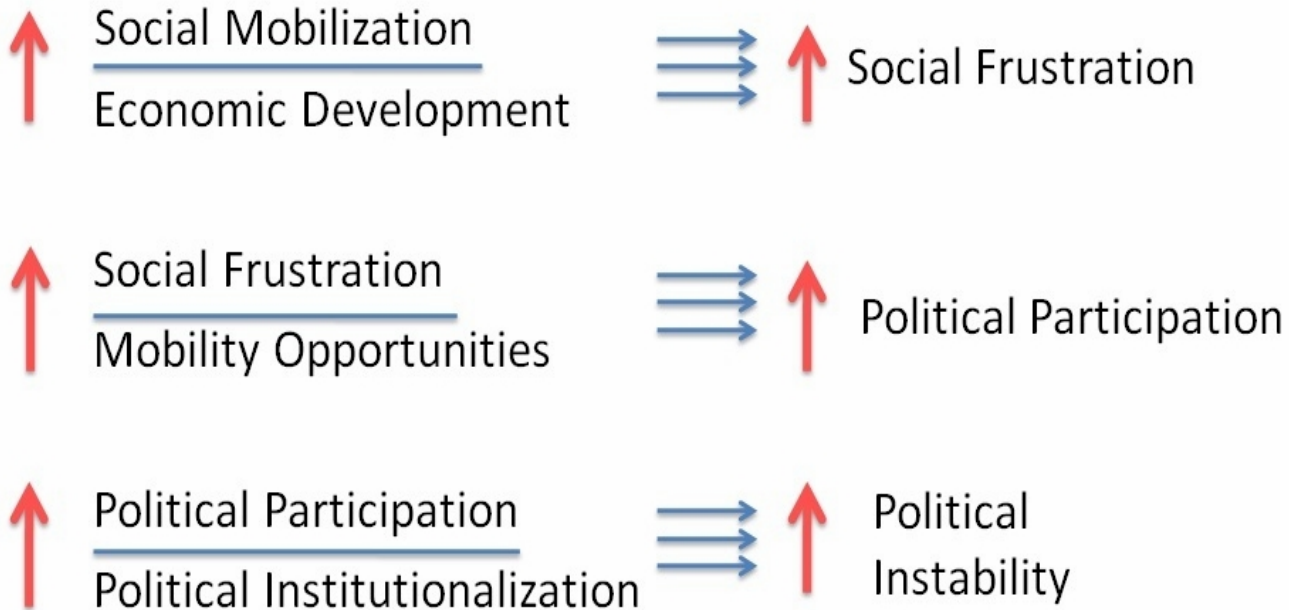
Situation of the ground changing daily – reconquest of Ramadi

