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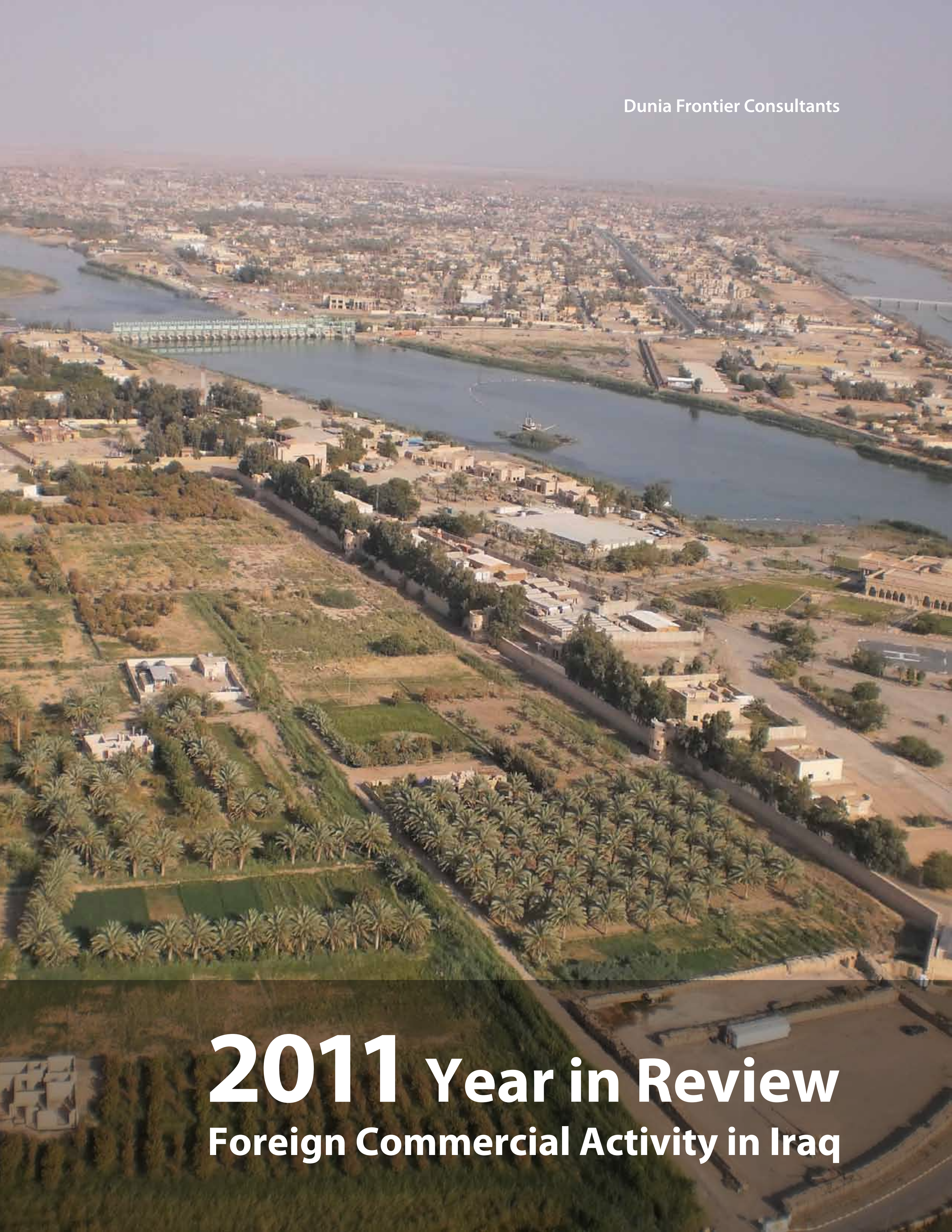

2011 Year in Review
Foreign Commercial Activity in Iraq

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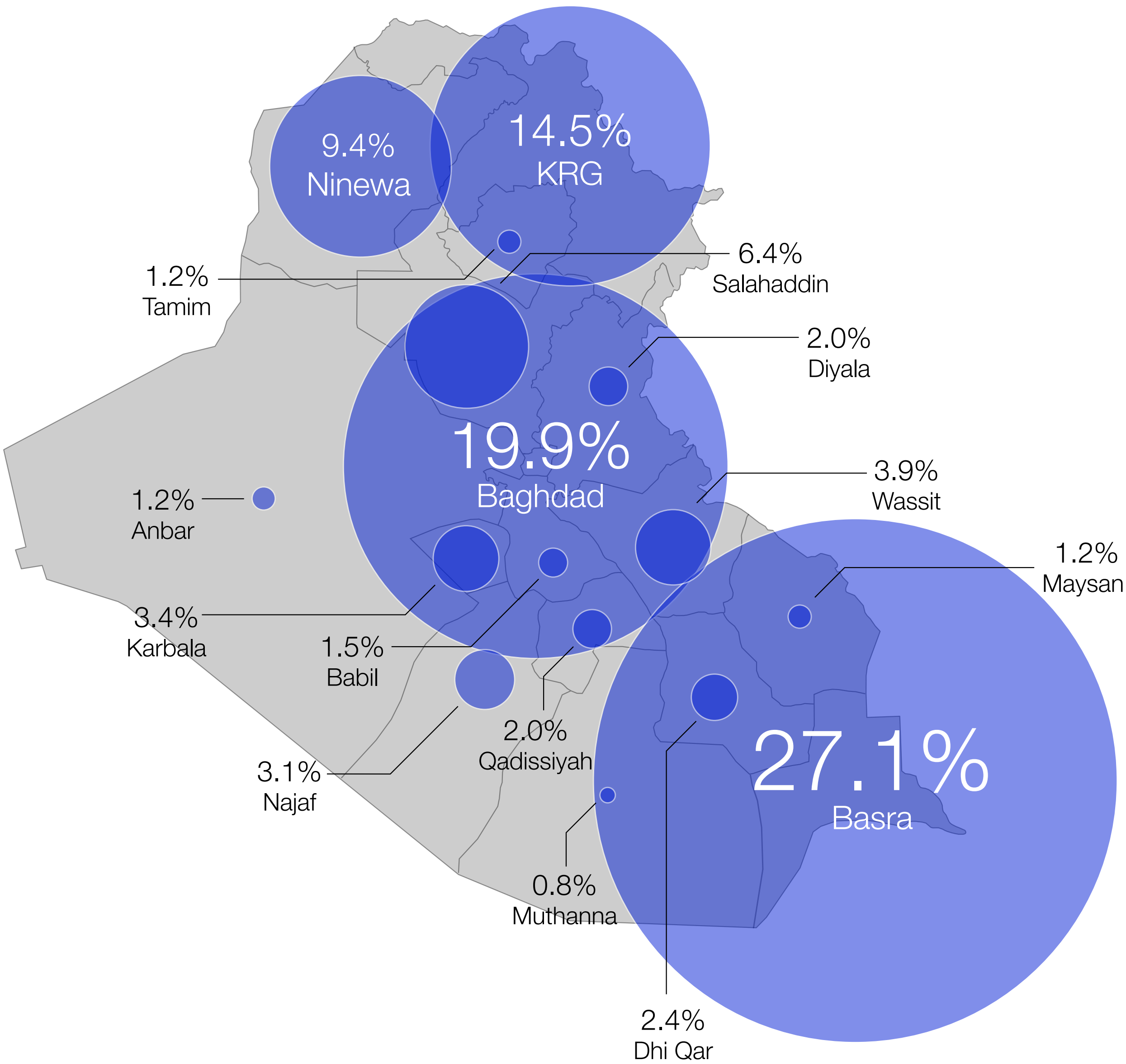

Figure 1. Relative Size and Geographic Distribution of Foreign Commercial Activity

In 2011, foreign firms and investors reported *$55.67 billion in investments, service contracts and other commercial activities across Iraq* — an estimated 40.3 percent increase in total deal value over the previous year.* This continued strong growth in deal flow occurred despite a year of steadily increasing political tensions, and the complete withdrawal of US forces from the country. The 40.3 percent increase represented a slight acceleration from 2010, but in absolute terms it was also the single biggest annual increase in the value of foreign commercial activity since 2003.

