

The Syrian Economy: Current State and Future Scenarios

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The Pre-Conflict Syrian Economy

The Syrian economy as a whole should be considered in terms of key macroeconomic indicators.¹ Even before the outbreak of the civil war, Syria had a very poor economy, and according to GDP per capita figures ranked 122 in the world in 2009 (at \$2,570). Concurrently its growth rate was relatively high: except for 1 percent in 2003, it ranged between 4 percent and 7 percent per annum. This high growth rate was most probably the outcome of the reform conducted in Syria in the early 2000s with the aid of the IMF. While the population grew at an average rate of 2.5 percent a year, the average labor force growth rate was slower and there was a decline in the labor force participation rate, from 49 percent in 2003 to 43 percent in 2009. The rate of unemployment declined from 11 percent in 2003 to 8 percent in 2009. The volume of external trade increased in the 2003-2008 period, with a slowdown in 2009 that can be attributed to the global crisis and did not have a big effect on the economy.

A few salient facts may be noted in terms of the economy's sectoral make-up:

- a. Agriculture's share in GDP was 17 percent, a large percentage relative to modern, advanced economies. This strengthens the notion that despite Syria's progress in the 2003-2010 period, it remained a very underdeveloped economy.
- b. The oil industry dominated the sectoral distribution of exports (almost half of total exports). The other main exports were goods, which require low skill levels.

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c. The share of Aleppo (which subsequently became the focal area of the conflict) in consumption, capital, number of industrial establishments, and so on was around 30 percent. The corresponding share of metropolitan Damascus was 40 percent.

Economic factors played a role in triggering the conflict. Although the reform earlier in the decade had a general positive effect on the Syrian economy, the gaps that it created between rural regions and metropolitan ones may well have had highly adverse effects. In addition, Syria's climate was very volatile, and water-related violence was on the rise. In the period 2006-2011, Syria experienced a multi-season, multi-year period of extreme drought that contributed to agricultural failures, economic dislocations, and population displacement.² Major developments included the following:

- a. Between 2006 and 2009, around 1.3 million inhabitants of eastern Syria were affected by agricultural failures.
- b. An estimated 800,000 people lost their livelihoods and basic food supports.
- c. A return of the drought in 2011 worsened the situation, and by late 2011, 2-3 million people were affected, with 1 million, according to UN estimates, driven into food insecurity.
- d. More than 1.5 million people, mostly agricultural workers and family farmers, moved from rural areas to cities and camped on the outskirts of Syria's major cities.³

The Devastation of the Syrian Economy since 2011

Level and Growth of Economic Activity

Table 1 and Figure 1 show GDP growth and its various components in the conflict period.

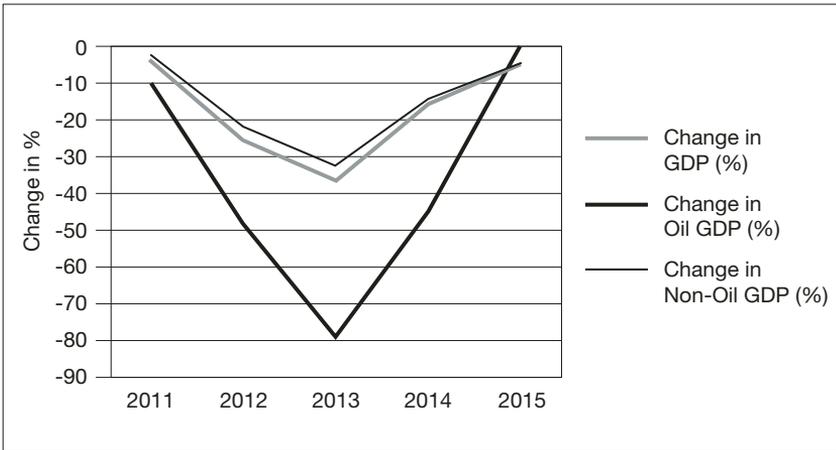
Table 1. Conflict Period Growth

Period	2010	2011	2012	2013	2014	2015
Change in GDP (%)	3	-3	-25	-36	-15	-5
Change in oil GDP (%)		-10	-49	-79	-44	0
Change in non-oil GDP (%)		-2	-22	-32	-14	-5
Government revenue (% of GDP)	24	19	12	7	6	5
Oil-related revenue (% of GDP)	8	5	3	1	1	1
Non-oil tax revenue (% of GDP)	10	9	5	4	3	3
Non-oil non-tax revenue (% of GDP)	7	5	3	2	2	2