Massive movements of refugees – possibly 4 million at end 2015

Cross border oil smuggling Syria-Iraq, Iraq-Turkey

Figure 5.1 Economic Development and Political Instability

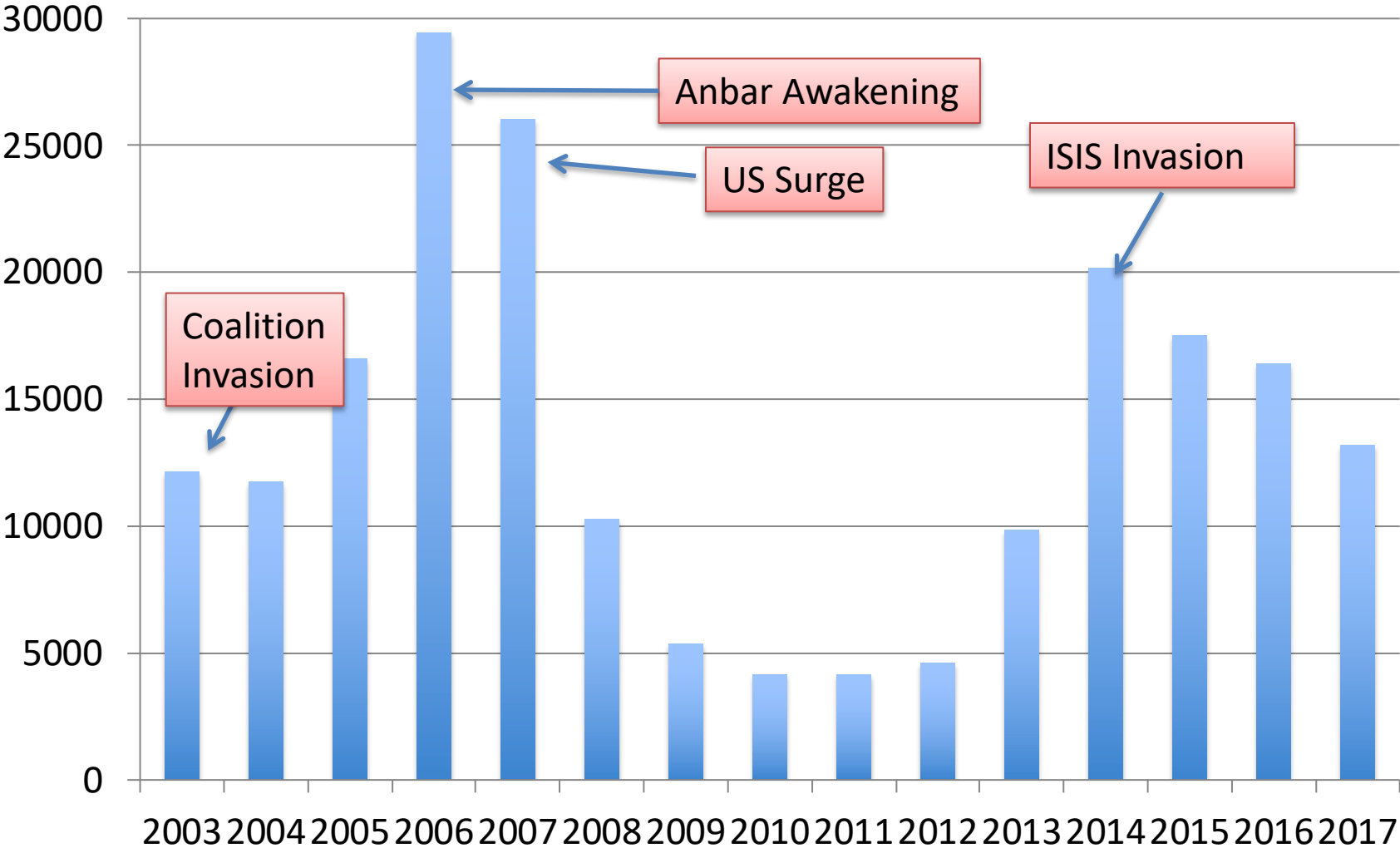
Huntington Hypothesis



Source: Huntington 1968, p. 55

