



AMERICAN UNIVERSITY OF IRAQ
SULAIMANI



Making Ends Meet: Economic Reforms in the Kurdistan Region of Iraq

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What is the IRIS Iraq Report (IIR)?

The IRIS Iraq Report (IIR) provides “on-the-ground” reporting and analysis on Iraq’s most pressing issues. It is aimed at providing decision-makers and experts with solid research and analysis of Iraq policy. The Report is unique because it is produced in Iraq, and is based on in-country fieldwork as well as open source research. It is the brainchild of Ahmed Ali and Christine van den Toorn, both of whom have years of experience researching and writing on Iraq and the Kurdistan Region of Iraq.

The Kurdistan Region of Iraq (KRI) is now in the third year of an unprecedented economic downturn. Following the cutoff of payments from Baghdad to the Kurdistan Regional Government (KRG) in the first half of 2014, the KRG's finances were subsequently dealt a mortal blow by the 2014 crash in world oil prices, which fell by over 50% in the second half of that year. The resulting collapse in KRG revenue led to an abrupt reversal of the rapid growth the region had previously enjoyed and left the economy in a state of crisis from which it has yet to emerge. A detailed account of the KRI recession can be found [here](#) (DeWeaver, 2015).

The situation is even more serious than that faced by many other oil exporters because of the extent to which the KRG is dependent on oil (whether its own or the federal government of Iraq's) and the relative importance of the public sector. Prior to the crisis, the regional government relied on its share of the Iraqi federal budget for around 90% of its revenue, 70% of which was spent on salaries, pensions, and stipends to beneficiaries such as former political prisoners and the families of martyrs (World Bank Group, 2016, 1, 9). 44% of the workforce is employed by the KRG (World Bank Group, 15) and most private sector activity involves the provision of services to the government (e.g. infrastructure construction and electric power generation) or its employees (e.g. residential property development and wholesale and retail distribution).

These structural imbalances are compounded by the fact that the KRG lacks the countercyclical policy tools available to sovereign countries in similar situations. It does not issue its own currency so it cannot cover deficits by printing money (probably a blessing in disguise, considering the recent experience of Venezuela). Unlike Saudi Arabia and the Gulf states, the KRI did not have a sovereign wealth fund at the time the oil price collapsed (legislation authorizing one was only approved in April 2015). The KRG's narrow tax base leaves it with few alternative revenue sources and it has not been able to raise money by issuing bonds, either domestically or internationally.

Given these limitations, efforts to make ends meet must primarily involve cutting costs. Initially this happened in a seemingly haphazard fashion—the government would simply stop paying its creditors when it ran out of money. As the situation has steadily worsened, the KRG has started thinking more strategically. Balancing the budget is increasingly being considered in the context of a long-term effort to reform the KRI's bloated public sector.

There are indeed many areas in which relatively simple administrative fixes could



make a significant difference. In the past, taking money from the government has been a bit like taking candy from a baby. So little attention was paid to how government funds were being spent that Erbil, the capital of the KRI, does not even know exactly how many employees it has. Subsidy programs were put in place without a clear economic rationale, imposing an additional burden on the region's finances for the sake of a suboptimal outcome. Obligations to the regional government, such as electricity tariffs and corporate taxes, have been collected erratically or not at all.

This report looks at how the KRG is using the opportunity presented by the economic crisis to address these longstanding problems. Section I shows how Erbil is improving accountability in the system for paying civil servants in an effort to reduce its payroll expenditure. Section II considers the elimination of subsidies for refined oil products and electricity. Section III describes a new program to improve tax collection. Finally, Section IV concludes with some observations on the obstacles to reform and the difficulty of achieving a permanent improvement in public sector governance.

I. The Biometric Revolution

The KRG's payroll problems are neither new nor unique. As is the case in rentier economies throughout the world, state-sector employment has long been one of the primary channels through which oil export revenues are distributed among the population. As these revenues rise, the number of sinecures invariably increases as well.

