1 Conflict, Growth and Development

The overarching context for this report, which focuses on the period from 2007 to 2012, is Iraq's status as a resource-rich, fragile and conflict-affected state. The country has been a nexus of conflict and fragility since the early 1980s, and has experienced multiple types of conflict: insurgency, international war, sectarian strife, persistent terrorism, regional fragmentation, and spillovers from conflict in other countries. What should have been a promising endowment of natural resources (land, oil, and gas) and human capital did not provide the foundation for poverty reduction and shared prosperity, because the realization of potential was confounded by war and repression. Yet, externally imposed regime change in 2003 and a tortuous process of reestablishing elected civilian government had in principle set the stage for inclusive growth in Iraq.

The country's trajectory since the 1970s has been a series of divergences from regional and global trends, beginning first with the Iran-Iraq war of the 1980s and followed by the invasion of Kuwait, which was even more damaging, triggering comprehensive sanctions, which didn't end until the 2003 US-led invasion. During each phase, any hope of catch-up was thwarted by further events, and policy reform was off the table.

1991–92 forms a major rupture in Iraq's development trajectory. With the government consolidating around the goal of regime survival and the private sector unable to function, this was the beginning of large-scale detachment from government and the formal sector for many Iraqis—laying the roots of profound marginalization. The space for market allocations was constricted since so much was taking place through administrative fiat, giving privileged access to state enterprises and certain cadres, especially during the sanctions era. Since the formal sector had to be run through the government, many market activities shifted to the informal sector, with consequent effects on productivity, investment horizon, and job quality. At the same time, the catastrophic decline of agriculture posed challenges for food supply and employment of the sector's workforce. While some problems predated the conflict era (irrigation water supply, salinity, and desertification), throughout the 1990s and beyond, the sector was afflicted by lack of access to critical inputs and low productivity. State-owned enterprises (SOEs) remained dominant and the state had no incentive to restructure SOEs; even aside from their value as a means of economic control, public sector jobs were one of the few reliable instruments that the post-2003 government had at its disposal. Far from being impetus to reform, growing oil revenues became an enabler of the status quo.

Spatial divergence became pronounced. Whereas the Kurdish region had been the most victimized before the 1990s, with de facto independence from Baghdad, and more flexibility—and access to cash—basic needs could be met more effectively. On the other hand, the southern provinces saw a double negative impact: the destruction of wars compounded by a failed rebellion. In principle, these trends should have been moderated post-2003 since the Iraqi government could direct resources to areas of greatest deprivation. In practice, the *significant variation in the quality of service delivery suggests the equalizing role of the central government was not effective. While oil continued in the enclave development model, other sources of economic activity such as pilgrimages, trade with Iran, and the Basra port, came into play as drivers of regional growth.*

A cross-cutting element of Iraq's legacy is severe economic and social fragmentation. Civil conflict created substantial internal displacement corresponding to ethnic and sectarian divisions. Baghdad became a city of internal boundaries formed by blast walls, checkpoints, and no-go areas. For the country as a whole, a basic prerequisite of economic development—internal integration—was lost. Increasing sectarian violence in 2013 and militancy and armed insurgency in 2014 have further fragmented the nation, leaving swathes of the country outside government control. Achievement of the twin goals of ending extreme poverty and boosting shared prosperity is bound to be an uphill struggle in this context. Quantitative evidence suggests that while development efforts by the government and other actors can mitigate the negative role of violence, the required effort is substantial. Thus, on a macro-economic level, and absent the establishment of peace and security in the nation, maintaining growth can in itself be a challenge in Iraq, and without these two pre-conditions in place, poverty reduction and broad-based prosperity will be difficult to sustain.

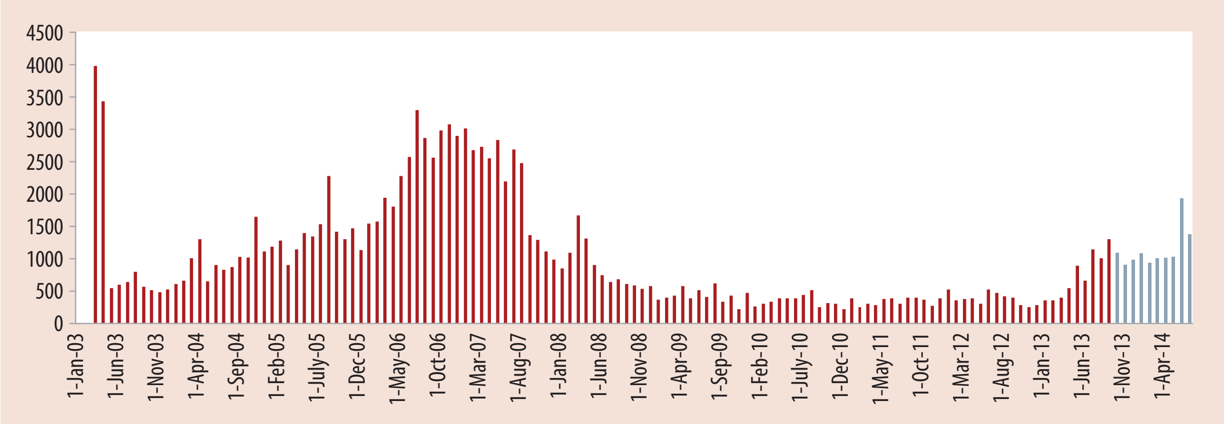
Introduction

The 2011 *World Development Report* (WDR 2011) highlighted the interaction of conflict and fragility with poverty and exclusion. Not only do countries affected by major violence experience slower poverty reduction, the effects are cumulative. "On average, a country experiencing major violence over the entire period (1981–2005) had a poverty rate 21 percentage points higher than a country that saw no violence". While the cost in terms of human life falls disproportionately on men, children and women bear significant indirect costs; not to mention the consequences of large-scale displacement. Beyond these human costs, large-scale and protracted violence stalls social development, is associated with large losses in productivity, as well as the destruction of assets and infrastructure. The WDR notes that conflict is typically recurring, and it can take a generation to recover from the setbacks to poverty reduction associated with conflict. At the same time, jobs and access to services, especially security and justice, are critical to peacebuilding, catching up on deferred progress, and reducing the susceptibility to conflict relapses.

Iraq provides an apt case study for this framework. The country has been a nexus of conflict and fragility since the early 1980s, and has experienced multiple types of conflict: insurgency, international war, sectarian strife, persistent terrorism, regional fragmentation, and spillovers from conflict in other countries. What should have been a promising endowment of natural resources (land, oil, and gas) and human capital did not provide the foundation for poverty reduction and shared prosperity, because the realization of potential was confounded by war and repression. Yet externally imposed regime change in 2003 and a tortuous process of reestablishing elected civilian government had in principle set the stage for inclusive growth in Iraq.

This poverty and inclusion assessment provides the first in-depth analysis of Iraq's economic and social development spanning the period 2007 to 2012, since the end of sectarian war of 2006–07, accompanied by recovery in the oil sector, a massive scaling up of oil revenues, and extensive efforts by the government to meet the high expectations of the people. However, Iraq's relationship with violence is not yet at an end: in 2013, sectarian violence led to an increase in civilian mortality that has not been seen since the 2007 spike in violence (Figure 1). Moreover, a violent insurgency in 2014 has left parts of the country outside of government control, leading to massive internal displacement in parts of the country yet again. This report therefore covers a period of relative stability in Iraq, following the end of the sectarian violence of 2007, and ending in 2012, prior to the militancy and insurgency in the northern governorates of the summer of 2014.

