Bringing Back Business in Iraq

Analytical Note[1]

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Content

I. Introduction

The Government of Iraq (GoI) has been designing a comprehensive reconstruction package linking immediate stabilization to a long-term vision in the aftermath of the liberation from Islamic State of Iraq and the Levant (ISIS). On December 9, 2017, after more than three years of intense fighting, the GoI announced the complete liberation of all Iraqi territories from ISIS. Effective delivery of basic services and creation of income-generating opportunities, particularly in recently liberated areas, is crucial to ameliorate the underlying fragility and prevent another cycle of violence and conflict in the country. However, risks are related to the capacity of the GoI to provide public services and start reconstruction.

The 2018 Iraq Damage and Needs Assessment (DNA) of the seven directly affected governorates estimates the overall damages to be US$45.7 billion and reconstruction and recovery needs to total US$88.2 billion. Economic losses due to conflict have been enormous and failure to address reconstruction needs would further reduce welfare. The main sectors needing attention are housing, industry and commerce, finance and markets, and energy.

The project Bringing Business Back (BBB) in Iraq seeks to contribute to recovery and reconstruction by spurring the participation of the private sector. The project aims to identify concrete entry points for private sector activity that can contribute positively to recovery and reconstruction in Iraq, as well as to identify obstacles hindering its growth. The concept stems from the premise that the private sector is an essential participant in stimulating early and inclusive recovery and reconstruction.[2] As part of Component 2 of the project, two main activities were supported: (a) the Construction Sector Opportunity Assessment and (b) a Rapid Enterprise Survey (RES).

This note is part of the BBB project's analytical component and is based on the RES that aims to capture perceptions regarding key constraints in the business environment and insights about the impact of the conflict on businesses. The analysis also draws from several other data sources, such as the Construction Sector Opportunity Assessment, the most recent World Bank Enterprise Survey (WBES) available for Iraq (2011), and the Doing Business indicators.[3] Global evidence suggests that the impact of conflict on businesses extends well beyond just physical destruction.[4] The most important effects of civil war on firms are likely to be through the disruption of production through the flight of employees, unreliability of transport, and fear of looting. Faced with unreliable transport, firms would normally have carried larger inventories, but the fear of looting would warrant the opposite response. Such disruptions tend to raise the cost of doing business.

This note identifies the major obstacles to doing business in Iraq, which are limiting the link between market actors and market opportunities. In addition to providing an overview of the private sector in Iraq, this note finds that the main impact of the conflict has been through a

[2] Concept Note. Bringing Back Business in Iraq (ID: P164893).
[3] It also includes Human Capital Index (HCI) and the Iraq Household Socio-Economic Survey.
[4] Few examples are Collier and Duponchel (2012) and Gaviria (2002).

reduction in sales, investment, and the number of employees. The major obstacles identified by the firms in Iraq are electricity interruptions, access to finance disruption, and a higher dependence on the government as a customer, compounded by the accumulation of unpaid arrears.

The next section provides details on the data sample and methodology. Section 3 provides an overview of the performance of the private sector in Iraq and the distribution and characteristics of firms in the sample. Section 4 presents the impact of the conflict on firms' performance with respect to sales, investment, and employment. Constraints to doing business are analyzed in Section 5, including physical infrastructure, social and human capital, access to finance, security, and supply disruption. Section 6 describes some strategies firms have used to cope with the conflict. Finally, Section 7 summarizes the key challenges faced by the private sector in Iraq and identifies key next steps toward enabling private sector activity.

II. Data and methodology

The RES aims to understand the business environment in Iraq, how firms have been affected by the conflict, and how surviving firms have coped. This survey was administered by phone and conducted between November 2018 and January 2019. It aims to understand how firms have been affected in relation to the following topics: service interruption, damage due to insecurity, financial and logistics problems, business operations, investments and employment, and payment and compensation.

High levels of insecurity posed a challenge to fielding the firm survey in Iraq in 2018; therefore, the survey was conducted by phone. Although research shows that phone surveys often produce an underrepresented sample and have several limitations, they also have important advantages such as providing researchers with flexibility and access that is unavailable through traditional methods (Block and Erskine 2012). Thus, given the complex and challenging context of Iraq, the lack of any comprehensive data, the RES represents a key opportunity to understanding the challenges firms face on the ground and the environment of doing business.

The Ministry of Trade provided a series of datasets of formal private sector firms to set the sampling frame. However, several issues were encountered when validating the frame such as inactive numbers, duplication of firms or duplicated phone numbers. After several iterations and cleaning of the database, 1,676 unique and validated phone numbers were identified, which were considered the core of the sample for implementing the survey. Out of the 1,676 firm sample frame, 945 firms did not answer the phone, 236 firms refused to take the survey and 96 were ineligible. Table 1 outlines this process and the final RES included 249 firms. It is important to note that this survey only covers the formal private sector. According to a survey conducted in 2011 by the Center for International Private Enterprise (CIPE), 55% of firms surveyed are not registered with any authority, though most of the remaining firms are registered with the Ministry of Trade. However, the datasets provided for this survey by the Ministry of Trade do not necessarily represent the entire formal sector population of firms.

Table 1: Survey sample structure

	Count	Percent
Number of firms in database (Ministry of Trade)[5]	**8,231**	**100**
Number of firms in the cleaned dataset (removing duplications and so on)	*2,124*	*26*
Number of firms with active and unique numbers	*1,676*	*20*
No answer	945	11%
Refuse to answer	386	5
Ineligible	96	1
Completed survey	249	3

Several steps were followed to ensure survey quality. The survey was designed and tested by the World Bank Group team and was planned to be completed in 45 minutes. The survey was then translated into Arabic and a pre-testing phase of mock interviews was conducted to ensure the protocol and data entry tool were accurate. Finally, a pilot of 25 completed surveys was conducted, taking approximately 8 days to complete. Given the nature of phone surveys, the main concerns are whether the questions were asked and coded in a consistent manner by the enumerators and whether the use of phone survey led to reluctance by respondents to answer questions. However, the following measures were taken to ensure the quality of the data:

- Supervision: A supervisor, for every shift, randomly monitors 10 percent of all live calls.
- Audio auditing: The supervisor randomly audited 20 percent of the audio recording to ensure the interview techniques were being used and for a quality check.
- Sample randomization: For each round, the system ensures enumerators select randomly to minimize any bias that could occur with calling the same respondents.
- Data quality assurance: Data checking in Excel format on a daily basis as data collection was under way.
- Operator refusal answers: Enumerators were trained to answer frequently asked questions, how to provide negative versus positive response reinforcement, and how to employ natural probing techniques.

Table 2 provides a comparison of the RES 2018 sample with the WBES 2011.[6] The WBES 2011 had a sample of 756 firms while the RES 2018 249 firms. The table shows that in the RES 2018, Baghdad and Al-Basrah are overrepresented while Arbil, Kirkuk, and Sulaymaneyah are underrepresented. Comparing by size, both surveys have similar coverage. In terms of sector, the RES 2018 is highly skewed toward firms in the construction sector. Although the two samples

[5] This was a database of contacts made available by the Ministry, however this is not necessarily the entire population of firms.
[6] The 2011 WBES is based on a stratified sample drawn from the best available population of firms through business census data provided by COSIT and registration data provided by the Chambers of Commerce.

may not be directly comparable, the table serves to provide some indication of the RES 2018 sample coverage.

Table 2: Comparison of 2011 and 2018 sample

Total firms	Number of firms - 2011			Number of firms - 2018	
	Unweighted		Weighted	Unweighted	
	Number	%	%	Number	%
By location	**756**	**100**		**249**	**100**
Al-Anbar	0	0.0	0.0	10	4.0
Al-Basrah	0	0.0	0.0	26	10.4
Arbil	68	9.0	39.5	2	0.8
Babylon	76	10.1	4.3	8	3.2
Baghdad	153	20.2	22.5	127	51.0
Basra	51	6.7	4.1	0	0.0
Dhi Qar	35	4.6	1.0	9	3.6
Diyala	0	0.0	0.0	7	2.8
Dohuk	0	0.0	0.0	1	0.4
Karbala	45	6.0	0.7	4	1.6
Kirkuk	76	10.1	2.1	9	3.6
Maysan	0	0.0	0.0	5	2.0
Muthanna	0	0.0	0.0	9	3.6
Najaf	45	6.0	4.1	5	2.0
Nineveh	91	12.0	1.5	8	3.2
Qadisiyyah	0	0.0	0.0	9	3.6
Saladin	0	0.0	0.0	6	2.4
Sulaymaniyah	116	15.3	20.2	0	0.0
Wasit	0	0.0	0.0	4	1.6
By size[a]	**756**	**100**	**100**	**249**	**100**
Small (<20)	610	80.7	90.0	193	77.5
Medium (20–99)	140	18.5	8.8	50	20.1
Large (≥100)	6	0.8	1.2	2	0.8
Missing	0	0.0	0.0	4	1.6
By sector	**756**	**100**	**100**	**249**	**100**
Manufacturing	475	62.8	5.8	43	17.3
Services	238	31.5	88.4	76	30.5
Construction	43	5.7	5.8	79	31.7
Other	0	0.0	0.0	48	19.3
Missing	0	0.0	0.0	3	1.2

Source: WBES 2011 and World Bank RES 2018.
Note: a. The RES 2018 only covers permanent full-time employees, as such for comparison; firm size in the WBES 2011 was also estimated using only permanent full-time employees.