Table 1. Conflict Period Growth, cont'd

Period	2010	2011	2012	2013	2014	2015
Government expenditure (% of GDP)	27	29	27	23	23	17
Current expenditure (% of GDP)	18	21	23	21	21	15
Investment expenditure (% of GDP)	9	7	4	3	3	2
Fiscal deficit (% of GDP)	-3	-9	-16	-16	-17	-12

Source: Syrian Center for Policy Research (SCPR) estimates

Figure 1. Conflict Period GDP Growth

Source: SCPR estimates

The 2015 level of GDP was 38 percent of 2010 GDP. Non-oil GDP was 42 percent of 2010 non-oil GDP, and oil GDP was only 5 percent of what it was in 2010.

Total GDP loss was estimated at \$163 billion by the end of 2015; capital stock loss was estimated at \$67 billion. Syrian Center for Policy Research estimates on the loss of capital as a result of the conflict indicate that as of the fourth quarter of 2015, the capital stock was 43 percent of what it was in 2010.⁴ Some estimates indicate that GDP contracted by another 19 percent in 2015 and by 8 percent in 2016.⁵

The Economic Decline in the Regional Context

Table 2 provides for a region-based analysis of the Syrian economy. Over the period of 2011-2014, GDP per capita in Syria plunged to an estimated

55 percent of GDP per capita in the Gaza Strip and 11 percent of GDP per capita in Lebanon.

Table 2. Regional Comparison of GDP per Capita (US dollars)

Country	GDP per capita 2010	GDP per capita 2011-2014, average
Syria ¹	2,700	975
Jordan ²	4,054	4,534
Egypt ²	2,668	3,168
Lebanon ²	8,764	8,510
West Bank ³	2,913	3,605
Gaza ³	1,487	1,730

Sources: (1) SCPR estimates (2) World Bank (3) Palestinian Central Bureau of Statistics

Sectoral Changes

There has been a substantial change in the sectoral distribution of GDP. The sector subject to the largest amount of damage was the housing sector, which constituted an estimated 66 percent of the total value of damage.⁶ The mining sector has shrunk from 13 percent to 2 percent of GDP, a change attributed to the collapse of the oil industry. In the meantime, the agriculture sector has grown from 17 percent to 29 percent of GDP.⁷

Public consumption, which increased early in the conflict, subsequently declined dramatically to 45 percent of what it was in 2010.⁸ Private consumption reacted immediately to the conflict, and has been in decline since its very beginning, though at a lower rate than public consumption. It is now 45 percent of what it was in 2010.⁹

Import and export volumes shrank to very low levels, with the major collapse of exports occurring in the oil sector. As of 2010, oil exports were 49 percent of Syrian exports. Since 2012, Syria has become an oil importer.

The Labor Market and Poverty

The labor market suffered major losses. As of late 2015, the unemployment rate was 53 percent, with 2.6 million workers employed and 2.9 million unemployed. By way of comparison, in 2011, when the conflict was in its initial stages, 5.2 million people were employed, and the unemployment rate was 15 percent (before the conflict it was 8 percent).¹⁰ According to ESCWA estimates, as of 2015, 83 percent of the population was below the upper poverty line. For comparison, in 2010 only 28 percent of the

population was considered poor by this standard. It is estimated that 50 percent of the nation's disposable income is used for food consumption.¹¹

Monetary Variables

Syria has experienced very high inflation: the average annual rate between 2010 and 2015 was 35 percent. The CPI as of 2015 was 4.5 times its level in 2010 and 9 times its level in 2005.¹² In terms of foreign exchange, there are formal and informal markets. The formal rate was around 250 Syrian pounds for one US dollar at the end of 2015, while the black market price was around 350 Syrian pounds for one US dollar. The price before the conflict was 45 Syrian pounds for one US dollar.¹³