FIGURE 1: Civilian Deaths in Iraq, 2003 to Present



Source: Iraq Body Count, https://www.iraqbodycount.org/database/ (Retrieved: July 29, 2014).
Note: Casualties since October 2013 are estimates that have not yet been verified.

This introductory chapter contains six further sections. Section 2 discusses the decades-long experience of internal strife, war, and sanctions which left indelible marks on Iraq. Section 3 looks at the more immediate context for understanding poverty and inclusion in Iraq in terms of the aftermath of the 2003 invasion and later civil war. Section 4 moves specifically to the economic policy context within which the current socio-economic outcomes are unfolding. Section 5 summarizes in terms of the legacy of all these factors, which provides a framework for thinking about the findings of subsequent chapters. Section 6 presents quantitative estimates of the relationship between conflict, development efforts and growth in Iraq for the post-2003 period, and section 7 concludes with the framework of analysis and outline of the report.

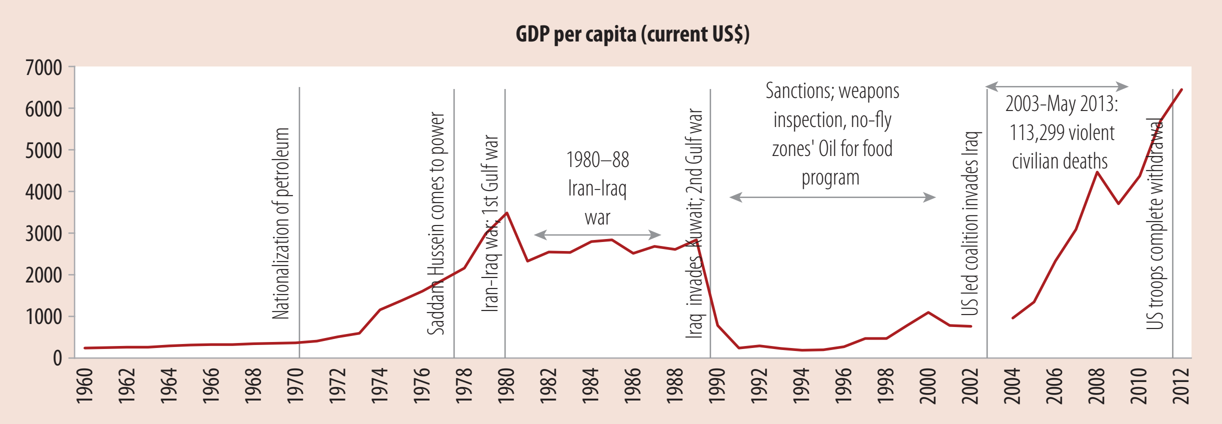
Repression, Invasion, and Sanctions

Although the long sweep of Iraqi history is fairly well known, it is useful to think about the country's trajectory since the 1970s in terms of a series of divergences from regional and global trends, during which time any hope of catch-up was thwarted by further events. The result of these divergences was to negate the beneficial effects of Iraq's promising endowment (agriculture, hydrocarbons, and human), leaving the country with significant challenges of delayed development today.

In the 1970s, Iraq was still in the Arab mainstream. Although in policy terms this was associated with Nasserite statism and authoritarianism, the state was playing a clear developmental role, meaning provision of infrastructure and scaling up of access to social services. At the same time, the surge in oil prices in the 1970s generated substantial revenues for the state and increased per capita income (Figure 2); there were ambitious plans for further increases in production in the oil sector. Unlike the Gulf states, Iraq had reasonable capacity for absorbing oil revenues at home (as opposed to overseas saving), and prospects for oil-financed development were plausible, even allowing for some of the pitfalls of this state-centered mode of development.

Nevertheless, warning signs were already present by the late 1970s. Even by the standards of the region, the rule of Saddam was taking on an increasingly autocratic character, including purges within the Baath party apparatus and brutal suppression of dissent, notably among the Shia and Kurdish populations. The 1979 Islamic Revolution in Iran altered the geopolitics of the region, so whereas the Saddam regime was once seen as part of a modernizing republican/presidential group of states in contrast

FIGURE 2: GDP Per Capita (current US$), 1960–2012, and Timeline



Source: World Development Indicators (2012); estimates for 1990–1996 from CSO, Iraq.

to the Gulf monarchies, both Iraq and Gulf states were now aligned against the Islamic and Shia fundamentalism emanating from Iran.

This culminated in the costly 1980–88 war with Iran—initiated by Saddam—which marked the first of Iraq's divergences from its neighbors. While this period was associated worldwide with the first wave of reducing the role of state and structural reforms, in Iraq the war effort further centralized the allocative role of the state, favoring corruption and connections over private sector development. In practical terms, the war front involved Iraq's key oil producing and exporting facilities in the south, putting an end to oil sector expansion plans and causing considerable destruction. While Iraq was still able to produce and export oil during this period, and benefitted in terms of access to global commerce from suspicion about Iran, the economic base was narrowing as defense and food imports were prioritized. The country's capital market access dwindled to *de facto* or *de jure* official sources, such as export credit guarantees and loans from the GCC countries.

As can be seen in Figure 2, Iraq's development trajectory during this period was stalled growth rather than collapse of the economy. Certainly, GDP per capita stagnated during the 1980s, but this was the typical experience for the region's oil exporters due to low prices and cuts in production in response to declining global demand. However, whereas in other developing countries the loss of momentum in development was the impetus for structural reform, in Iraq, policy reform was off the table, leaving in place the 1970s structures of a large role for the state, ossified administrative procedures, subsidies, and crowding out of the private sector.

The end of the Iran-Iraq war brought little respite. In principle, Iraq had the opportunity to use the reconstruction effort to drive a broader catch-up with the lost years of the 1980s. However, the Saddam regime was instead focused on its own entrenchment, and a sense of impunity around the inner circle was pervasive—with a severe deterrent effect on anyone who might come to the attention of the regime. In economic terms, the war had left large a debt overhang, a considerable amount in the form of war loans from the Gulf countries. The combination of deteriorating relations with the Gulf countries over these debts with Saddam's increasing sense of nationalistic grievance proved to be a lethal combination, leading to the invasion of Kuwait in July 1990 and then a multinational military operation to liberate Kuwait and destroy Saddam's invasion force in January 1991.

This early 1990s period was Iraq's second divergence, and in many respects it was more damaging than the first. Unlike the Iran-Iraq war, where

Iraq had significant tacit international support, the invasion of Kuwait was almost universally seen as a catastrophic miscalculation which had upended the sovereign norms of the Arab world. The invasion resulted in an overwhelming alignment of Arab countries against Iraq (including all the Gulf countries, Jordan, Egypt, and Syria), with one of the few dissonant notes coming from the PLO and Yemen. As is widely known, the US-led force which liberated Kuwait pursued Saddam's military into southern Iraq, compounding the destruction in the southern provinces from the Iran war era. However, the coalition could not agree on an extension of the mission to remove Saddam from power and he was left in place. This lack of finality meant that Iraq would continue under a stringent UN sanctions regime (initiated following the invasion of Kuwait) until 2003.

The immediate aftermath of the 1991 war was stark. Encouraged by the belief that Saddam's demise was imminent, there were significant uprisings in the Shia-dominated south and Kurdish north. The coalition intervention was limited to imposing northern and southern no-fly zones. This has limited effect in the south because the regime could still move in ground forces, but the Kurdish region took advantage of its geography and universal disenchantment with the central government to establish a *de facto* autonomous region based on the three provinces that already had a nominally special status within Iraq dating from the 1970s. Backed by its own Peshmerga militia, the Kurdish Region was able to enforce its separation from the regime in Baghdad. However, one consequence of this was that Iraq now had a fragile internal border in the north, with ethnic groups scattered both sides of it and extensive hydrocarbon resources below it. This set the stage for forced displacement as the regime continued with a policy of "Arabizing" the areas in northern Iraq that it controlled.