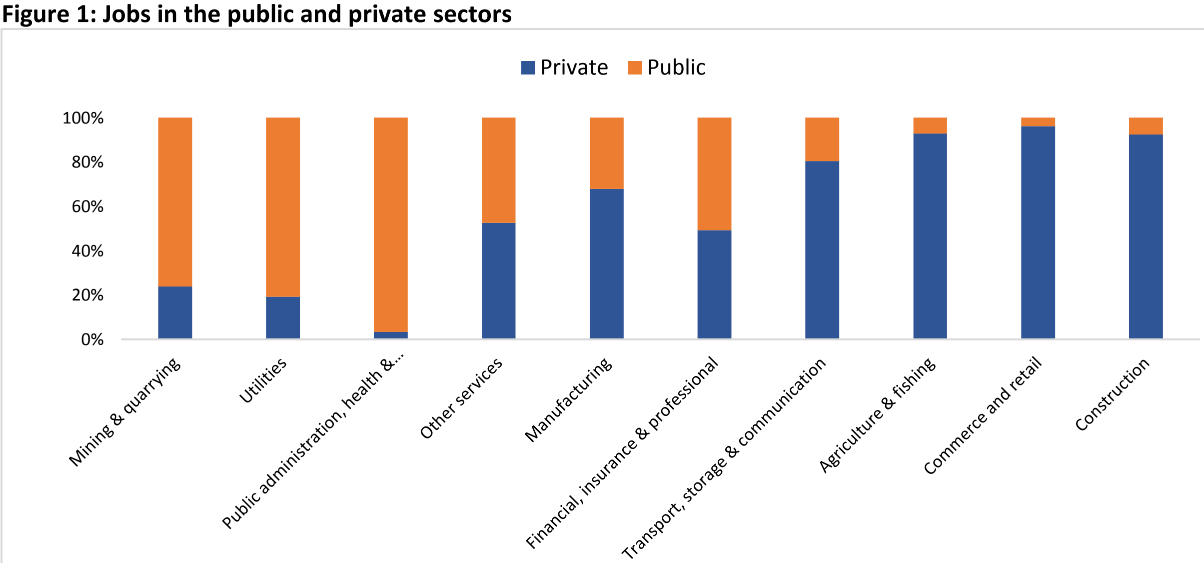
III. Overall state of the private sector and firm distribution

a. State of the private sector

This section aims to provide an overall snapshot of the state of private sector in Iraq based on literature review and secondary data to complement the RES 2018 results in the rest of the note.

A long history of conflict has led to a relatively small and constrained private sector in Iraq. A combination of sanctions, conflict, and insecurity coupled with a history of heavy state involvement in the economy has limited private sector development in Iraq. During the period of sanctions in the 1990's, resources became more concentrated in the public sector as the government's efforts and resources were increasingly focused on ensuring the survival of the regime rather than on productive investment, job creation, and diversification. This increased the marginalization of the private sector and led to a shift of many activities to the informal sector.[7] The public sector accounts for nearly 40 percent of all jobs and for nearly all formal sector jobs (See Figure 1). Large and medium-sized firms contribute a negligible proportion of all jobs, and nearly two-thirds of workers are likely to have informal jobs with no social security benefits. The role played by State-Owned Enterprises (SOEs) in the economy has continued to grow, as has the dominance of public procurement and the effects of excessive procedures and regulations for commercial transactions. The recent emergence of a pseudo private sector owned by political factions or parties is also crowding out organic private sector growth. These is anecdotal evidence that some public procurement contracts are awarded to politically connected firms (some which may just be shell companies that then subcontract the work), which may indicate little political will to leveling the playing field through regulatory and business environment reform.

Figure 1: Jobs in the public and private sectors



Source: Iraq Household Socioeconomic Survey 2012.

[7] Iraq Systematic Country Diagnostic, 2017.

Iraq ranks 171 out of 190 economies according to the 2019 World Bank Group Doing Business report: one of the lowest ranking economies in the Middle East and North Africa region. The private sector is constrained by limited access to electricity, the perception of high risk due to instability and insecurity, dominance of the public sector, poor governance, limited access to finance, and a challenging regulatory environment. The country's complex, nontransparent regulatory system compares poorly not only to those in OECD countries but also to those in the upper-middle-income country and the Middle East and North Africa region. There is a lack of sound legal rules and institutions necessary to guide and implement an effective regulatory policy and to assess the impact of regulations, which has created an unfavorable environment for the private sector, especially small enterprises. In an environment where investor confidence is subdued, the lack of government commitment to honor contracts in key sectors has discouraged foreign investments. Moreover, the state's long-standing dominance of the economy has limited credit systems and access to finance.

It is estimated that fewer than five percent of SMEs in the formal sector have ever received a bank loan.[8] Only 23 percent of Iraqi households have access to an account with a financial institution, one of the lowest levels in the Arab world. Women are particularly disadvantaged as additional steps are required for women to register and start businesses, and their access to finance is limited.[9] Moreover, the non-banking financial sector is at an early stage of development with an underdeveloped microfinance sector and capital markets. The country lacks an appropriate regulatory and legal framework for a modern financial sector that would address MSME needs. This includes-KYC (Know Your Customer) regulations, consumer protection regulations for financial services, a comprehensive and reliable modern public credit registry, an effective credit information sharing system for non-bank FIs including MFIs, regulations for loan recovery, and an appropriate legal framework for leasing and secured transactions).

Overall Iraq's private sector is characterized by low dynamism, and it has not adequately played its role as a creator of jobs. The conflict led to an exodus of both civilians as well as businesses. Figure 2 shows entry rates in Iraq and compared to its peers; Iraq's annual number of new entrants fell from 5,293 firms in 2008 to 2,020 firms in 2016, according to the World Bank Doing Business Entrepreneurship Data.[10] In addition to Iraq's poor business environment, the conflict too significantly contributed to low firm entry rates. A lack of entrepreneurship (in the formal economy) reduces the pool of young firms, which have been identified as the engine of job creation in other countries.[11] In a context where firms do not grow over their life cycle, the result is an ecosystem with a large number of small and medium old firms, leading to low firm turnover, and a lack of creative destruction. That is, small firms stay small, failing to contest the few large firms that are mainly SOEs, and do not create sufficient high-quality jobs. As a result, many economic sectors are characterized by a few large old firms and myriads of micro and small

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[8] 2012 Iraq Investment Climate Assessment.

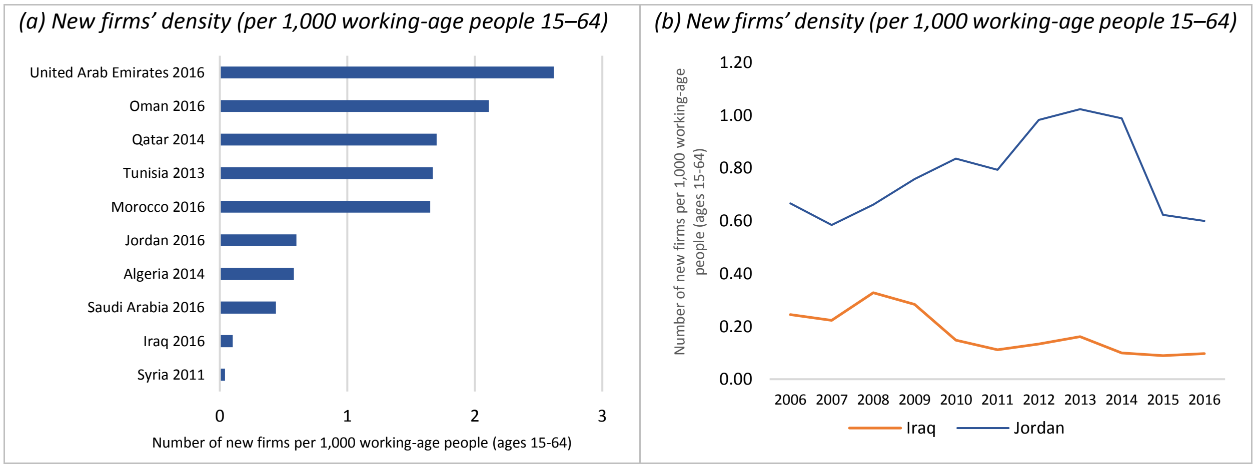
[9] Access to finance is limited due to unequal inheritance rights, the lack of an enabling environment for building credit (scores 0 in 2018 Women, Business and the Law index on "building Credit"; fewer women have accounts at formal financial institutions WDI data.

[10] This number refers to limited liability of formal private sector firms, which have been sourced from the Iraqi Ministry of Trade.

[11] Mansfield 1962, Hall 1987, Hart and Oulton 1996, Ayyagari et al. 2011, Hsieh and Klenow 2012.

firms that do not grow over time. This market structure, which comes at a significant cost for employment as well as innovation, is a symptom of a lack of private sector competition.

Figure 2: Entry rates in Iraq and peers - limited liability firms



Source: World Bank Doing Business - entrepreneurship data (source for Iraq is Company Registrar at Ministry of Trade).

The informal sector in Iraq is significant, but outside the scope of the RES 2018. A survey in 2011 showed that an estimated 55 percent of firms in Iraq are not registered.[12] Labor informality is also rampant; 67 percent of employed persons are without social security and 24 percent are informally self-employed (World Bank 2012).

Iraq's conflicts have generated significant barriers to entry. These include the marked exodus of educated, skilled Iraqis; the sustained isolation from global networks of information and trade; and the destruction of economic infrastructure. Most private businesses in Iraq are small, with 65 percent employing less than 20 employees. Most are in retail and trade, construction, and transportation as well as in the textile, food, engineering, and chemicals fields. Most businesses are owned by sole proprietors (94 percent) followed by family partnerships (around 4 percent). Iraq only possesses a handful of large, typically family-run multi-industry conglomerates, and these are in retail, domestic trade, telecommunications, and construction rather than in traded goods and services.[13] As a result, the productivity of Iraq's firms is generally lower than firms in other countries in the Middle East and North Africa region.[14] Nevertheless, some sectors of the Iraqi economy have higher average levels of productivity than their regional peers. These include metals and equipment, textiles and garments, and chemicals and pharmaceuticals, suggesting that the potential exists for private sector-led growth in an improved business environment (World Bank 2015).