Key Future Scenarios

Scenario 1: Continuation of the Conflict

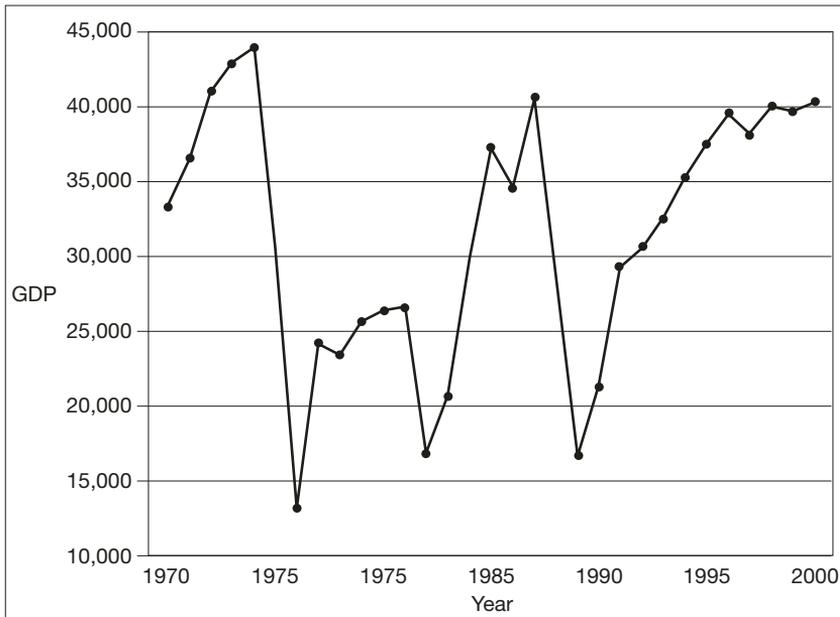
Continuation of the conflict means continuation of the economic destruction delineated above. If the conflict continues, it is highly likely that GDP will shrink further, and the question is at what rate. Current GDP is 38 percent of its 2010 level. The World Bank has projected that the 2016 decline would be 8 percent, which means 2016 GDP was 35 percent of the 2010 level. These estimates indicate that the rate of GDP contraction is decreasing.¹⁴ The unemployment rate reacted faster than other economic indicators, but has been almost unchanged over the past two years.

It can be conjectured, then, that a continuation of the conflict would inflict further damage to GDP, but at a diminishing rate. The fact that the rate of change has been substantially lower suggests that under certain circumstances the Syrian economy may even reach a new, low "steady state." However, it seems that Syria has not yet reached this level. Necessary conditions for an economy experiencing a civil war to reach a steady state are that the conflict does not expand to regions with high levels of economic activity, and does not destroy capital and/or cause a decline in the labor force. Such conditions do not currently exist in Syria, with Aleppo having been one of the major regions of battle. Therefore, as long as the war takes place on several fronts, including urban centers, further damages are to be expected. Moreover, because investment declined more heavily than other components of the economy, foreign aid is imperative to build up the necessary amount of capital for a steady state to exist.

Historically, there are examples of economies that witnessed positive or zero growth rates during civil wars. One relevant historical example of

an economy that went through a long period of civil war is the Lebanese economy. In the course of Lebanon's civil war between 1975 and 1990, there were changes in the intensity of conflict, in its main regions of battle, and in foreign intervention. Figure 2 shows the changes in GDP throughout that conflict.

Figure 2. Lebanon's Real GDP, 1970-2000



Source: Penn World Table¹⁵

Notes: Constant 2005 prices in US\$

Figure 2 shows a huge contraction of GDP in the first two years of the conflict. Thereafter, and until the 1982 Lebanon War, the economy grew at a relatively stable rate. In 1982 GDP collapsed again. The partial Israeli retreat in 1985 signaled a period of development, followed by another period of negative growth in the late 1980s. Following the end of the civil war in 1990, Lebanon experienced steady positive growth, but reached its level of pre-war GDP only 15 years later (or 20 years later, according to IMF estimates¹⁶).

This example shows the possibility that positive and even stable growth rates may be achieved in the course of a conflict, although such growth may be short-lived. In any case, it can take the economy a long time to reach its

pre-conflict level. One must keep in mind that even if Syria enters a “steady state,” its current state is almost unprecedentedly bad. The level of poverty exceeds 80 percent, GDP has contracted by more than 60 percentage points, and 45 percent of the population comprises IDPs and refugees.

Scenario 2: A Single State/Economy

A single state is probably the best scenario for the recovery of the Syrian economy. Putting aside the question of whether it would be Alawite, Sunni, or an Alawite-Sunni federation, any of these three options would presumably lead to a reconstruction of the Syrian economy.