As already mentioned, Iraq came under extremely tight UN sanctions following the invasion of Kuwait. Exports and imports were subject to a sanctions framework in which all oil export revenues had to be paid into a designated US bank account, with 5 percent going off the top for Kuwait reparations, and other revenue released only to finance approved essential imports, most notably food and medicine but also basic industrial parts and equipment. Since the government's entire policy framework—for jobs, subsidies, and investment—had been predicated on access to oil revenues, the result was near-total economic collapse by the middle of 1991.[1] The scale of the decline in GDP per capita in 1990–91 compared to that in the early 1980s (which reflects the combined effect of oil price decline and war with Iran) is striking.

A critical aspect of the post-1991 sanctions environment was the protracted process for putting permanent arrangements in place, during which time the most stringent form of the sanctions applied. As a result, the 1990–91 GDP decline was locked in for a decade, in contrast to the normal pattern of a reconstruction-driven recovery. There was a wide divergence between the Saddam regime and the UN Security Council over the structure of sanctions. Negotiations took several years, and given its secure grip on control, the regime had little incentive to take general well-being and the impact of sanctions thereon into account. A workable sanctions system in terms of meeting national humanitarian needs was not in place until 1996 and industrial imports were essentially frozen for the entire decade. Oil output in 1995 was less than in 1960. The oil sector could only accomplish routine maintenance—enough to keep crude export flowing at something like post-1991 levels, but new investment, or even reinvestment to maintain existing capacity, was ruled out. As the country had defaulted on most of its international financial obligations following the invasion of Kuwait, its capital market access was gone and its domestic financial sector was insolvent.

For ordinary Iraqis, the operational impact of the sanctions regime was through government delivery

[1] The consequences in terms of welfare indicators is described in Dreze, Jean and Haris Gazdar, 1991. Hunger and Poverty in Iraq, 1991, World Development Vol. 20, No 7, pp 921–945.

of food rations and medicine under the auspices of the Oil-for-Food program, all under UN oversight.[2] The performance of the Oil-for-Food program itself became a point of controversy in the run-up to the 2003 invasion, but it seems clear that the food component thereof—the Public Distribution System (PDS)—did succeed in delivering a monthly subsistence ration to most Iraqis between 1996 and 2003. Nevertheless, the sanctions did have somewhat paradoxical effects: although targeting the regime, their effect was to increase the power of the regime since it had a role in delivering the goods and awarding the various export and import contracts under the program. Thus, incentives for corruption (especially given the ease of trading spot cargoes of oil) were considerable. The signal to the private sector about what kind of activities would be rewarded was unmistakable.

With a broader development policy agenda off the table, these post-war arrangements remained dominant throughout the 1990s. The Kurdish region began putting the basics of a state—in administrative terms, a replica of the Iraqi state—in place. The Shia majority provinces were already neglected in the pre-1991 era and now subject to the distrust of the Baghdad government. The private sector had never been given a major role in Iraq's economy, and there was no internal or external impetus for modernization of private sector (e.g. WTO membership). Relations with the Gulf had ruptured in 1990, and land trade routes to the Gulf were effectively closed. For practical purposes, the only open land routes were through Syria and Jordan, and these routes are not aligned with Iraq's major commercial centers which were on a north-south axis reflecting the historic influence of the rivers and the Ottoman orientation of the pre-independence administration.

It is worth noting that by the early 2000s, Iraq had already endured 20 years of disruption and isolation. Although the regime had little interest or ability in playing a developmental role, it was well-entrenched and any potential opposition had long since been repressed or exiled. A chronic brain drain which had begun in the late 1970s accelerated with each phase of isolation, while the brain drain compounded that isolation as the country lost its intellectual connections to the outside world. Any commercial opening to the world required the approval and facilitation of the regime apparatus: this was privilege in extreme form, and hardly the stage for inclusive growth.

Reconstruction and Insurgency

Although the 2003 US-led invasion generated numerous impacts, for the purposes of the poverty and inclusion assessment, some pertinent after-effects are as follows. In quick succession during 2003–04, the Iraqi administrative and security state was dismantled and then reassembled. Administrative and Baath party structures were abolished and the former reinstated, but at the cost of an enormous loss of remaining capacity as much of the public sector did not know who they worked for. By 2004, there was a rapidly deteriorating security situation which transformed into the sectarian civil war of 2005–06, resulting in high levels of displacement across the country and within Baghdad. With a limited range of instruments to respond, the government placed emphasis on security spending and public sector jobs and pay increases to secure the loyalty (or at least the non-defection) of the public.

The security situation made it impossible for the government to focus on reconstruction (especially for fragile network infrastructure like electricity and water) or chronic and accumulating sector problems such as agricultural decline. As a result, broad-based economic development and diversification, which needs such basic infrastructure, was effectively on hold until some semblance of stability could be restored. At the same time, a new layer of displacement and internal fragmentation of cities was added to previous episodes. In terms of economic growth, the oil sector started to ramp up production, but in an enclave model of development: the focus of

[2] In the Kurdish region, the food ration delivery was managed directly by UN agencies.

the companies was on oil-field rehabilitation and export infrastructure. Thus there were limited local spillovers and a downgrading of priorities that usually feature in emerging natural resource producers, such as local content development.

With restored oil production coming on stream at a time of high and rising global oil prices, large amounts of revenue and spending began flowing through the government, but in a context of very weak public financial management (PFM) and governance mechanisms. In the face of instability, the government had no appetite to undertake major reform of state-owned enterprises (SOEs), even though many had been defunct since the 1980s. Despite their lack of viability, the government could rely on the two large state-owned banks, Rafidain and Rashid—themselves insolvent—to lend to the SOE sector for payroll financing. This locked in continued state dominance of financial sector, since a financial sector restructuring would have opened up the question of broader SOE reform.[3]

In terms of the social safety net, the PDS continued to function as a universal food ration and the backstop to subsistence consumption for the country. There were also universal price subsidies for energy, although these have been somewhat reduced over time by eliminating on-budget fuel subsidies. Iraq continues to spend a sizable percentage of its social protection budget on pensions. In 2010 more than 4 percent of Gross Domestic Product went to pensions. This is among the highest levels of spending in the region. Emergency policies that were implemented after April 2003 replaced regular pensions with emergency "flat" payments paid directly from the Ministry of Finance budget, with very limited contributions from employers and employees. At the same time, only around 25 percent of the total labor force in Iraq is covered by a mandatory pension system (most of these public sector workers). Only around two percent of the labor force in the private sector is actually covered. Therefore, there are now various calls for reform of the pension system, including full integration of the public and private sector scheme as one fund, and ensuring the system's adequacy, affordability, and fiscal sustainability.