[12] CIPE.

[13] World Bank 2014.

[14] Iraq Systematic Country Diagnostic (SCD).

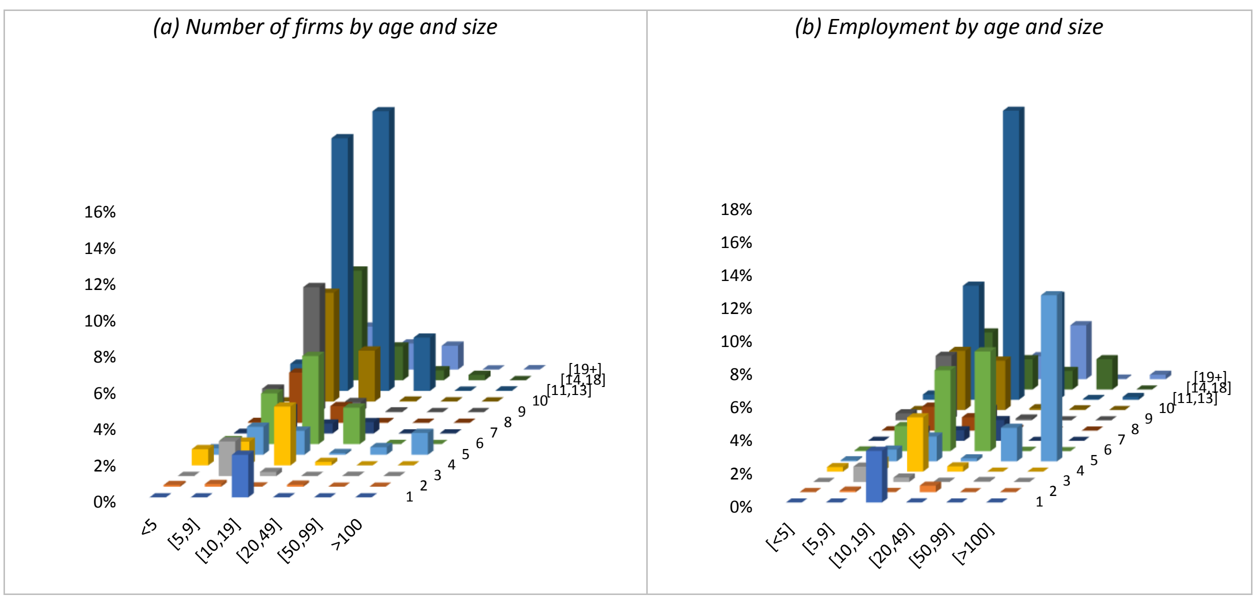
b. Distribution of firms and employment

This section aims to provide a snapshot of the distribution of firms and employment in Iraq, as represented by the latest available firm-level data, including the WBES 2011 and the RES 2018. The analysis provides a description of the distribution of firms for each period; however, conclusions regarding trends are not possible due to the different sampling strategies.[15]

According to the WBES 2011, the distribution of private sector formal firms and employment in Iraq was skewed toward small and medium-size firms that are old. The larger firms in Iraq are mainly state owned. Figure 3 illustrates that 65 percent of private sector firms in Iraq were small, that is, employing less than 20 employees; 32 percent were medium size (20–99 employees); and only 2 percent were large (>100 employees).[16] However, the larger firms in Iraq are mainly SOEs that were not included in this sample. According to the 2016 Iraq SCD, there are 176 SOEs. In 2011, subsidies to SOEs totaled US$3 billion, 3 percent of gross domestic product (GDP) and in 2014, 41 percent of employment was in the public sector with state-owned finance, insurance, and professional institutions alone employing 282,000 people. State-owned banks (SOBs) also dominate the financial sector.

In 2011, over 58 percent of jobs were in 'established' and "mature" firms, defined as those aged between 9-14 years and over 15 years respectively, **followed by 'young' firms (between 4-8 years) at 37 percent**. On the other hand, only 5 percent of the jobs were in 'new' firms, i.e. under 3 years of age. This distribution of jobs concentrated in small-medium and old firms suggests that small firms may not be growing over time[17].

Figure 3: Distribution of firms and employment by age and size in 2011 (WBES)



[15] WBES 2011 sampling methodology: The sample for Iraq was selected using stratified random sampling following Enterprise Survey methodology. Three levels of stratification were used in this country: business sector, establishment size, and governorate. Regional stratification was defined by 10 subnational locations (governorates) in Iraq.

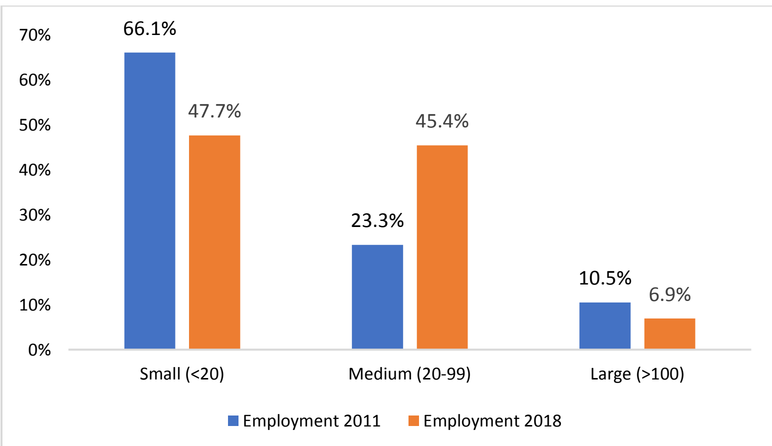
[16] Iraq 2011 ICA.

[17] A panel dataset is required to make a definitive statement on job creation.

Source: WBES Iraq 2011.
Note: The results are weighted.

The RES 2018 sample shows a similar distribution of firms—with 77.5 percent small firms, 20 percent medium firms, and less than 1 percent large firms. However, the RES 2018 shows a higher proportion of jobs in medium-size firms. While the majority of private sector jobs in the 2011 survey are in small firms (66 percent), the majority of jobs in the 2018 survey sample are equally divided among both small enterprises and medium enterprises (48 percent and 45 percent, respectively). The proportion of jobs in medium-size firms surveyed in 2018 is double that of the 2011 survey sample (Figure 4). However, given the limitations of the 2018 survey described earlier, conclusions regarding trends must be made with caution.

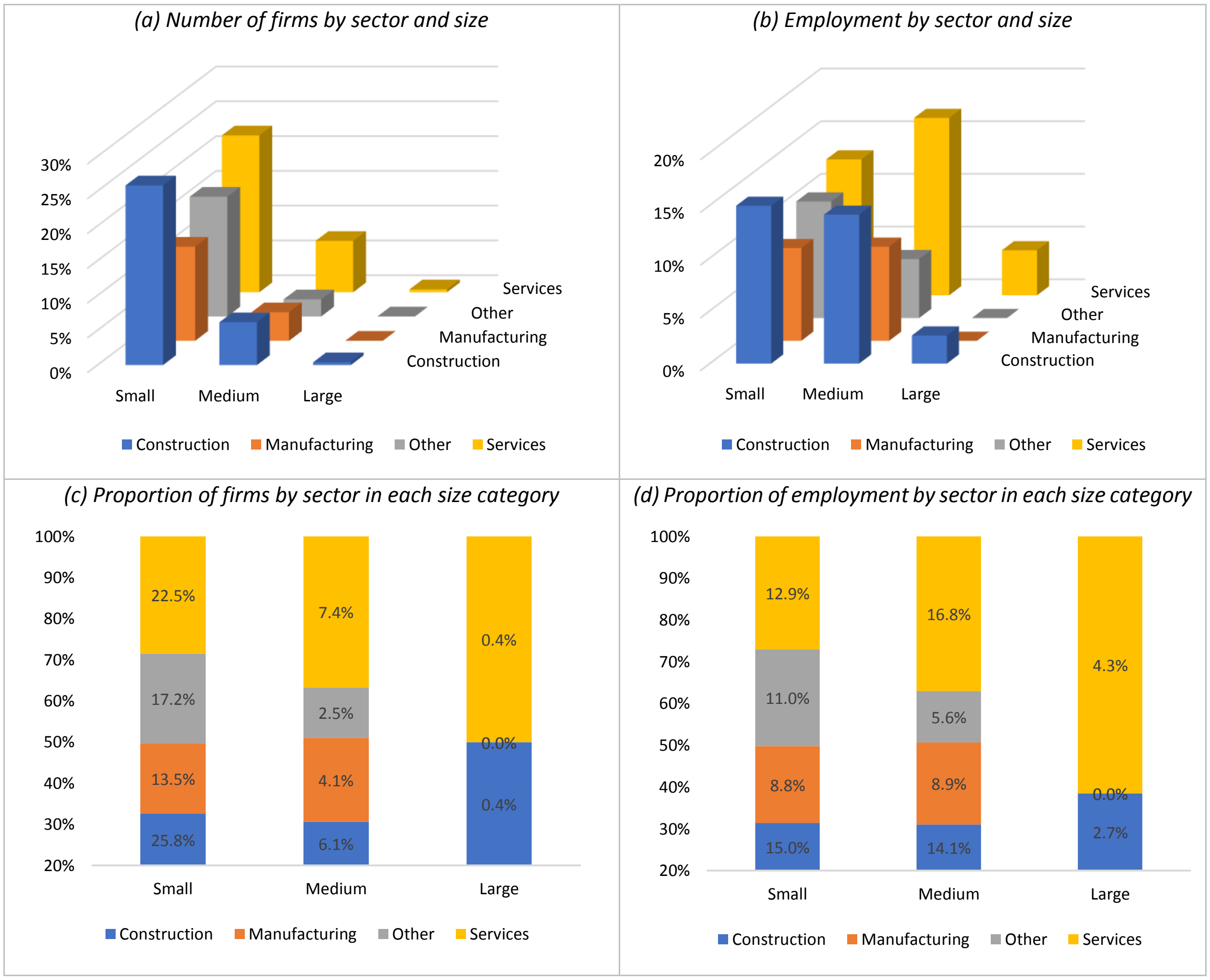
Figure 4: Employment 2011 (WBES) and 2018 (RES)



Source: WBES Iraq 2011 and RES 2018.

