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Financing Public Pervices on the Local Level: Charging Development Costs, User Charges and Supporting Low Income Groups

Introduction: restructuring the public service sector

This paper will deal with the financial issues of local public (communal) services after transition in post-socialist countries. The transition of the countries in the region from a centrally-planned economy toward a market economy has turned out to be a very complex and long process. Fiscal decentralization is the key to most of the reforms needed in transitional economies. The assignment of expenditure responsibilities among the different levels of government is a very important step in this process. The decentralization of the responsibility and authority to provide and regulate services and to manage and/or promote local development can lead to better services and an improvement in local conditions. The expectation is that placing the authority and responsibility for certain public services in the hands of local elected officials will lead to decisions regarding the quantity, quality and mix of services that most closely match the preferences of local service beneficiaries. The process of decentralization, however, has not offered an easy solution for these countries. One of the general problems that local governments had to face was the issue of “un-funded” mandates. Un-funded mandates means that central governments, in the process of decentralization, “pushed down” several responsibilities without providing proper financial resources to fulfill the requirements of public services. There are several examples when the un-funded mandates caused major trouble for local governments. However, we should understand the other side as well, as the central government also had “un-funded” mandates. Post-transition economic decline forced central governments to narrow the services that they finance or to restructure the public sector. From this point of view, the fair solution would have been to share the political cost of restructuring between the central and local governments, but, in most of the cases, short-term institutional interests blocked that type of solution. The basic question was who will be responsible for the structural changes needed to move toward a more efficient economy and a democratic society. Structural

1 The paper is based on the presentation at the expert workshop on “Public services on Local and Regional Level” organized by Friedrich Ebert Stiftung, Zagrab Regional Office in Budapest on 17th - 18th of October.
2 In this paper I deal with local public communal services and issues of the social and human services that have several common elements but need to be analyzed differently.
adjustment at the local level means that under fiscal pressure local decision makers have to decide how they bridge the gap between the expenditure needs and revenue possibilities of their community. There are several possible ways to increase revenue and decrease cost, like increasing user charges or local taxes, or cutting services (either the level or the scope of the services). However, the most difficult and efficient way to manage fiscal pressure was to initiate changes in the public communal sector including reorganization, contracting out, and privatization.

The keys to the success of the structural adjustments were the institutional settings. Did the newly formed local governments have the legal possibility to make necessary changes and did they have the incentive to carry them out? Most observers and experts are willing to forget about the condition of “incentives”, and focus only on the legal environment and problem of technical capacity, which explains why most of the technical assistance programs in the region stressed these elements. However, we know that without proper incentives local governments\(^3\), no matter how trained they are or how much legal possibility is open to them, will not make any changes.

The institutional settings, that is, the structure of local functions and responsibilities varies from one country to another and certain elements of responsibilities for regulation are shared between the different levels of government, which leads to different institutional structures. There are two extremes: 1. the centralized model, where the service utility company is basically a de-concentrated unit of the central government, and the 2. the decentralized model, where the utility companies are accountable to the local government. The central government includes the sector ministries and the central public agencies under the control of the parliament or government. The existing institutional settings can be placed between these two extremes. The control of different elements of the responsibility can be shared in very different ways.

In this paper, I will focus on the relationship between the financial issues of the local public sector and the institutional settings (e.g. responsibilities, incentives, etc.). In the first part we introduce an explanation for the “public sector decline”. I will attempt to show that without proper decentralization the macroeconomic discipline supported by international agencies could lead to a general decline in public sector services. This decline could take place under “good” macro fiscal indicators that are parallel with quite good macro performance. The second part deals with the problem of user charges (tariffs) in local public services and with related economic, social and political issues. The public communal services (like water, waste disposal, housing, district heating, etc.) should be financed basically from user charges. However, in socialist economies the “price” of public services used to be very low, and had nothing to do with the economic cost of the services. After the transition, the local governments had the task of introducing a new financial regime\(^4\), where the user charges play a

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\(^3\) When we are talking about local governments, we should not forget the complexity of local government systems (the executive, elected council, the decision makers at budgetary institutions and local government owned companies).

\(^4\) The energy sector belonged typically to the central governments, so their responsibility was to set the energy price.
significant role in financing these services. The third part of the paper deals with the problem of low-income consumers. This is a curtailing question in the region, where 30-40 % of households live below the poverty level. The problem is, how can the price be increased if a substantial part of the society cannot pay for its level of consumption.