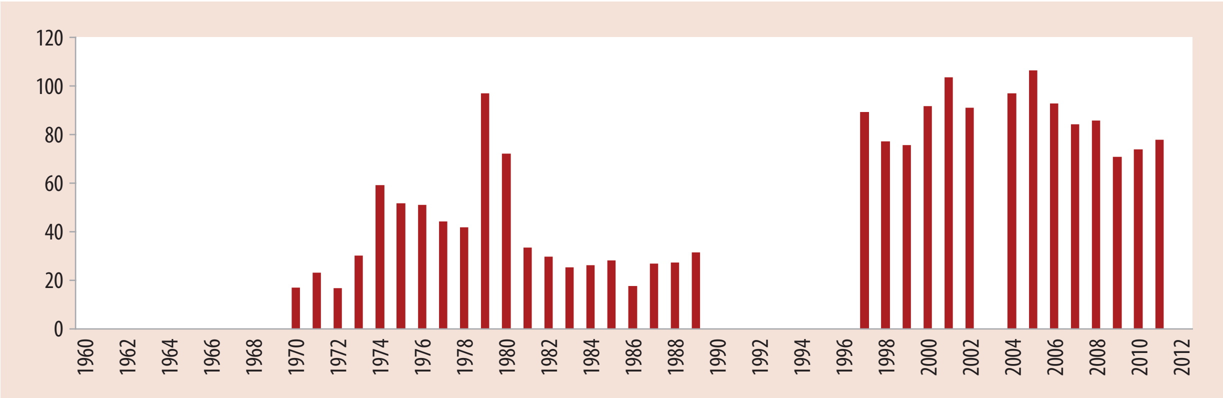
The other, smaller, pillar of social protection is a cash transfer program. Along with *ad hoc* transfers to the vulnerable such as from religious foundations, it can be an important source of income for households in specific categories. The use of broad social categories rather than more effective targeting mechanisms (such as proxy-means testing or geographical targeting) to determine eligibility is likely to result in the majority of the poor falling through the cracks of the non-subsidy safety net.

While oil remained the main driver of economic and fiscal developments, there were other bright spots, notably the reopening of trade with Iran and a revitalization of the pilgrimage cities (Najaf and Karbala), also linked to increased openness with Iran. But there was no transformation in the structure of GDP; it is noticeable that the share of oil rents in GDP remained broadly stable from the mid-1990s to the present, despite the tumultuous events during this period (Figure 3). The crude oil sector accounted for 44 percent of real GDP in 2012.

Overall, the reconstruction period marked the beginning of the end of Iraq's divergence from the region. However, the reintegration was very incomplete. Civil war acted as a further deterrent for skilled Iraqis to remain in Iraq, or for the externally displaced population to return. Foreign investors were likewise deterred. Relations with the GCC countries remained frozen, and unresolved legacy debts with the GCC countries outside the Paris Club framework acted as a legal impediment to commercial relationships.

[3] The public sector's total domestic obligations have increased significantly since 2009. Total obligations increased from ID 5.2 trillion at end-2009 to ID 16.2 trillion at end-2012 (6.5 percent of GDP). The obligations are composed of (1) T-bills held by the banking system and bank loans totaling ID 7.5 trillion; and (2) government guaranteed loans by state-owned banks to state-owned enterprises totaling ID 8.6 trillion.

FIGURE 3: Oil Rents (% of GDP), 1960–2012



Source: World Development Indicators (2012).

Very little structural policy reform took place during the reconstruction period, and private sector development is probably the weakest reform area of all. Iraq ranks 169 for starting a business and 189 for resolving insolvency—the worst score in the world—because it is not possible to legally close a business. The informal sector in Iraq is very large vis-à-vis the formal sector and formal sector firms are squeezed between SOEs with open-ended funding and informal firms that don't have to comply with the same rules as them.

Current Policy Framework

The legacy factors and economic circumstances discussed above are mediated partly through the prevailing economic policy framework. This section outlines this policy framework and describes how some key economic outcomes are affected by it. Perhaps the dominant influence on households is that in the post-2003 era, public sector jobs and numbers became part of the oil redistributive mechanism. This is the pattern throughout the MENA region, but it had been somewhat constrained from operating in Iraq as oil revenues were preempted by war and sanctions, so oil revenue management had not been a significant area of discretion for the government since the early 1980s. However, once revenues started to increase and public sector positions were one of the few things the government could reliably deliver, oil revenue become an enabler of rapid growth in public sector employment. The size of the public sector in Iraq-measured by public spending-to-GDP ratio is one of the highest in the region (61.1 percent of GDP), and the approximately 4 million public sector employees account for nearly half of total employment. Government and state-owned enterprises employ approximately half of the labor force. The wage bill in the public sector and military jobs consume a large part of the recurrent budget.

Yet growth in public sector employment has not animated the labor market overall: participation rates remain exceedingly low, especially for women. Multiple factors explain low participation including lack of security, "wait unemployment" pending a public sector job, and substantial numbers of discouraged workers as the labor market does not generate appealing jobs. The gains associated with public sector employment are substantial: one study (ERF) found based on 2007 data that the most important determinant of receiving formal benefits is the sector of employment: public sector workers are 83 percent more likely than private sector workers to have formal benefits.

International trade would normally be expected to be a driver of integration. The potential for trade to grow would similarly be expected to be high, as the constraints of sanctions were relaxed. But in addition to the challenges of insecurity, trade was also subject to the vagaries of geopolitics. The country had only one consistent trade partner in the entire post-1991 era (Jordan), while its relations with other neighbors were in constant flux as they calculated how to position themselves to their own advantage and the disadvantage of others. For example, Syria and Iran had complex stances during the 2006–07 civil war, which included enabling the transit of Sunni militants, while over time Turkey has varied its emphasis on relations with Baghdad and Erbil, depending in part on its own energy strategy.

Iraq has trade barriers, mainly regulatory and bureaucratic practices, which restrict the level of trade and investment. These include increasingly burdensome import procedures, corruption at the border, stringent requirements on certificates of origin, pre-shipment inspection certification requirements on agricultural products; significant behind-the-border barriers and inadequate mechanisms in place to perform these processes or revise them to more progressive ones. Many of these issues can be traced to Iraq having been largely absent from the international trading stage for more than three decades, other than with regional trading partners, and having little experience with free trade as a result. Instead, trade relations are seen as an extension of political relations.

Iraq has an unusual macroeconomic stability context, even allowing for the effects of oil and conflict. Because of the structural weaknesses of the financial sector, the economy is cash-based and somewhat dollarized, given the Iraqi dinar peg to the US dollar (ID1170 per dollar). In turn, the peg is a product of an exchange-rate based stabilization during 2006–2008 which was designed to bring down high inflation. As with many exchange rate based stabilizations, this appears to have contributed to persistent overvaluation of the currency, compounding the standard effects of Dutch Disease in squeezing the traded goods sector. While there are high headline GDP growth rates, these are driven by expansion in crude oil production. At the same time, there are strong indications of capital flight, which serves to constrain domestic non-oil investment. When combined with fragility and insecurity, this policy mix favors short-term and easily reversed investments over the sustained commitments that Iraq needs to boost its growth potential.

The content for intergovernmental fiscal relations is also important. Iraq is designated a federal state in its constitution. The common subnational layer is composed of governorates, of which there are 18; 15 are not grouped into a region. The constitution permits the formation of semi-autonomous regions from one or more governorates, but to date only the semi-autonomous Region of Kurdistan, with 3 governorates, operates in this fashion. The boundaries of KRG reflect a 1970s arrangement by the Saddam regime to moderate separatism, but meaningful autonomy dates from 1991. With the exception of this region, subnational powers are limited.

It is important to note that a revised provincial powers law passed in 2013 which substantially increases the power of the elected provincial governments, especially over public service delivery. But this law has not yet been implemented. This illustrates a more general issue that the assignment of powers and responsibilities between the layers of government is incomplete and a large grey area is left to be determined by power politics.

Exclusive federal powers include (a) "drawing foreign sovereign economic and trade policies ... setting up general budget of the nation and drawing up currency policies"; (b) drawing up financial and customs policies; and (c) planning policies connected to water resources from outside Iraq. There are also a set of powers that are shared by federal authorities and regional authorities which may require some coordination between the two levels of government—for example general planning and development policies, administration and organization of customs and organization and distribution of the main electrical power resources.