To understand the scale of reconstruction, recall that in late 2015 the total economic loss was estimated at \$255 billion.¹⁷ This loss equals five times the 2010 GDP or thirteen times current GDP. Again, the decline in GDP itself is estimated at \$163 billion, which equals three times the 2010 GDP or eight times current GDP.¹⁸

The loss of capital is estimated at \$67 billion (1.3 times 2010 GDP). A 2016 IMF report estimates the reconstruction costs of physical infrastructure in the range of \$100-200 billion.¹⁹ The damage to the labor force is due to emigration (refugees and migrants), internal displacement, and war-related deaths and injuries. While the capital stock is now 44 percent of its level in 2011, the labor force is 90 percent of what it was in 2011. However, with an unemployment rate of 53 percent, the number of employed workers is 50 percent of the 2011 number. Overall, the capital/labor ratio is lower than its pre-crisis level. This is also consistent with the fact that the share of capital-intensive sectors in GDP has shrunk substantially, and with the fact that investment underwent steeper declines than any other component of GDP. The capital/labor ratio will probably decline further once the conflict is over, since the labor market reacts faster than the accumulation of capital. Moreover, a return of refugees would cause further declines in the capital/labor ratio.

Under these circumstances, the immediate outcome of ending the conflict would most probably be a decline in the unemployment rate and an increase in GDP, but lower labor productivity and real wages. In order for the latter two to rise, the capital/labor ratio needs to rise. This adjustment requires high levels of investment, potentially facilitated by foreign aid.²⁰

Currently, the UN, the EU, the World Bank, and foreign governments are assisting Syria by providing aid to the Syrian government, or by directly helping Syrian IDPs, refugees, and other victims of the conflict. It is very

likely that these organizations and governments will continue to invest and provide aid to Syria once the conflict is over. It is also likely that Syria would ask for the assistance of the IMF or the World Bank. However, overall assistance thus far has been too limited to suffice. Given that foreign aid is dependent on donors' confidence and on political and economic conditions, it would probably take time before the Syrian economy would be provided with the required means for the monumental task of re-building.

Another adverse effect of the conflict, which has severe long run implications, is the fall in labor productivity, as a result of lost school years and unemployment. Poverty in Syria now exceeds 80 percent, with many children experiencing issues of food security. Unlike capital loss, it is hard to recover labor productivity. It is highly plausible that the generation of children who suffered through the war would remain a less productive generation.

The IMF's long run projection for the recovery of the Syrian economy assumes that a peace agreement and new government are in place by the end of 2017 and that conditions permit investors and international donors to safely engage in the country's rebuilding efforts. The IMF analysis states that "If we hypothetically assume that for Syria the post conflict rebuilding period will begin in 2018 and the economy grows at its trend rate of about 4 percent, it would take the country about 20 years to reach its pre-war real GDP level. ...This assumes that the country can quickly restore its production capacity and human capital levels and remains intact as a sovereign territory."²¹

Scenario 3: Multiple States and Economies

A discussion of the scenario of multiple states and economies invites an analysis of the economic resources of the different regions and the political entities that control them, along with their respective trading relations. Such analysis can help determine which regions may split and become autonomous states.

The government controls the greater Damascus area and the coastline. Damascus had a 40 percent share in most of the economic factors of production prior to the conflict, and the coastline is the region that suffered the lowest rates of destruction during the conflict. Moreover, the population in government-held regions is between 55 to 70 percent of the total Syrian population. The Syrian government has trading relations with Russia and Iran, and is assisted by aid from the UN and from Iran. Under the multiple

states scenario, it is possible that it would be assisted by more states and organizations. Therefore, under these circumstances, the government-held parts could rebuild and grow, if no further combat takes place.

If, however, most of the regions in which there are oil fields stay out of government reach, then its recovery process would take longer than under the scenario of a unified economy. The region of Aleppo has suffered major destruction. As it enjoyed a share of 30 percent in most of the factors of production prior to the conflict, control of Aleppo holds important implications for the government.