2011 also saw the continued proliferation of smaller-scale projects, particularly in the electricity and oil and gas sectors, which each enjoyed dozens of multimillion-dollar deals. These smaller-scale deals are more likely to be implemented than the overly-ambitious, multibillion-dollar deals that capture headlines, and they also reflect the continued maturation of the Iraqi economy as a place for regional and international firms to do business.

Several major conclusions emerged from Dunia's analysis:

» The total number of reported investments, service contracts and other commercial activities by foreign firms in Iraq increased 80.4 percent to 294;

» Average deal size continued to fall, from $243 million to $189 million;

» Deal flow was much less volatile in 2011, varying only 10 percent on average per month, as opposed to an average of 50 percent per month in 2010;

» The overall share of foreign commercial activity captured by Baghdad, Basra and the Kurdish region fell from 81.2 percent in 2010 to 61.5 percent in 2011, reflecting strong interest by foreign firms in Iraq's other provinces;

» At least 45 countries were active in Iraq, with an increasing role for non-regional players. The United States captured a larger share of foreign commercial activity, as did European and Asian firms — particularly from the United Kingdom, the Netherlands, Germany, Italy, China and South Korea;

» The top sector continued to be residential real estate, which accounted for 26.1 percent of foreign commercial activity. Other top sectors were oil and gas, and electricity, which each enjoyed dozens of multimillion-dollar deals;

Although 2011 confirmed Iraq as a rapidly emerging market with enormous potential, there remains lingering uncertainty stemming from a contentious political environment, which may well have a significant impact on foreign commercial activity in 2012.

There are concerns about the viability and durability of Prime Minister Nouri al-Maliki's government, especially following a slew of politically motivated arrests in late 2011, and subsequent sectarian and partisan tension. Increased calls for autonomy from Sunni-

* *This figure reflects a decrease in the estimated deal value for 2010, from $42.668 billion to $39.668 billion, after the reported $3 billion plastics factory deal with South Korea's STX Heavy Industries failed to materialize.*

majority provinces such as Anbar, Salahaddin, and Ninewa, as well as calls for devolution in Basra and other southern provinces, may presage a rise in violence that could disrupt reconstruction or shake investor confidence. Unresolved constitutional and other legal disputes over oil and gas development with the Kurdistan Regional Government also pose long-term challenges to Iraq's internal cohesion.

However, the relatively quick passage of the $100.5 billion federal budget for 2012 suggests that Prime Minister Maliki may yet succeed in forging a new status quo while placating many of his political detractors. Deal flow of foreign commercial activity in January 2012 already exceeded the 2011 average, so there is certainly reason for cautious optimism when looking at the year ahead. If Baghdad and Erbil can find an avenue for rapprochement within the next six months, as pressure mounts to rationalize the country's long-term hydrocarbon strategy, then 2012 may prove to be watershed moment in the reconstruction of Iraq.

Kyle Stelma
Managing Director
Emerging Markets

Nicholas Skibiak
Director
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***Note on Methodology**: This is the latest report by **Dunia Frontier Consultants** to track the activities of foreign firms and investors in Iraq. Dunia employs the category* **foreign commercial activity (FCA)** *to capture the dynamics of foreign participation in Iraq's reconstruction process, and to assess the opportunities available in Iraq. The data presented in this report are not intended to be exhaustive. Instead, Dunia hopes the data and accompanying analysis provide useful insights into how the Iraqi economy is evolving amid the constant stream of deal news and varying assessments of the country's economic outlook.*

Strong Interest in Iraq, Despite Another Challenging Year

Iraq witnessed another year of significant foreign commercial activity in 2011, even as the country's political strife and institutional challenges underscored the slow pace of reconstruction. Foreign investment and government expenditure on critical infrastructure in the electricity and oil and gas sectors continued apace as lingering disputes between Prime Minister Nouri al-Maliki's State of Law coalition and the Iraqiya bloc (which won a narrow plurality in the 2010 election) simmered for much of the year.

Months of political wrangling following the March 2010 elections left the country with a massive, unwieldy ruling coalition fundamentally incapable of tackling meaningful legislation. Iraqi politics entered a period of heightened tension in the last few months of 2011 as the final withdrawal of US troops magnified existing flashpoints. Tensions between Maliki and prominent leaders of Iraqiya (as well as between the central government and provincial councils clamoring for greater autonomy) culminated in late December 2011. Within 48 hours of the last US military forces officially departing from Iraq, Iraq's Supreme Judiciary Council issued an arrest warrant for Vice President Tareq al-Hashemi on terrorism charges, and Prime Minister Maliki announced that he was firing his deputy Saleh al-Mutlaq and launching an investigation into alleged ties between Finance Minister Rafi al-Issawi and terrorist groups in Fallujah.

Reported investments, service contracts and other commercial activities by foreign firms in Iraq rose 80.4 percent year-on-year to 294.

This reassertion of authority by Maliki and Baghdad is still playing itself out, and it remains to be seen what the final constellation of power will look like — particularly as it involves other key players like the Kurds and the Sadrists. What is clear, however, is that Iraq's legislative priorities will face further delays.

Despite the turmoil, the pace of foreign commercial activity in Iraq was sustained throughout 2011. The total number of reported investments, service contracts and other commercial activities by foreign firms in Iraq rose 80.4 percent year-on-year to 294. Furthermore, the deal flow was much less volatile throughout 2011, varying only 10 percent per month on average, as opposed to an average of 50 percent per month in 2010 [see Figure 2].

At the same time, average deal size continued to fall, from $243 million to $189 million. Both trends reflect an important and continuing maturation of the marketplace, as greater numbers of smaller-scale deals are being signed and implemented. Although much of the news from Iraq is still dominated by headlines of multibillion-dollar deals, the underlying reality is one of dozens of multimillion-dollar deals each month across numerous sectors. Ultimately, this bodes well for Iraq's continued economic recovery.