Virtually all expenditure and revenue assignments are central, with policies established in Baghdad and implementation through de-concentrated agencies of central ministries in the governorates and municipalities. The share of total public spending executed through federal government including de-concentrated structures is estimated to exceed 90 percent. The two exceptions are (1) a small number of capital projects assigned directly to governorate administrations for implementation and (2) projects that are included in the "Regional Development Program" which is a special item in the budget (around ID4 billion) allocated to the governorates using a formula which is intended to capture needs.

Global experience with service delivery shows that functioning of administrative systems can have a strong influence on performance. In Iraq, public financial management (PFM) is a known area of weakness. In practical terms, this can mean the coexistence of aggregate revenue abundance and line ministries, especially in the governorates, that are often short of cash. The Ministry of Finance (MOF) has treasury operations in each governorate. Line ministries have their own offices at each layer of government including municipality and they execute their local activities through these offices rather than through the local government. The revised provincial powers law is supposed to bring these operations under provincial control.

Provincial councils have little power as most services are delivered by de-concentrated offices of central ministries. They have no hiring authority. However the provincial councils do play a role (jointly with the Ministry of Planning) in formulating and executing the provincial capital projects included in the National Development Plan. In KRG, provinces have more autonomy over services, but employees are appointed by the regional government and paid out of the 17 percent revenue allocation from the center. Districts and municipalities engage in purely local services, such as street paving and cleaning, and feeder roads.

Legacy

The purpose of the above overview has been to set the context and expectations for the poverty assessment. Some key emerging messages are as follows. First, 1991–92 forms a major rupture in Iraq's development trajectory. While the Iran-Iraq war was costly and destructive, the state had managed to maintain its core functions, and Iraq was not isolated from the world during the 1980s. However, the invasion of Kuwait triggered comprehensive sanctions months before Operation Desert Storm, and as noted above, the sanctions era didn't end until 2003. With the government consolidating around the goal of regime survival and the private sector unable to function, this was the beginning of large-scale detachment from government and the formal sector for many Iraqis—laying the roots of profound marginalization.

Second, the space for market allocations in Iraq was constricted since so much allocation was taking place through administrative fiat. Throughout the sanctions era, state enterprises and certain cadres (military, Ba'ath) were given favored access to imports. This was privilege and connectedness in extreme and debilitating form. Since the formal sector had to be run through the government, many market activities shifted to the informal sector, with consequent effects on productivity, investment horizon, and job quality. A closely related issue is the impact of governance shortfalls on diversification: if effort and resources are being pulled into distortions caused by deficient procurement, arbitrary decision-making, and excessive procedures for commercial transactions, they are being directed away from job creation and productive investment.

Third, spatial divergence became pronounced. Whereas the Kurdish region had been the most victimized before the 1990s, with de facto independence from Baghdad, food and nutrition distribution was directly implemented by UN agencies. These had more flexibility—and access to cash—than the Baghdad government for the rest of Iraq, meaning that basic needs could be met more effectively. On the other hand, the southern provinces saw a double negative impact: the destruction of wars now compounded by a failed rebellion. In principle, these trends should have moderated post-2003 since Iraqi government could direct resources to areas of greatest deprivation. The administrative system for governorates not in a region is de-concentrated and therefore might be insulated from capacity differentials across regions. In practice, there seems to be a significant variation in the quality of delivery of common services across the country: the equalizing role of the central government was not effective. There is considerable World Bank knowledge on approaches to establishing (or re-establishing) social cohesion and basic services in conflict-affected and fragile environments. However it is worth noting that three well known cases—Indonesia Kecamatan Development Program (KDP) and local government support in Bangladesh and Sri Lanka—arguably represented cases of strong central governments seeking a direct channel to local communities. Iraq's central government did not have this type of capacity, and thus gaps in local services across the country were highly persistent.

With the uneven nature of security restoration across the country, the ingredients for a new set of divergences between the provinces were now in place. Since the southern provinces were finally out of the grip of a hostile government in Baghdad, and home to many of the country's oil fields, the pace of economic development could pick up. While oil continued in the enclave development model, other sources of economic activity such as pilgrimages, trade with Iran, and the Basra port, came into play as drivers of regional growth. On the other hand, the provinces north and west of Baghdad were in effect contested regions: between sects, ethnicities, tribes, and insurgents, all interacting in different ways with the government. In particular, the government faced a complex calculation vis-à-vis the provinces: those with clear majorities of one sect could be taken for granted—perhaps to their detriment—while those with more finely balanced populations could also attract more competition for influence but also more violence and insecurity.

Fourth, there was a catastrophic decline of agriculture, posing challenges for food supply and employment of the sector's workforce. Cereals production in 2000 was around one quarter of its 1990 level. Some sector problems predate the conflict era (irrigation water supply, salinity, and desertification) but throughout the 1990s the sector was afflicted by lack of access to critical inputs. Severe droughts in the late 1990s made things worse. Again, the Kurdish region fared somewhat better due to availability of rain-fed land and the ability to source inputs through grey markets outside the sanctions regime. Thus with more effective food distribution and more diversified supply, nutritional outcomes in northern Iraq began to diverge from the rest of country in the 1990s.

Fifth—and related to the second point above—state-owned enterprises (SOEs) remained dominant. Agriculture is a good example: the agricultural inputs industries were concentrated around Baghdad both to provide sources of patronage and ensure regime control of the sector nationwide. This would prove to be a major vulnerability from 2003 onwards, as insecurity disrupted the sector's supply chain across the country given the need to get critical inputs from areas around Baghdad. More generally, the state had no incentive to restructure SOEs; even aside from their value as a means of economic control, public sector jobs were one of the few reliable instruments that the post-2003 government had at its disposal. Far from being impetus to reform, growing oil revenues became an enabler of the status quo. State dominance of financial sector remained, the insolvency of the system became a reason to do nothing, and banks now had the means to expand as their government business was growing.

Sixth, a cross-cutting element of Iraq's legacy is severe economic and social fragmentation. Civil conflict created substantial internal displacement corresponding to ethnic and sectarian divisions. Baghdad became a city of internal boundaries formed by blast walls, check-points, and no-go areas. For the country as a whole, a basic prerequisite of economic development—internal integration—was lost.

Previous World Bank analytical work on Iraq provides some guidance as to the effects that could be expected from Iraq's recent growth pattern. The 2012 Country Economic Memorandum used a modeling framework drawing from the Oxcarre methodology for describing the sectoral effects of various options for oil revenue management in Iraq. One of the stylized options considered was allocating all revenues to public sector pay and numbers, which is helpful in illustrating the impact of the actual dominance of this type of spending in the budget. The model shows that such spending essentially eliminates the economy's traded good sector. Wages rise sharply, which mitigates any beneficial impact of government spending on the real economy in terms of provision of goods and services. Given spending patterns of relatively well-off public employees, consumption needs are met by imports (which are high cost due to logistical deficiencies), and because there is no public accumulation of capital or foreign assets, the economy is completely oil-dependent. In practice, Iraq does allocate a significant portion of oil revenues to investment, but long-standing deficiencies in public investment management limit the productive effects of this spending.

In summary, the overarching context for the poverty assessment is Iraq's status as a resource-rich fragile and conflict state (FCS). Achievement of the twin goals of ending extreme poverty and boosting shared prosperity is bound to be an uphill struggle in that context. As the Global Monitoring Reports have shown, weakness of state capacity in FCS plays a disproportionate role in the failure to achieve the MDGs. The dynamics of income growth in resource-rich FCS are often closely linked to fissures in society (e.g. limited formal or resource sector growth which only benefits connected groups). How did these forces play out at the individual and household level in Iraq? Before we turn to evidence from micro-level data, we provide some quantitative macro-level evidence on the relationship between conflict and violence in Iraq in the period following the US-led invasion; development efforts and economic growth.

