



Main Causes of Municipal Electricity Arrears and Expected Fiscal Impact of Transferring the Electricity Service

Executive Summary

Prepared by

Hernando Garzon, Ph.D.

This study was prepared under the EMSRP II Project - Funded by the World Bank

Ramallah, Palestine
December 12, 2008

Municipal Electricity Arrears: Main Causes Transfers of Service: Impact on Municipal Budgets

Executive summary

Background

The Palestinian Authority and the donor community are concerned with the increasing amount of electricity arrears owed by some municipalities in the West Bank. Though local governments (LGs) in the West Bank and Gaza are legally responsible for electricity distribution, in practice not all of them provide this service directly. Most LGs are associated with regional utilities that provide this service for them. To illustrate, none of the 25 municipalities in Gaza directly provide electricity distribution, while 56 municipalities in the West Bank (out of the 107) are associated with regional utilities. This leaves 51¹ municipalities that are still directly in charge of electricity distribution.

Considering this situation, the Municipal Development and Lending Fund (MDLF), as the delegated implementation Agency of the Emergency Municipal Services Rehabilitation Project II (EMSRP II), which is funded by the World Bank and the Government of Netherlands, contracted the preparation of this study to provide needed technical assistance to address this issue. This study constitutes part of the products of the third component of the EMSRP II. It should be noted that one of the objectives of the EMSRP II is to help mitigate further deterioration in the delivery of essential municipal services including, among others, electricity distribution.

Objective

Though some of the utilities also owe a significant amount in arrears, this study only focuses on the 51 municipalities. The objective is to diagnose the issue of arrears in these 51 municipalities, assess the expected municipal fiscal impact of transferring this service to regional companies; and examine alternative municipal revenue sources, as well as potential expenditure reductions to mitigate the expected budgetary impact. This process takes into account that the transfer of the municipal electricity distribution service to regional companies is part of the current policy of the energy sector in Palestine. Hence, it is expected that this study will shed some light on how to proceed in the implementation of sector policy. Furthermore, this report will offer specific recommendations on how to gradually eliminate the current flow of electricity arrears during the transition period.

¹ However, it could be argued that in practice there are 52 municipalities which are directly in charge of this service, if Hebron is included. Though, Hebron's electricity distribution is provided by HEPCO, which is owned by the municipality. The mayor of Hebron is the President of HEPCO, and makes the company's decisions. Hebron has received a loan from electricity revenue, which makes the municipality and HEPCO's financial management inter-dependent. In the questionnaire of Sept. '08 (and in the MOF data) Hebron still reports arrears on electricity as its own, rather than as the company's.

Data Sources

In order to examine these issues, this study has primarily relied on information obtained from three main data sources: (i) The municipal arrears provided by the MOF, (ii) the municipal executed budgets primarily provided by MOLG, and (iii) the answers to the questionnaire, which was sent by the MDLF to the 51 municipalities and directly filled out by the municipalities in the West Bank. MOF data (with few exceptions) may be considered fairly good quality, while the municipal budget data and particularly the questionnaire may be deemed relatively acceptable quality. However, several efforts were made to identify inconsistencies, outliers, and errors in the three data sources. Several of them were found, and the corresponding corrections were made.

Scope of this Study

As part of the diagnosis, the study addresses the questions of the magnitude and trend of the flow of electricity arrears across municipalities, efficiency in electricity revenue collection, the actual diversion of electricity revenue, and the expected net fiscal impact on municipal budgets of the service transfer. Also, the study offers some answers to the several speculations regarding the actual municipal financial situation with respect to the arrears issue.

Briefly, some of the speculations have practically assumed that municipal financial management (or, more accurately, mismanagement) of the electricity service is rather similar across the 51 municipalities. However, as will be documented below, the results show that municipal arrears and the municipal net fiscal impact of transferring this service vary substantially across municipalities. Also, speculations in general seem to assume that most municipalities keep (i.e., divert) much of their electricity revenue to finance other municipal expenditure programs as well as their own operational deficits. In addition, it is generally argued that municipal deficits are primarily due to the critical municipal fiscal situation rather than to the soft budgetary constraint posed by the discretionary access (i.e., diversion) of electricity revenue. Furthermore, it has been speculated that most municipalities benefit financially from the provision of this (revenue generating) service. This study has examined each of these arguments, among others, and offers some answers. The main findings and highlights of this study are briefly summarized below including their main policy implications.

