



# Decentralized Rent Seeking in Iraq's Post-ISIS Economy: A Warning from the Concrete Block Industry

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## **About the author**



Dr. Mark DeWeaver is an emerging-markets fund manager, independent economist, and author. His publications include the book Animal Spirits with Chinese Characteristics: Investment Booms and Busts in the World's Emerging Economic Giant (Palgrave Macmillan, 2012), op-eds for major media outlets including the Wall Street Journal and the Financial Times, and contributions to the Journal of Socio-Economics and Economics Bulletin. He is currently partnering with IRIS as a non-resident fellow. His research focuses on interactions between Iraq's public and private sectors, the impact of changes in oil prices and the security situation on the Iraqi economy, and economic conditions in the Kurdistan Region of Iraq.

## Introduction

Since 2014, the success of Iraq's militias in combatting the Islamic State (ISIS) has greatly strengthened their power relative to the central government. Their successes on the battlefield have made them indispensable in the fight to regain control of ISIS-held areas. They have consequently become an even greater force to be reckoned with as victory is achieved.

After falling into a period of relative inactivity following the withdrawal of US troops in 2011, the militias got a new lease on life under the umbrella of the Popular Mobilization Forces (Hashd al Sha'abi, PMF). This organization was created in June, 2014 following the issuance of a fatwa by Grand Ayatollah Ali Al Sistani calling Iraqis to arms to defend their country from the ISIS threat. In February, 2016, Prime Minister Haider Al Abadi made the PMF an "independent military formation" that is "part of the Iraqi armed forces" with a "general staff, fighting formations, and brigades" (Roggio and Toumaj, 2016).

While the PMF is thus ostensibly a part of the federal government, in practice its approximately 40 different factions have proved difficult to control. In fact, many observers are concerned that they are increasingly taking control of the government, rather than the other way around (Gulmohamad, 2015; Mansour, 2015). Analysts, scholars and journalists alike have written about their concerns that they will eventually evolve into an Iraqi version of the Iranian Revolutionary Guard Corps in Iran or Hezbollah in Lebanon.

Aside from the obvious political consequences, this development has important ramifications for the future of the Iraqi economy. As the state's authority weakens, the country's already serious problem with rent seeking and corruption is likely to get worse, presenting particularly serious obstacles to the development of the non-oil private sector.

This article illustrates the economic implications of this weakening of the Iraqi state through the specific example of the concrete block industry in the town of Tuz Khurmatu. Tuz, as it is commonly referred to by Iraqis, is an area over which the federal government of Iraq and the Kurdistan Regional Government both claim jurisdiction, located halfway between Baghdad and Kirkuk in the province of Salahaddin. It is one of the southernmost places in the country where surface deposits of limestone aggregate can be found. This makes it an optimal location for the production of concrete blocks for markets in major cities further south such as Baghdad, Basra, Karbala, and Najaf.





In recent years, the concrete block business has fallen victim to the depredations of militia groups. In 2014, Tuz was cut off from its main markets by ISIS incursions to the south and west. ISIS was pushed out of the area by the end of 2014 but control of the main road (Highway 2) subsequently fell into the hands of the militias, which began charging trucks ad-hoc tariffs at a number of checkpoints. These extra costs have made it unprofitable for wholesalers to transport concrete blocks and resulted in the virtual suspension of activity at the factories that produce them.

The militias seem to have killed a goose that laid golden eggs. Obviously it is not in their best interests to shut down a sector they are trying to tax. The difficulty from the militias' point of view is a coordination failure. Each group is apparently attempting to generate the most tariff revenue for itself without considering the actions of the others or the effect on producers. The result is a non-cooperative equilibrium in which no one makes any money on concrete blocks at all.

The economic effects of militia checkpoints are not limited to Tuz or to the concrete block business. Trucks throughout the country carrying all types of cargoes are now being forced to pay internal tariffs, to the detriment of producers, traders, and consumers alike. The Independent has reported that in Iraq "nothing moves without paying up and a good security reason can always be given for imposing endless delays while the real purpose is to extract the maximum bribe" (Cockburn, 2016). A truck driver interviewed by Al Araby put the number of stops between Baghdad and the north of Iraq at 20, complaining that a trip to Erbil that used to take five hours now takes seven days (Shammari, 2017). According to an article in Al Aahlem, at one location in the Diyala Governorate trucks are sometimes backed up for "tens of kilometers," while the checkpoint operators collect US\$ 80,000 – 100,000 a day (Ahmed).