Prior to the administrative separation of the Kurdistan Region from the rest of Iraq, following the first Gulf War in 1991, tribal sheiks loyal to the regime were often rewarded by being allowed to put their followers on the public payroll (Noori, 2016). Later, as the region evolved into a quasi-independent entity, civil service posts continued to be used as rewards for loyalty.

This practice intensified after 2003. As the federal government's revenue grew in line with increased oil production and rising prices, the value of the KRG's revenue share rose as well, thereby making more money available to pay salaries. During the eight years prior to 2015, the number of KRG employees rose by 100,000 to 682,000. As might be expected, "clientelism and party affiliation, rather than expertise and experience, were the main criteria for recruitment" (Noori, 2016, 11).

Fraud and abuse have become commonplace. In many cases people get paid without ever showing up for work or receive multiple fraudulent payments from different departments. Supervisors take advantage of poor internal controls by collecting salaries for more subordinates than they actually have, keeping the payments to the extra “ghost” employees for themselves. Many people who never worked for the government are reportedly receiving government pensions.

When times were good, there was plenty for everyone and none of this seemed to matter. Today, however, the KRG can no longer afford to support its enormous unproductive bureaucracy. Since the start of the crisis in mid-2014, the government has consistently been short of funds to pay employees. Most were paid for only eight out of twelve months in 2015. Starting in March 2016, salaries were cut by 15% to 75%, depending on the pay grade, with the average cut being about 60% (World Bank Group, 11).

Employees have responded by not showing up for work, understandably seeing no reason why they should work for free. In Erbil, government workers are coming in only three days a week; in Sulaimani, only once a week. Teachers have been on strike since the start of the current academic year. As of the end of December, public school students had already missed three months of school.

It would clearly be better to reduce the KRG’s payroll burden by eliminating fraud than by imposing draconian pay cuts on the entire workforce. For the KRG, figuring out which salaries are legitimate and which are not has become a top priority.

The first step in addressing this problem is to create a centralized list of KRG employees. Under the current system, different parts of the government keep track of their staff independently, using paper records or disaggregated computer files, making it impossible even to get a precise number for the total headcount. The obvious solution of having supervisors produce employee rosters would be unlikely to succeed, given the risk that many of them would pad the rolls with fictitious names.

The KRG has instead opted to require biometric registration for the entire workforce. This addresses the ghost-employee problem by having civil servants come to a local registration center in person. There, they submit forms filled in with their employment details, present their ID cards, are fingerprinted, and have retinal scans. Their files are sent electronically to a central office in Erbil, where



they are checked and added to a centralized database.

This new program was initiated on October 10, 2016 and now includes 76 centers throughout the KRI. Generally, these are in the offices of KRG-controlled banks, which have the necessary IT connections and tend to be familiar locations to those registering. The initial phase, during which employees with salaries totaling IQD 660 – 670 billion per month are expected to register, is supposed to last three months. After this time, anyone who has not registered will in theory no longer get paid. In practice, it is expected that extensions will be granted given that there are bound to be employees with legitimate reasons for missing the deadline. The next step will be to identify anyone whose name appears on the list more than once. These cases will naturally have to be reviewed to determine whether or not the multiple salaries involved are legitimate.

The registration process is supposed to be completed in the first half of 2017. After that, the KRG is planning to initiate a new system for disbursing salaries. Traditionally supervisors have withdrawn all the cash needed to pay their subordinates from a government bank account and distributed it at the workplace. Or, in the case of large organizations, someone at the top of the hierarchy might provide cash to lower ranking managers who would in turn be responsible for making payments.

Under the new system, the employees will go to the bank and get their salaries themselves. This has the obvious advantage of making it easier for the government to track the cash being paid out and harder for supervisors to line their own pockets with withdrawals for non-existent workers. There will also be no need for any new banking arrangements. Once it is clear exactly who is on the payroll, each salary recipient will be able to withdraw funds from an existing payroll account.