The decline and the decentralization of the local public service sector

Un-funded mandates
As a consequence of the macroeconomic fiscal pressure on governments right after the political changes of 1989/1990, the central government tried to “push” the deficit down as a part of the reformation of intergovernmental fiscal relations and the decentralization of the state sector. Typically a huge “gap” arose between the expenditure assignment and revenue capacity at the sub-national government level. There is a debate about the nature and size of this gap. For example, the gap had increased even before the transition, as obsolete public service equipment (deteriorated buildings, overused pipes, run down vehicles in public transportation, etc.) used to be part of the service sector in socialist times. There is a discussion among experts about how much of the increased gap was the responsibility of the new regimes. Nevertheless, most of the countries realized that the gap was increasing at a sub-national level, and they had to react to it. The structural adjustment describes the process of local governments trying to manage this gap (or deficit).

The mechanism of “public sector decline”
The first and most direct consequence of the economic problems of transition was “public sector decline” (e.g. no continuous water service, cuts in electricity, no proper waste collection, no road repairs, no maintenance of public schools, etc.) One of the most important statements of this paper is that improper decentralization, or the lack of it entirely, led to a deepening of the public sector decline. What is more important is that the policy to force macroeconomic fiscal discipline on the governments without proper decentralization (which was a consequence of the policy, especially in the first period, of international agencies such as the IMF, etc.) hid the size of the problem, because macroeconomic indicators seemed to prove that the economy was on the right track.

Let me describe the process with the help of a figure. Column TC represents the expenditure needed for a proper service. We can see that even in the beginning, the actual cost of the services was lower than what was needed, that is TC>AC. It illustrates that before the transition there was not enough money for proper operation: it was known as “deferred maintenance”. We knew that in most of the services, user charges cover only a small portion of the actual cost, and less than the total cost UC (user charge), so the UC/AC was less than 30 %, and UC/TC was even smaller. In Hungary, for example, rent covers 30 % of the actual cost related to maintenance and operation, but it covers 20 % of the cost that would be needed for proper maintenance.
The services were subsidized, so the difference between the actual cost and the user-charges was provided to the service provider (the subsidy was equal to \( AC-UC \)). We knew that a certain part of the cost was due to managerial problems. In the public sector there were endless lists to illustrate this phenomenon, like “inside unemployment”, waste with material cost, etc. Most of these losses were connected with the lack of autonomy and incentives. The managers of service institutions needed incentives and autonomy to make proper changes, provided they are accountable to the local community directly or indirectly through the elected local government bodies. The local public sector decline can be explained with the lack of local autonomy and incentives. The central governments, and in the beginning even some of the international agencies, were against decentralization. There were several arguments supporting this policy, among them the most powerful were 1. the lack of capacity to manage local affairs, and 2. the danger of corruption. We know cases where central governments could not demonstrate the superiority of their capacity to manage public issues, or when corruption was more dangerous and harmful than at the local level. But these questions are beyond our topic.

So the typical expectation for the service provider is to increase user charges and decrease cost, so that \( AC'<AC \) while the subsidy will decrease because of the higher user-charges and/or lower cost. To increase the user charges is very problematic, because there is no change in the level of services or they may even deteriorate, as the actual cost is decreasing. If managers did have limited autonomy, they would have to keep the same number of workers with lower salaries (sometimes service providers do not pay salaries for a while or pay less than earlier), and/or neglect maintenance, saving on material cost, etc. The loss because of managerial problems is increasing, again because the service providers do not have the autonomy and incentive to make changes. The service level is decreasing, because less money is spent on maintenance and operation, and even the number of workers is lower. However, the macroeconomic perspective is fine. The sector used less money (\( GR'<GR \)) and the households paid more, and the \( UC'/AC' > UC/AC \). But the level of public services has
declined. To conclude, cutting costs (without expenditure autonomy) will result in further losses because of the inflexibility of management, and as a consequence, the level of services will further deteriorate. The problem is that the policy to increase user charge coverage (UC/AC) may be accompanied by the lower level of services.

User charges: setting the price of public services

Price setting mechanisms
In a market environment, user charges should reflect the total cost of the service, and, at the same time, should signal the demand for the public utility service. Both of these requirements were new for transition countries, where consumer prices were heavily subsidized, and the demand and actual use did not indicate the real need for a particular service. Prices were set centrally, so no regional production cost differences were reflected in the local prices.