The Islamic State dominates large territories in Syria and in Iraq – though the areas under its control have diminished recently – but has a very small population under its control. On the one hand, it controls most of the regions in which there are oil fields and thus has sources of income. On the other hand, oil resources are generally running out, the Islamic State has no formal trading relations with any other entity (though the volume of clandestine trade is not clear), and it sells its oil at lower prices than global prices. Estimates put the Islamic State oil industry daily income at around \$3 million, giving it a total value of oil assets between \$1.3 and \$2 billion.²² Other sources of income for the Islamic State include:

- a. Taxation and extortion of residents: This form of income has a downside as well, because it imposes severe costs on the motivation to invest and causes a fall in labor productivity, as skilled workers try to escape Islamic State-dominated regions.
- b. The excavation and sale of cultural artifacts: It is very hard, though, to estimate the revenue this industry generates.
- c. Kidnapping ransom: It is estimated that revenues from ransom were between \$20-45 million in 2014.²³ This kind of activity may lead to foreign military intervention, which is destructive to the economy.
- d. Though the Islamic State receives no formal aid from international organizations, and although it faces embargoes and sanctions, it has a fundraising system, and it receives donations. It is estimated that the Islamic State accumulated as much as \$40 million between 2013-2014 from donors in the oil-rich nations of Saudi Arabia, Qatar, and Kuwait.²⁴ The organization approved a \$2 billion dollar budget for 2015, including a projected \$250 million dollar surplus, designed to cover the costs of operations in both Iraq and Syria.²⁵

The conclusion is that the Islamic State economy is heavily dependent on resources that are likely to run out in the medium or long term. Note that

oil was running out even before the conflict, the Islamic State lost control over major regions that have cultural artifacts, kidnapping for ransom risks foreign intervention, and taxation and extortion risk lower investment and cause skilled workers to flee. Therefore, if the Islamic State refrains from conflict with other entities, it could survive in the short run, but is not likely to survive in the long term if it does not create alliances and trade relations, establish traditional industries, and motivate its people to work and invest.

The Kurds control most of the northern frontier with Turkey. On the eastern part of the border is the governorate of Hasakeh, relatively rich with oil fields and cereal production. Sam Dagher, a correspondent for the *Wall Street Journal*, quoted officials in the PYD-controlled part of Hasakeh as saying that fields in this region were producing 40,000 b/d in late 2014. This oil was sold to local Arab tribal groups for about \$15/barrel.²⁶ However, the Kurds are exposed to fighting with the Islamic State in Hasakeh. The Kurds hold alliances with the PKK in Turkey and with the KRG in Iraq, and are strongly opposed by Turkey. It is claimed that they have some arrangements with the Assad regime, which gave them control over the northern frontier and has trading relations with them.

Under these circumstances, it seems that the Kurds are dependent on oil resources that would not suffice in the long run, on agriculture that is vulnerable to volatile climate changes, on Assad's regime survival, and on the absence of Turkish intervention of the type seen in August and September 2016. These circumstances provide survival options in the short run, but demand structural changes and avoidance of future conflicts in the long run.

Economic data about the *National Coalition for Syrian Revolutionary Opposition Forces* are hard to come by. The regions controlled by the Free Syrian Army are not rich in natural resources, and it seems that the rebel groups are heavily dependent on foreign aid. Therefore, without expanding, they would probably continue to be dependent on foreign aid. It is plausible that foreign governments would continue to assist them, but they would need to create autonomous sources of income in order to survive in the long run.

Conclusion

It may take the Syrian economy decades to recover to its initial pre-conflict position. Some damages look almost impossible to repair – people who fled the country may never come back; years of schooling are lost forever;

and the damage to physical capital and human capital is so enormous it will require probably hundreds of billions of dollars to rebuild. The IMF estimates 20 years of reconstruction. This means that under the best of circumstances Syria will need a very long period of time to regain the (poor) status it had before the civil war.

One can also assume that a unified Syria is a much more promising proposition than a fragmented one, at least in terms of economic rebuilding. This is particularly the case, as international aid will not be so readily given to those parts of a fragmented Syria that are anathema to the rest of the world, such as the Islamic State.