At some point, biometric registration will be expanded to cover the 420,000 people who are now receiving pensions and other forms of government stipends. These payments come to IQD 220 – 230 billion per month.

Over the long term, possibly within the next five years, the KRG intends to issue ID cards to all employees. There is also a plan to begin paying salaries through direct deposit. This is not likely in the foreseeable future, however, given that 90% of households do not currently have bank accounts.

It would be hard to imagine a better way to eliminate ghost employees and fraudulent multiple salaries than biometric registration. How well it will work in practice is unclear. If there is no effective enforcement, those who are currently defrauding the government will continue to do so, regardless of what the new centralized database uncovers. People will simply go on withdrawing more salaries than they have subordinates or receiving payments for extra jobs they do not actually do.

The KRG's pervasive corruption problems have thus led some to conclude that the registration program is unlikely to make any difference. This seems too pessimistic an assessment. Registration clearly will not solve the government's payroll problems once and for all. People with the best political connections may have little to fear. But those who initially relied on more tenuous relationships to get special deals for themselves years ago when money was free for the taking may now be out of luck. Even with only minimal enforcement, they may find that they no longer have the "wasta" to perpetuate their old frauds under the new regime. For purposes of cutting the KRG's salary expenditure it is not really necessary to catch "both tigers and flies," as the Chinese say. Even taking out the lowest tier of flies should be a meaningful improvement.

II. Subsidy Reform by Default

Subsidies for refined products and electricity have long been a significant burden on the KRG budget. In a presentation at the 2016 Middle East Research Institute (MERI) Forum, KRG Minister of Natural Resources (MNR) Ashti Hawrami put the cost of subsidies for publicly distributed products (mainly petrol, diesel, and naphtha) and fuel for electric power generation (diesel and heavy fuel oil) at IQD 1,670 billion and IQD 2,720 billion, respectively, in 2014. The magnitude of this cost, which comes to a total of IQD 366 billion per month, has made subsidy reform second only to reducing the wage bill as a priority for improving the KRG's finances (Hawrami, 2016).

Unlike public-sector salaries, these subsidies do not necessarily involve a net cash outflow because the government can barter physical crude oil for the subsidized items. In the case of refined products, the MNR provides oil to a refinery, which then returns products to the MNR in exchange for a tolling fee, after which the Ministry sells the products to distributors at a subsidized price. In the case of power generation, the diesel or fuel oil received from a refiner is provided to the Ministry of Electricity (MoE). The MoE delivers it to a power plant, buys back the

electricity generated, and transmits and distributes it to the end user—again at a subsidized price (Figure 1).

The issue here is the opportunity cost of using the oil in this way rather than selling it in the export market. Eliminating refined product subsidies reduces the budget deficit primarily by increasing the amount of cash coming in rather than by reducing expenditures.