Small firms (less than 20 employees) account for three-quarters of the firms in the RES 2018 sample. The major sectors are small-scale services and construction—sectors that tend to entail low-productivity activities (see Figure 5a–b). Figure 5c–d shows that 30 percent of jobs in the sample are in SMEs in the construction sector. The services sector also employs a total of 34 percent with 13 percent in small and 16.8 in medium firms. The large private sector firms are either in construction or in services.

Figure 5: Distribution of firms and employment by sector and size in 2018



Note: Small (<20), medium (20–99), large (>100). In panels c–d, the percentages represent the shares by size and by sector (that is, all three columns total 100 percent).

Construction firms are mainly small individual and family enterprises. Small firms are individual and family enterprises with regional reach and very little permanent infrastructure. Medium-size construction firms are few and nationwide. Large construction firms are primarily international companies contracted on massive technical projects. According to the construction sector assessment, the estimated number of jobs in the private building construction sector is around 34,000 jobs (0.4 percent of total workforce in Iraq) (World Bank 2018a). In contrast, the RES 2018 sample covers 79 firms in the construction sector, employing around 1,200 permanent workers.

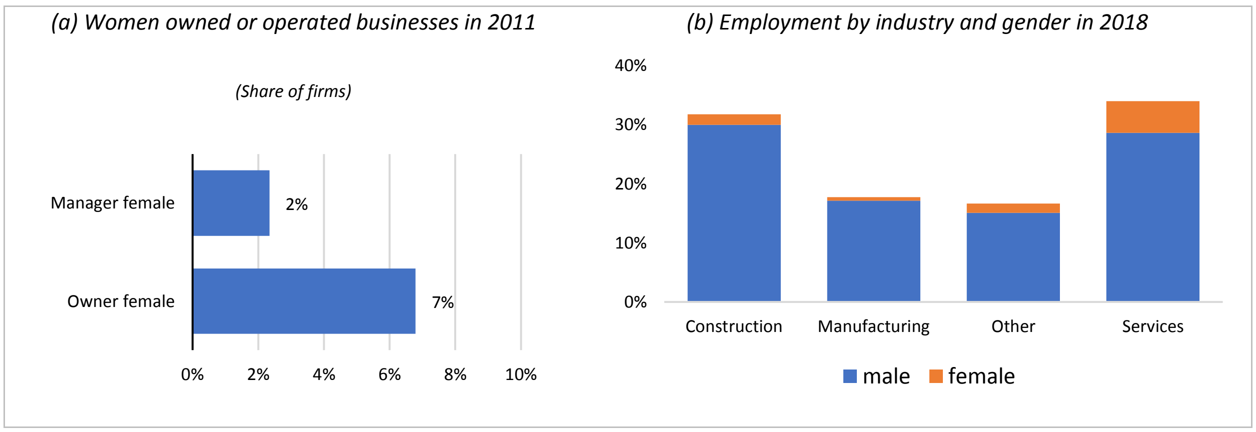
The dominance of SOEs has stunted the growth of the private manufacturing sector.[18] The RES sample shows that SME manufacturing jobs form only 18 percent. The SCD states that continued state ownership of industrial firms that sell products into competed markets will tend to encourage protectionism of such SOE-supplied markets. Unable to compete on quality as a result of insufficient foreign direct investment and domestic innovation, Iraq's manufacturers cannot

[18] Iraq SCD 2017.

compete on price due to high input costs. This reflects, in part, inefficiencies among Iraq's manufacturers—especially manufacturing SOEs. A transformation of Iraq's industrial SOEs into globally competitive firms is essential. An influx of foreign investment, management, and links to global markets and supply chains is needed.

The private sector in Iraq has poor gender balance. Only a fifth of Iraqi women participate in the nation's workforce, indicating widespread exclusion from economic life. Women-owned and women-operated businesses are scarce—only 7 percent of firms had a female owner while only 2 percent had a female top manager in 2011. This remains consistent from the RES 2018, where only 9 percent of employees of the sample are women (see Figure 6). The services sector is the main employer of women, with gender-related barriers thwarting the economic potential of women both as employees and as entrepreneurs. There is a growing body of literature and international experience that suggests female ownership of firms enhances productivity, which means there is vast untapped potential for economic growth in Iraq.

Figure 6: Women in business 2011 (WBES) and 2018 (RES)



Source: Panel (a) WBES Iraq 2011 and Panel (b) RES 2018.
Note: The results using the WBES 2011 are weighted.

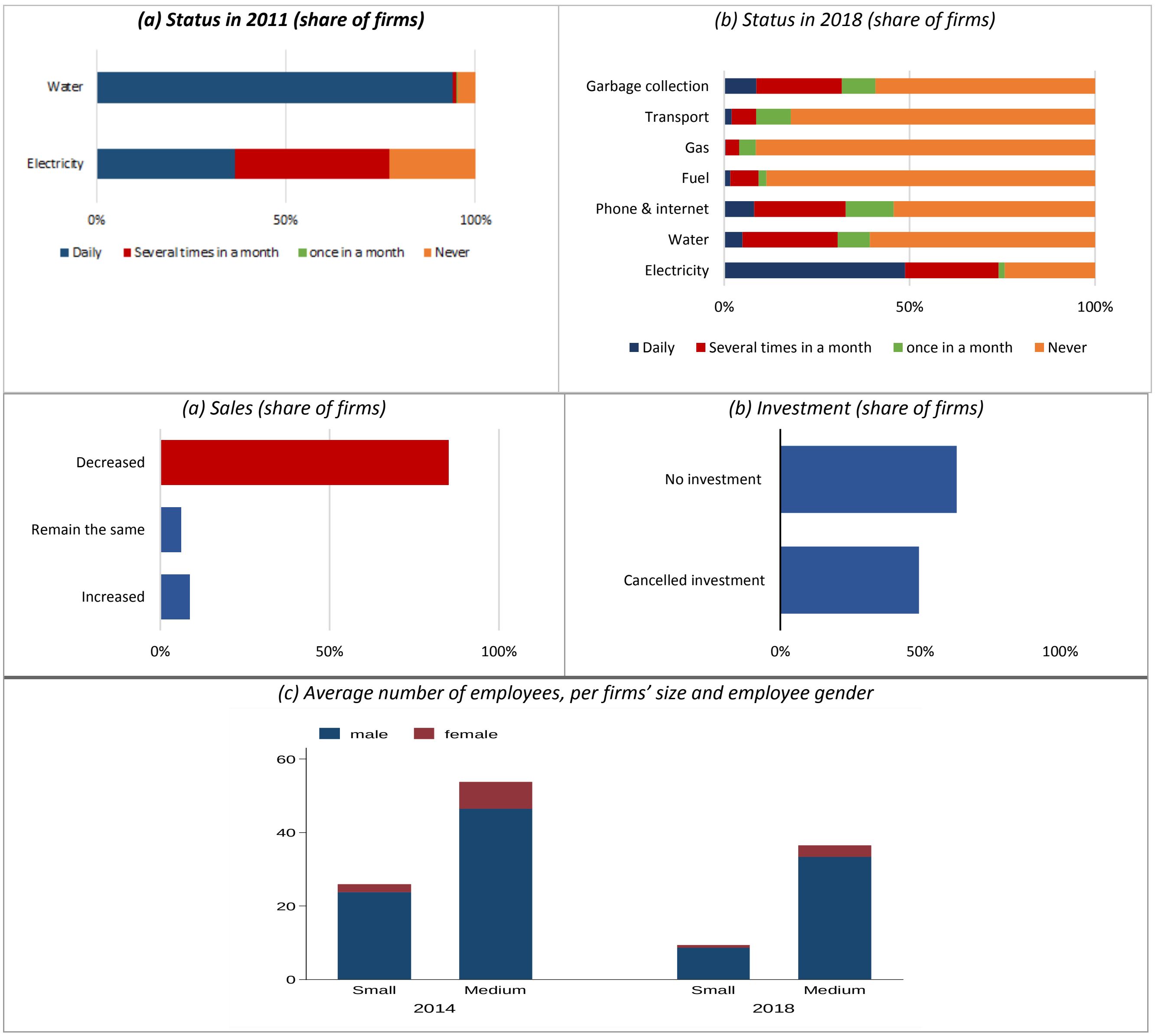
IV. Impact of the conflict on firm performance

Since 2014, the war against ISIS has claimed the lives of over 67,000 Iraqi civilians. The war has caused massive displacement, trauma, and rapid increase in poverty with the internal displacement of over three million people across Iraq. Recent estimates suggest that more than 8.7 million Iraqis are currently considered in need of some form of humanitarian assistance. The conflict with ISIS and widespread insecurity have also caused the destruction of infrastructure and assets in ISIS-controlled areas, trade routes have been cut off or severely curtailed, and investor and consumer confidence has dwindled.