The Huntington Hypothesis is: “The last great attempt to integrate the social, economic, and political causes of instability.” (Fukuyama 2011)

Figure 5.2 Civilian Deaths from Violence



Source: Iraq Body Count (Download 15 January 2018)

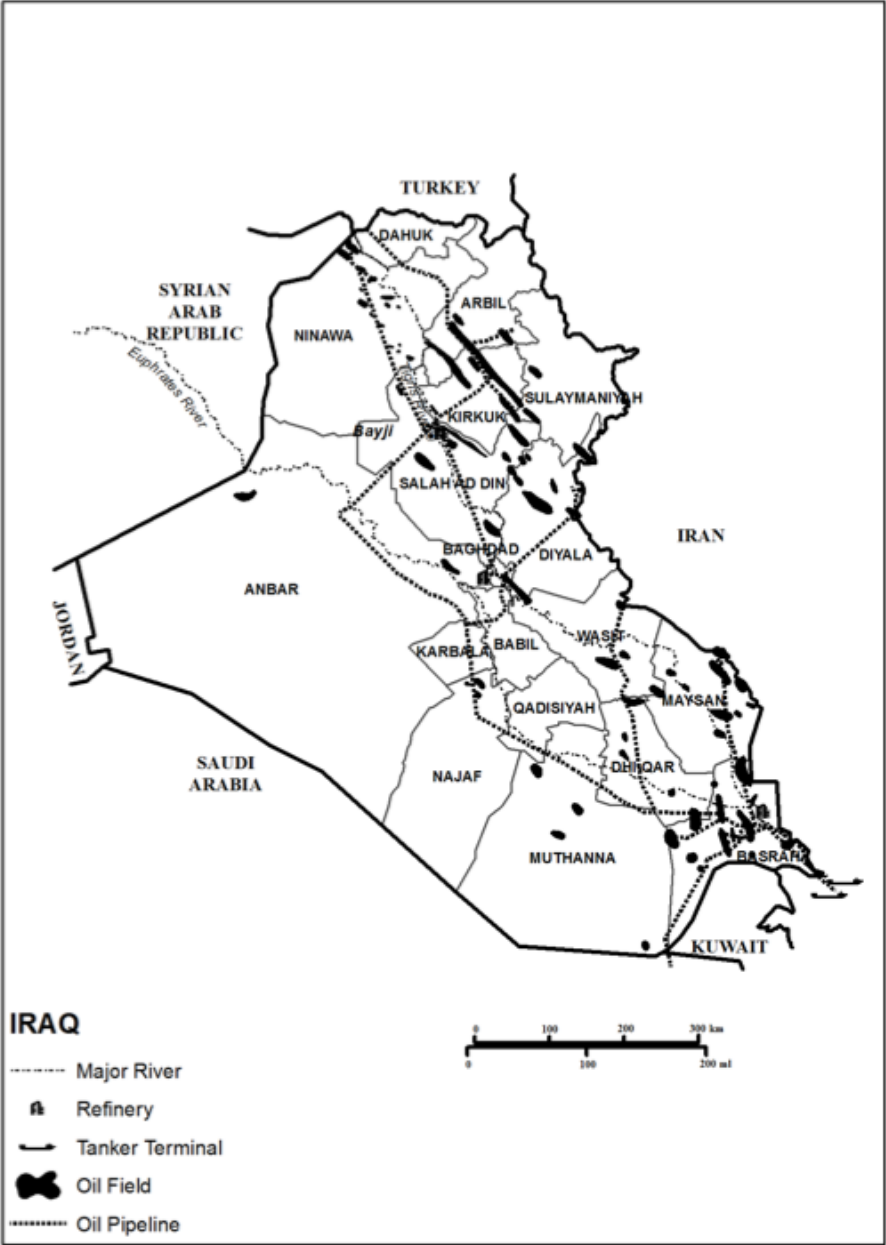
Table 5.1 Living in an interesting neighborhood