Violence, Growth and Development

It is very difficult to quantify the entire economic and social impact of violence on growth and development. In this report, we attempt to provide quantitative evidence of the relationship between conflict and development in Iraq, in the immediate period covered by this poverty and inclusion assessment, and in some cases, the effect of longer term violence and deliberate neglect. While the rest of the report primarily draws on evidence from micro data (household surveys), we begin by drawing on a district-level dataset to establish and quantify the negative relationship between conflict and economic growth on the one hand, and the positive relationship between development efforts and growth on the other. In doing so, we show that while development efforts by the government and other actors can mitigate the negative role of violence, the required effort is substantial. Thus, on a macro-economic level, and absent the establishment of peace and security in the nation, maintaining growth can in itself be a challenge in Iraq, and without these two pre-conditions in place, poverty reduction and broad-based prosperity will be difficult to sustain.

The relationship between growth, development and conflict can run both ways. Miguel et al. (2004) use cross-country data to investigate the effect of economic development on conflict, and find that a negative shock to economic growth is associated with a significantly higher likelihood of conflict emerging in the following year. In the Iraqi context, Berman at al. (2011) combine detailed data on insurgent violence with information on reconstruction projects aimed at restoring public services in Iraq. They find that improvements in service provision tend to reduce insurgent violence, most noticeably for smaller projects, and in particular after the "surge" began in 2007.[4]

[4] Ahrens (2013) provides further empirical support for the negative correlation between development and violent conflict using cross-country data for Africa. Shapiro and Weidmann (2011) further investigate whether improved communication means can influence the degree of violence in the context of Iraq. They argue that if there is in-

On the other hand, conflict can also negatively affect growth and development. Abadie and Gardeazabal (2003) try to estimate the economic cost of violent conflict, focusing on the Basque country in Spain. The economic cost of conflict is found to be quite substantial; after violent conflict emerged in the late 1960s, per capita GDP in the Basque country was found to have declined by about 10 percent relative to a control region that has not been exposed to violent conflict. Murdoch and Sandler (2002) use cross-country data in their effort to estimate the effect of violent conflict on economic growth.[5] They too find that violent conflict is detrimental to economic growth, but that the damage is most pronounced in the short-run.[6]

In what follows, we try to further understand and quantify the relationship between the level of violence on the one hand and development efforts on the other on economic growth in Iraq. We do this by estimating a set of growth regression models using district level panel data with annual observations between the years 2003 (which marks the beginning of the US-led invasion of Iraq) and 2010.

Since disaggregated income or GDP data at high frequency is not available, we rely on night-time-lights (NTL) data as a proxy for local economic output; and information on the number of US financed reconstruction projects in Iraq as a proxy for development efforts.[7] Thus, the independent variables considered in the growth regressions are: lagged NTL (to account for convergence effects across different parts of the country with different levels of initial growth); conflict violence (as measured by the number of civilian deaths according to the Iraq Body Count); reconstruction projects; ethnic fractionalization and the share of agricultural land. Since the latter two variables do not vary over time, we interact these with the violent conflict and reconstruction project variables. These interaction terms, if significant, will tell us how the effect of conflict and reconstruction efforts on growth might vary depending on the degree of ethnic diversity and/or the degree of urbanization. Finally, we also include GSM cellphone coverage to measure the role of enhanced communication.

We use night time lights high gain data from DMSP-OLS, which are publicly available from NOAA.[8] We derive two metrics from the night time lights data at the district and governorate level: the mean of all night time light pixels within an administrative unit and an inequality measure (the Theil Index) within an administrative unit. We expect mean night time lights to be significantly correlated with economic growth. Figure 4 plots this measure at

deed a relationship, the sign of the effect can go both ways, as improvements in communications may ultimately help both sides (the side who wishes to initiate violent conflict and the side who seeks to curb conflict). The question then is which side is best equipped to take advantage of the new technology. Their empirical results suggest that the counterinsurgents gain the most as an increase in cellphone coverage is found to have reduced insurgent violence in Iraq.

5 They consider different lengths of "growth-spells" (5 years compared to 10–25 years) to investigate the importance of the time-horizon, and also explore the significance of spatial spill-overs.

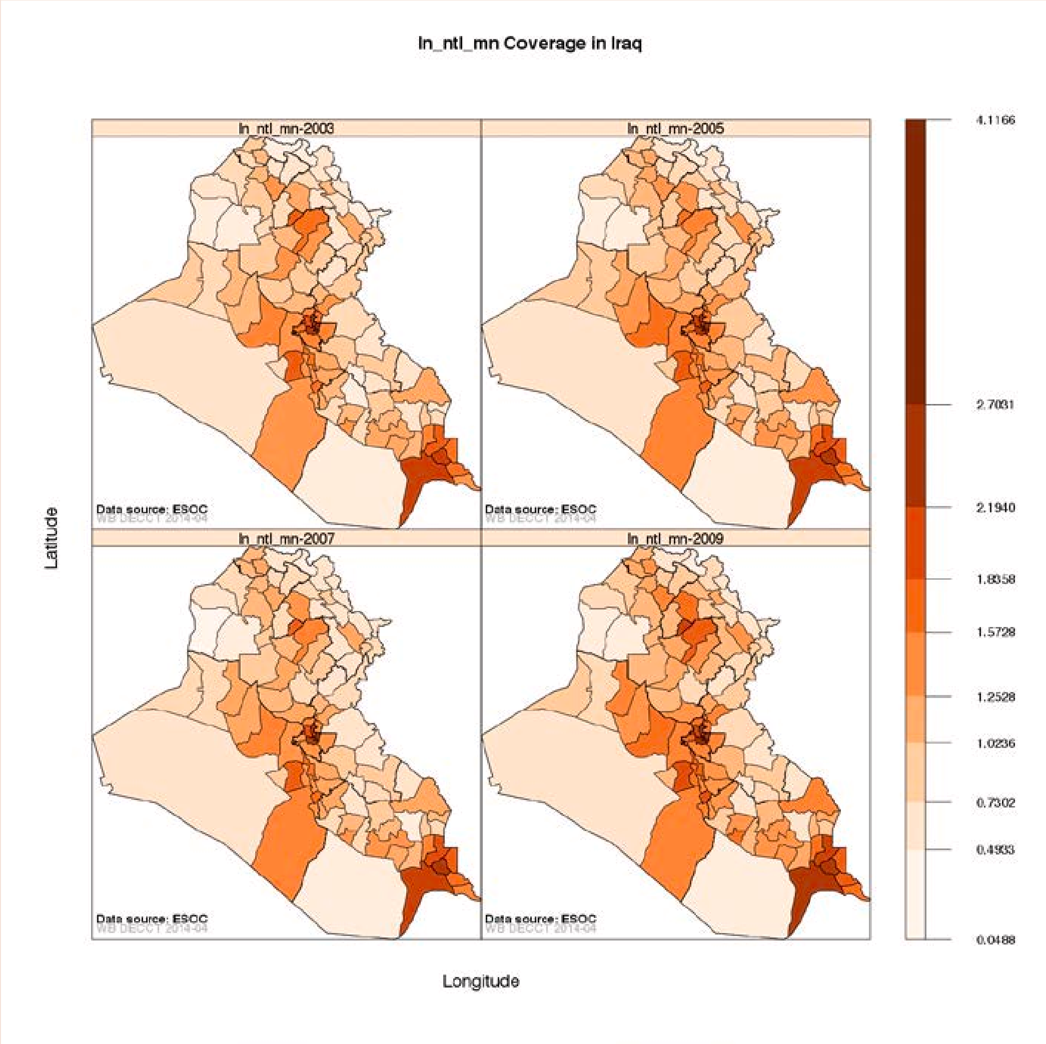
6 They offer two possible explanations for this finding: (a) violent conflicts tend to be relatively short-lived, and (b) in the longer term, the effects of conflict on growth may get diluted with the convergence effect.