Main Findings

In 2007 there was a small slow down in the sharp pace of the increasing magnitude of yearly electricity arrears. The overall trend still suggests a worsening of this issue. During recent years (2004 to 2006) the total yearly flow of arrears in Palestine has been increasing. It has gone up from NIS 399.9 million in 2004, to NIS 748.4 million in 2006. However, in 2007 (the most recent executed fiscal year); the yearly flow of arrears dropped slightly from NIS 748.8 to NIS 720.9 million. This change in pace has apparently been due to marginal increases in the wholesale payments made by some providers in the West Bank. However, the yearly increasing

trend still continues in Gaza. Gaza arrears for the last period (2006-07) went up from NIS 317.7 million to NIS 329.2 million.

Most of the arrears, however, are concentrated in a rather small number of municipalities. In contrast to speculations, the electricity arrears problem is not by any means broadly spread across the 51 or 52 municipalities. Five municipalities owe more than 70% and eight of them (i.e., 15%) owe about 80% of the arrears. Also, five of the municipalities that provide this service have had no flow of arrears. They paid for their wholesale purchases in 2006 and 2007. These findings suggest that though sector policy ought to cover all the municipalities providing this service, its implementation strategy should clearly start with the five largest debtors that represent 70% of the problem.

That is, specific policy implementation actions (such as the proposed Municipal Fiscal Restructuring Program -- MFRP) should strategically start with Nablus, Tulkarem, Jenin, Qalqilia and Bruqin. In addition, and considering that the HEPCO flow of arrears (NIS 79.7 million in 2007) is the second largest debt in the West Bank (after Nablus with NIS 90.1 million), sector policy should consider ways and means to address the arrears of this company as part of the overall strategy to deal with the net lending issue. For instance, specific enforcement tools should ensure that revenue from electricity is used to reduce outstanding payments for wholesale electricity purchases, rather than being allocated (diverted) to other uses.

As noted above, arrears are far from being evenly spread across all municipalities. In relative terms they may vary from NIS 21 per capita (Surif), to NIS 2,782 per capita (Bruqin). In absolute terms, the range goes from NIS 150,000 (Deir Ballut) to NIS 90 million (Nablus). Enforcement tools and specific actions across municipalities should vary depending on the severity of the problem.

The main cause of the electricity arrears is the fairly low rate of bill collection -- which is worsening over time. In 2007 collection of electricity bills reached its lowest level (56.6%). Based on the data for the 51 municipalities in the West Bank, the results indicate a negative trend in the collection rate, which went from a high of 72.8% in 2004 to a low of 56.6% in 2007. Given the results for 2007, it may be argued that 43.4% (i.e., 100% - 56.6%) of the municipal arrears could, at least in principle, be explained by the *inefficiency* of the municipalities in collecting their monthly bills from subscribers. This inefficiency in collection, however, could be due not only to municipal administrative weakness in revenue collection capacity, but also to the simple '*inability to pay*' of some subscribers, as well as to other factors such as '*free-riders*' in the system (i.e., those with *ability to pay*, but who choose not to), and of course political factors such as lack of political will to enforce payments.

However, it should be noted that full cost recovery (or any amount close to 100% collection efficiency) would not automatically fix the flow of arrears. It must be highlighted that there would still be the issue of revenue diversion; which means that

even assuming full cost recovery (and of course also assuming adequate² pricing of the service)³, this by and of itself would not solve the arrears issue (i.e., the net lending), as long as revenue diversion keeps compromising wholesale payments. Nearly half of the municipal electricity revenue is diverted, which of course aggravates the arrears issue that is already drastically affected by the low collection efficiency rate. In 2007, about 45.46% of the electricity revenue collected by the 51 municipalities (that should have been used to pay the bill of wholesale purchases) was diverted.