	Corruption (2016, 1 st is best)	Freedom Status (2016, 100 is best)	Population (2014) (Ages 0-14)
Iraq	166 th	Not Free (27)	37 million (41%)
Iran	131 st	Not Free (17)	80 million (24%)
Turkey	75 th	Partly Free (38)	80 million (26%)
Syria	173 rd	Not Free (1)	18 million (37%)
Saudi Arabia	62 nd	Not Free (10)	32 million (29%)
Jordan	57 th	Partly Free (36)	9 million (36%)
Kuwait	75 th	Partly Free (36)	4 million (22%)

Table 5.2 Total Fertility Rate and Population

	1970-1975 Fertility	1990-1995 Fertility	2010-2015 Fertility	Population (2016) (Ages 0-14)
Iraq	7.2	5.6	4.6	37 million (41%)
Jordan	7.8	5.1	3.5	10 million (36%)
Syria	7.5	4.8	3.0	18 million (37%)
Saudi Arabia	7.3	5.6	2.9	32 million (26%)
Kuwait	7.0	2.4	2.2	4 million (21%)
Turkey	5.3	2.9	2.1	80 million (25%)
Iran	6.2	4.0	1.7	80 million (24%)

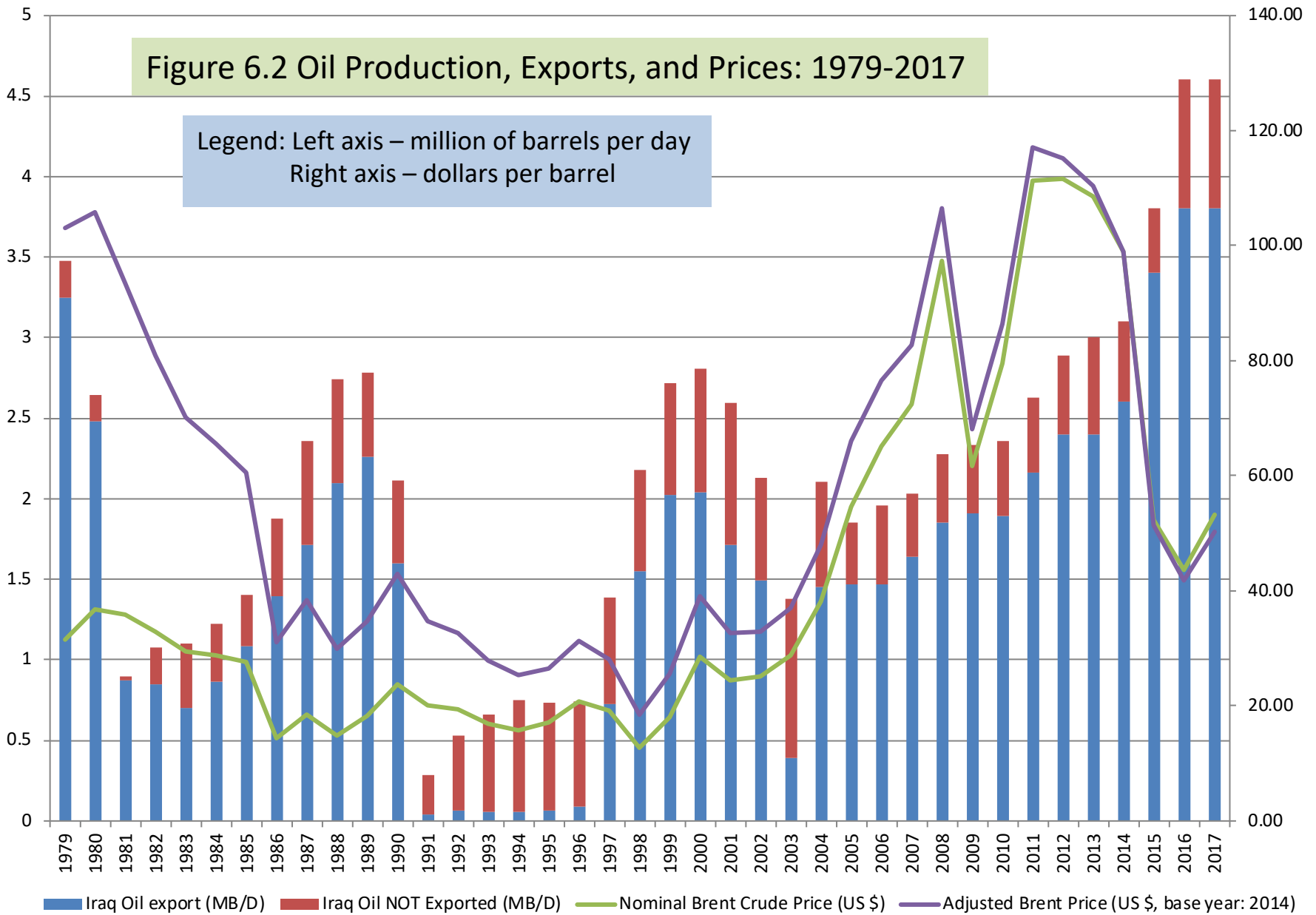
Figure 6.1 Oil and Gas Map



Source: Professional Maps Of Houston, Texas. Based on IEA (2016) data.

Figure 6.2 Oil Production, Exports, and Prices: 1979-2017

Legend: Left axis – million of barrels per day
Right axis – dollars per barrel



New Table 6: Potential 2020 Annual Oil Export Revenues

	3.75 mbpd	4.75 mbpd	5.75 mbpd
\$125	\$171 billion	\$217 billion	\$262 billion
\$100	\$137 billion	\$173 billion	\$210 billion
\$75	\$103 billion	\$130 billion	\$157 billion
\$50	\$68 billion	\$87 billion	\$105 billion
\$25	\$34 billion	\$43 billion	\$52 billion

Insert several years of actual earnings 2013-2015?

IMF predicts 3.84 exports in 2018

Best guess for 2020: 4.75 mbpd at \$50 pb for \$87 billion

Table 7.1: Agricultural Production (2012)

	Product	Value	Volume (metric ton)
1	Tomatoes	\$406 million	1,100,000
2	Dates	\$260 million	650,000
3	Wheat	\$210 million	2,400,000
4	Meat – cattle	\$135 million	50,000
5	Grapes	\$130 million	227,000
6	Meat – sheep	\$128 million	47,000
7	Meat – chicken	\$120 million	85,000
8	Okra	\$102 million	160,000
9	Cucumbers and gherkins	\$100 million	505,000
10	Eggplants	\$98 million	460,000

New Table 7.2: Iraq Agriculture

	2000	2014
Rural Population (% of total population)	7.7 million (32%)	11.7 million (34%)
Female employment in agriculture		51%
Agriculture value added per worker	\$4,968	\$7,046
Food production value	\$2,324 million	\$2,917 million
Food exports	\$6 million	\$57 million
Food imports	\$1,831 million	\$6,333 million
Net food production (Index 100 in 2004-2006)	100	126
Of which: cereals	15	205
Of which: meat	108	143

New Table 8.1: Bank Loan Assets (December 2016, IQD)

Loans to	Central Government	Public Institutions	Private Sector	Total
By State Banks	11,616 bn	7,383 bn	10,851 bn	29,850 bn (80%)
By Private Banks	0 bn	0 bn	7,330 bn	7,330 bn (20%)
Total	11,616 bn	7,383 bn	18,181 bn	37,180 bn (100%)

About half of all loans are to the central government or public institutions.