However, the unstable political climate is having a discernable effect on both the security situation and the ability of the government to

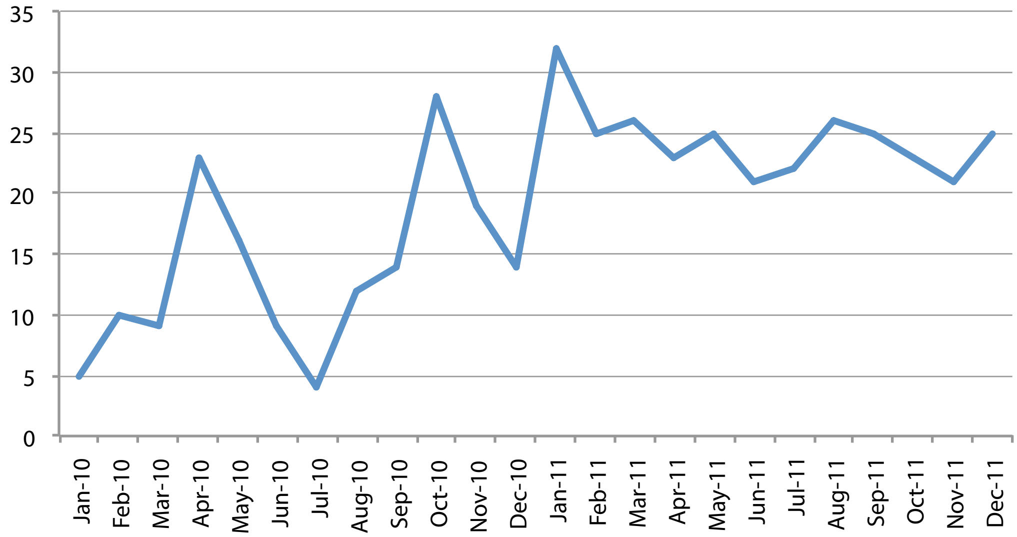

Figure 2. Monthly Deal Flow (2010-2011)

engage in strategic decision-making, which in turn is delaying the development of critical infrastructure. Accusations of ministerial corruption led to the cancellation of billions of dollars in electricity deals, and independent assessments suggest that bureaucratic delays and inefficiency mean that Iraq (excluding the Kurdish region) may only export 4 million barrels per day (mbpd) of crude oil by 2017. [See electricity and oil & gas sector reports below].

The security environment in Iraq deteriorated in the final months of 2011, coinciding with Prime Minister Maliki's efforts to reassert his authority over Iraqiya and autonomy-seeking provincial governments. There was a sharp spike in violence beginning with the issuance of arrest warrants in October for hundreds of former Baathists accused of conspiring against the government. This was quickly followed by a rise in security incidents during the final withdrawal of US combat forces, which overlapped the traditionally violent Shiite holiday period spanning Ashura and Arbaeen. However, while the number of fatalities remained essentially flat from 2010 to 2011, the number of security incidents declined nearly 10 percent.

Increased alienation of Iraq's Sunni provinces raises the risk of renewed sectarian violence, as well as attacks against the government or security forces in Baghdad by groups such as the al-Qaeda affiliate Islamic State of Iraq. However, threats to foreign business interests in Iraq will continue to be indirect. Attacks against foreign firms and contractors (which are infrequent and usually opportunistic attacks against convoys in Basra or near Baghdad), and attacks against oil infrastructure, are often a proxy struggle between Iraq's various political or criminal factions over access to power and local resources.

Despite the heightened violence and political tension of late 2011, Iraq is still expected to attract the foreign firms on which it is relying so

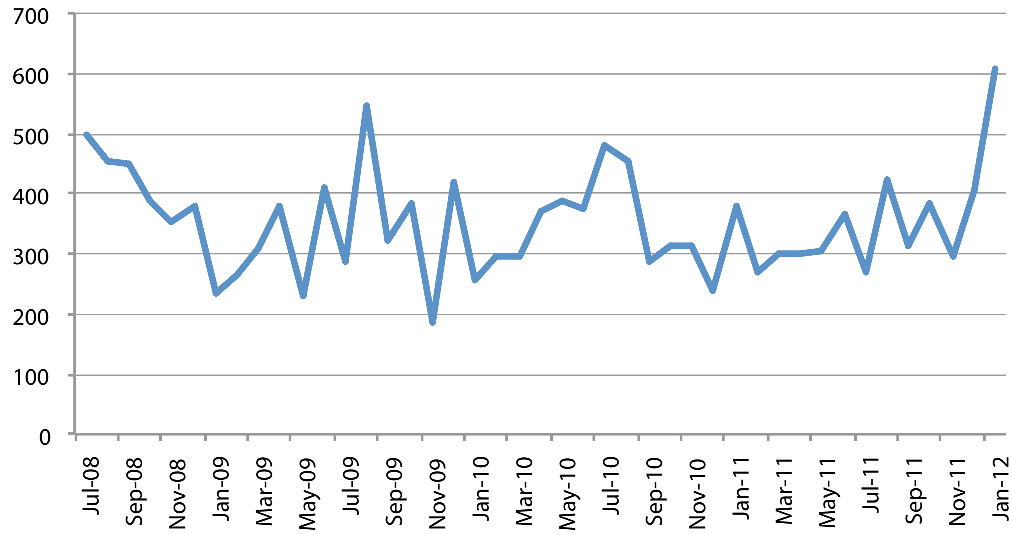

Figure 3. Monthly Fatalities in Iraq (July 2008 - Present)

heavily to design and implement its economic development program. The country is expected to generate billions of dollars in unscheduled oil revenue as it hopes to exceed 2.6 million bpd in oil exports in 2012., which by itself would underpin at least an element of stability. The revolutions and political upheaval sweeping across the Middle East in 2011 highlighted Iraq's relative economic strength in the region. In January of this year, the World Bank predicted Iraq's GDP would grow by 12.6 percent in 2012 and 10.2 percent in 2013. Shortly thereafter, the deputy governor of the central bank, Mudher Kasim, said Iraq's gross domestic product (GDP) is expected to grow by an average of at least 9.4 percent annually between 2012 and 2016, reaching around $360 billion.

While there is little doubt that Iraq will continue to enjoy strong growth and sizeable oil export revenue, the country now faces a key political turning point. Whether and how Prime Minister Maliki is able to lead a government that is capable of tackling Iraq's transcendent territorial and resource ownership issues with the Kurdistan Regional Government, while minimizing its Sunni minority's perceptions of marginalization, will go a long way toward shaping the country's fate in the coming years.

In particular, both because of their pivotal role in the ruling coalition and because of their unique history and position of autonomy within Iraq, the relationship between the Kurds and Prime Minister Maliki will remain a key bellwether of Iraq's future as a whole. Not only are the Kurds politically best placed as kingmakers within the ruling coalition, but their special status as a semi-autonomous group cuts across some of the most divisive and decisive issues in Iraq; from the status of regions and devolution of federal authority, to the country's relationships with international oil companies (IOCs). Whether and how the recent controversial entrance of ExxonMobil into the Kurdish oil sector is resolved will in large part point the way for the investment climate and the country as a whole.

2011 FCA Data & Analysis

During 2011, 276 foreign firms from 45 different countries announced new investments, service contracts, and other commercial activities in Iraq. The total reported value of these deals reached $55.67 billion.*

» European, Asian Firms on the Rise

2011 saw a continuation of the trend away from regional players, as European and Asian firms captured a larger share of foreign commercial activity with numerous multibillion-dollar deals across various sectors. This was particularly true for South Korea, the Netherlands, Germany and the UAE, which owed their prominence to a handful of exceptionally large deals. However, the United States, United Kingdom, Turkey, China, Italy, and Iran, as well as South Korea, made significant entries into the Iraqi marketplace in 2011 with numerous multimillion-dollar deals. [See rankings in Deals Under $1 Billion below for comparison].

