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Charging local government services in Hungary

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1. Introduction

Fiscal decentralisation in Hungary

The initial wave of decentralisation reforms was implemented during 1990-1992, immediately after the political changes. The first piece of legislation passed by the newly elected multi-party parliament was the Act of Local Governments. With this rather symbolic step the law has laid down the basic rules of decentralisation by regulating the municipal functions, political and organisational settings, financial foundations, municipal supervision and audit. Two level local government system has been established with rather broad competencies: during the past fifteen years the share of local budgets was between 11%-13% of GDP.

The Act on Local Government set the framework of decentralisation, but it had to be followed by supplementary regulations on various aspects of administration, public services and financial management. The local governments were authorised to set user charges and parallel, the national subsidies on utility services have been eliminated. Gradually all the conditions of market based service provision have been regulated by passing the laws on concessions, privatisation of communal enterprises, allowing limited “enterprise” activities with own source revenue raising for budgetary institutions, introducing modern accounting rules and fiscal information system in the public sector. (Péteri, 2004)

This first period of transition in the public sector was mostly driven by efficiency goals. Local governments aimed at introducing new innovative forms of service management and developing effective forms of service delivery. Economic decline and fiscal restrictions forced them to utilise local revenues and benefits of modern service management. After the first wave of reforms by mid-1990s, new sectoral laws were harmonised with the decentralised provision of public services (e.g. new forms of local social assistance were developed). The regulatory environment of local utility services has also been transformed towards market based service delivery arrangements. Starting from 1995 the new public procurement rules, limited forms of compulsory competitive tendering, mandatory use of local - privatised – communal and utility services all supported the further development of municipal services funded by user charges.

Later, by the end of 1990s social policy goals dominated the discourse over local government reforms. Equalisation of differences in local revenue raising capacity, reallocation of extremely high tax revenues through the national budget transfers, limitation on local government borrowing and introduction of municipal bankruptcy law by setting the consolidation procedures were the most important regulatory changes. Management of arrears in local housing and utility services became a national priority and several non-governmental organisations were also involved in solving the local problems of high debt and delinquencies.

Own source revenues

Fiscal decentralisation has been implemented parallel to devolution of services, public functions and competencies. Well before the political changes, there were several

minor innovations in intergovernmental fiscal relations, which helped to prepare comprehensive local finance reforms in 1990. Since the mid-1980s some capital grants were allocated to local governments on a per capita basis. This limited, minor portion of central budget already increased the transparency and political neutrality of intergovernmental transfers. Local governments were also allowed to levy municipal “development fees”, which were the initial forms of municipal taxes.

Based on these experiments the new Law on Local Governments in 1990 has specified the basic principles of local government finances and methods of grant allocation. This was followed by the legislation on local taxation. As a consequence local governments fiscal autonomy became quite significant: one-third of local budgets originated from local own source revenues, municipalities were free in using the formula based general purpose national budget grants.

Local own source revenues had two major sources: current and capital revenues. Municipal capital revenues were about 10% of local budget revenues during 1990s. Local governments became owners of former state owned assets during the property transfer and privatisation process. Municipalities could generate capital revenues from selling the local property, from privatisation and collecting revenues through various transactions and investments. However, by the early years of this decade the sources of capital revenues gradually decreased, as these one-time revenue raising options were mostly utilised by the municipalities.

Consequently the need for own source current revenues has been increased. Local taxes, dues and other revenues raised by municipal service institutions expanded. In 1994 own source current revenues took only 16% of local budgets, but one decade later their share was 24%. (See Table 1.)

Table 1.