Similar situations have also been documented in settings as diverse as fifteenth century Europe (Heilbroner and Milberg, 2012) and modern-day India (Murthy, 2009), Mexico (Ureste, 2015), Zimbabwe (Kachembere, 2016), and Syria (Glass, 2017). The case of Tuz's concrete blocks is thus not only interesting in its own right but also illustrative of an issue that has recurred in multiple times and places throughout history.

More importantly, Tuz is also emblematic of the problem of "decentralized corruption." There we see in microcosm how the deleterious effect of rent seeking on economic growth is exacerbated in the absence of a strong centralized authority. If there were only a single bribe taker, he would find it optimal to

limit what he took to a level that did not destroy the economy. But when multiple people have their hands out for a bribe, their individual attempts to maximize revenue can easily lead to a situation in which there is less for everyone. This may be one reason why corrupt regimes with relatively strong central governments—e.g., Suharto's Indonesia or post-Soviet Armenia—often seem to enjoy higher growth than those with relatively weak ones—e.g. Mobutu's Zaire or Georgia under Shevardnadze (Easterly, 2001, 248; Stefes, 2006).

Decentralized corruption became a particularly serious issue in Iraq after 2003, when rent seeking by multiple power centers replaced the more centralized exactions of Saddam Hussein and his inner circle (More and Parker, 2007). In the post-ISIS era, the strengthening of the militias will have the potential to exacerbate this problem even further. As these groups become more powerful, each will demand a greater share of the country's economic surplus. But in the absence of any effective coordination among them, there will be nothing to prevent them from collectively becoming an unsupportable burden on many of the sectors they are trying to exploit.

In this article, I use the experience of Tuz's concrete block manufacturers to illustrate the threat that the militias' decentralized rent seeking poses to the Iraqi economy. The evidence comes mainly from interviews with factory owners carried out in March, 2017 as part of a research project sponsored by the Institute of Regional and International Studies (IRIS) at the American University of Iraq, Sulaimani (AUIS). Section I begins with some basic information about concrete block manufacturing and marketing in Tuz. Section II describes how the security crisis following the emergence of ISIS in 2014 led to the current checkpoint regime. Section III provides a theoretical explanation for the seeming paradox of an entire industry shut down by excessive tariffs—clearly the worst possible state of affairs for everyone involved. Finally, Section IV considers the implications of this particular case for the future of Iraq's non-oil private sector.

# I. The Concrete Block Industry in Tuz Khurmatu

In addition to aggregate (a mixture of sand and gravel), cement is the only other raw material input required by Tuz's concrete block factories. As limestone is also the main raw material for cement, Iraqi Kurdistan and neighboring parts of Iran have a comparative advantage in the production of both inputs. There, limestone formations that originated on an ancient seabed during the Eocene and Oligocene periods (56 – 23 million BP) have been pushed to the surface as a result of the collision of the Arabian and Iranian plates that formed the region's iconic mountain ranges. (See Kamal, 2011, for an excellent introduction to the geology of Iraq.)





Further south, where uplifting of the Arabian plate did not occur, these strata have remained below the surface and the geology is less suitable for cement and concrete production. This area includes the fertile floodplains of the Tigris and Euphrates Rivers—home to Iraq's largest population centers and, consequently, also to its biggest markets for concrete blocks.

In Tuz, limestone aggregate is available in the Awa Spi (Kurdish for "white water"), a small river with its source in the mountains of the Qaradagh region immediately north of the town. This material is the product of erosion at the higher elevations. It is carried downstream and deposited in the riverbed as the channel widens and the gradient declines. The current also dissolves unwanted particles of silt and clay, washing them out of the deposits. (I am indebted to Kamal Karim, professor of geology at the University of Sulaimani, for this explanation.) Tuz's concrete blocks are composed primarily of aggregate, held together by a small amount of cement. A truckload of 2,000 22-kilogram blocks (a total of 44 tons) consists of about 41 tons of the former and only 3 tons of the latter.

Given the extremely low value/weight ratio for this product, identifying the best site for production is primarily a matter of minimizing transport costs for the aggregate and the finished blocks. This consideration makes Tuz an optimal location in the sense of Weber (1929). The aggregate deposits in the Awa Spi are only a short distance from the main road, where the factories are located, and these in turn are as close to their customers in the South as this proximity to the sources of their main raw material will allow.