The conflict in Iraq has a negative impact on firm performance leading to marked deterioration in sales and investment as firms faced liquidity shortages and outdated productive assets. The majority of the respondents (85 percent) in RES 2018 reported a decrease in sales when compared with 2014 (Figure 7a). Moreover, 63 percent indicated that they did not invest in building, plant, or equipment since 2014 and a half of the respondents reported cancelling planned investments (Figure 7b).

In a context of conflict, firms are also affected by a decline in demand driven by lower incomes and shift into subsistence activities. During conflict situations, the demand for output of the formal private sector is reduced due to lower incomes compounded with higher unit costs (Collier and Duponchel 2012). The RES 2018 revealed that a significant proportion of firms (32 percent) reduced prices of their goods and/or services when compare to 2014, with higher incidence in medium and large firms (42 percent) than in small firms (30 percent).[19]

Figure 7: Firms performance and the influence of the conflict



Source: RES 2018.

[19] Statistically significant differences at the 10 percent level.

Note: The graph depicts the share of firms that responded with positive values: sales (97 percent), investment (97 percent), and employment (100 percent).

In absolute terms, the total number of employees reported by firms fell by 52 percent between 2014 and 2018.[20] Several firms reduced their numbers significantly, moving them into a smaller firm category. About 58 percent of medium firms moved into the small firms category, similarly 11 percent of large firms moved into the medium category and 72 percent into the small one. The average number of employees has dropped markedly since the onset of the crisis—from 32 employees in 2014 to 15 permanent employees in 2018, with strong implications for small firms.[21] By gender, between 2014 and 2018, the average number of male employees fell from 28 to 14, while the number of female employees decreased to 1 from 3.[22] The average number of employees in firms under the 'small' category in 2018 fell by 36 percent while that in medium and large firms fell by 15 percent[23] (Figure 8, panel c). This is consistent with the findings of Collier and Duponchel (2012) of the negative consequences on employment and earnings in Sierra Leone due to conflicts.

Looking at the impact of the conflict on sectors, it is found that firms in the construction sector are the most affected in terms of price reduction, cancelled investment, and reduction of employees. Firms were asked two separate questions, 'Has your company made any investments in building, plant, or equipment since the beginning of the conflict in 2014?' and 'Did your company cancel any planned investment in building, plant, or equipment due to the conflict?'. A higher proportion of firms in the construction sector reported a decrease in price (44 percent[24]) and cancelation of planned investment due to the conflict (68 percent[25]). However, a high rate of firms in the construction sector (66 percent) still reported investment in building, plant, or equipment since the conflict.[26] These investments could be the result of rebuilding following the conflict and not necessarily investments for expansion. The total number of employees reported by firms in the construction sector fell by 42 percent between 2014 and 2018 and in the service and manufacturing by 39 percent and 20 percent, respectively.[27]

V. Key constraints to doing business

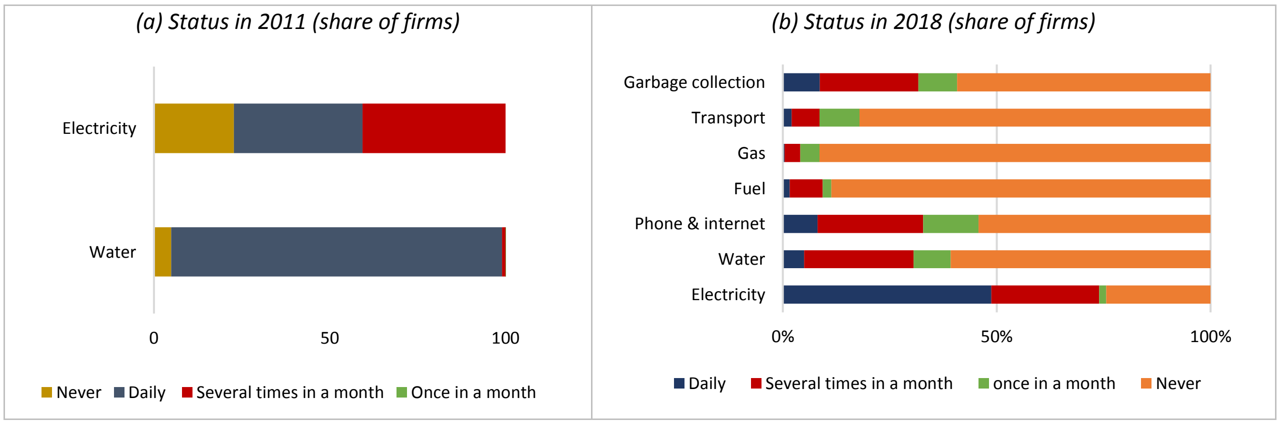
a. Physical infrastructure

Chronic shortages in the delivery of public services, especially electricity supply, are frequent in the most affected governorates by the crisis. Since 2004, service delivery has been a pervasive problem in Iraq with unstable delivery of electricity, water, and municipal services. In 2011, firms faced water interruption on a daily basis and recurrent shortages of electricity. In 2018, firms

[20] Statistically significant differences at the 1 percent level.
[21] Statistically significant differences at the 1 percent level (mean).
[22] Both statistically significant differences at the 1% level (mean).
[23] Statistically significant differences at the 1 percent level.
[24] Statistically significant differences at the 10 percent level.
[25] Statistically significant differences at the 1 percent level.
[26] Statistically significant differences at the 1 percent level.
[27] Statistically significant differences at the 1 percent level.

reported electricity interruption as the most recurrent problem—49 percent of firms reported daily interruptions of electricity and 25 percent reported several times in a month. Though, when the six governorates most affected by ISIS[28] were compared with the rest of Iraq, a higher proportion of firms reporting electricity interruption was found: 80 percent versus 66 percent, respectively.[29] The outages of electricity inflict costs associated with the time and quantities of production. In some sectors, availability of significant amounts of electricity would allow more modern production, such as in bricks, glass, thermostone (World Bank 2018a). Nevertheless, the access to electricity indicator in the Doing Business Report shows improvement in score from 54.5 in 2015 to 61.7 in 2019.

Figure 8: Interruption of services 2011 (WBES) and 2018 (RES)



Source: Panel (a). WBES Iraq 2011. Panel (b). RES 2018.
Note: Panel (b) Share of firms that reply the survey with positive values: Electricity (99 percent), Fuel (99 percent), Garbage collection (98 percent), Gas (98 percent), Phone and Internet (99 percent), Transport (98 percent), and Water (97 percent).

Despite the country's vast oil and gas reserves, Iraqis do not have access to adequate amounts of electricity for basic needs. Years of neglect have led to a dilapidated grid infrastructure with low operational efficiency, high losses, and poorly designed tariffs. The absence of reliable electricity supply from the grid has led to the widespread use of private diesel generators, whose constant operation imposes high generation costs, with households having to pay almost US¢40 per KWh compared to the grid supply household tariff of about US¢3 per KWh. Moreover, in Basra in particular, the lack of electricity that is used for water desalination and treatment negatively affected efficiency of water delivery.[30]

In addition, phone, Internet, water, and garbage collection services are frequently interrupted. Around 50 percent of respondents recognize problems associated with disruption of phone and Internet, water and garbage collection at least once in a month (see Figure 8b). When categorized by size, 19 percent of medium and large firms reported interruption of fuel (diesel or gasoline) while only the 9 percent of small firms reported the same problem. Manufacturing and service

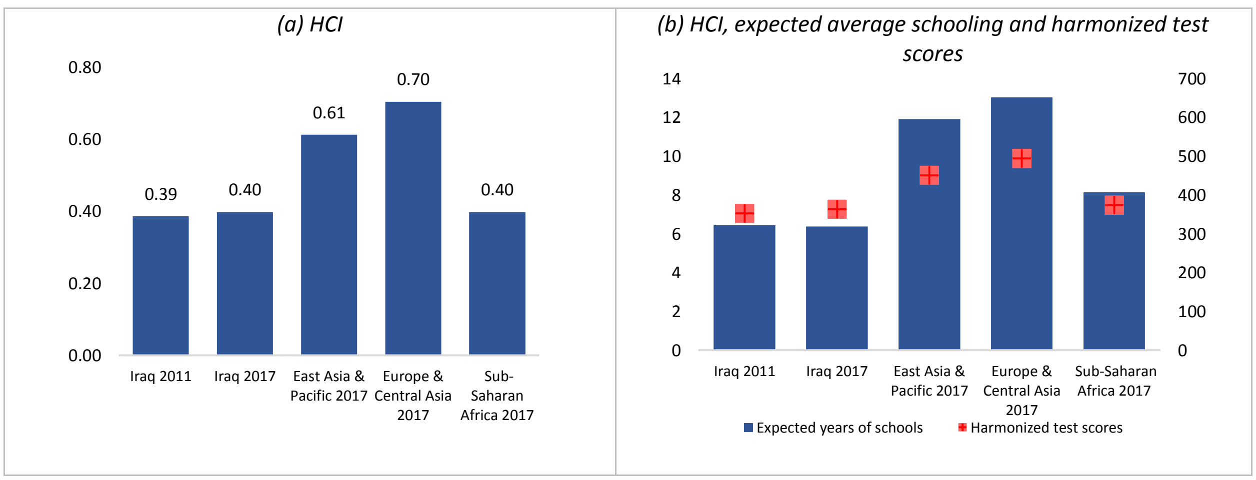
[28] According to the post DNA, the governorates are Baghdad, Al-Anbar, Babylon, Diyala, Kirkut, Nineveh and Saladin.
[29] Statistically significant differences at the 1 percent level.
[30] Iraq Country Partnership Framework.

sector firms were the highest and the most significant reporters of fuel interruption[31] (19 percent and 14 percent, respectively) and transport problems (21 percent and 28 percent[32]).

b. Social impact and human capital

Human capital accumulation in Iraq represents an important constraint—especially the lack of skilled workers. According to the 2011 COSIT labor market statistics, more than 38 percent of the labor force has no education, and only 11 percent of the Iraqi population has diplomas or higher degrees. Iraq's HCI has not improved since 2011, with a score of 0.39 in 2011 and 0.40 in 2017. Compared to other regions, the HCI in Iraq is comparable to the average of Sub-Saharan Africa countries (0.40 in 2017), while it is below the average of Asia region (East Asia: 0.61 and Central Asia: 0.70 in 2017). The expected years of schooling and test scores have remained nearly the same from 2011 to 2017; both indicators remain under the average of the Sub-Saharan Africa and Asia regions (Figure 9). The lower average years of schooling and the low levels of education attainment could limit the availability of skilled workers and ultimately curb Iraq's potential economic growth.