The second main cause of municipal arrears is the diversion of electricity revenue to other uses. About 45.4% of electricity revenue, as noted above, is diverted by the municipalities. In 2007, 21 municipalities (out of the 51) diverted 100% of their electricity collections to other uses. In 2006 only 11 municipalities had been identified as diverting 100% of their collections. In contrast, six (6) municipalities in 2006-07 made payments to the Israeli Electricity Company (IEC) that were greater than their actual collections, in order to contribute to the payment of their wholesale purchases. However, due to a lack of *accountability*, compliance is worsening. Evidently, there is a moral hazard associated with the lack of both enforcement and accountability. For instance, in 2007 the Kafr Al Labad municipality purchased electricity for NIS 631,000, collected electricity revenue during the same year for NIS 847,000 and made no payment to the IEC, without any consequences on discretionary or unilateral net lending. Also, Jenin purchased electricity for NIS 28.5 million, collected electricity revenue for NIS 14.7 million, and chose to pay nothing at all to the IEC. The implicit incentive is that MOF ends up paying for these unpaid bills through the deductions that the Israeli Government makes from the VAT that they collect on behalf of the Palestinian Authority. Also, since the unpaid bills are generally much larger than the deductions that MOF can make to the municipalities, mainly from property tax collections, there is still an implicit incentive not to pay ('net lending'). Given this environment, 'net lending' is not surprisingly worsening.

Enforcement of payment for wholesale purchases is critically needed. In terms of policy implications, the above results highlight the importance that payment enforcement should not be limited to retail sales (subscribers), but should also cover payments by wholesale purchasers (providers). This key element is missing in the proposed new PNA Electricity Law, which only addresses enforcement at the retail sales level. Both municipalities and utilities should be held fully accountable, particularly when there is diversion of electricity revenue that could be allocated to pay the wholesale bill. In order to contribute more effectively towards the elimination of the net lending issue, enforcement tools to enhance compliance with wholesale payments need to be included, at least in the bylaws of the Electricity Law and in the corresponding regulations.

This lack of enforcement and accountability perhaps explains why in 2007 HEPCO was able to divert NIS 78.9 million of its electricity revenue (i.e., its entire revenue collection),

²By "adequate" is meant a tariff structure that can recover the cost of providing the service.

³ For some of the issues in some municipalities regarding adequate pricing (tariff structure) of the service, see the study by Mr. Wafa Dajani: "The West Bank Municipal Electricity Operation" August 28, 2008. It is available in MDLF's webpage.

and make no payment towards its wholesale purchase bill of NIS 103.9 million. The entire 2007 wholesale bill of HEPCO went to arrears – that is, to be *automatically* paid by MOF from the netting out of the VAT – without any consequences on the net lending.

Transferring the electricity distribution service to local or regional companies will contribute to greater municipal fiscal discipline. This argument, that better financial management is likely without revenue from electricity, seems to be supported by the results of comparing the municipal financial performance in the 56 municipalities that do not provide this service (in the West Bank), with the performance of the 51 that currently do provide the service. The results show that the average municipal budgetary deficit among the 51 providers is about 47%, while among the 56 non-providers it is only 2%. Also, the empirical findings show that there is a direct relationship between the size of the municipal budget deficit and the size of the municipal arrears. In other words, most of the municipalities appear to be financing their deficits primarily with revenue from electricity (i.e., arrears). This sort of ‘practical’ option of deficit financing obviously does not exist among the 56 non-providers. As such, the financial management of the group of 56 has had to face a rather *hard budgetary constraint*, in contrast to the group of 51 municipalities who, in practice, have operated with a *soft budgetary constraint*. These empirical results seem to illustrate the moral hazard and/or financial/fiscal risks associated with a *soft budgetary constraint*, and hence the importance of eliminating it.