7 This has been shown to work reasonably well, see e.g. Henderson et al. (2012). [Henderson, V., Storeygard, A. and D. Weil, Measuring economic growth from outer space, American Economic Review, 102(2), pp994–1028].

8 NOAA DMPS-OLS (The National Oceanic and Atmospheric Administration's Defense Meteorological Satellite Program) has another night time light data product that provides a radiance correction and corrects for the top-coding problem, which is present in the high gain night time lights data. Currently, the low gain data are not available at a consistent annual basis necessary for this time-series analysis.

The data display luminosity in units of Digital Number from 0 to 63, where high values represent high luminosity. Due to the lack of inter-calibration of the satellite, we perform an adjustment to the raw data in order to calibrate the data for time-series analysis according to Elvidge et al. (2013).

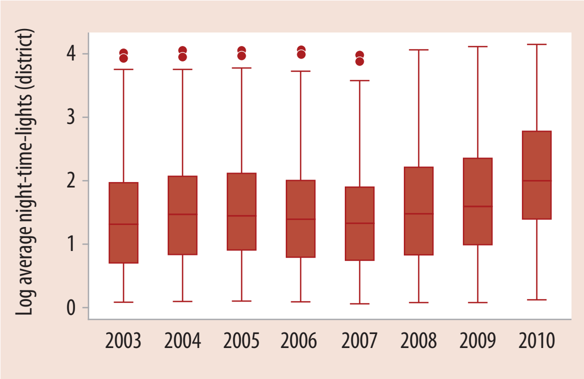
FIGURE 4: Log Mean Night Time Lights (District Level), 2003, 2005, 2007 and 2009



the district level on a map for 2003, 2005, 2007 and 2009 and shows high levels in and around Baghdad as well as near Basra. With regards to the between region differences, the highest levels are in the Central region and the lowest levels are present in the North region. Figure 5 shows the annual changes in night time lights at the district level; there is a small gain from 2003 to 2005, then there is a decline to the minimum level at 2007, and finally there is a steeper increase in the night time lights until the last year in the analysis (2010). Thus, this proxy measure for economic growth appears to be in line with GDP, reflecting a steady increase, especially after 2007, which represented the peak of internal violence in Iraq.

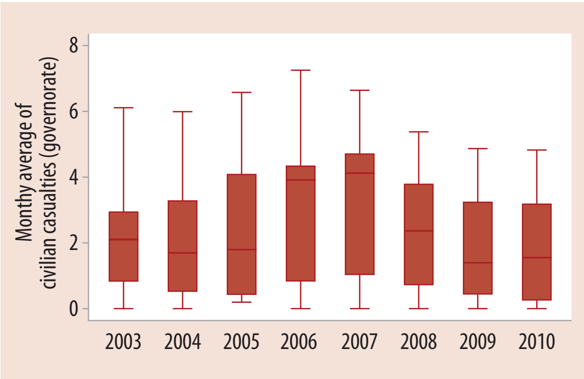
Data on violence comes from Iraq Body Count (https://www.iraqbodycount.org), which is a database of violent civilian deaths in Iraq since 2003, drawn from crosschecked media report and supplemented by review of hospital, morgue, NGO and official figures. We use their conflict incidents database, where each incident has a start date, an end date, and an estimate of minimum and maximum

FIGURE 5: Log Average Night Time Lights, 2003–2010



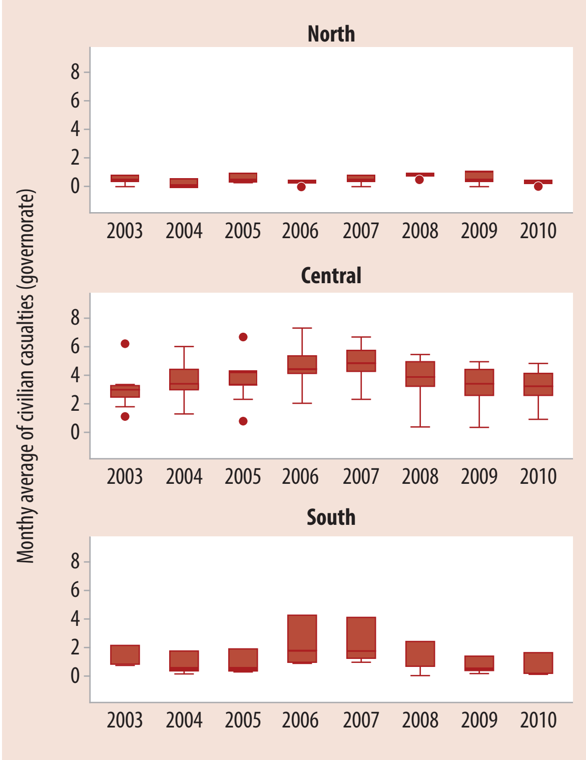
Source: Authors' calculations derived from DMSP-OLS.

FIGURE 6: Average Civilian Casualties (Iraq Body Count): 2003 to 2010



body count. Since both the minimum and maximum estimate of the body count is provided, the midpoint is used in the analysis. Incidents can occur across months; the given start date is considered the month of the incident. Then, it is possible to calculate the average body count per month within a year at the governorate level. It is expected that the body count data have a negative effect on growth. Figure 6 shows the variation by year during period 2003 to 2010, which shows a peak of the body count in 2007. Figure 7 displays the between region differences for the same time period; the Central region experienced the highest body count and the North region shows the lowest counts of the three regions.

FIGURE 7: Average Civilian Casualties (Iraq Body Count) By Region: 2003–2010



Data on reconstruction projects and ethnic fractionalization are drawn from the ESOC database, while population estimates are drawn from the Landscan population database.[9] The available data on the cellphone network is for the Zain network, which is a dominant provider in the Baghdad and South regions; we do not use any GSM cell phone data for the north of Iraq and also exclude the Central districts of Nineveh, Salahaddin, and Kirkuk due to lack of consistent or missing data from Zain.[10] In order to measure agricultural land use in Iraq we

[9] For a detailed discussion of the ESOC dataset kindly refer to the ESOC-I-v3 codebook, available at: http://esoc.princeton.edu/subfiles/codebook-iraq-civil-war-dataset-v3 (accessed 2014-05-06). A more detailed description of Landscan can be found at: http://web.ornl.gov/sci/landscan/landscan_documentation.shtml (accessed 2014-05-12).

[10] Jake Shapiro kindly provided data on cellphone coverage.

use the Global Hybrid dataset (0611–2012 V2) produced by Fritz et al. (2011) which estimates the percentage share of land used for agriculture within a one square kilometer pixel. In this analysis, we also use Normalized Differentiated Vegetation Index (NDVI) data constructed by the U.S. National Aeronautics and Space Administration (NASA) Global Inventory Modeling and Mapping Studies (GIMMS) at a bi-monthly frequency between 2003 and 2009 that measure greenness over 8 square kilometers pixels available for the entire area of Iraq (Zhu et al. 2013).[11]

The correlates of growth we are indeed most interested in are the incidence of violent conflict on the one hand, and reconstruction efforts on the other hand. Do they both have an impact on growth (presumably with opposing signs)? If indeed, to what extent are the reconstruction efforts able to compensate for the damage done by violent conflict? Finally, under what conditions are the effects on growth particularly strong (or diminished)? We consider three regions: the north comprising Kurdistan, the south, comprising Basra, Thi Qar, Muthanna, Missan and Qadisiya and the central region, comprising the rest of the country. We use two different samples for our growth regressions: one with and one without the northern region (Kurdistan), the reason being that we only have GSM cell phone coverage data for the rest of the country. Hence the regressions with GSM coverage as one of the control variables exclude the northern region from the sample, while regressions without GSM coverage use the full cross-section of district observations.