Just as Turkey owed its position last year to a $11.28 billion residential real estate deal for the reconstruction of Baghdad's Sadr City neighborhood, so too was South Korea catapulted into first place by Hanwha Engineering and Construction's $7.25 billion contract to build 100,000 housing units about 25 kilometers east of Baghdad (the largest confirmed deal of 2011). As Dunia has consistently warned in its reports on foreign commercial activity in Iraq, these multibillion-dollar "mega" deals may take years to come to fruition, and have frequently stalled or even collapsed over failures to secure financing and other logistical challenges. Indeed, Hanwha's Vice Chairman Kim Hyun-Chung has already expressed misgivings about the deal, admitting in August that "the cost of construction … is very, very challenging" and said he expected his company would make little, if any, profit on the deal.

The United States continued to enjoy a growing share of foreign commercial activity in Iraq thanks to its significant participation in Iraq's oil and gas sector, particularly through construction, engineering and oil services companies. However, the big news in 2011 was the $2.3 billion sale by Lockheed Martin of 36 F-16 Block 52 jets and related spare parts, weapons systems and training programs. The deal could ultimately grow in value to over $4.2 billion depending on options exercised by the Iraqi government. US firms also made significant inroads into non-oil-and-gas sectors, with significant deals in real estate, electricity, hospitality/tourism, and agriculture. It is estimated that the US share of non-energy-related commercial activity grew from $720 million in 2010 to $2.83 billion in 2011, or 5.1 percent of total foreign commercial activity.

The Netherlands and the United Kingdom achieved a victory of sorts following years of negotiation when in November 2011, Iraq's

Multibillion-dollar "mega" deals may take years to come to fruition, and have frequently stalled or even collapsed over failures to secure financing and other logistical challenges.

* *See methodology section on page 31 for an explanation of calculating total deal value.*

*Table 1. Geographic Origin of Foreign Commercial Activity in Iraq**

Country	Value ($ mil)	% Total
South Korea	11,988	21.5%
United States	6,878	12.4%
United Kingdom	4,096	7.4%
Netherlands	3,825	6.9%
Turkey	3,694	6.6%
Germany	3,172	5.7%
China	3,093	5.6%
UAE	2,959	5.3%
Italy	2,829	5.1%
Iran	2,184	3.9%

* *Other significant countries, with 1-2 percent of reported deal volume: France, Cyprus, Japan, Russia, Sweden, Kuwait, Australia, India and Ukraine.*

cabinet approved a deal between Royal Dutch Shell, Mitsubishi and Iraq's state-owned South Gas Company that would see two billion cubic feet per day of associated natural gas captured from the Rumaila, Zubair and West Qurna oilfields by 2017. Planning documents for the project call for an eventual $12.8 billion to be spent on infrastructure and $4.4 billion on the construction of a liquefied natural gas facility. The Iraqi government will contribute $5.24 billion worth of cash and existing infrastructure to the joint venture — the state-owned South Gas Co. will control 51 percent of the project — while Shell and Mitsubishi have reportedly committed to an initial investment of $6.98 billion (which is recorded in this report as the official deal value). The remainder of financing is expected to come from project revenue.

Finally, although its standing appears greatly diminished since 2010, Turkey remains among the top five foreign competitors in Iraq, with 38 deals (up from 22 in 2010) across nearly all of Iraq. Furthermore, its $3.69 billion in commercial activity was comprised entirely of deals under $1 billion — the largest single deal being a $600 million project to build 1,500 housing units in the International Zone in Baghdad. Although tension has grown following political disagreements between Ankara and Baghdad, it is likely that Turkey's role in Iraq will continue to grow significantly in the years ahead.

The US share of non-energy-related commercial activity grew from $720 million in 2010 to $2.83 billion in 2011, or 5.1 percent of total foreign commercial activity.

» While Real Estate Remains Strong, Energy Sectors are Catching Up

Although major residential real estate deals have dominated foreign commercial activity, there remains an enormous housing deficit in Iraq. Using Ministry of Construction and Housing and Ministry of Planning data, Dunia estimates a nationwide deficit of nearly 4 million housing units, requiring construction of 650,000 housing units *per year*† in order to accommodate an expected population of around 38 million by 2018.

Despite $14.5 billion in residential real estate deals announced in 2011 (a 2.9 percent increase over 2010), Iraq is nowhere near reaching this housing target, and the housing sector will continue to attract significant interest from foreign investors and construction firms over the next decade. In addition to the $7.25 billion deal with South Korea's Hanwha Engineering and Construction, there were two deals valued at $1.5 billion each — one with US firm HillStone International to supply building structural systems to TRAC Development Group, a South Korean real estate developer, which is negotiating a potential $35 billion project to build 500,000 housing units and related infrastructure; the second with Dubai-based Greek/Cypriot contracting company FiberPro Group to build 30,000 housing units near Tikrit, Salahaddin. In total, contracts that would see the construction of 238,434 housing units were announced in 2011.

The clearest shift in 2011 was the near

† *This is substantially higher than the target set by the Iraqi National Investment Commission (NIC) and the Ministry of Planning, which call for 3,500,000 additional housing units by 2020.*

Table 2. Sector Breakdown of Foreign Commercial Activity in Iraq

Sector	Value ($ mil)	% Total
Real Estate (Residential)	14,524	26.1%
Oil & Gas	12,769	22.9%
Electricity	11,196	20.1%
Water & Sanitation	4,285	7.7%
Defense	2,850	5.1%
Real Estate (Commercial)	2,433	4.4%
Telecommunications	2,063	3.7%
Industry	1,919	3.4%
Transportation	1,213	2.2%
Tourism	844	1.5%

doubling of deal value in both the oil and gas and electricity sectors. Although a significant share of this year's oil and gas sector deal value comes from the $6.98 billion Shell-Mitsubishi gas capture deal, the overall number of deals in the sector increased 92.8 percent, from 28 in 2010 to 54 in 2011. These deals represented not only the exploration and drilling of Iraq's oil fields, but also billions in engineering and construction of field facilities, storage tanks, pipeline networks, pumping stations and other export infrastructure.

Iraq's oil and gas sector remains at the core of the country's economic recovery, accounting for more than 90 percent of government revenue. While Iraq is slated to hold a fourth licensing round in 2012, there are mounting concerns that oil production and exports are being constrained by infrastructure bottlenecks, which may lead to a renegotiation of some of the technical service contracts (TSCs) from the first two licensing rounds. This may have already been foretold in ExxonMobil's decision in late 2011 to sign production-sharing contracts for at least six blocks with the Kurdish Regional Government, in defiance of Baghdad and the Ministry of Oil, which may ultimately jeopardize its contract for the West Qurna 1 field in Basra.

It appears that the Ministry of Oil, under pressure from ExxonMobil's move as well as other IOC complaints, has softened some terms of the TSCs in favor of IOCs. Such developments, which are likely to broaden in 2012, will have a major effect on the development of the sector — and the nature of related foreign commercial activity. Because this debate is also intimately tied up with the autonomy of the Kurdish region, how the Government of Iraq resolves these issues will touch upon fundamental aspects of the country's political structure. [See the oil & gas sector report below for further discussion].

Dunia estimates that 650,000 housing units must be built per year by 2018 in order to accommodate an expected population of 38 million.