Figure 9: HCI 2018



Source: World Bank HCI 2018.
Note: Panel (a) HCI. Panel (b). Harmonized test scores scale: 625 represents advanced attainment and 300 represents minimum attainment.

The 2018 RES looks at how firms have dealt with loss of employees due to the conflict. Amongst the surviving firms, the loss of human capital was not reported as a recurrent problem.. The majority of firms never experienced the loss of employees and managers, 86 and 95 percent respectively. In the six most affected governorates[33], 23 percent of firms reported the loss of an employee while in the rest of Iraq the figure was only 9 percent.[34] These results may be subject to selection bias, given that the survey only captures surviving firms.

[31] Statistically significant differences at the 10 percent level.
[32] Statistically significant differences at the 5 percent level.
[33] According with the Post Disaster Need Assessment the most affected governorates are Baghdad, Al-Anbar, Babylon, Diyala, Kirkut, Nineveh and Saladin.
[34] Statistically significant differences at the 1% level.

c. Access to finance

The Iraqi banking sector is dominated by state ownership and remains fragile and inefficient, with poor credit intermediation. The three largest SOBs Rafidain Bank, Rasheed Bank and Trade Bank of Iraq (TBI), between them hold around 90 percent of the banking system's assets. The two largest SOBs Rasheed Bank and Rafidain Bank together account for 71 percent of total deposits and extend 54 percent of total credit in the Iraq banking sector. Both Rasheed and Rafidain have capital deficiencies and asset quality problems and are primarily used by GOI to provide quasi fiscal support to SOEs (payments of salaries, financing low cost housing schemes etc). As of June 2018, there were 73 banks operating in Iraq including 7 state-owned banks (SOB), of which one is an Islamic bank; 46 Iraqi private banks, of which 23 are Islamic banks; and 19 foreign banks, of which 4 are Islamic banks. The majority of private banks are small in size and rely on currency arbitrage as their main revenue source. Credit intermediation is at a very low level, with bank credit to private sector at only 9.3 percent of GDP at the end of 2017.

Private sector opportunities remain constrained by difficulty of access to finance. Similar to the Doing Business indicator in 2011, the RES 2018 shows that firms did not access formal sources of credit. In 2018 firms were mainly financed by informal sources, with 14 percent of firms not using any form of credit. About 62 percent of firms in the sample reported the use of informal sources of funds, while 19 percent used formal sources. Informal sources mainly include family and friends while formal sources include banks and MFIs (Figure 10a). Access to formal credit in 2011 was minimal as well; when asked whether the establishment had a line of credit or a loan from a financial institution, 97 percent answered they do not access credit. In 2018, as expected, medium and large firms in the sample are more likely to have access to formal banks than small firms: 29 percent of medium and large firms reported having access to formal banks while the same indicator is 17 percent in small firms.[35] It is important to note, however, that the poor access to formal credit is not necessarily related with physical access to banks; the survey revealed that most of the firms in the sample have access to a bank branch in their city (65 percent).

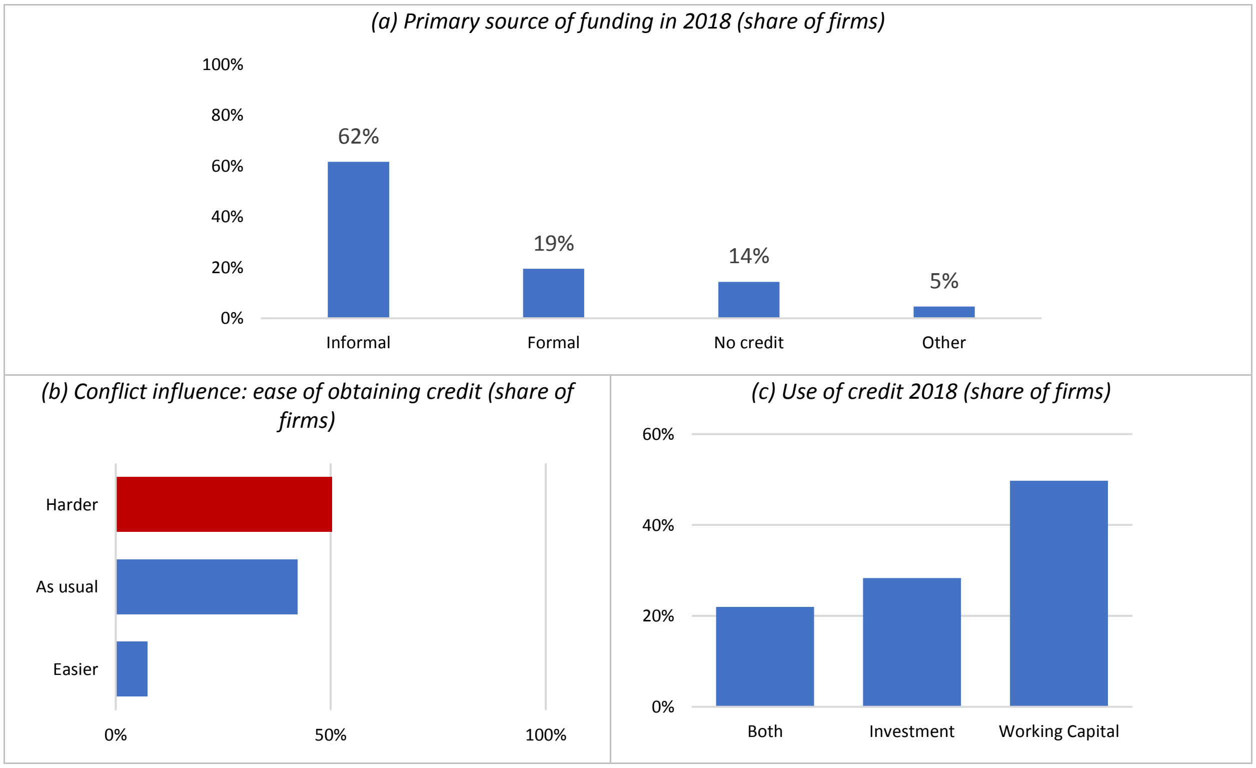
Interviews with the private sector, and construction contractors in particular, reveals that the low demand of formal credit is related to the difficulty in obtaining guarantees, impacting negatively the ability to conduct several projects in parallel. Taking the construction sector as an example, bank guarantees are required on public tenders in the first stage for bidding and in a second stage for the attribution of the project. Reportedly, only cash and personal real estate are accepted by banks, and according to entrepreneurs the latter tend to be under-valued by the banks. To cope with this situation, some building contractors try to interest convince banks into co-investment in projects.

While some positive steps towards improving access to credit have occurred such as the launch of a new credit registry, the gap in access to finance remains wide and firms surveyed in 2018 reported that the conflict has negatively impacted the ease of obtaining a credit. Half of the firms with access to credit reported that in 2018 getting credit was harder than in 2014, while 42

[35] Statistically significant differences at the 10 percent level.

percent reported that it was the same, and only 7 percent reported it was easier to obtain credit in 2018 (Figure 10b).

Figure 10: Access to finance 2018



Source: RES 2018 and WBES Iraq 2011.
Note: Panel (a) Formal includes banks and microcredit institutions; informal includes friends, family, and supplier.

Firms mainly use any credit they obtain for working capital, relative to investments, as the number of nonpaying customers has increased rapidly. Around 50 percent of firms report that they use credit only for working capital, 28 percent report using it for investments only, and 22 percent use it both for working capital and investment (Figure 10c). Around 50 percent of the firms stated that the share of nonpaying customers has increased with the conflict. Among the medium and large firms, 77 percent report using credit only for working capital in comparison with the 44 percent in small firms.[36] On the other hand, small firms are more likely to use credit for investment (32 percent versus 13 percent).[37]

Iraq's economy is mainly cash based, with some utilization of banks and the hawala system to pay suppliers.[38] The vast majority of the firms, 98 percent of them, report paying their employees

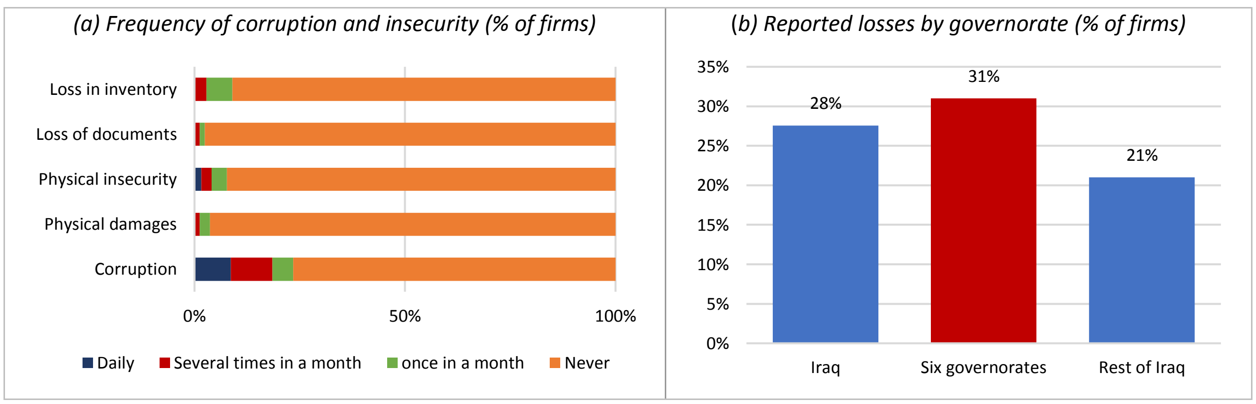
[36] Statistically significant differences at the 1 percent level.
[37] Statistically significant differences at the 5 percent level.
[38] Hawala is a popular and informal value transfer system based not on the movement of cash or on telegraph or computer network wire transfers between banks but instead on the performance and honor of a huge network of money brokers.