It is worth noting that Tuz is not a unique optimal location. As the weight of the finished product is practically the same as the combined weight of the raw materials, in theory it might also be optimal to ship aggregate and cement to a site closer to Baghdad and produce the blocks there. When the input weight/output weight ratio (what Weber called the "materials index") is equal to one, any point between the closest raw materials source and the market could be chosen.

It would be possible for producers to source cement in Kurdistan, but they generally use Iranian imports instead, despite the fact that these are currently banned. While of lower quality, they are approximately 25% cheaper. The cost of transportation is roughly comparable. There are plants in western Iran that are not much further from Tuz than their competitors in Bazian, Kurdistan's main center for cement production.

The first step in the production process is aggregate mining, which involves using earth movers to transport sand and gravel from the river to a "sand factory," where specialized equipment is used to screen out larger stones not suitable for block production. These operations continue throughout the year but are most productive in the dry season, when large sections of the riverbed are entirely exposed. In general sand and block factories are run by different families, though in a few cases both have been built on the same site.

There are approximately 20 sand factories in Tuz, each with a license from the municipality to mine a particular section of the Awa Spi. This is the most capital intensive part of the industry. Investment in a typical sand factory is around US\$ 500,000.

Each block factory consists of a wall approximately 20 meters high behind which the aggregate is piled. At the top of the wall are cement storage towers, which feed cement into a small vehicle consisting of a hopper mounted on wheels and controlled by a driver. There the two inputs are combined, after which the mixture flows into a block mold at the bottom of the machine. The finished blocks are then driven to a lot in front of the facility where they are left to dry.

There are approximately 100 of these factories in Tuz with an average investment of about US\$ 300,000 each. Production capacity varies with the weather and is typically about 25,000 blocks per day in the dry season, when the blocks dry faster, 15,000 blocks per day in the rainy season.

While Tuz is an ethnically mixed town, with Kurdish, Turkmen, and Arab inhabitants, the block and sand businesses are monopolized by the Kurds. Their main customers are individual traders from the South, who drive their trucks to Tuz, load them with blocks, and return to the major cities, where they sell their cargoes in specialized "block bazaars."

The end users are usually individuals or family-owned businesses, who use the product for simple structures such as walls and small houses and shops. Blocks from Tuz are also sometimes used for more advanced applications, though these require special-ordering a premium product with a higher cement/aggregate ratio.





# II. The ISIS Crisis and Its Aftermath

In Tuz, the cement-block industry is relatively recent. The first electric-powered factory was set up in the 1980's, at a time when there were only two sand factories and a handful of small block producers that relied entirely on manual labor. In those days, concrete blocks were not a popular building material and most of the output was for local use.

The sector took off after 2003, when Iraqi economic growth was stimulated by high oil prices and the lifting of international sanctions. New plants began to appear along the main north-south road from Baghdad to Kirkuk (Highway 2), first to the north of town, later to the south on sites more convenient for the truck traffic. Additional sand factories were also set up to the east and west of the road, which is roughly perpendicular to the river at this point.

By 2013, business was booming. Prices were high, profit margins were good, and the factories were operating at full capacity. Sometimes demand was so strong that buyers were willing to load blocks that had only had a day to dry, rather than waiting the usual three to five days.

This period came to an abrupt end in the second half of 2014, when ISIS blocked the main roads heading south and west by taking over Tikrit (to the west) and a number towns to the south. The area was subsequently the scene of fierce clashes between ISIS fighters and a variety of opponents, including the Iranian-backed groups Badr Brigade and Asa'ib Ahl al-Haq, locally based Turkmen militias, and units of the Iraqi army and Kurdish Peshmerga forces. Tuz was only a few kilometers from the front lines.

It took about eight months for ISIS to be expelled and the road to Baghdad reopened. During this period, approximately ten block factories that had been located in ISIS-controlled territory were completely destroyed, with combatants on both sides reportedly helping themselves to any equipment that could be carried off. More than ten sand factories west of town were also forced to close after falling under Turkmen-militia control.

The block business revived in the second half of 2015 following the cessation of major hostilities. At that time trucks heading for the Baghdad block bazaar only had to pass the same five checkpoints that had been in place prior to the crisis: one each entering and exiting the towns of Adhaim and Khalis, one entering Baghdad itself. There was, however, an important new development. These had all formerly been operated by the government. Post-crisis, the first four were taken over by militias.