Beyond oil and gas, there were significant developments in Iraq's electricity sector in 2011. Although power shortages are a major public grievance, and led to violent protests across the country in 2010, Iraq's electricity production still averages less than 50 percent of estimated demand of around 15,000 megawatts (MW). With construction still ongoing on some greenfield projects and progress delayed on others, the Electricity Ministry in 2011 aggressively signed deals as part of a master plan to increase Iraq's production capacity to 27,000 MW by 2015. However, this scramble to award contracts and show progress in response to electricity shortages led to charges of corruption and incompetence within the Electricity Ministry. In August 2011, Electricity Minister Raad Shallal al-Ani resigned after allegations surfaced of fraud and mismanagement in two contracts. The deals, worth a total of $2 billion, were awarded in July 2011 to German and Canadian firms that were allegedly unqualified to carry out the work. The new electricity minister, Abdul-Karim Aftan, pledged to conduct a full review of the ministry's staff, operations and projects after he took over the job.

The fallout from this scandal cast a pall over many of the deals that had been signed prior to August. However, a final review suggests that there were at least $11.196 billion in legitimate electricity sector deals during 2011. These included a $1.189 billion contract with the China National Machinery & Equipment Import & Export Corp (CMEC) to build a 1,260 MW thermal power plant in Salahaddin, and a $1.044 billion contract with China's Shanghai Electric to increase the size of its existing Zubaydah power station project in Wassit from 1320 MW to 2540 MW.

Additionally, there was a great deal of confusion surrounding a number of electricity deals signed between Baghdad and South Korea's STX Group. An initial announcement in June 2012 suggested that STX had signed a $2.76 billion deal to build 25 mini-power stations in southern Iraq. However, by the time Electricity Minister Ani resigned, it appeared the deal was falling through because STX had been unable to secure third-party financing. One report stated that STX's contract had been reduced to nine plants, and that efforts to boost supply in 2012 with the mini-plants had been scrapped. By mid-November, however, the Electricity Ministry said a $1.044 billion contract had been signed with STX Heavy Industries to build diesel power stations with a total capacity of 900 MW in three provinces (and it is this deal that is included in the final 2011 tally).

Despite this flurry of activity, it is unlikely that Iraq's power situation will improve much before 2013, which means the country faces at least one more summer of acute power shortages. Additionally, despite the Iraqi government's hopes to effectively double electricity production by 2015, independent assessments suggest that a best-case scenario may be only an 18,000 MW capacity by 2015, ensuring continued significant shortages for the foreseeable future.

The share of foreign commercial activity captured by Baghdad, Basra and the Kurdish region fell from 81.2 percent in 2010 to 61.5 percent in 2011.

» Basra Moves to the Fore as Oil & Gas, Electricity Spending Rise

2011 saw the geographic center of foreign commercial activity in Iraq shift further south, as 81.9 percent of all oil and gas sector deal value (around $10.455 billion) was concentrated in Basra province. Basra also enjoyed more than a billion dollars in the electricity sector and in the real estate sector, which serves as a further testament to its growing economic importance.

While Baghdad and the Kurdish region continued to attract strong interest, another major development of 2011 was the growing share of foreign commercial activity captured by other provinces. Ninewa and Salahaddin placed in the top five thanks to multibillion-dollar real estate and electricity deals. Overall, the share of foreign commercial activity captured by Baghdad, Basra and the Kurdish region fell from 81.2 percent in 2010 to 61.5 percent in 2011. Ten Iraqi provinces (excluding the Kurdish region) recorded deal value in excess of $1 billion, compared with just six provinces in 2010. This is another sign of a maturing marketplace in Iraq as foreign firms and investors begin to look for specific opportunities away from what have been the traditional commercial centers of the last few years.

Table 3. Provincial Breakdown of Foreign Commercial Activity in Iraq

Country	Value ($ mil)	% Total
Basra	15,114	27.1%
Baghdad	11,099	19.9%
KRG	8,091	14.5%
Ninewa	5,227	9.4%
Salahaddin	3,536	6.4%
Wassit	2,153	3.9%
Karbala	1,874	3.4%
Najaf	1,720	3.1%
Dhi Qar	1,344	2.4%
Qadissiyah	1,130	2.0%
Diyala	1,120	2.0%

2011 Deals Under $1 Billion

Because the 11 deals valued at over $1 billion represent 51.7 percent of total foreign commercial activity for 2011, they somewhat skew the pattern of foreign commercial activity in Iraq. Accordingly, the following data and analysis of deals valued at less than $1 billion is presented to eliminate such exaggerated effects and to offer a supplemental view of emerging trends in Iraq.

» Turkey Leads in Smaller Deals

As noted earlier, all $3.694 billion in Turkey's deal value was composed of deals valued at under $1 billion, so it remains the leader in this category for the second year in a row. With 37 separate deals in 11 sectors, Turkey is a clear standout among both regional and international players in Iraq. Furthermore, with average deal value of just $100 million, Turkish firms are engaging in smaller-scale projects that have a higher success rate than many of the more grandiose and ambitious ones undertaken by their geographic rivals.

The United States continues to dominate the oil and gas services market, with Baker Hughes, Weatherford and Halliburton leading drilling, construction, and services operations at fields throughout southern Iraq, in a market worth at least $1.664 billion in 2011. However, US firms also participated significantly in electricity, commercial real estate, and tourism/hospitality sectors.

Compared with 2010, the other major shift was the ascension of Italy and South Korea into the top five at the expense of China and the UAE,

With 37 separate deals in 11 sectors, and average deal value of $100 million, Turkey is a clear standout among both regional and international players in Iraq.

although the latter two remain among the top 10. Pushing Italy into the top tier were several deals worth hundreds of millions of dollars in the electricity, residential real estate and industrial sectors, along with the emergence of Saipem SpA as a key player in the development of Basra's Zubair oil fields and offshore export infrastructure. South Korean firms, meanwhile, signed nine electricity sector deals worth an average of $233 million, which accounted for nearly all of the country's deal value in 2011.

» Electricity, Telecoms are Standouts

As in 2010, removing the multibillion-dollar deals highlights the large deal volume in both the electricity, and oil and gas sectors (47 and 53 deals, respectively). However, even as Iraq's residential real estate market is dominated by multibillion-dollar deals promising tens of thousands of new housing units, it is important to note that there were also 17 deals in that sector valued at under $1 billion.

While the overall rankings largely mirrored those of 2010, a new entrant into the top five categories was telecommunications, thanks to announcements by mobile operators Zain Iraq, Asiacell and Korek Telecom that they would be investing heavily in expanding their network coverage and improving service quality ahead

Table 4. Geographic Origin of Foreign Commercial Activity in Iraq (<$1 bil)

Country	Value ($ mil)	% Total
Turkey	3,694	14.0%
United States	2,963	11.2%
Italy	2,634	10.0%
South Korea	2,294	8.7%
France	1,655	6.3%
United Kingdom	1,539	5.8%
Iran	1,184	4.5%
UAE	1,074	4.1%
Russia	1,000	3.8%
China	904	3.4%

of planned IPOs for all three firms in mid-2012. A prime beneficiary of these plans was telecoms services provider Ericsson, which signed mobile network management and modernization agreements worth over $800 million with Zain and Korek. Additionally, France Telecom said it would invest up to $245 million for a 20 percent stake in Korek, and extend a $185 million loan to the company. Should these telecoms companies issue shares on the Iraqi Stock Exchange (ISX) as required by new Iraqi government regulations, they would likely more than double the market capitalization, deepening liquidity and enabling a new level of investment in Iraqi shares.