in cash. Similarly, 43 percent of firms reported they paid their suppliers in cash, 30 percent paid through the hawala system. and 26 percent used the formal banking system.

d. Insecurity and supply chain disruption

Insecurity and physical losses due to the conflict and insecurity have negatively impacted firms in Iraq, but this is not fully reported through the survey. Perceived corruption and crime have a negative and significant effect on investment and employment growth at the firm level (Gaviria, 2002). Figure 11 (a) indicates low instances of both losses and corruption in Iraq. However, the extent of damages, losses and insecurity may not be best captured by the Rapid Enterprise Survey due to selection bias: the firms in the sample are the ones that have survived and were active and available to respond to the phone survey, and thus may not represent those that experienced major loss. The RES 2018 did reveal though that in the six most impacted governorates (according to the Damage Needs Assessment), losses were significantly higher - 31 percent reported losses from looting or theft since the start of the conflict in the six most impacted governorates, while in the rest of Iraq only 21 percent report such losses.[39]

Figure 11: Corruption and insecurity



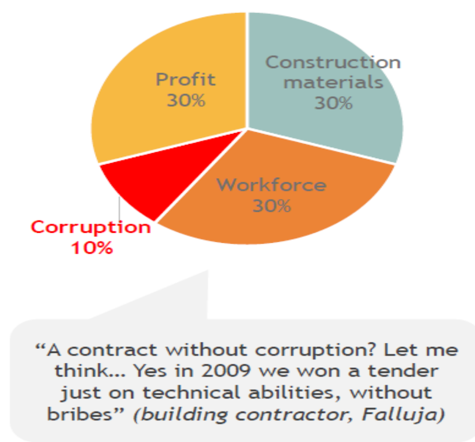
Source: RES 2018.
Note: Panel (a) Physical insecurity refers to insecurity firms are experiencing at or around their premises; Physical damages refers to damaged or looted building, equipment, computers, and so on. Panel (b) Six governorates includes Baghdad, Al-Anbar, Babylon, Diyala, Kirkut, Nineveh and Saladin. Reported losses includes any extra losses from looting, theft, or vandalism crimes since the beginning of the conflict in 2014.

Corruption is a significant constraint particularly for the construction sector, all along the project cycle from the tendering/procurement process to the validation of the final project delivered.

[39] Statistically significant differences at the 10% level.

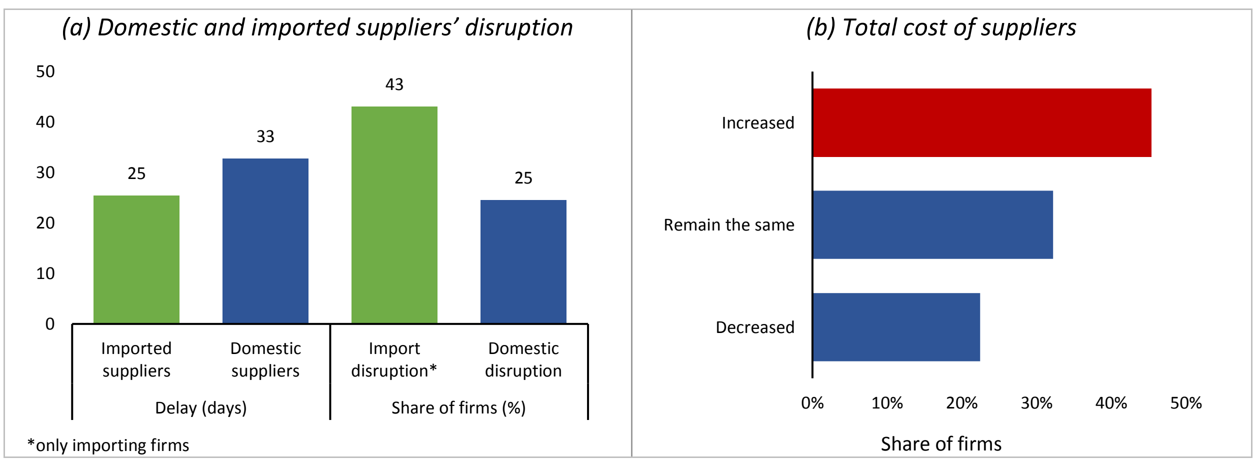
Firms have also struggled with delays in obtaining supplies, both domestically and through imports. The average delay in obtaining domestic supplies was 33 days, while the average delay in obtaining imported supplies was 25 days. Around 43 percent of firms reported disruption in imported supplies while 25 percent of firms reported disruption in domestic supplies (Figure 13a). Anectodical evidence suggests that delays in the construction sector, for example, resulted from Erbil/Baghdad tensions. This is because brick demand is from the south and central regions while the production facilities are in the Kurdistan region. Therefore, the market is affected by the Erbil/Baghdad tensions over registration mechanisms, internal tariffs, and fuel prices (World Bank 2018a). The survey also shows that the average delay in imported supplies is higher for small firms than for medium and large firms, with a difference of 12 days.[40]

Figure 12: Construction project cost structure analyzed by a mid-range Basra building contractor



Firms have also been forced to adjust prices for their goods and services. Figure 13b shows that results are mixed; half of the firms in the RES 2018 sample increased their prices since 2014, while the remaining half either decreased their prices perhaps to adjust to lower incomes or kept them the same during the conflict period.

Figure 13: Supply chain disruption



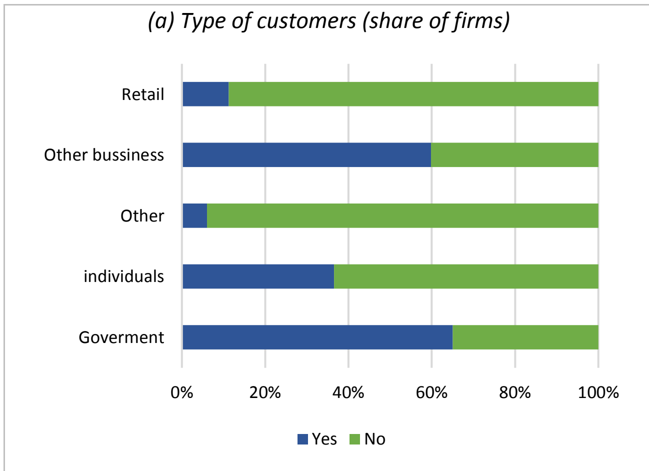
Source: RES 2018.
Note: Disruption refers to delay in receiving supplies. Delay is defined as how many additional days are typically taken to receive supplies compared to 2014, before the conflict.

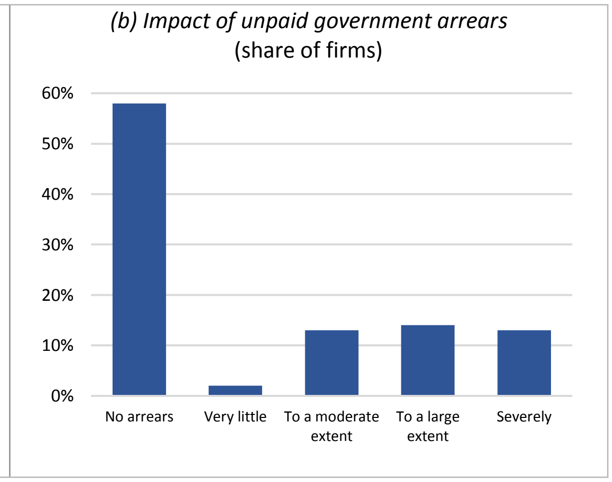
[40] Statistically significant differences at the 5 percent level.

e. Domestic market

The principal customers of the firms in this survey are government entities and other businesses. The government is reported as the principal customer of firms, followed by other businesses. The dependence on other business was more severe in medium and large firms, with a 73 percent, than small firms (58 percent).[41]

Figure 14: Domestic demand





Source: RES 2018.

The accumulation of government arrears has been shrinking the liquidity of firms in Iraq. A third of the firms surveyed reported to have been severely to moderately impacted by lack of payment by government customers. Interviews revealed that small and medium building contractors often claim that they are owed arrears worth about 1-year of their pre-crisis revenue. As a result, some contractors intend to abandon public contracts and focus only on private projects. The World Bank Construction Sector assessment noted that many construction firms have closed due to this problem. A representative of building contractors from Basra revealed in an interview that government arrears have not only effected firm liquidity, but productive capital has shrunk as well: *"Skills are there, but many companies have lost or sold machinery. Because of state arrears, some have eaten their capital and stay only by name, like empty shells".* [42] Thus, the problem of arrears is likely to be underestimated by the RES.