Notes

- 1 A general caveat applies throughout. Data and figures on Syria are incomplete and their reliability is questionable. Estimates are even worse. One needs to use what is available and proceed with due caution. Most data in this report are taken from the Syrian Center for Policy Research (SCPR), which describes itself as follows: "The Syrian Center for Policy Research (SCPR) is an independent, non-governmental, and non-profit think tank, which undertakes public policy oriented research to bridge the gap between research and policy making process. SCPR aims to develop a participatory evidence-based policy dialogue to achieve policy alternatives that promote sustainable, inclusive, and human-centered development." See <http://scpr-syria.org/>.
- 2 P. H. Gleick, "Water, Drought, Climate Change, and Conflict in Syria," *Weather Climate and Society* (WCAS) 6 (2014): 331-40, doi:10.1175/WCAS-D-13-00059.1.40. doi:10.1175/WCAS-D-13-00059.1.
- 3 Ibid., p. 334.
- 4 Syrian Center for Policy Research (SCPR), "Syria: Confronting Fragmentation! Impact of Syrian Crisis Report," New York, UNDP, February 2016, p. 31. <http://www.sy.undp.org/content/syria/en/home/library/poverty/confronting-fragmentation.html>.
- 5 Shanta Devarajan, Lili Mottaghi, Quy-Toan Do, Mohamed Abdel Jelil, "Syria, Reconstruction for Peace," *Middle East and North Africa Economic Monitor*, Washington D.C., World Bank, April 2016, p.48, doi: 10.1596/978-1-4648-0907-1.
- 6 World Bank. "The Importance of Planning Syria's Eventual Reconstruction," last modified May 24 2016, <http://www.worldbank.org/en/news/feature/2016/05/24/the-importance-of-planning-syria-s-eventual-reconstruction>.
- 7 "Syria: Confronting Fragmentation! Impact of Syrian Crisis Report," p. 24.
- 8 Ibid., p. 27.
- 9 Ibid.

- 10 Ibid., p. 37.
- 11 Abu-Ismaïl Khalid, Omar Imady, Aljaz Kuncic, Osama Nojoun , and Justine Walker Justine, "Syria At War, Five Years On," United Nations Economic and Social Commission for Western Asia (ESCWA), 2016, p. 28, <https://www.unescwa.org/news/syria-war-five-years>.
- 12 "Syria: Confronting Fragmentation! Impact of Syrian Crisis Report," p. 36.
- 13 Ibid., p. 35.
- 14 Devarajan et al., "Syria, Reconstruction for Peace," p. 48.
- 15 Robert C. Feenstra, Robert Inklaar, and Marcel P. Timmer, "The Next Generation of the Penn World Table," *American Economic Review* 105, no. 10 (2015): 3150-82, www.ggdc.net/pwt.
- 16 Randa Sab, "Economic Impact of Selected Conflicts in the Middle East: What Can We Learn from the Past?" IMF Working Paper 14/100, Washington, International Monetary Fund, Washington, June 2014, p. 4, <https://www.imf.org/external/pubs/ft/wp/2014/wp14100.pdf>.
- 17 "Syria: Confronting Fragmentation! Impact of Syrian Crisis Report," p. 31.
- 18 The calculations are based on 2010 GDP data of the Syrian Central Bureau of Statistics (<http://www.cbssyr.sy/index-EN.htm>), and growth data through the conflict, given by SCPR estimates in the above article, p. 17.
- 19 Jeanne Gobat and Kristina Kostial, "Syria's Conflict Economy," IMF Working Paper WP/16/123, Washington, International Monetary Fund, June 2016, p. 20, <https://www.imf.org/external/pubs/ft/wp/2016/wp16123.pdf>. Unless noted otherwise, this will be the key reference to IMF citations here.
- 20 For relevant research on post-war recovery see Paul Collier, "Post-Conflict Economic Recovery," 2006, paper prepared for the International Peace Institute (IPI) in New York, August 2008.
- 21 Gobat and Kostial, "Syria's Conflict Economy," p. 19.
- 22 Financial Action Task Force (FATF), "Financing of the Terrorist Organisation Islamic State in Iraq and the Levant (ISIL)," Paris, Financial Action Task Force, February 2015, pp. 14-15, <http://www.fatf-gafi.org/media/fatf/documents/reports/Financing-of-the-terrorist-organisation-ISIL.pdf>.
- 23 Ibid., p. 18.
- 24 Janine Di Giovanni, Leah McGrath Goodman, and Damien Sharkov, "How Does ISIS Fund its Reign of Terror," *Newsweek*, November 6, 2014, <http://europe.newsweek.com/how-does-isis-fund-its-reign-terror-282607?rm=eu>.
- 25 "Islamic State Group Sets out First Budget, Worth \$2bn," *New Arab*, January 4, 2015, <https://www.alaraby.co.uk/english/news/2015/1/4/islamic-state-group-sets-out-first-budget-worth-2bn>.
- 26 Sam Dagher, "Control of Syrian Oil Fuels War between Kurds and Islamic State," *Wall Street Journal*, November 23, 2014, <http://www.wsj.com/articles/control-of-syrian-oil-fuels-war-between-kurds-and-islamic-state-1416799982>.