» Foreign Firms Looking Beyond Basra, Baghdad and Kurdish Region

Another 2011 trend seen more clearly through the prism of deals valued at less than $1 billion is the further ascendancy of Basra in capturing the largest share of foreign commercial activity. However, what is perhaps more interesting is the movement of the Kurdish region (with 53 deals) into second place, reflecting continued interest by foreign firms and investors in nearly all its sectors — especially electricity, oil and gas, real estate, and tourism/hospitality.

Other movement in the rankings reinforces the spread of foreign commercial activity beyond Basra, Baghdad, and the Kurdish region. The persistence of Ninewa province in the top five, despite continued violence in Mosul and the disputed territories bordering the Kurdish region, is a testament to the region's population size, historical importance and no doubt geographic proximity to Turkey. Turkish firms Çalık Enerji, Lanka and Tikarvan each signed deals worth more than $200 million in the electricity or real estate sectors, but European and other regional players are also quite active in the province.

When Iraq's telecoms issue shares on the ISX, they will likely more than double market capitalization, deepening liquidity and enabling a new level of investment.

Because the major electricity and real estate deals in Salahaddin were worth more than $1 billion, the province is not included among the top 10 provinces, and is replaced in the top five by Karbala, which along with Najaf is expected to continue to attract important non-oil-and-gas related investment thanks to their Shiite shrines that draw tourists from around the world. The bottom line, however, is that foreign firms in 2011 continued to move beyond the stability of the Kurdish region and the traditional hubs of Baghdad and Basra to capitalize on reconstruction elsewhere that double-digit GDP growth and rising oil export revenues is set to fuel in the coming decade.

Table 5. Sector Breakdown of Foreign Commercial Activity in Iraq (<$1 bil)

Sector	Value ($ mil)	% Total
Electricity	7,029	27.4%
Oil & Gas	5,789	22.6%
Real Estate (Residential)	4,016	15.7%
Telecommunications	2,063	8.1%
Industry	1,919	7.5%
Transportation	1,213	4.7%
Tourism	844	3.3%
Defense	550	2.1%
Finance	482	1.9%
Real Estate (Commercial)	403	1.6%

Table 6. Provincial Breakdown of Foreign Commercial Activity in Iraq (<$1 bil)

Country	Value ($ mil)	% Total
Basra	6,356	24.5%
KRG	4,119	15.9%
Baghdad	2,810	10.8%
Ninewa	2,219	8.6%
Karbala	1,746	6.7%
Najaf	1,630	6.3%
Dhi Qar	1,110	4.3%
Wassit	998	3.9%
Qadissiyah	986	3.8%
Diyala	893	3.4%

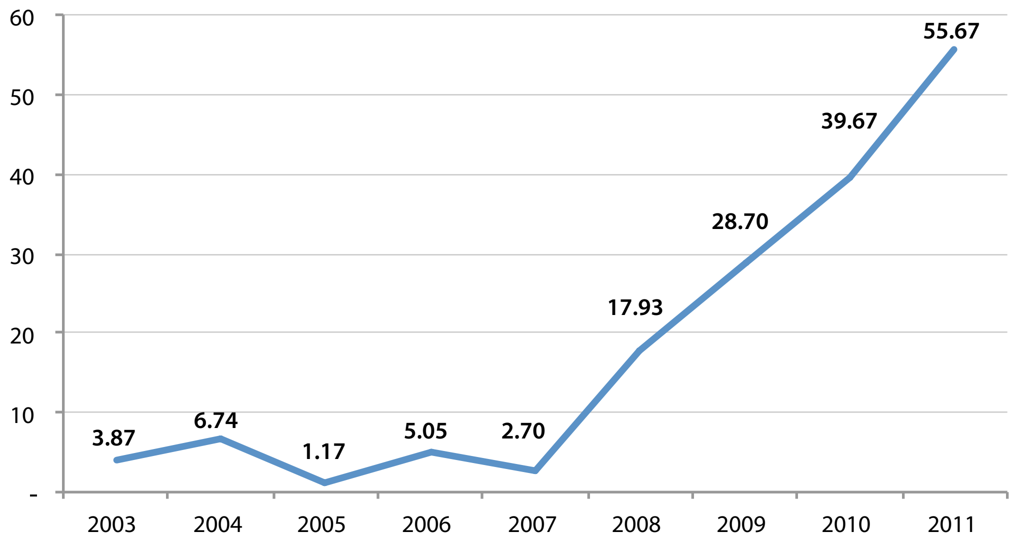

Figure 4. Value of Foreign Commercial Activity in Iraq, 2003 – 2011 ($ billions)

Year-on-Year Change in Foreign Commercial Activity

The total $55.67 billion in reported foreign commercial activity in 2011 represented an increase of $16.002 billion in total deal value over 2009. This 40.3 percent increase was a slight acceleration from 2010, but in absolute terms was also the single biggest annual increase in the value of foreign commercial activity since 2003.

Although foreign commercial activity has increased an average of $13.24 billion per year since major violence ended in Iraq in early 2008, it is highly likely that 2012 will see the beginning of a plateau effect as the oil and gas and electricity sectors sustain current annual levels of investment and expenditure. However, a more mature oil and gas sector and a robust infrastructure backbone will enable broad-based economic growth that can drive future foreign commercial activity in sectors such as real estate, industry, and transportation, among others.

In early 2012, the Iraqi Central Bank predicted that nominal GDP for the year would reach $160.7 billion, while the International Monetary Fund expects GDP growth of 12.57 percent. The value of foreign commercial activity in 2012 is expected to grow 30 to 40 percent, and Dunia expects the growth rate of foreign commercial activity to decline gradually until 2015 and to subsequently mirror overall GDP growth rates for the remainder of the decade.

Oil & Gas Sector Report

Iraq's oil industry is the most critical component of the country's economy, accounting for more than 90 percent of government revenue. The Maliki government has made rebuilding the sector, which was left in disrepair after the rule of Saddam Hussein and the U.S. invasion of 2003, its top priority. The Iraqi Oil Ministry's strategy since 2009 has been to invite international oil companies to redevelop the country's largest oil and gas fields, many of which are located in the southern province of Basra. Three rounds of auctions held by the ministry between late 2009 and late 2010 for the rights to develop the fields attracted most of the world's most prominent IOCs.

The Oil Ministry's efforts and subsequent work by IOCs and Iraq's state-owned oil companies have so far been reasonably successful. Oil production reached a reported peak rate of 3 million barrels per day in late 2011, up from 2.4 million bpd in 2010. Exports have not increased proportionally, continuing to hover just above 2 million bpd, as Iraq has so far been unable to add much export capacity for its southern fields. A new offshore export terminal was scheduled to come online in February 2012, which when fully operational would add 900,000 bpd of export capacity. Two additional terminals are slated to be finished by the end of the year, with a fourth scheduled to be up and running in 2013.