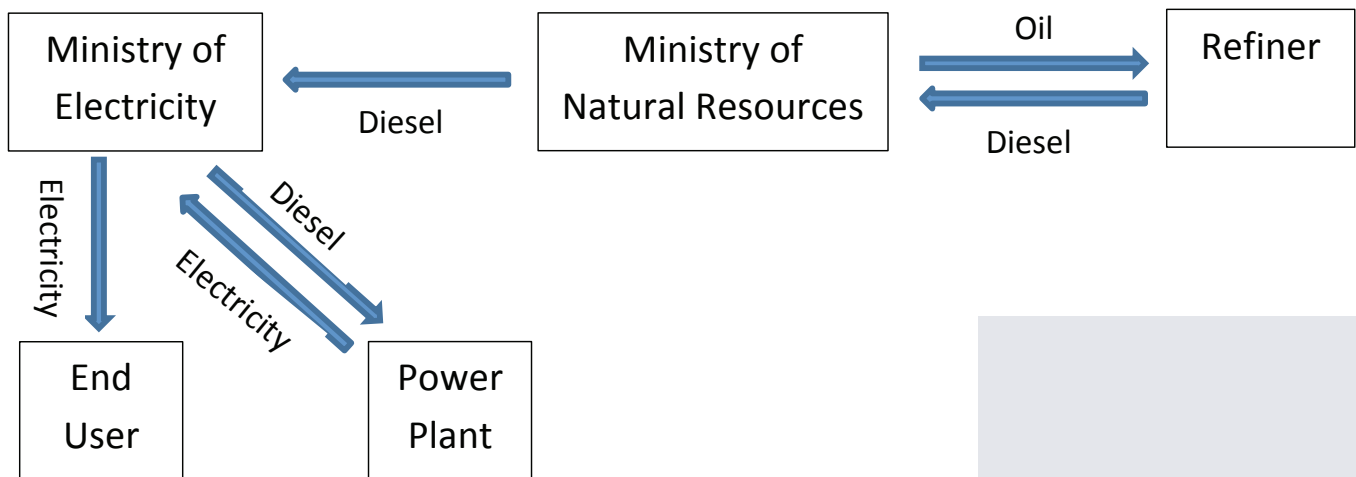


Figure 1: Electricity subsidies using oil-for-fuel and fuel-for-electricity swaps.

The petrol subsidy was the first to be eliminated. This had a long history prior to the crisis, when there were separate filling stations for government-supplied and imported petrol. Drivers received a monthly coupon allowing them to purchase a set amount of the former per month at a heavily discounted price.

In 2014, there was a brief period of de-liberalization during which the KRG banned imports and attempted to supply the entire market. Unfortunately, local refining capacity was insufficient. In order to boost output, the government had the refiners produce fuel with the lowest octane rating allowed by Iraqi petrol standards (#88), which maximizes production volume per barrel of oil. This was quite unpopular with motorists, many of whom found that this low-quality product clogged their fuel pumps or, in the worst cases, even started car fires.

In 2015, this policy was reversed and imports were once again allowed. But the government did not restore the former subsidy system. The MNR, which desperately needed more oil revenue, no longer had barrels to spare for oil-for-petrol swaps with refiners.

This change was welcomed by drivers, who once again could buy higher octane petrol—imported mainly from neighboring countries such as Iran, the UAE, and Turkey. They also found that they were getting a better deal than before thanks to a steady decline in international prices. Where the price of #88 was set at IQD 500 per liter in 2014, today #91 is available in Sulaimani for IQD 550.

This was a rare case of an entirely painless subsidy reform. It was also a big win for the KRG, helping to bring about a major reduction in the cost of subsidies for publicly distributed refined products. Dr. Hawrami's presentation showed this falling by 53% in 2015 to IQD 781 billion and to only IQD 150 billion year-to-date as of the October 25, 2016 date of the MERI Forum.

This year the subsidy on naphtha (also referred to locally as kerosene or white oil) has also been removed. It is common for families to burn this fuel in small stoves to heat their homes during the winter months. In the past, the government supplied households with one barrel each winter for IQD 40,000. A typical family in Sulaimani might need to supplement this with an additional 2-3 barrels, which at the current market price would cost IQD 125,000 each.

Bakers of traditional Kurdish flatbread were also entitled to receive naphtha allocations at subsidized prices. They generally sold their ration tickets in the market and used the proceeds to purchase compressed natural gas (CNG), which they preferred to use for baking and could obtain in sufficient quantities for less than what they got from the ticket sale. Some people even used phony baker's licenses to obtain those allocations.

Sulaimani Governor Sardar Qader Ali told us that this year the MNR will no longer be distributing naphtha to the population. He said he had managed to obtain 30 million liters for the governorate from the federal government in Baghdad, and hoped to obtain another 30 million. But even this would still leave a 43 million liter shortfall: he put the governorate's total subsidized naphtha requirement at 103 million liters.

The termination of the main refined product subsidies leaves government-provided electricity as the main remaining challenge for subsidy reform. This will be a more



difficult problem to solve. Government employees getting by on a fraction of their salaries are not going to be willing to pay higher electricity tariffs and the government is not likely to risk the social unrest that would result from cutting off power to those who do not pay.