New Table 8.2: Bank Deposit Liabilities (December 2016, IQD)

Deposits by	Central Government	Public Institutions	Private Sector	Total
In State Banks	14,211 bn	24,298 bn	15,297 bn	53,807 bn (86%)
In Private Banks	59 bn	121 bn	8,411 bn	8,592 bn (14%)
Total	14,270 bn	24,419 bn	23,708 bn	62,399 bn (100%)

Table 8.3 Iraqi Stock Exchange (December 2017)

	Companies Listed	Companies Traded	Number of Trades	Trading Volume
Banks	24	19	40%	76%
Services	7	4	7%	2%
Industry	18	10	30%	8%
Tourism/Hotels	9	8	6%	7%
Insurance	4	3	<1%	<1%
Investment	2	0	0%	0%
Agriculture	6	5	13%	5%
Telecom	2	1	3%	2%
Total	72	50	5,631 (100%)	21,767 million (100%)

Table 8.4 Financial Regulations

1 st is best in world	Iraq Ranking 2017	Iraq Ranking 2011	UAE Ranking 2016
Registering Property	101 st	95 th	10 th
Getting Credit	186 th	170 th	90 th
Protecting Investors	124 th	120 th	10 th
Enforcing Contracts	144 th	140 th	12 th
Resolving Insolvency	168 ^{th*}	183 ^{rd*}	69 th

* Iraq is tied for worst in world for “Resolving Insolvency”

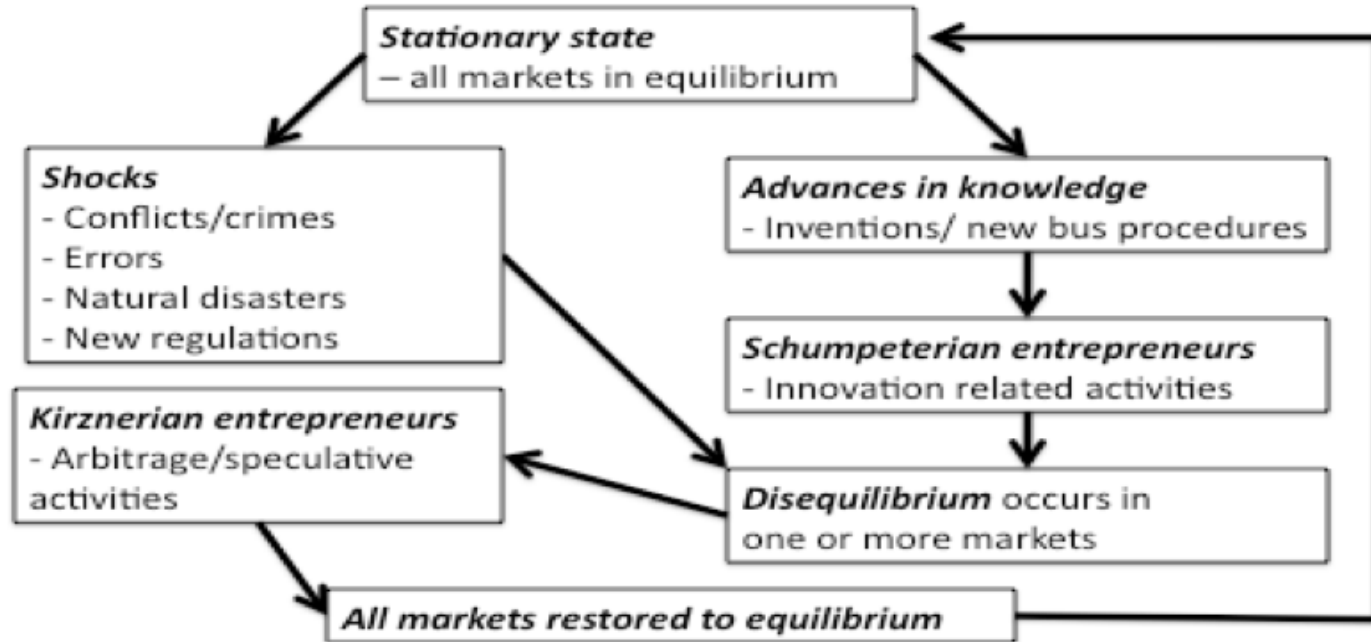
Table 9.2 SOE Reform Options

	Type of reform	Ownership	Management
1	Status quo	State	State
2	Improved state management	State	State
3	Managerial contracts	State	State/Private
4	Private-public partnership	State/Private	State/Private
5	Regulated privatization of natural monopolies	Private	State/Private
6	Complete privatization	Private	Private

Table 9.3 Successful joint venture/privatization scores

Score	Likelihood of success	Number of SOE	Examples
35-40	Excellent	6	Cement, oil production
31-34	Good	58	Refining, fertilizer, electrical generation
21-30	Fair	126	Textiles, software
10-20	Poor	5	Missiles, PDS food imports

Figure 10.1 Kirznerian vs. Schumpeterian Entrepreneurship



In high-income countries, governments generally focus on encouraging Schumpeterian (innovative) entrepreneurship.