This takeover implied a major change in the objectives of the checkpoint operators. Under government control, the checkpoints' ostensible purpose was to prevent the free movement of terrorists, arms, and explosives. For the militias, they became profit centers. Trucks were no longer just paying bribes to feather the nests of individual inspectors. Now they were paying internal tariffs used to fund militia operations.

During the next year and a half the number of checkpoints more than doubled as various armed factions began taking advantage of this new funding source. By the end of 2016, trucks were also being stopped in the towns of Sulayman Beg, Amerli, Matful, Injana, Hosseinia, and at a point where the road to the Adhaim Dam intersects Highway 2.

The federal government has also set up a new internal customs facility of its own near the town of Safra. The justification for this was that the Kurdistan Regional Government had been withholding the tariffs it collected at the Kurdish region's borders with Iran and Turkey, thereby making it necessary for Baghdad to collect this money itself from southbound traffic. Unlike those run by the militias, the Safra checkpoint issues an official receipt proving that the required payment has been made. This document must be presented at all Baghdad checkpoints for trucks entering the city.

By the beginning of 2017, concrete block traders thus had a total of twelve separate stops to make on the Tuz-Baghdad road. The total paid in internal tariffs and bribes had reached IQD 100,000 for a fully loaded truck, IQD 25,000 for an empty one.

This extra cost has all but eliminated the traders' profit margins. Trucks generally carry a cargo of 2,000 blocks, which might be sold in the block bazaar for around IQD 800,000. The trader might pay the factory IQD 550,000 and spend about IQD 90,000 for petrol. We may take the IQD 50,000 it would cost to hire someone to make the round trip from Baghdad to Tuz as an imputed wage for the typical driver, who is self-employed. These expenses alone imply a gross profit of only IQD 110,000, IQD 15,000 less than the IQD 125,000 combined round-trip total that must be paid at checkpoints.

As a result, very few buyers are still coming. Block factories that used to operate every day are now down to only a few days of production a month or are entirely idle.





# III. A Militia Tragedy of the Commons

If a central authority were put in charge of militia rent seeking, it would take the effect of the tariff on the aggregate volume of trade into account in deciding how much to tax the trucks. It would maximize revenue by setting the tariff rate at a level at which marginal revenue was equal to marginal cost. At that point, any additional revenue that could be realized by collecting more from each truck would be exactly offset by the resulting decrease in overall truck traffic. The total amount collected would be the same regardless of how it was divided or of the number of checkpoints.

The traders would share this burden with producers and consumers. Ex-factory prices would fall, prices at the block bazaar would rise, and, as a result, fewer blocks would be produced and consumed. In this scenario, everyone but the militias would be worse off but trade would continue, albeit at a slower pace than before.

In reality, the militia groups are neither under the control of Baghdad nor of any other central authority. At the same time, as Cigar points out, "the militias are not marginalized armed gangs...in a very real sense they are the government, through the political parties they control." (Cigar, 2015, location 328). To the extent that this is true, there is no real power center to which they might even in theory be subordinated.

While sometimes united on the battlefield, at other times they are rivals. In areas from which ISIS has been driven out, such as the towns on the Tuz-Baghdad road, they find themselves in direct competition for power and influence, occasionally even fighting minor skirmishes against one another. Sources in Tuz report that a recent shootout in Amerli (just south of Tuz) left two fighters dead.

The lack of effective coordination among these groups means that each will take the total traffic volume as given when deciding how much to charge per truck. As a result, they will collectively take too much. Initially prices and unit sales might adjust in the manner described above for the central authority scenario. But as long as shipments continue, there will be an incentive for more checkpoints to be set up. Eventually, there will be so many that the factories will become unprofitable and will ultimately have to shut down.

This is exactly the situation that Shleifer and Vishny describe in their seminal 1993 article, which shows why corruption is so much more detrimental to economic growth when different "levels of local government all set their own bribes independently in an attempt to maximize their own revenue" (Shleifer and Vishny, 1993, 605). In fact, tolls are one of the examples they cite. In Zaire (now the Democratic Republic of the Congo), for example, they note that "taking goods inland is more expensive because of corruption than bringing them from Europe by ship to a port" (608). Similarly, in the late fifteenth century, Heilbroner and Milberg (2012, 36) mention that "there were so many toll stations along the Seine in France...that it cost half its final selling price to ship grain 200 miles down the river."

When each town on a road independently charges its own toll, Shleifer and Vishny find that "the volume of traffic and aggregate toll collections fall. In fact, they fall to zero when any party can erect its own tollbooth" (608).