After the transition, the price setting mechanism had to be changed in order to give room for local service providers to adjust. Subsidies were cut drastically in most of the countries. In some countries, this was accompanied by the decentralization of price-setting competencies, parallel to the devolution of service ownership and management functions.

Pricing in an economic sense means the setting of the value of a product (service) on the per-unit basis that is used in the settlement between the suppliers and consumers of the product (service). In reality, pricing is used in a way that is much broader than this economic definition, as in the region it is not unusual for the quantity of a service not to be susceptible to measurement. In such cases, prices are indirectly related to consumption, thus coming much closer to the condition of benefit taxation.

The institutional setting of the sector has an effect on the pricing mechanism. The legal decision is a key element in pricing. Most of the countries in the region have delegated pricing functions to local governments, but the real influence depends on several other things. The price of the service depends very much on the price of inputs, like energy cost. If the energy price is centrally defined, but the local government has the right to define the service price, its freedom could be quite limited. Another example from Hungary is that regional water works owned by the central government transfer water for distribution to companies owned by the local government at a price set by the central government. In this case as well, the room for local government is limited.

The procedure of pricing is very important as well. It is a one-sided decision making process, with no room for possible appeal processes. In some countries in the region, the local government units have the right to set the tariff, but they have to be approved by the central government or by the central government agency. There are some cases when the central government gives a subsidy proportional to the tariff to the service provider. In this case, the right of the central government to give or withhold its approval, that is, sharing the responsibility for pricing, is understandable. The service provider.

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5 We know that the extreme case is when companies (service providers) exist but they do not provide services, e.g. district heating in Azerbaijan or limited water services in Ukraine, Albania, etc.
companies need security, especially if they make long-term investments, because they can make losses if the service is under-priced. The law defines the procedures or accounting rules which again - depending on how enforceable the laws are - could limit the manoeuvring room for an organisation with price-setting rights.

The present price-setting authority follows the characteristics of utility services. The more connected the provision to the networks and the greater the chance of monopolies, the more regulated and centralized is the method of price setting. User charges are often defined as official prices, calculated at different levels of government. The energy price formulation is well established in many countries, where energy regulatory bodies were established. In Poland and Romania, for example, user charges for district heating are defined by the central regulatory agencies, mostly after consultation with the competition offices or boards. In Estonia, the price for heat is inspected and approved by the Energy Market Inspectorate with respect to companies that sell more than 50,000 MWh per fiscal year. Local governments have the responsibility to set the price for the smaller companies. There are now 18 separate energy regulatory bodies in the region, most of which have tariff setting competency and experience. In the Estonian water sector, municipalities have the right to set the prices in cooperation with the service companies.

District heating is the subject of subsidies in, for example, Romania, where the “national reference price” is set for consumers. This price is driven by the costs of the large national energy companies and it is accompanied by a subsidy to local governments, where the local price is above the national reference price.

Price-setting mechanisms and related regulatory institutions are rather underdeveloped in the region. Prices are approved or controlled by some national agencies (ministries and boards), but they are usually calculated on a cost-based method. Modern techniques of price-capping, or profit-rate regulations, with some exceptions (e.g. Hungary), have not been introduced. This fact does not support privatization and structural changes in the sector. In Slovakia, the Regulatory Office for the Networks Sector is responsible for price control, which uses a price cup regulation method (Slovakia Intermediaries).

Government subsidies and various forms of “bailing out” still exist. All these factors have an unfavorable impact on those local utility services that are dependent on or part of the energy sector. However, the price formulation function is an emerging and efficient component of regulation. The assignment of the price-setting authority and the allocation of competencies to influence the methods of designing user charges are part of the reform process of public administration and local government.