In 2009, then-Oil Minister Hussain al-Shahristani claimed that Iraq would be able to produce 12 million bpd by 2017. These ambitious projections have been widely questioned, and Oil Ministry officials have since backed away from that estimate. However, there is growing skepticism of even the recent and more modest stated goal of producing 6.5 million barrels per

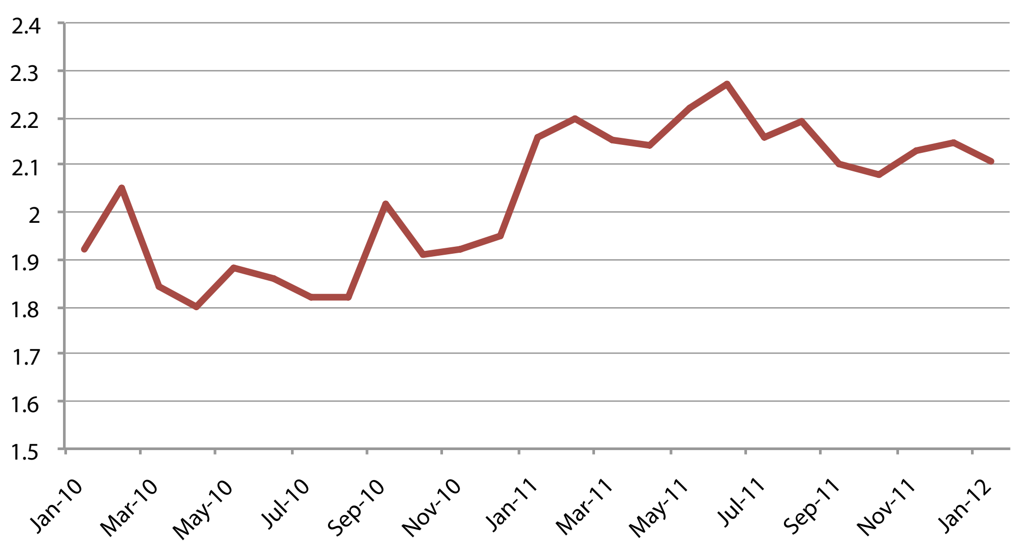

Figure 5. Iraq Oil Exports, mbpd (2010 – Present)

day (exporting 5.65 million bpd) by 2014. Some IOCs working on Iraq's southern fields have released their own projections which show total production rising to only around 5 million bpd by 2014. Concerns over infrastructure bottlenecks and payment issues with the Ministry of Oil have also caused some IOCs to reduce output levels and delay further field development after reaching an initial (contractually obligated) 10 percent increase in production. With several IOCs set to enter the main development phase over the next 12 months, there is a risk that further spending may not be compensated in a timely fashion. Analysts now question whether Iraq has the political will to develop the necessary infrastructure to support high levels of production (at least within the original timeframes), which raises the possibility that many of the second round technical service contracts (TSCs) will need to be renegotiated.

The sector was cast into turmoil after ExxonMobil signed six production-sharing contracts (PSCs) with the Kurdistan Regional Government in late 2011. News of the deal triggered political tremors in Iraq, as it cut to the heart of broader calls for regional devolution in Iraq. Because the KRG has continued to sign more lucrative PSCs, as opposed to the Iraqi Ministry of Oil's preferred TSCs, there has been a glaring difference in profitability for IOCs, strongly favoring the Kurdish region. Exxon was merely the first oil major to defy Baghdad and move into the Kurdish region, potentially jeopardizing its West Qurna 1 contract. This could be a watershed event, as France's Total indicated in early 2012 that it would follow Exxon's lead, potentially heralding more defections among oil majors now at work in Basra. This movement of major IOCs gives real credibility to the Kurdish oil sector, and negates the Iraqi government's central argument that the Kurdish model is simply a renegade operation. Dunia expects that within the next 12 months, Prime Minister Maliki and the Ministry of Oil will need to tackle the issue head-on. Iraqis must decide if there will be one national oil and gas law, or two regional approaches. Because this is fundamentally tied to notions of Kurdish autonomy and territory, it will not be a simple or easy decision.

It is widely believed that Iraq won't meet its stated goal of exporting 5.65 million bpd of crude oil by 2014.

Furthermore, Iraq is slated to hold a fourth licensing round in May 2012, in which 12 additional oil and gas fields, including undeveloped exploration blocks, will be auctioned to approximately 40 preapproved companies. As punishment for its decision to work in the Kurdish region, ExxonMobil has been banned from participating in the fourth round. Meanwhile, South Korea's SK Innovation was recently added to the list of approved fourth-round firms after it sold its shares in an oil field in the Kurdish province of Sulaymaniyah, effectively exiting the KRG oil sector. However, these issues — blacklisting ExxonMobil when it already holds a contract for one of Iraq's southern fields, and auctioning more fields when infrastructure bottlenecks are already jeopardizing production — highlight the importance of the decisions that face the Ministry of Oil in the year ahead.

Iraq has also devoted considerable resources to boosting its production of natural gas. The Oil Ministry in October 2010 auctioned the rights to develop three fields with total reserves of more than 10 trillion cubic feet of gas, and the fourth round auction in 2012 might add on another 29 trillion cubic feet (Iraq's total reserves are currently estimated at about 110 trillion cubic feet). After years of negotiation, the ministry also signed a controversial $17 billion deal with Shell and Mitsubishi in November 2011 to capture "flared" gas that is currently being burned off during oil production at fields in Basra. That project is expected to produce about 1.1 billion cubic feet per day of gas, more than all three fields auctioned in 2010 combined.

Additionally, the Korean Gas Corporation (KOGAS) is expected to begin its work developing Anbar's Akkas gas field, nearly 18 months after the South Korean firm won the rights to the field in the third licensing round. KOGAS was initially going to develop Akkas as part of an equal partnership with Kazakhstan's KazMunaiGas, however the Kazakh firm backed out of the deal after the Anbar provincial government refused to support the project. Ultimately, a contract was signed between the Ministry of Oil and KOGAS after unspecified concessions were granted to the Anbar provincial government to secure their support for the project. The lengthy process underscored the fact that all foreign firms run the risk of being caught in Iraq's ongoing center-periphery power struggle.

Finally, Iraq is also keen to rapidly increase the capacity of its refineries, in order to capitalize on growing hydrocarbon output, and reduce its sizeable import bill for gasoline and other light petroleum products. According to OPEC, Iraq produces about 453,000 bpd of refined products and uses 589,000 bpd. There are only three refineries currently operating in southern Iraq: the Baiji refinery in northern Salahaddin, the Dora refinery in southern Baghdad, and the Shu'aiba refinery a few kilometers west of Basra city. While the three facilities have a nameplate capacity of 800,000 barrels per day (bpd), reported utilization rates are only around 50 to 60 percent. Meanwhile, there are three refineries in the Kurdish region, although one (Taq Taq) is not operational. The other two (Bazyan and Kalak) have a combined nameplate capacity of 60,000 bpd, and are refining at above 90% capacity. Iraqi Deputy Oil Minister Ahmed al-Shamma announced in late 2011 an ambitious, $30 billion plan to upgrade Shu'aiba and build five oil refineries in Kirkuk, Maysan, Ninewa, Nasiriyah and Karbala that aims to double current nameplate capacity. The largest of the refineries would be Nasiriyah with 300,000 bpd, while the other four would produce between 100,000 to 200,000 bpd. Given the size of this planned investment, the development of Iraq's petroleum refineries will have a huge effect on foreign commercial activity for years to come.

The entrance of major IOCs gives real credibility to the Kurdish oil sector. Iraq must decide if there will be one national oil and gas law, or two regional approaches.