**Own source current revenues in percentage of total local government revenues
(1994-2004)**

	1994	1996	1998	2000	2002	2003	2004
Institutional revenues	8.4%	8.4%	8.8%	10.1%	7.2%	6.8%	9.1%
Dues	1.1%	1.6%	1.7%	1.7%	1.7%	2.1%	2.3%
Own source current revenues (total)	16.1%	21.4%	22.7%	28.1%	27.1%	25.4%	24.0%
Total local revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Ministry of Finance

Besides the scope of own revenues, the composition of the municipal current revenues has also been transformed. In the first years of fiscal decentralisation dues and revenues raised by the service institutions dominated the own source current revenues. The newly legislated local taxes were only 4.7% (1994) in percentage of total local revenues. During the past decade this ratio has increased by 12.3%, while the share of user charges, fees and dues has slightly been modified.

Chart 1. Annual changes in local revenues and CPI

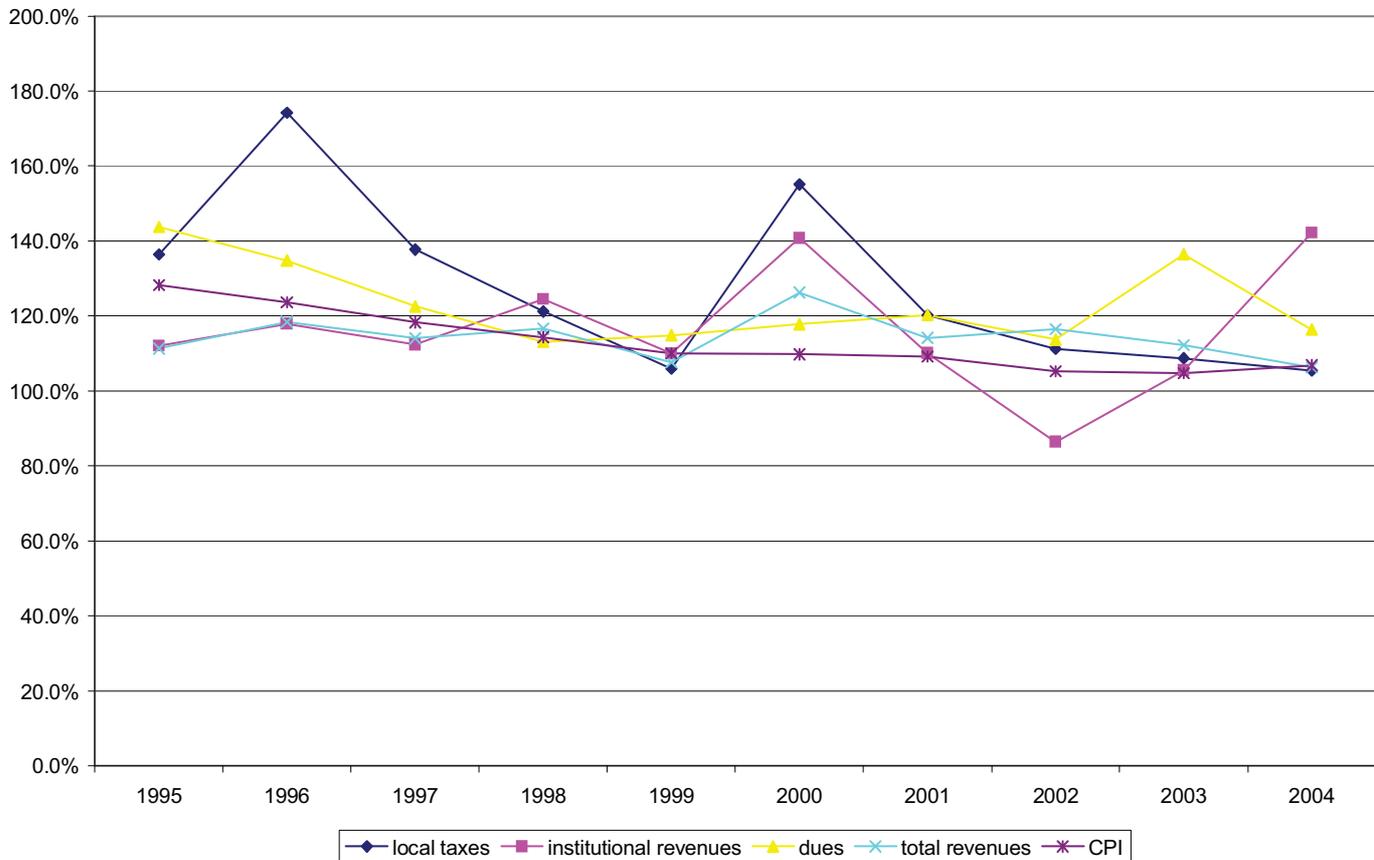


Chart 1. above shows, that until the end of 1990s annual increase of local tax revenues were much higher, than the changes of institutional revenues and dues. The other peculiarity of this trend is, that in both election years (1998, 2002) all the major own revenues were growing slowly or even declined. This shows the politically sensitive character of user charges and taxes.

Contrary to the New Public Management argument, which emphasises that direct linkages are best ensured by user charges between customers and service providers, in Hungary the newly legislated local taxes were more attractive revenue sources for local governments. Within the group of own source revenues local taxes gradually gained higher significance, compared to other municipal current revenues. Decreasing share of user charges among own revenues was against the international trend in that period.

This fact can be explained by two factors. Firstly, local taxes are dominated by the local business tax (80% of local taxes). As the business tax is levied on the net turnover of companies located in the territory of a municipality - instead of local citizens -, this source of income is preferred by local councils. The local business tax is levied on non-voters and it can be transferred to other entities, so it does not create financial burden on local taxpayers. It makes the local business tax politically more attractive, than the user charges or local taxes levied on residents.

Secondly, in this period the local government communal sector went through a major transformation. Majority of former general purpose city management companies with mixed public-private characteristics was converted to new types of businesses. Water companies, solid waste management firms, housing maintenance organisations, public cleansing and park maintenance companies became entities registered under the company law. In the most attractive sectors (municipal solid waste and water management) they were often privatised.