**User charges and capital investments**

The mechanism of setting user charges has an effect on capital investment finance in the public service sector. The question is that local capital investment is financed through a “pay-as-you-go” strategy, where the resources of investment expenditures come from previous savings (at the central or local level). This also means that capital costs are not built into user charges. The other option is the “pay-as-you-use” strategy, which means that the investments are financed by “future savings”. Usually the financing of these improvements is provided by loans with a maturity that equals the
lifespan of the facilities. If the maturity of the loan is shorter, you can roll over the loan costs, and the capital improvement is paid back by user charges or future taxes. Experts from many countries note the importance of properly reflecting the investment component in the tariffs. Investments imply the acquisition of fixed assets, intangible assets, corporate rights, and securities in exchange for cash or property rights, as well as the return on such investments. The investor can recover his capital costs through: 1. depreciation; 2. return; 3. “tax for development” (Romania). The sources of capital investments include: internally generated cash (self-financing), borrowed capital and shareholder capital.

In those systems where prices are controlled by central (quasi independent) regulatory bodies, investment decisions are more complicated, as the future price increase as the source of investments is difficult to predict.

Without sufficient financial resources, these planning competencies have only a limited influence on public utility services. The investment needs are huge in the region. The dilapidated and obsolete equipment as a consequence of public sector decline are the most critical elements of the service sector because they lead to high losses and high service costs. There are various capital investment subsidy schemes. The most targeted forms of capital grants are designed and allocated by the central budget. Earmarked subsidies from the central budget to local investment projects (e.g. in Romania) are the traditional form of capital grants. In a more decentralized local government structure, targeting is achieved through matching grant schemes (e.g. in Hungary).

Other preferred forms of allocating targeted subsidies are the funds and special appropriations managed by sectoral ministries. They might be controlled by the general budgetary policy or often they enjoy greater independence as separate funds, allocated by the relevant ministries. The amount and spending of extra-budgetary funds are obviously controlled by the national fiscal policy (Ministry of Finance) to a lesser degree than subsidies through other centralized appropriations. On the other hand, they support sector development policies and programs more efficiently.

External funding might be provided through national budget loan schemes or by ensuring direct access to international financial institutions and commercial banks. The World Bank, EBRD and pre-accession funds, like ISP A, have an important effect on the sector in the region. Not only because the size of the capital, which is sometimes substantial, sometimes less important, but because of the institutional changes accompanying the investment. Donor agencies want guarantees to ensure that new assets will be managed efficiently, and they believe that the private sector would be more successful. The results are sometimes conflicting. Private financing is possible if cost recovery is guaranteed in the sector, and political influence does not jeopardize predictability. Again, this shows how important the overall economic policy is, especially with respect to privatization and liberalization.

**Regulation and price setting after privatization**

Privatization had an effect on the pricing mechanism as well. Public utility services as natural monopolies are subjects of large-scale privatization. Generally speaking,
large-scale privatization means breaking up monopolies of large state-owned firms and putting them into private hands. This step can be made in at least two ways. One is to transfer assets to private ownership without making any crucial changes. In this way, state-owned property becomes a private monopoly (for example in the Russian energy sector, including gas and electricity). The other route is to transfer ownership to competitive companies, whilst preserving the necessary public functions under public control. This is more complicated and requires political commitment, along with more time and deliberation.

This process already started in several countries in the region, however, the results are sometimes contradictory. Privatization typically led to a higher price, more investments, more efficient service, but less employment. The regulators’ capacity to monitor the service providers is generally limited, which gave room for the service providers to make good profits. However, the political instability may have negative effects on the service performance.

The problems of arrears and social policy considerations

Collecting charges

According to the practices of developed countries, service providers should achieve at least 95 percent collection rate on current accounts. That is, no more than 5 percent of the current charges for billed services should be delinquent. In this region, there are countries where the collection rate is less than 50%. It is not because of the technical problems related to collection, but rather the collection and “charging” methods influencing the financial performance of the service sector.

Achieving this collection rate depends on local economic conditions, including the unemployment level, and on the aggressiveness of the collection effort.

Service charges are collected in one of two ways: at the point of sale (such as a rental charge for the use of recreation equipment) or on a periodic basis for the service used (such as a monthly statement for the quantity of water consumed). While the first approach in principle eliminates the problem of delinquency, it is usually more costly to administer relative to the amount of revenue collected. Periodic billing of users yields the largest portion of revenue from service charges. However, managing accounts receivable creates many of the same problems a private firm encounters when it extends short-term credit to consumers. One of the advantages of a billing system is that the cost of administering each account declines as the number of accounts increases. Local governments typically economize even further by piggybacking several utility and related service charges onto one billing system. For example, the charges for water, sewer, solid waste (refuse) collection, and electric power may be listed on one statement.