The municipal net fiscal impact of transferring the service to utilities will vary drastically across the 51 municipalities. Not all of them will lose with the transfer; there will be both winners and losers. Based on 2007 yearly executed budgetary data **21 municipalities will come out ahead from the transfer.** This is of course the case for those that are spending more on the provision of the service than they are actually diverting from revenue collection. Among the top winners would be: Nablus (54.6%), Tulkarem (59.4%), and Ya’bad (88.1%). The average net *positive* impact on the municipal operating budget is 35.8%, while the range fluctuates between from 2.2% to 88.1%. Clearly, these would be fairly significant gains in their operating budgets.

However, why have municipalities continued to operate this service if they would be better off without doing so? As it appears, some of them have not fully analyzed their financial situation as a whole, including not only their yearly collections and payments to the IEC, but also the net magnitude of their diverted revenue, as compared to the actual cost of providing this service (i.e., salaries, operational and administrative costs). Some of them may therefore really not understand their financial position with respect to this service. Others, who may be more aware, may have also realized that they would have to substantially increase their revenue collection and/or cut down on staffing, which are two difficult social issues -- with associated political costs. On the other hand, those few who may be actually aware of the *net* fiscal impact, and who may be interested in transferring this service, have not been offered yet the means and ways to proceed with this transfer.

In contrast, 30 municipalities will actually lose from the transfer, because they are currently diverting more revenue than they are spending in delivering this service. The three municipalities that would lose the most, in absolute terms, are Qalqilia, Jenin and Idna. In relative terms their losses would be equivalent to -29.1%, -39.2%, and -62.3% of their operating budgets. The negative fiscal impact for these 30 municipalities ranges from as little as -4% or less (of their operating budget) to as high as -84.4%. The average *negative* impact is -34.2% and 14 municipalities (the most critical cases) would lose more than the average. The implementation of a gradual Municipal Fiscal Restructuring Program (MFRP) should focus especially on this group of municipalities.

Conclusions and Recommendations

A. Policy implementation should strategically differentiate between:

(i) Large and small debtors. As reported in this study the largest debtors include: Nablus (NIS 90.1 M), Tulkarem (NIS 31.9 M), Jenin (NIS 27.5 M), Qalqilia (NIS 19.1 M), Bruqin (NIS 10.1 M), Taffuh (NIS 6.5 M), Beit Ummar (NIS 5.3 M), and Qabatya (NIS 5.1 M). Hebron & Hepco show yearly arrears of NIS 78.9 million. These eight municipalities held 80% of the flow of arrears in 2007; so that it appears that policy implementation should start with the group of eight, since the positive impact on reducing 'net lending' would be the largest.

(ii) Winners and losers. The top winners (i.e., those with the largest net *positive* impact) would include: Ya'bad (88.1%), Jammaein (77.0%), Kefel Hares (68.0%), Qarawat Bani Hassan (66.0%), Tulkarem (59.4%), Zeita (58.9%), and Nablus (54.6%). This result shows that three of the largest debtors (**Nablus, Tulkarem and Beit Ummar**) would actually benefit, financially, from the transfer. Beit Ummar would practically break even, as its net benefit is only 2.2%. This net positive impact suggests that, at least in principle, it should be relatively easier to implement a Municipal Fiscal Restructuring Program (MFRP) for these two largest debtors. Hence, it seems that Nablus and Tulkarem are the two best municipalities in which to start the policy implementation program.

On the other hand, the largest municipalities with the largest net *negative* impact would include Baqa Al Sharqeyya (-88.4%), Kharas (-79.3%), Taffun (-79.1%), Beit Ula (-63.4%) and Idna (-62.3%). Only five out of these eight municipalities would face a *negative* impact. The results show, however, that with the exception of Taffuh (-79.1%), four of the remaining largest debtors would not be among those bearing the largest negative fiscal impact. The negative impact of these four would be as follows: **Jenin** (-39.2%), **Qalqilia** (-29.1%), **Qabatya** (-21.7%), and **Bruqin** (-2.0%). However, Bruqin would practically break even. As such, and other than Hebron, it seems that the most difficult challenge for policy implementation, among the largest debtors, would be Jenin, Qalqilia, and Qabatya.