But in low income conflict countries, the binding constraint on accelerating economic development may be a shortage of Kirznerian (arbitrage/speculative) entrepreneurship.

Table 10.1 Ease of Doing Business in Iraq

Category	Iraq 2017	Iraq 2015	Range of MENA Rankings
Ease of Doing Business	168 th	160 th	21 st to 186 th
Starting a Business	154 th	144 th	31 st to 169 th
Dealing with Construction Permits	93 rd	145 th	2 nd to 186 th
Getting Electricity	116 th	102 nd	1 st to 187 th
Registering Property	101 st	116 th	10 th to 187 th
Getting Credit	186 ^{th*}	180 th	20 th to 186 th
Protecting Minority Investors	124 th	114 th	10 th to 183 rd
Paying Taxes	129 th	57 th	1 st to 167 th
Trading Across Borders	179 th	178 th	41 st to 189 th
Enforcing Contracts	144 th	119 th	12 th to 175 th
Resolving Insolvency	168 ^{th**}	189 ^{th*}	63 rd to 168 th

Red background = deterioration of five places or more; Green = improvement of 5 or more
 * Worst in MENA; ** Tied for worst in world!

Table 10.2 Starting a New Business in Iraq, Saudi Arabia, and the UAE

	Iraq	Saudi Arabia	UAE
World Ranking (out of 189)	154 th	135 th	51 st
Procedures	9	11	5
Time	27 days	18 days	9 days
Cost (% of per capita income)	43%	7%	13%
Minimum capital legally required (% of per capita income)	19%	0%	0%

Table 12.1 Balance of Payments (billions)

	2013	2014	2015	2016e	2017p	2018p
Exports (fob)	\$89.8	\$92.9	\$56.5	\$50.0	\$62.4	\$64.9
(Oil Exports)	(\$89.4)	(\$92.5)	(\$56.1)	(\$48.7)	(\$62.0)	(\$64.4)
Imports (cif)	-\$66.5	-\$67.3	-\$56.7	-\$53.1	-\$61.0	-\$61.3
Balance of trade	\$23.2	\$25.6	-\$0.2	-\$3.1	\$1.4	\$3.6
Current acct bal	\$2.7	\$6.1	-\$11.6	-\$14.9	-\$12.3	-\$13.6
Capital balance	\$13.2	\$9.6	\$7.5	\$6.2	\$8.5/ \$11.0	\$13.0/ \$15.5
Errors/omissions	-\$7.4	-\$27.6	-\$9.4	-\$0.2	\$0/- \$5*	\$0/- \$5*
Change reserves	\$8.5	-\$11.9	-\$14.6	-\$8.5	-\$3.8/ -\$6.3	-\$0.6/ -\$3.1
Reserves (Dec 31)	\$77.8	\$66.7	\$53.7	\$45.2	\$41.4/ \$38.9	\$40.8 \$35.8
Oil Price	\$102.9	\$96.5	\$45.9	\$35.6	\$45.3	\$45.4

New Table 13.1a: GoI Budget

(trillions of ID except where noted)

	2014	2015	2016E	2017P	2018P
Total Revenues	104	64	56	82	88
Oil Exports	97	57	47	72	75
Oil Price	\$96.50	\$45.90	\$35.60	\$45.30	\$45.40
Oil Exports	2.6 mbpd	3.4 mbpd	3.8 mbpd	3.8 mbpd	3.9 mbpd
Total Expenditures	119	89	84	93	99
Current Expenditures	70	58	61	70	75
Salary/Pension	40	42	42	48	46
Investment Expenditures	49 (41%)	32 (36%)	23 (27%)	24 (26%)	24(24%)
Budget Surplus/Deficit	-15	-26	-29	-11	-11

New Table 13.1b: GoI Budget Financing (\$ Billions)