Tariff collection is already a significant problem. Many households and businesses do not pay their electric bills. End users often are not metered properly or may bribe the meter reader to reduce their payment. These collection issues, combined with transmission losses due to technical factors, mean that no revenue is received for 30 to 50% of the electricity supplied to the grid (World Bank Group, 59). This compares to the 10 to 20% loss ratios that are typical internationally.

One solution would be to privatize electricity distribution. Private companies would have much stronger incentives to maximize collection and their involvement could also help to disabuse consumers of the idea that electric bills should be deducted from their accumulated salary arrears rather than paid in cash.

Privatization is already underway in the rest of Iraq, starting with one pilot neighborhood in Baghdad, and is currently being planned for the KRI as well.

The KRG is fortunate in having an alternative to the diesel fuel on which it has traditionally relied for electric power, thanks to new natural-gas fired capacity that has come on line in recent years. The problem is that this is not yet sufficient to replace diesel generation entirely and the MNR can no longer afford to provide power plants with enough diesel to make up the shortfall. As a result, the supply of electricity from the grid has fallen sharply. While a few years ago this was approaching 24 hours a day, in Sulaimani as of the end of November it was down to just four.

Households must now turn to local neighborhood diesel generators to make up the difference, at considerably greater expense. But even these are in many cases not able to cover all the hours when the government supply is out. In Sulaimani, neighborhoods are now experiencing as many as seven hours a day without power from any source. Households that rely on electric heaters are of course without heat as well.