These organisational changes modified the financing schemes of these municipal services. User charges were transferred to these arms-length-companies and direct financial transfers to service organisations became more regulated and they were often limited to capital investment grants. Local governments kept the authority to define the level and schemes of service charges, but the actual collection and use of these revenues were controlled primarily by the service companies. Consequently the user charges raised by these service organisations became off-budget revenues and they are not accounted as municipal own source revenues.

Why user charges?

As the first wave of decentralisation policy in Hungary was based on efficiency considerations, the user charges were very much in the focus of professional and political discussions. Demand for effective services and need for raising capital in order to improve service quality were behind reform efforts in the case of fee based local services. Theoretical arguments for the benefit principle in local public services were quickly understood by the local decision makers.

Benefit principle

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Both councillors and managers of the newly established utility companies emphasised, that user charges should be in line with the services consumed. It became evident, that if fees represent the primary source of funding communal services, then it will have an impact on service production and operation of the companies. Even in the case of utility services with mixed (partially public/common and private/toll) character, the user charges have important economic consequences. They indicate the level of preferred service consumption and consequently increase local managers' cost awareness.

Gradually this led to reduction in wasteful consumption, however declining industries under a market pressure also cut back their expenditures on local utility services. Especially water consumption and demand for sewage treatment capacity decreased. Spending autonomy of local governments and transformation of municipal companies financed primarily through user charges quickly modified the demand for these services.

During the past decade volume of water consumption has decreased to 68%: in 2003 supplied water was 560 Million m³, which is 32% lower, compared to the volume in 1991. Consumption declined in that period, when water network was extended: by 2003 93% of dwellings were connected to the network (in 1991 only 86%). Household consumption was responsible for 65% of total water consumption in the first half decade of the 1990s. (Table 2.)

Table 2.