Top 30 Deals of 2011

Value ($ mil)	Company/Investor	Country of Origin	Project Description	Industry	Province
7,250	Hanwha	South Korea	100,000 housing units and essential services in Bismaya, east of Baghdad.	Real Estate	Baghdad
6,980	Royal Dutch Shell | Mitsubishi	Netherlands | UK | Japan	Gas capture infrastructure for Iraq's southern oil fields.	Oil & Gas	Basra
2,600	Bauer	Germany	Planned six-year rehabilitation of 3.6 kilometer-long Mosul dam.	Water & Sanitation	Ninewa
2,300	Lockheed Martin	United States	Sale of F-16 Block 52 jets, along with related equipment and services.	Defense | Security	Iraq-wide
2,000	Majid al Futtaim Holding	UAE	Construction of shopping centers.	Real Estate	KRG
1,500	FiberPro	UAE | Cyprus | Greece	30,000 housing units in Tikrit.	Real Estate	Salahaddin
1,500	Hill International	United States	Project and construction management services contract.	Real Estate	Basra
1,400	Consortium (incl. Kolon, SsangYong, Hyundai)	South Korea	Construction of water supply and sewers.	Water & Sanitation	KRG
1,189	China National Machinery and Equipment Corp.	China	Construction of a thermal power plant with two 630 MW units.	Electricity	Salahaddin
1,044	STX Heavy Industries	South Korea	Construction of diesel power stations with 900 MW total capacity.	Electricity	Iraq-wide

Value ($ mil)	Company/Investor	Country of Origin	Project Description	Industry	Province
1,000	Shanghai Electric	China	Expansion of Zubaidi power plant from 1320 MW to 2540 MW.	Electricity	Wassit
700	Consortium (incl. Kolon, SsangYong, Hyundai)	South Korea	Construction of electricity infrastructure.	Electricity	KRG
650	Ericsson	Sweden	Five-year network outsourcing agreement.	Telecommunica-tions	Iraq-wide
640	Baker Hughes	United States	Contract to drill 60 wells at Zubair oil field.	Oil & Gas	Basra
600	Nursoy	Turkey	Construction of 1,600 housing units in the International Zone.	Real Estate	Baghdad
550	Alstom	France	Construction of water supply and sewers.	Electricity	Diyala
550	Antonov	Ukraine	Supply of six light An-32 planes.	Defense | Security	Iraq-wide
518	Leighton Offshore	Australia	Single point mooring buoy and a 48-inch export pipeline.	Oil & Gas	Basra
510	Saipem SpA	Italy	Early production facilities and the refurbishment of facilities at Zubair.	Oil & Gas	Basra
472	Saipem SpA	Italy	Construction of an oil measuring and control platform.	Oil & Gas	Basra

Value ($ mil)	Company/Investor	Country of Origin	Project Description	Industry	Province
467	*Undisclosed*	Turkey	Construction of 5,166 housing units 10 km southwest of Karbala.	Real Estate	Karbala
400	Zain	Kuwait	Expansion and upgrade of network systems.	Telecommunica-tions	Iraq-wide
390	Sumitomo | Siemens Italy	Japan | Italy	Supply of eight mobile substations and spare parts.	Electricity	Iraq-wide
388	Çalık Enerji	Turkey	Construction of a six-turbine 750 MW power plant.	Electricity	Ninewa
365	National Iranian Gas Company (NIGC)	Iran	Construction of pipeline network to import gas.	Oil & Gas	Iraq-wide
360	Hyundai Engineering & Construction	South Korea	Construction of 1,500 MW Rumaila power plant.	Electricity	Basra
348	Metka	Greece	Construction of 1,250 MW Shatt al-Arab power plant.	Electricity	Basra
340	Tabdil Energy Company	Iran	Construction of four 125 MW power plants.	Electricity	Wassit
333	Bharat Heavy Electricals Ltd.	India	Construction of a 550 MW power plant.	Electricity	Wassit
308	Tikarvan	Turkey	Construction of 4,500 housing units.	Real Estate	Ninewa

Methodology

» Definition of Foreign Commercial Activity

Dunia's intent in producing these reports is to assess the changing economic landscape in Iraq, with a particular focus on the financial activities and interests of foreign firms and investors. As the process of reconstruction in Iraq began in earnest in 2010, many of the more interesting deals and contracts being concluded (from the perspective of a foreign firm or investors looking for business opportunities) were not in private foreign investment, but instead in Iraqi government or private-sector service contracts, production sharing agreements, lease agreements, or foreign partnerships with private Iraqi investors. Furthermore, increasingly complex and opaque financing (soft loans by foreign governments, conditional or staggered project financing, etc.) further undermined "foreign investment" as a coherent category of economic activity in Iraq.

Dunia therefore chose to collect and analyze data under the umbrella category of "foreign commercial activity," which includes investments, service contracts and other revenue-generating activities that involve foreign-domiciled firms operating in Iraq. The data generally includes only those projects that have either seen final contracts signed or which have actually broken ground — rather than simply memoranda of understanding, or investment licenses issued by the governorates — although final contracts themselves offer little guarantee that any deal will actually materialize.

» Estimating Unreported Deal Size

Many of the deals announced in Iraq have no assigned monetary value, and few financial details are released. This is a function both of natural secrecy sought and in some case required by businesses, but also the poor reporting environment in Iraq. This was the case for 32.3 percent of the 164 reported deals in 2010, and 42.5 percent of the 294 reported deals in 2011.

In order to fill these data gaps, Dunia employed a sector-specific analysis, comparing pools of similar contracts and investments to estimate unreported value. While this approach is no guarantee of accuracy, it ensures an apples-to-apples comparison that is more likely to be accurate. In this sense, it was particularly important not to compare all deals across an individual sector, but to calculate per MW or per housing unit averages for those deals that were comparable in scope.

» Observational Biases and Errors

To produce its reports on the Iraqi economy, Dunia collects and analyzes data from a combination of publicly available regional, Iraqi, and industry-specific media, as well as private sources. However, given the source and nature of the data collection, it is inevitable that there are observational biases that produce inaccuracies in the assessment of Iraq's economy. For example, many firms have no incentive to announce their market entry or signed contracts in Iraq. There are likely many multimillion-dollar deals across Iraq that were never publicly reported, and are therefore not reflected in the dataset presented in this report.

About Dunia

With offices in Washington DC, Dubai and Kampala, **Dunia Frontier Consultants** provides consulting services to investors and corporations operating at the frontiers of 21st century business. Dunia works closely with a small number of clients to provide an unparalleled level of service. With a world-class staff and highly efficient global network of consultants and partners, we support your endeavors in several key areas:

» **Emerging Markets Investment**
The heart of our business, we offer a full suite of financial services, including deal sourcing, due diligence, valuation, and market survey support;

» **Risk Reporting and Analysis**
Anchored by rigorous data collection and subject matter expertise, we organize and deploy research teams across the Middle East, Africa and South Asia to help our clients mitigate risks and optimize decision-making in key transactions;

» **Business Development**
With well-developed local networks in the world's financial capitals and across key emerging markets, we identify prime market opportunities and business partners for our clients, and provide essential insights to help them navigate new markets;

» **Information Networking and Design**
We develop and refine research methodology and analytic tools to generate useful information for clients operating in data-poor or otherwise challenging business environments.

Dunia in Iraq

Dunia has performed dozens of due diligence and market surveys in the agriculture, oil and gas, manufacturing, logistics, and real estate sectors in Iraq. Dunia recently completed an in-depth survey of the upstream oil and gas sector, and a number of surveys of the housing and real estate markets outside of Baghdad. Dunia offers daily, weekly and monthly subscription products providing actionable insights on developments at the Ministry of Oil and its operating entities, as well as a comprehensive analysis of the on-the-ground situation at the major oil fields under development.

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