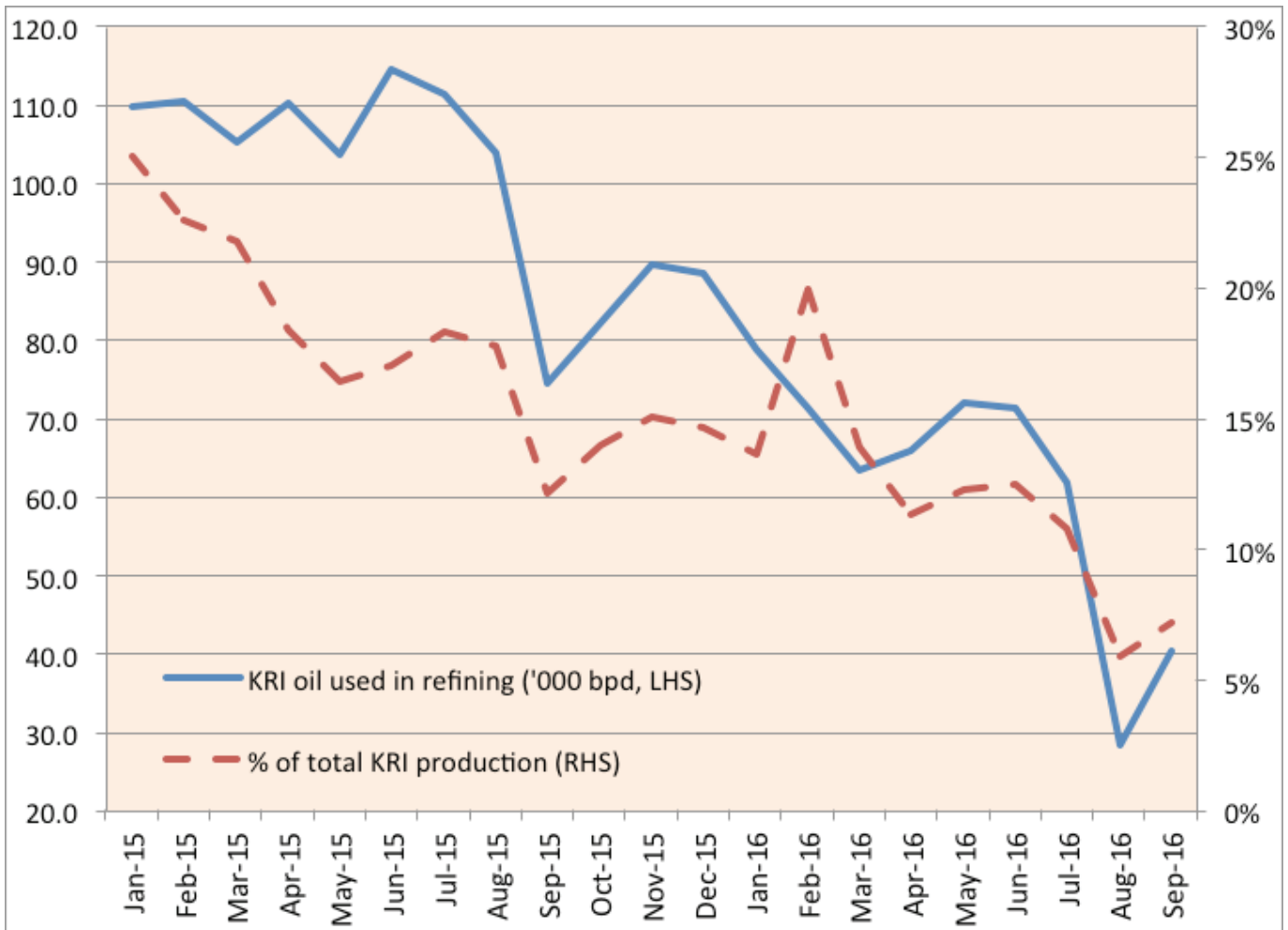


Figure 2. Oil used in refining (Ministry of Natural Resources, 2016)

Provision of electric power is thus effectively being privatized, but in the worst possible way. According to Dr. Hawrami’s MERI presentation, the subsidy costs associated with the MNR’s supply of diesel to power plants has fallen from IQD 2,513 billion in 2015 to IQD 725 billion for 2016 year-to-date. But this supply is to a large extent simply being replaced by the private-sector imports now being burned in thousands of small private generators.

With 5,000 MW of installed capacity and peak demand of 4,500 MW, there is a priori no reason for this suboptimal outcome. Households ought to be better off buying all of their electricity from the grid at market prices. The amount they owed the government would increase but their total electricity expense should be lower because it would not be necessary for them to pay a second bill to relatively inefficient neighborhood generator operators.

Any such attempt at subsidy removal would almost certainly backfire, however. Households would welcome the increased electricity supply but many would view it as compensation for cuts to their government salaries rather than as a service for



which they were supposed to pay. End users would pay an even smaller percentage of their government power bills than before and the cost of the subsidy to the government would go up.

It thus makes sense to postpone the complete removal of the electricity subsidy until all of the KRI's power plants have been converted from liquid fuels to natural gas, which the government is hoping to accomplish over the next two to three years (World Bank Group, 63). This conversion will lower the cost of generating electricity by approximately 82% (World Bank Group, 59), making it possible to carry out this reform without imposing an additional burden on the consumer.

While there are important differences in the ways that the KRG has removed refined product and electricity subsidies, the underlying dynamics are the same in all cases. Lower oil prices mean that the MNR has to export more barrels to earn the same amount of revenue. As a result, it has less oil available to convert into subsidized products and is forced to stop supplying them. The sharp decline in the share of oil deliveries to refiners shown in Figure 2 tells the whole story.

In theory, eliminating subsidies could make households relatively better off. The government would return the resulting revenue gains to the population through increased salary payments. Consumers could then spend this money on whatever basket of goods they chose, rather than being forced to overweight consumption of the limited set of items that were formerly subsidized. They would thereby reach the optimal outcome achievable at current low oil prices.

How things will work out in practice may be quite a different story. Unfortunately, households are not the only claimants on the KRG's revenue. Payments to oil companies must continue or investment in field development will stop and output will decline. The KRG also has little choice but to pay back the US\$ 1.5 billion it has pre-sold oil international oil traders. It is not surprising that there has yet to be any improvement in the salary situation.