Generally speaking, as Wilson puts it in his discussion of the roadblock problem in Zaire, "as the tax rate climbs, individuals put more effort into avoiding bribe opportunities...they travel by roads with fewer roadblocks, carry less money with them, and conceal the wealth of goods they are shipping" (Wilson, 247). Mitigating strategies such as these are not available when the cargo is concrete blocks. There is no way to hide the value of the shipment and the high share of transportation in the cost structure means that detouring around the checkpoints would be prohibitively costly.

The very factors that make Tuz an optimal location for the concrete block industry—proximity to markets and a low value-to-weight product—also make it especially vulnerable to decentralized rent seeking. The business is predicated on minimizing transport costs, but with the introduction of excessive tariffs this advantage ceases to be relevant.

The industry could conceivably relocate to an alternate site further south to avoid some of the checkpoints. In fact, a few new factories have reportedly been set up in the area around Adhaim, using aggregate trucked in from Tuz. But since aggregate trucks are also paying tariffs, these new plants are unlikely to be very profitable (unless, of course, the owners have connections to some of the militias). At this point, there really is no optimal location because production itself is in most cases no longer optimal.

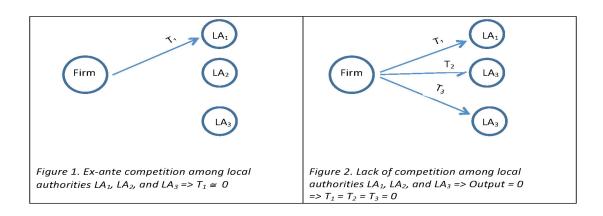
This outcome is a surprising departure from what happens in accounts that attribute industrial location partly to differences in local tax regimes (see for





example, Abbas et al., 2012; Oxfam, 2016). These model local authorities as competing among themselves to draw industry to their areas. The winner of this "race to the bottom" then has to provide such generous incentives that it ends up collecting very little in taxes from the firms it attracts (Figure 1).

In the case of Tuz's concrete block producers, the militias are the de-facto local tax authorities. But they do not have to compete with one another. The traders must pay them all. The result is the same—no taxes are collected—but for a very different reason. Rather than competition among authorities forcing the tax rate to zero, lack of competition among authorities results in a tax rate so high that production is forced to zero and there is nothing left to tax (Figure 2).



## **IV. Condusion**

Authors such as Mohtadi and Roe (2003) and Rock (2007) have posited an inverse U-shaped relationship between corruption and democratization. Following the replacement of an authoritarian regime with a democratically elected government, they argue that corruption may initially get worse as "the collapse of centralized networks of corruption gives way to more corrosive and decentralized corruption free for all's" (Rock, 2007). Later, as democratic institutions mature, corrupt practices should become more risky and therefore less common.

The fate of Tuz's concrete block industry suggests that today's Iraq remains mired in the "corruption free for all" stage. In fact, this example indicates that the situation is actually getting worse. As the militias grow stronger, Iraq's democratic institutions are losing what little power they might ever have had to curb rent seeking. And in areas liberated from ISIS that have fallen outside the state's control, the corruption-democratization relationship is no longer even relevant.

The greatest economic effect is likely to be felt by private sector firms, such as the block producers, whose business exposes them to multiple competing power centers. These firms include not only those buying or selling goods that must be transported across areas controlled by different militias but also those dealing with parts of the government that are not under unified control. The situation for investors in fixed assets, for example, may be not unlike that in African countries where "many quasi-independent government agencies have the power to stop a project and use it to set bribes without collusion with other agencies" (Schleifer and Vishny, 1993, 605). There will be less manufacturing and trade, less investment, and slower growth.

Due to its central role in the Iraqi economy, the effect on the state-owned oil sector may be relatively less severe. As a result, the country may become even more dependent on oil, with the various pathologies associated with the "resource curse" becoming even harder to counteract. The goal of diversifying into other areas in which the country might enjoy comparative advantages—for example tourism, building materials, agriculture, and petrochemical products—may prove to be entirely illusory. (See Izdihar, 2006, for an analysis of the potential for economic diversification.)

Tuz Khurmatu's concrete-block industry is flashing a warning signal for the future of private enterprise in Iraq. The fact that the town's factories have been forced to halt production is sign of how serious the problem of decentralized rent seeking has already become. The situation in Tuz is a preview of what will happen in many more sectors if the country's continuing slide into anarchy cannot somehow be reversed.

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