B. A Municipal Fiscal Restructuring Program (MFRP) is recommended for the most severe cases in order to facilitate the transition period.

Key elements of the MFRP that could significantly affect both, the revenue structure as well as the expenditure structure, include the following:

(ii) **Tap the unexploited municipal property tax.** MOF pays for the arrears, and to facilitate the transition MOF could revamp property tax collections in the group of eight starting with the three that pose the greatest fiscal challenges. The potential for the property tax in the West Bank is large. The average per capita property tax per year is 21 Shekels, and more than half (55%) of the municipalities fall below this average. Yearly property tax collection per capita ranges from 1 to 71 Shekels; this suggests a potential for substantial improvements. According to MOF, the Property Tax Department has adopted a new enforcement system for tax collection, in among other municipalities Ramallah and Al Bireh, which have doubled collections during the last 12 months – ending on 10/31/2008. This result, as reported, has been achieved without increasing tax rates or adjusting the tax base, which it is drastically outdated. This also suggests the untapped potential for additional revenue.

(ii) **Set a ceiling for staffing and salaries according to the size and budgetary capacity of the municipalities.** MOF in coordination with MOLG should agree on these ceilings. Based on calculations for this report, empirical results indicate that the national average for Palestine is about three staff per 1000 inhabitants. The current range fluctuates between one and 11 staff per thousand inhabitants, which suggests that there is potential for downsizing in those cases where there is evidence of overstaffing. Some mayors, among the large debtors, have openly recognized overstaffing. Others claim that the salary levels are above their fiscal capacity. Average yearly salaries range from NIS 15,000 to NIS 300,000, while the average municipal salary is about NIS 130,000.

(iii) **Make the capital grants of MDLF conditional to the adoption and implementation of MFRPs.** It is recommended that MDLF in coordination with MOF and MOLG, provide technical assistance in the design and implementation of their specific MFRPs to the group of eight as part of its institutional capacity building program. As part of this effort, consideration should be given to withholding the capital grants from the MDLF's Transfer Mechanism, subject to, among other things, compliance by the municipalities with the following actions: (i) agreeing to a timetable for the elimination of revenue diversion, (ii) management of electricity collection and wholesale payments through a special account -- earmarked for electricity only, (iii) meeting the agreed targets on revenue increases and expenditure reductions, and (iv) actual implementation of basic measures on revenue administration -- billing, collections and payment enforcement.

C. Furthermore, it is recommended that the PA and the donor community consider, among other options, the following actions:

1. Continue with the installation of pre-paid meters to strengthen revenue collection.
2. Eliminate revenue diversion through direct deposits to special bank account, earmarked for the payment of monthly wholesale purchases only.
3. Reviewing tariff structure to ensure cost recovery and adequate cross-subsidies.
4. Implement a system of direct subsidies to the poor, through pre-paid basic electricity consumption cards.
5. Support PEA's role on price structure and price regulation.
6. Support the role of MOF/MOLG in financing direct subsidies targeted to the poor.
7. Encourage municipal financial performance using MDLF's municipal ranking system and capital grants incentives through the Transfer Mechanism.
8. Strengthen the property tax as a municipal revenue source, as part of the MFRP.
9. Set specific revenue collection targets in the design of each MFRP (e.g., indicators on electricity collection, and MOF targets on property tax collection).
10. Set specific expenditure efficiency targets in the design of each MFRP (e.g., indicators on staffing, salaries and payments on wholesale purchases).
11. Set specific arrears reduction targets in the design of each MFRP.
12. Reach an agreement between MOF-MOLG-MDLF and the 51 municipalities on the specific tools to be used and targets to be met (through the MFRP) to eliminate the yearly flow of arrears. Use proposed MFRP agreement model.
13. Used specific legal tools to enforce payment compliance on subscribers.
14. Include in the bylaws of the Electricity Law specific tools to enforce compliance with wholesale payments on providers.

File: Municipal_Fiscal_Impact_Executive_Summary. HG: 12/12/08.