	2014	2015	2016E	2017P	2018P
Financing Gap	-\$16.3	-\$22.1	-\$24.2	-\$9.6	-\$9.6
External Financing	\$5.6	\$3.6	\$1.8	\$6.1	\$4.1
Budget Loans	\$0.0	\$2.4	\$3.0	\$5.3	\$1.9
Other	\$5.6	\$1.2	-\$1.2	\$0.8	\$2.3
Domestic Financing	\$10.7	\$18.5	\$22.4	\$3.6	\$0.4
CBI	\$3.0	\$8.7	\$14.1	\$3.8	\$0.3
Commercial Banks	\$1.0	\$6.8	\$3.9	\$1.1	\$0.1
Other	\$6.7	\$3.1	\$4.4	-\$1.4	\$0.0
Remaining Gap	0	0	0	0	\$5.0

Sources: IMF Iraq Staff Reports, Table 3 (p. 35)

New Table 13: GDP and Public Finance

(Revenues and Expenditures as Percent of GDP)

	2012	2013	2014	2015	2016e	2017p	2018p	2019p
GDP (billions)	\$218	\$235	\$235	\$180	\$172	\$193	\$203	\$212
Total Revenues	47.0%	42.2%	38.2%	30.3%	27.4%	36.0%	35.6%	35.6%
Revenues from Oil Exports	43%	38.6%	36.0%	27.5%	23.3%	32.0%	31.9%	30.8%
Total Expenditures	42.9%	48.0%	43.5%	42.6%	41.5%	41.0%	41.2%	37.3%
Current Expenditures	29.7%	30.6%	25.5%	27.5%	30.1%	30.5%	31.1%	27.8%
Capital Expenditures	13.2%	17.4%	18.0%	15.1%	11.4%	10.5%	10.1%	9.5%
Balance	4.1%	-5.8%	-5.4%	-12.3%	-14.1%	-5.0%	-4.7%	-1.9%

Source: IMF 2017c, August, Table 1, p. 32; Table 4, p. 36

New Figure 13.1: The Flow of Dinars and Dollars in the Iraqi Economy: 2016 Estimates