For example, in Kiev (Kiev: Case Study, MUNEE) the fee collection system was changed. Before 1998, collection was organized by the housing maintenance companies that were replaced by a single billing and accounting center. As a result, the collection increased from 70 % to 85 % (from 1997 to 2000).

The collection problems could relate to the issue of metering. Before the transition it was not typical to meter the consumption of services. However, after the general
increase of the service prices, metering became an important issue and a precondition for households to adjust their consumption to their financial possibilities. Introducing metering has been quite difficult for multi-unit buildings, so in most of the cases metering is organised according to the buildings, not apartments. Willingness to pay is lower when individual consumption cannot be measured, which increases the possibility of arrears. This is the reason why municipalities responsible for service provision set up subsidy schemes that give incentives to introduce individual meters for consumptions. In Lviv (Lviv: Cases Study, MUNEE) the users with individual meters had a 20% discount (later changed to 10%) on the heating tariff. However, the service companies have no short-term incentives to foster the use of individual meters because it decreases the consumption, and frequently the efficiency, of the companies. In the long run, however, they have to realise that helping consumer adjustment is the only way to keep their consumers. In Hungary, because of the competition on the “heating” market, houses cut themselves off from the district heating system and installed individual boiler systems instead, forcing the district heating company to change its policy toward the consumers.

Improving the collection of current charges must begin with the design of the statement, which should communicate clearly to customers the amount owed, the basis for determining that amount (quantity used and rates), and the payment due date. If a discount is offered for early payment, this should also be indicated on the statement. However, evidence suggests that discounts do not significantly improve collection rates, and that their costs do not justify their benefits to local governments.

One of the greatest challenges confronting those responsible for managing accounts receivable is keeping mailing addresses current. At a minimum, local governments should request notification of changes of address from the postal service. Some governments have found that contracting out the collection of utility charges is more cost effective than performing the task internally. This will more likely be true where the local government provides only one utility service and has few opportunities to piggyback a number of charges onto one statement.

Companies may bill the consumption at stated intervals (monthly, every second month, twice a year, once a year and so on). The following payment methods are available: 1. direct payment to the fee collector; 2. payment directly to the companies by check; 3. payment by transfer.

In Romania and Lithuania, consumers pay directly to the companies that provide the public services. Other systems for the collection of payments also existed earlier, but the current system has proved to be the most efficient. In Budapest, there is a company responsible for the collection of the public utility services' charges (including water, sewage, rubbish, gas and district heating, but not including electricity). In Hungary as a whole, consumers pay directly to their local supplier.

The problem of low income consumers
During the past decade, the development of public utility services has been influenced by different factors. The first set of factors focuses on the improvement of service performance, demanding capital investments, and the raising of the technical
standards of services. The next set of factors relates to financial requirements, because the necessary resources have to be made available. Efficient service delivery and modern financial techniques are the necessary conditions for internal and external funding. The third set of factors includes the social policy aspects of utility and communal services that have tended to set priorities. However, these social considerations have to be balanced with technical (capital investment) goals and financial (efficiency) objectives in the development policies. In the case of local public utilities, all these three aspects of transformation should develop jointly.

One form of ensuring social policy objectives is to establish customer protection mechanisms. This is a crucial condition for developing a modern regulatory system. Independent and professionally sound regulatory institutions automatically protect the interests of the consumers. They have an impact on service performance through licensing, and the monitoring of service delivery. They might prevent customers from a major breakdown of utility services by guaranteeing professional standards and financial disciplines in the service organizations. By controlling price setting, regulatory bodies may ensure the principles of lowest cost pricing, fair methods of price adjustment formulae, and the curbing of unjustified increased cost pressure from service organizations. This influence on the price setting mechanism is extremely important in an inflationary economic environment, which was typical in almost every transition country.

However, countries in transition were not prepared to set up efficient “customer protection mechanisms”. There are several conditions that could guarantee that the transition will not “hurt” the needy population. First of all, official income has been a weak indicator of neediness, and the indirect indicators such as age, family status, and occupancy make targeting a critical issue. To build up the capacity to manage efficient social protection takes time, money and a strong political will, which are scarce in the region.