Informality also remains a constraint to the formal private sector. Given the high level of informal activity, the WBES 2011 found that practices of firms in the informal sector were the fifth leading constraint identified by the formal sector. A high degree of informality in the economy makes it difficult to enforce government regulations and further reduces their impact. This was mainly the case for manufacturing firms and firms located in Baghdad (79 percent). Over 60 percent of firms in Babil and Kirkuk also identified informal sector competition as a serious constraint. Business leaders participating in World Bank-held focus group remarked that even

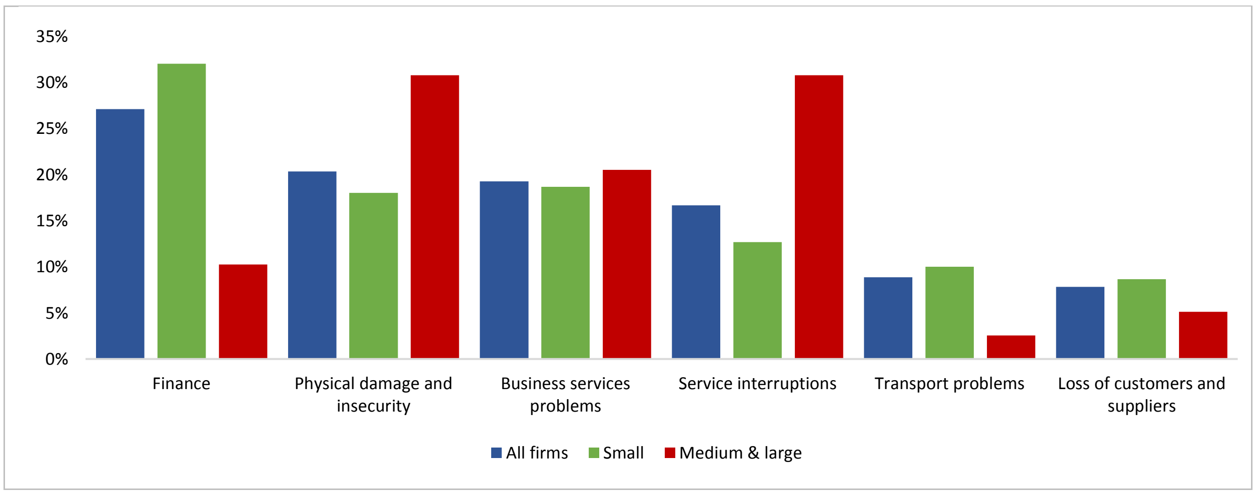
[41] Statistically significant differences at the 5 percent level.
[42] Construction Assessment

unregistered, illegal, and counterfeit companies compete successfully with legitimate businesses in obtaining government contracts.

f. Overall most important constraint

Access to finance and physical damage are the main challenges identified by all firms. Some constraints are more significantly impacting small firms. Figure 15 illustrates the importance of different constraints in the business environment by firm size. Finance was identified by 27 percent of firms as a most important constraint, while 20 percent identified physical damage and insecurity. For small firms the top constraint was reported to be access to finance (32 percent)[43]. While medium and large firms report that service interruption (30 percent)[44] and physical damage and insecurity (30 percent)[45] were their top most significant constraints. Readers will note that when firms were asked to provide information about the frequency of insecurity in the last month most of them answered never, however when firms were asked about the "most important problem" physical damage and insecurity was among the top constraints. This might be because the first question referred to the past month, whereas the latter represents the overall impact of physical damage and insecurity since the conflict.

Figure 15: Most important constraints by firm size



Source: RES 2018.
Note: Share of firms that reply the survey with positive values: 77 percent of the sample.

VI. Coping mechanisms used by firms to overcome the conflict

The impact of prolonged conflict is particularly pervasive on the formal private sector, leading firms to adopt coping strategies to stay afloat. Once foreign and local investors have fled, taking with them the skills, the jobs, and technology, the surviving firms are left to struggle with disruptions in their supplies and an environment that is increasingly corrupt. Some coping mechanisms adopted by firms in Iraq are the following:

[43] Statistically significant differences at the 1% level.
[44] Statistically significant differences at the 1% level.
[45] Statistically significant differences at the 10% level.

- **Firms moved their business operations to other cities to avoid the conflict.** Among the surviving firms, 13 percent report having moved operations elsewhere in Iraq—mainly to Baghdad and Erbil. Some firms moved businesses to other countries in the region such as Turkey and Lebanon.

- **Businesses reduced their operational working hours;** 34 percent of firms reduced the number of opening and operation hours.

- **Businesses adopted more flexible structures and remote work schedules, some have downsized.** An analysis of five construction value chains provides evidence that highlights this trend. For example, a key firm in the construction sector in Baghdad reports that it reduced the number of employees from 2,100 to 600 due to the crisis. Other employees work on a project basis. Of the labor-intensive value chains, such as architecture and engineering services, architects report working remotely from inside and outside Iraq (World Bank 2018a).

VII. Conclusions

- Despite the limitations inherent in a phone survey and the challenging context in Iraq, the RES results provide valuable insights into the effects the 2014 conflict on businesses in Iraq, especially as this is the latest available firm level dataset for the country. Although service delivery and physical structure were not significantly affected (as reported by the respondents), sales and income generated by these businesses drastically decreased. Most notably, the majority of businesses indicated that their main customers were the government or other businesses and that overall investment has decreased. This suggests a correlation between the 2014 conflict and the government allocating more resources to provide for an environment that is stable and secure.

- There is a critical lack of data on the private sector in Iraq, and it would be important to have a broader survey or census that included both informal and formal sector, with a focus on differences between regions in Iraq given the disparate experience of the private sector in cities such as Baghdad, Irbil, Basrah, and Mosul, and the difficulty of obtaining respondents from some of the conflict affected areas as revealed in this survey.

- There is little dynamism and entry in the private sector in Iraq, largely due to conflict (emigration of businesses, direct impacts of conflict, and high risk) as well as continued dominance of the public sector.

- The construction sector seems to be dominant among private sector enterprises active in Iraq. While the sample is not representative, the dominance of contractors in the sample frame combined with findings from the construction sector mapping and the findings that government contracts are the dominant market reinforce this conclusion.

- Firms report severe and widespread impacts from the conflict on their businesses, with electricity, insecurity, government services (permits, etc.) and access to finance standing out. The issue of finance demands greater attention to determine what modalities could be effectively used to address this constraint to address different needs (guarantees for public bids, working capital for SMEs, investment capital, and other).

- Iraq has a number of important investment climate challenges. The main challenge faced is the burdensome bureaucracy. This was identified as a main barrier to doing business by domestic firms in 2011 Enterprise Surveys and was widely cited in the RES as a deterrent to firm operations. Import costs are made up largely of the costs associated with documentation. Not only does inefficient bureaucracy impose a financial cost by raising the price of goods and services, but also it has a high opportunity cost for the economy related to reduced firm entry. The regulatory regime is reportedly outdated and does not correspond to the needs of a modern private sector. Entry barriers maintain entrenched interests and prevent potentially competitive new firms from entering the market.
- As a reflection of the political instability in Iraq, security and crime are also major concerns, with many surveyed firms spending considerably on protection. It is important to note however, that the magnitude of these problems often varies significantly between different regions and sectors.
- Regional differences were hard to isolate due to the lack of the representativeness of the data. Annex A shows a figure that compares the distribution of the respondents by region and by sector in comparison with the 2011 WBES. However, the main regional difference is the low response rate outside Baghdad and Basrah which may also indicate severe impacts on firms in these other cities.
- Supply chains are disrupted and costly. A better understanding of key issues arising in supply chains will be important to help stimulate growth in private sector firms.

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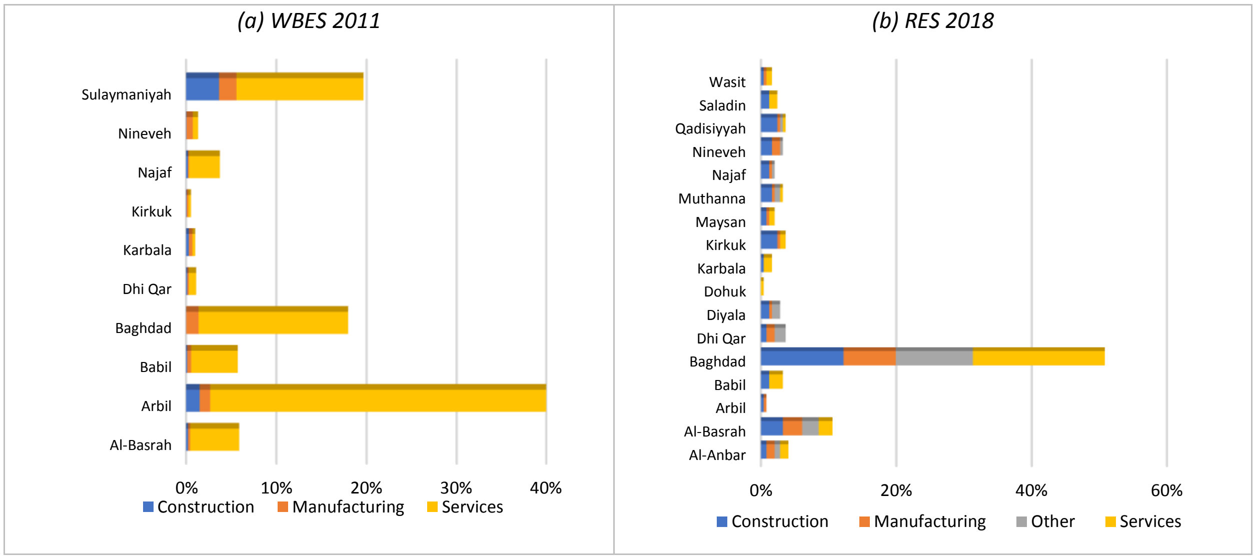
Annex A: Distribution of firms by sector and region according to WBES 2011 and the RES 2018



Source: Panel (a) WBES Iraq 2011 and Panel (b) RES 2018.
Note: The results are weighted.