At the moment, the situation is clearly getting worse for the 'man on the street'. For the past two years, he has been running down his savings while receiving only a fraction of his normal income. Now he must get through the winter without enough electricity or naphtha to light and heat his home properly.

III. Improving Tax Collection

In addition to boosting revenues by exporting more of the oil it formerly used for subsidy programs, the KRG is also trying to boost its top line by collecting more in corporate profit taxes, particularly from “large” taxpayers. This involves both increasing collections and improving the transparency of the assessment process.

According to the tax law, companies owe the KRG 15% of net profit based on audited financials. In the event that these are not available or, as is commonly the case, are considered to be inaccurate, taxes are instead based on “deemed income schedules” that are supposed to provide reasonable estimates of what profits might have been for different types of business in any particular year (World Bank Group, 21-22).

In practice, this “presumptive tax system” leaves a lot to be desired. One small business owner told us that he is entirely unable to identify the rationale behind the taxes that his company pays. The inspectors who calculate how much he owes never base their assessments on his financials, which they routinely rule out as not credible despite having no justification for this claim. The amount is almost the same year after year, even including 2015, when the economic recession made it quite unlikely that there could have been any profits to be taxed. Strangely, he was told that since he hadn’t declared bankruptcy the business must have been profitable.

The process is evidently more of a negotiation than a calculation. One year, he complained to the tax authorities that his company’s tax should be lowered because a ten-thousand dollar generator had burned out and had to be replaced. He was able to get a break not on the strength of any evidence relating to the age of the asset, its original cost, or the cost of the replacement, but simply by showing the inspector a photograph of the ruined equipment.

Paying taxes is not easy either. Generally, his lawyers have to bring a cash payment to the tax office several times before the right person can finally be found to accept it. Requests to be allowed to pay by wire transfer fall on deaf ears.

Under these circumstances large, well-connected, businesses will naturally have a significant advantage. Many may be able to negotiate their taxes down to almost nothing. And in the absence of any clear procedure for calculating what they owed, it might not even be possible to accuse them of tax evasion.



In order to address some of these problems, the KRG has set up a “large taxpayer office” (LTO) and is moving to the self-assessment method common in other countries. Taxpayers will work out how much they owe and submit this amount with their filing. The tax authorities will reserve the right to audit the returns but will have to have a reason for requiring a higher payment.

The LTO expects to begin collecting taxes from the KRI’s 400 to 500 largest private companies next year. They are supposed to begin submitting returns for the 2016 tax year starting in June 2017.

Interestingly, it seems that in most cases it will not be possible for taxpayers to net out amounts that the KRG owes them from the tax they owe. This is an important issue, for example, for the privately owned power plants and oil refineries, which together, according to one of our sources, have unpaid receivables from the MNR of approximately US\$ 2.5 billion. In these cases, it seems that the Ministry of Finance, which will be collecting the tax, may not recognize the MNR’s obligations. The taxpayer’s situation may be more like that of someone with payables and receivables due to and from unrelated parties than that of someone dealing with two different departments of the same government.

Skeptics doubt that the LTO will be able to collect much from the large taxpayers. As with the biometric program, the key question is enforcement. Unless there is a credible threat that these companies’ returns may be audited, it seems unlikely that they will report much profit to the tax authorities. And it might be entirely legitimate for the power plants and refineries to provision against the amounts the KRG owes them, in which case they could easily recognize large losses. Trying to tax them may be an exercise in getting blood from a stone.

Nevertheless, the move to regularize tax collection is certainly a step in the right direction. How much revenue can be raised in the short term remains to be seen. But in the longer run, it may be possible not only to broaden the KRG’s revenue base, but also to level the playing field for small businesses.

IV. Conclusion

Some view the KRG's economic reform program as a case of ill-timed fiscal austerity, not unlike the contractionary measures the Europeans forced on Greece following its debt crisis. But the KRG really has no alternative. In the absence of any other way to make ends meet, cutting expenses and raising revenues are its only options.