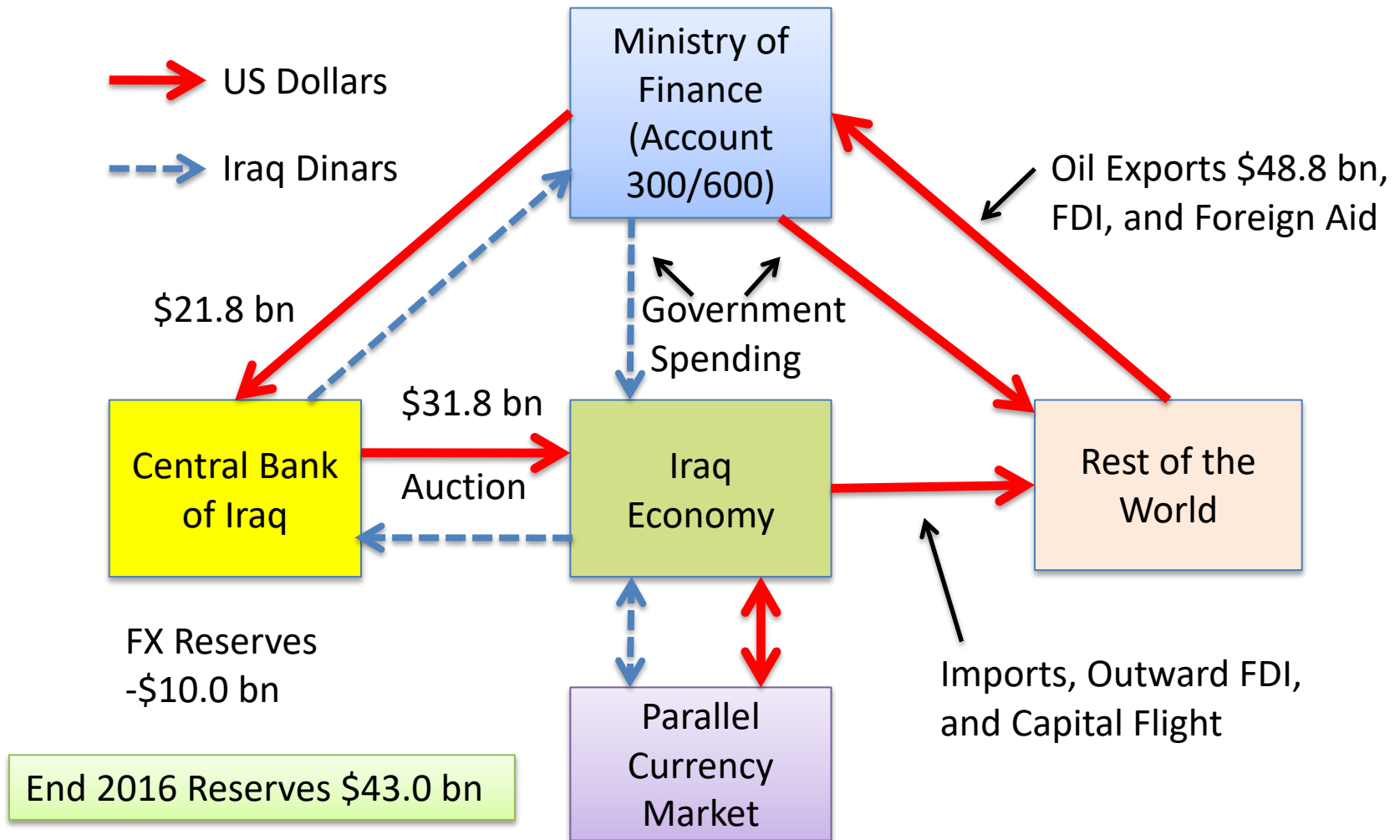


Table 13.2 Monetary and exchange rate variables

	2012	2013	2014	2015	2016e	2017p	2018p
Inflation rate	6.1%	1.9%	2.2%	1.4%	0.4%	2.0%	2.0%
Exchange rate							
CBI Auction (ID/\$)	1166	1166	1166	1167	1182	1190	
Market premium	5.0%	4.6%	4.4%	3.5%	9.9%	?	
Interest policy rate	6.0%	6.0%	6.0%	4.0%	4.0%	4.0%	
Broad money growth	3.4%	15.9%	3.6%	-9.0%	7.2%	4.9%	4.9%
Reserve requirement	15%	15%	15%	15%	15%	15%	15%

New Table 13: Iraq's Foreign Debt, International Reserves, and Exchange Rate

	Total Govt Debt	International Reserves	CBI Dollar Sales	CBI Auction Exchange Rate	Market-Auction ER Gap
2013	\$73.1 bn	\$77.8 bn	\$53.2 bn	1166 ID/\$	4.6%
2014	\$75.2 bn	\$66.7 bn	\$51.3 bn	1166 ID/\$	4.4%
2015	\$98.0 bn	\$53.7 bn	\$40.7 bn ^a	1182 ID/\$	3.5%
2016 ^e	\$114.6 bn	\$45.2 bn	\$31.8 bn	1182 ID/\$	9.9%
2017 ^p	\$122.9 bn	\$41.4 bn	\$15.7 bn	1190 ID/\$? ^b
Issues	Rising Debt	Falling International Reserves		Devaluation	Gap Between Market and Auction ER

Notes: ^a CBI Currency auction suspended February 24th – April 5th

^b CBI ceased publishing market rate on March 15th.

New Table 13: Cost of Reestablishing Iraqi Currency Board

	2014	2015	2016P
CBI Assets – Dollar	\$62.2 bn	\$47.0 bn	\$38.2 bn
CBI Liabilities - dinars	ID 66.2 trn	ID 66.3 trn	ID 67.7 trn
Currency in Circulation	ID 39.9 trn	ID 44.0 trn	ID 47.1 trn
Bank Reserves	ID 26.3 trn	ID 22.3 trn	ID 20.6 trn
CBI Liabilities in dollars at current ER	\$56.8 bn	\$56.9 bn	\$57.2 bn
Surplus at current ER	\$5.4 bn	-\$9.9 bn	-\$19.0 bn
Current ER	1166	1166	1182
“Balancing” Currency Board Rate		1410	1771

Data: IMF (2016) Table 7, p. 23, January 12

Table 8.1: Bank Loan Assets (December 2014, IQD)

Loans to	Central Government	Public Institutions	Private Sector	Total
By State Banks	8,368 bn	8,010 bn	10,500 bn	26,878 bn (79%)
By Private Banks	0 bn	0 bn	7,245 bn	7,245 bn (21%)
Total	8,368 bn	8,010 bn	17,745 bn	34,123 bn (100%)

New Table 8.2: Bank Deposit Liabilities (December 2014, IQD)

Deposits by	Central Government	Public Institutions	Private Sector	Total
To State Banks	18,143 bn	31,095 bn	15,138 bn	64,376 bn (87%)
To Private Banks	46 bn	86 bn	9,564 bn	9,697 bn (13%)
Total	18,189 bn	31,181 bn	24,702 bn	74,073 bn (100%)