To establish the robustness of our findings, each regression model is estimated using three different types of estimation methods: (i) Pooled OLS with governorate dummies; (ii) District Fixed Effects (the "within estimator"); and (iii) System GMM. The GMM estimator is often considered the preferred method as it allows one to account for potential problems of endogeneity.[12] Below we present the findings based on the System GMM estimator.

We indeed find that in Iraq, violent conflict between 2003 and 2010 had a negative effect on subsequent growth (proxied by growth in night time lights), while development efforts (measured by reconstruction projects) mitigated this effect by promoting growth. This finding is fairly robust across the different methods of estimation and across the different samples used. Estimates based on the System GMM suggest that compared to a district with no civilian casualties, a district with the average number of casualties experienced between 5.7 and 11.4 percent lower growth depending on the specification used (Annex Table 1.1). On the other hand, a doubling of reconstruction projects increased growth between 5.8 and 8.4 percent. This suggests that the size of the development effort required to compensate for the negative growth effect of violence is substantial.

Moreover, the negative effect of violent conflict on growth is strongest in the central region (including Baghdad), in ethnically mixed districts, and in relatively poorer districts (proxied by low intensity of NTL). On the other hand, the positive effect of development efforts on growth was strongest in the central region (including Baghdad) and the southern region; in urban areas (with low shares of agricultural land); in high income districts (proxied by high intensity of NTL) and in ethnically homogenous districts. With the inclusion of GSM coverage information and for the sub-sample excluding the Kurdistan region, districts with improved communication are also associated with higher growth (Annex Table 1.2).

Thus, not only is the development effort required to mitigate the negative impact of violence on

[11] Jim Tucker NASA kindly provided the data.

[12] It also avoids the finite sample bias that affects standard OLS and FE estimators as they try to account for the district fixed effects (the so-called "Nickell bias"). We use Principal Component Analysis to reduce the number of instruments in an effective manner. Too many instruments relative to the dimension of the panel data are found to reduce the effectiveness of the System GMM estimator (see e.g. Roodman, 2009, 2012).

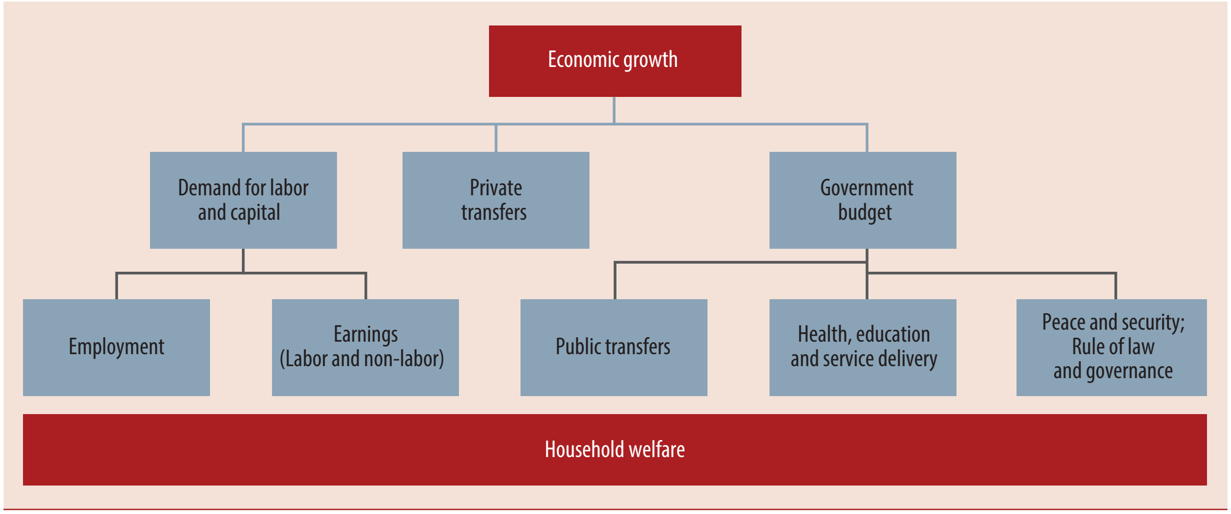
growth substantial, violence disproportionately affects growth in poorer parts of the country, while development efforts are more effective in richer parts of the country. This implies that it will take an even larger development effort to maintain growth when violence affects poorer districts. Keeping this, and the larger political economy, institutional and macro-economic context in mind, we now turn to the levels, trends and correlates of poverty and shared prosperity in Iraq between the years 2007 and 2012.

Framework of Analysis and Report Outline

This report takes a broad and comprehensive approach to the analysis of poverty and welfare in Iraq, and examines how inclusive the development process has been—across space, groups, and gender. Over and above the typical association between poverty and large families, lack of human capital, and adverse labor market outcomes, poverty in Iraq is a reflection and symptom of much larger, structural and often long-term factors. Iraq is an upper-middle income country with one of the world's largest proven oil reserves and has experienced strong growth in the period considered in this report. Yet it has also suffered from a long and difficult legacy of violence and insecurity, which continues in some parts of the nation to this day. In some sense then, any progress in improving the welfare of its citizens is in and of itself a commendable achievement, and has perhaps occurred despite the odds. The objective of this report is to use the rich and detailed survey information available to learn from the experiences of the five year period between 2007 and 2012; and to identify the many opportunities for change in the future.

In general, economic growth in a country can translate into welfare improvements for its citizens through two main channels: by enhancing the demand for labor, capital and other inputs and therefore employment and earnings; and by boosting the resources available to the government to transfer, redistribute and provide services to the population (see Figure 8 for a simple representation). Another core function of government, which is particularly relevant in the case of Iraq, is the establishment and maintenance of peace and security and the rule of law. Each of these elements—employment, income (earned and unearned), the access to and quality of basic services, and the overall environment—contribute directly or indirectly to household welfare, and therefore, to poverty and shared prosperity.

FIGURE 8: Economic Growth and Welfare: Main Channels



This report began with an overview of the institutional, macro-economic and political economy of the nation, which sets to context for the findings and analysis in the rest of the report. The next chapter follows with the core poverty and shared prosperity diagnostic, and an examination of the determinants and correlates of life satisfaction and subjective well-being and how these move with consumption poverty. We then take up an in-depth analysis of each of the important correlates of welfare—human development, place of residence, labor market outcomes, and the role of public transfers. Given the strong relationship between education and poverty in Iraq, Chapter 3 examines the relationship between broader human development—health, education, and basic services—and poverty. The chapter that follows delves deeper into the factors driving spatial disparities in welfare across the five divisions of Iraq; and in particular, the role of past and current violence and insecurity in the country. Chapter 5 identifies the different sources of household incomes that account for poverty reduction for the country as a whole and for different sub-divisions to get a sense of the importance of different channels. The next three chapters focus on the links between economic growth, the labor market, public and private income transfers and household welfare. The last chapter pulls the implications of the analysis together to provide directions for policy.