The issue for the policymakers is not whether to close the deficit hole, but rather how to close it. Returning the KRI to its golden era of pre-crisis prosperity will not be a real possibility as long as oil prices stay low. The goal must rather be to balance the budget in a way that optimizes resource use, hopefully moving to a more efficient economic model in the process.

Reducing payroll fraud, eliminating subsidies, and improving tax collection are all good ideas. Subsidy elimination is clearly the easiest of these and is, not surprisingly, the only area where significant progress has been achieved so far. The other two objectives will require overcoming considerably more difficult enforcement challenges and make much greater demands on the KRG's limited administrative capacity.

Insiders report that there has never been as much high-level political support for reforms as there is today. The biggest problem, they say, is the lack of a system to implement them. The bureaucracy is corrupt and poorly managed, lacks competent staff, and is so underfunded as a result of the salary crisis that employees are coming in as infrequently as only once a week. Under these circumstances, there is bound to be a considerable gap between how policies are supposed to work in theory and how they actually turn out in practice.

It is naturally too early to say whether any of the changes now underway will lead to permanent improvements in public sector governance. If oil prices return to their pre-crisis levels, any progress that is made now may well be rolled back as the KRG returns to its traditional role in distributing export revenues. Collecting taxes may no longer be viewed as essential, indiscriminate hiring may once again seem unobjectionable, and powerful people looking for a bigger piece of the pie may find it easy to override whatever new internal controls had previously been put in place.

During the current crisis, it is relatively easy to reduce waste, fraud, and abuse simply because the government has so little money to hand out. But with the



economy in recession, there is also little hope of laying off redundant workers, developing the private sector, or diversifying away from oil. Later, when oil prices finally recover, diversification will no longer be an urgent priority. The system will be as dependent on fossil-fuel exports as ever and generate the same powerful incentives for rent seeking and corruption as it always has.

There is reason to be cautiously optimistic about the KRG's efforts to make ends meet in the short term. Phasing out subsidies has already made a significant contribution to balancing the budget. And while the effectiveness of biometric registration and the large taxpayer office may fall short of expectations, they nonetheless have the potential to brighten the fiscal picture next year.

But the extent to which these initiatives can bring about lasting reform is less clear. The old habits of the rentier economy will be hard to break.

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Citations

- DeWeaver, Mark. "Kurdistan's Great Recession: From Boom to Bust in the Rentier Economy." IRIS Iraq Report. American University of Iraq-Sulaimani. December 10, 2015. Available at: http://avis.edu.krd/iris/sites/default/files/Kurdistan%27s%20Great%20Recession_1.pdf
- Hawrami, Ashti. "The Economic Crisis: Lessons Learnt?" Presentation to the 2016 MERI Forum. Erbil, Iraq; October 25, 2016. Available at: <http://www.meri-k.org/multimedia/session-1-%E2%80%AFthe-economic-crisis-lessons-learnt/>. (The presentation begins at minute 25.)
- Ministry of Natural Resources. "Kurdistan Oil Production by Field and Operation: January, 2015 – September, 2016." November, 2016. Available at: http://mnr.krg.org/images/pdfs/Kurdistan_Oil_Production_Field_Operator_2015_2016.pdf
- Noori, Nyaz Najmalddin. "The Failure of Economic Reform in the Kurdistan Region of Iraq (1921-2015): The Vicious Circle of Uncivic Traditions, Resource Curse, and Centralization." *British Journal of Middle Eastern Studies*, September, 2016, 1-18.
- World Bank Group. "Kurdistan Region of Iraq: Reforming the Economy for Shared Prosperity and Protecting the Vulnerable." May, 2016. Available at: <http://documents.worldbank.org/curated/en/672671468196766598/pdf/106132-v2-main-report-P159972-PUBLIC-KRG-Economic-Reform-Roadmap-post-Decision-Review-05-30-16.pdf>