The cost of an inefficient protection system is high in the economy. The example of the energy sector shows that keeping prices at an artificially low level will lead not only to economic inefficiency, but also to unexpected social consequences. Low energy (or any other utility price) or lower VAT tariffs will provide more subsidies to large consumers, who are probably better off than the poor customers. This will also lead to economic distortions and import dependent sectors for high budget subsidies. The preferred privileged status of these public service providers might also lead to monopoly situations, which further accelerates inflation. Accordingly, the present practice of flat low-utility prices in many transition countries should be moved towards market-based prices. This shift should be combined with targeted social policy measures, with means tested subsidies and other social policy measures. But again, efficient targeting methods require important conditions such as reliable information provision and certain norms and attitudes toward the public sector.

The basic issue that the public service sector faces in the region is clear: most municipal utility services are under-priced. They are being de-capitalized due to political pressure to keep utility service prices too low. Efficient economic policy requires sound economic pricing which forces politicians to address the needs of
vulnerable populations. Governments best deal with the needs of vulnerable populations: utilities are not good deliverers of social welfare but can sometimes do this through tariff adjustments. Regulatory bodies can play a key role by establishing economic tariffs that allow for the financial sustainability of the municipal utilities. This is highly evident in the extent of poverty and the limited ability of some households to pay for even the most basic of provisions, such as utility services. Indeed, the problems of low-income households can be seen as a barrier to various reform initiatives, such as eliminating or reducing cross-subsidization, tariff reform, and even privatization.

There are three solutions to the problem of low-income households. One is the “tariff solution”, when the structure of the price indirectly provides advantages for low-income groups. The second option is to target the subsidy directly to the needy households, and the third option is to increase the end-use efficiency. The tariff solution is used widely in the region, because it appeared to have lower administrative cost and complexity. In the second group of solutions, the focus is on assistance to either individual households or specified groups of households. This assistance may be provided in two ways: via tariff discounts (lower prices) or via income support (higher incomes). The third solution is end use efficiency, which reduces the use of public services (water, electricity, gas or heat) and which has a long-term social impact by reducing the waste and consequently the cost to the poor, as well as others.

These solutions however are not mutually exclusive
The countries in the region have used a mixture of the above-mentioned options. The efficiency of the solution depends very much on the institutional structure of the services and the incentives of the different organizations having responsibilities in the service sector.

The “tariff” solution is the simplest one. Basically, the low tariff is used before the transition can be interpreted as a “solution”, but rather a very inefficient one. Another specific case under the “tariff solution” is the arrears, when households do not pay the charges and the service provider does not disconnect the non-paying consumer. This is a very common and complicated problem in the region. The examples shows that the willingness to pay / payment discipline depends very much on both the legal framework and the incentives for households and institutions. Sometimes the service providers themselves are not very interested in collecting arrears, if they can charge the loss on the government or on the “good payers”. The incentives of the municipalities are equally important. If they own the companies, and there is no possibility or hope of receiving additional central subsidy, they are to forced to make decisions to increase the collection rate or cross subsidize the services. The practices are very mixed even in one country. For example, in Hungary public housing management companies typically realize a 50 % collection rate, which is extremely low. But because of the small size of the sector, it is rare that the municipality takes the political risk to enforce payment or evicts non-paying households.

The typical tariff solution is either the “across-the-board price subsidy” or “life line” tariffs. These are considered the easiest to implement, but their efficiency from the
point of view of targeting is questionable. The service providers and sector ministries prefer these solutions because funding seems simple (because of budget subsidies or overcharged “good-payers”).

There have been a lot of attempts for targeted programs. One type is the price discount for certain consumer “classes”. A typical example is providing free public transportation for elderly people. In Russia, Ukraine and countries with ethnic conflicts, other special categories of privileged households were also defined (e.g. veterans, or victims of Chernobyl). The more common solution is the “housing allowance” type of program, which tries to target assistance to the really poor households. The programs (Russia, Ukraine, Hungary, etc.) depend on the procedures of their implementation. In Hungary, for example, the municipalities have to use their own resources to provide assistance, and they have the right to define some of the conditions. As a consequence, the total cost program is quite limited. Typically, it is not a general-purpose transfer, but an earmarked transfer to pay the bills of the service providers.

End-use efficiency is very important as well. As we showed in the first part of the paper, the public sector decline may lead to much higher cost (a less efficient system). The right incentives and properly designed (investment) subsidies could stop this process. Without improving service sector efficiency, the tariff solution or the targeted solution will not be sustainable.

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