Restructuring in water consumption						
	<i>Dwellings connected to water network</i>	<i>Dwellings with public sewerage</i>	<i>Changes in supplied water, 1991=100</i>	<i>Percentage of household consumption</i>	<i>Changes in treated wastewater 1991=100</i>	<i>Changes in wastewater treatment capacity, 1991=100</i>
1991	86.4%	42.1%		64.5%		
1995	90.0%	44.2%	80.5%	63.7%	78.9%	107.6%
2000	92.1%	51.0%	68.1%	69.3%	64.8%	126.2%
2003	93.2%	59.1%	68.2%	70.5%	66.0%	127.4%

Source: CSO, 2004

Due to higher prices, use of water more dramatically fell in the case of institutional consumption. Share of businesses and public institutions in water consumption declined from 35.5% (1991) to 29.5% in 2003. The quantity of treated wastewater decreased by 66% of the 1991 level in the same period, which can be explained mostly by the economic crisis and restructuring, resulting decline in institutional consumption.

However, in the same period sewage treatment capacity has increased by 27%. This partly contradicts to the argument, which emphasises, that price mechanism would reduce excess demand for a service. There are several reasons behind this fact.

Firstly, environmental policy goals urged the development of wastewater network (from 42% connection rate in 1991 to 59% ratio of served dwellings by 2003). National government's capital investment programmes continued to support local investments in waste water, the EU requirements forced accelerated capital investment projects.

Also the lack of alternative (green) technology pushed local governments towards large treatment plants. The regulatory environment was not favourable, as technical (emission) standards were the same for villages below population 2,000, unlike to the EU, which allowed the use of more cost efficient alternative technologies in rural areas.

Increase in sewage treatment capacity was the consequence of fragmented local government system, as well. In this period, when higher demand was urged by increased residential consumption, dispersed and excess capacity of utility services resulted under-utilised facilities.

Similar trends were reported in the case of municipal solid waste management, where landfills were built with high and sometimes unused capacities. (Hermann, *et al*, 1997) However, the level of municipal solid waste management services, which are typically financed through user charges, have improved. In 1990 only two-thirds of

dwellings were served by regular waste removal, which has increased by 92% service level by 2003. Due to economic growth and wealth, the volume of collected municipal solid waste has also increased by 22% in ten years.

| *Need for accountability*

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Because of the increased consumption of these almost natural monopoly services in a market environment, the accountability mechanisms in the utility sector matters a lot. (WDR, 2004) Client power can be enhanced by introducing service charges and when seller of utility services at least partially becomes dependent on its customers. Voice of service users will be stronger through decentralisation. Competition rules help to establish a compact not only between the local and the national state, but the consumer (client) and the service producer, as well.

Assuming that these accountability mechanisms are properly developed, then customers' ability to pay has to be taken into consideration. Services financed through user charges become more equitable if the fee structure ensures vertical equity. Potential political opposition towards fees and charges is more manageable, when people with different abilities do not pay the same amount for a similar unit of services. Despite the properly designed fee structure, the political risk of visible increase in user charges is quite high, especially when the targeted groups are clearly identifiable.

In Hungary utility companies usually serve a group of municipalities. Consequently accountability is lower partly because of the fragmented local government system. Even if the water or solid waste companies are owned by these local governments, the service organisations are in a good negotiating positions, because they are able to divide the small and professionally weak local administrations. Our survey showed, that the user charges are set jointly by all the owners only in 34% of cases in the water sector and 20% in the case of municipal solid waste management. So in majority of cases local governments have to negotiate the price with the service producer alone. This obviously puts them into a weaker negotiating position.

2. Typology of user charges, dues and fees

User charges and fees are categorised in this paper along two dimensions: (i) whether they appear in the local government budget or they are raised by the local service organisations as off-budget revenues; (ii) there are national or municipal regulations setting the level and form of user charges or they are just negotiated by the various economic actors. These four basic forms of user charges and fees show the level and forms of local autonomy in own source revenue raising. (Table 3.)

The user charges and fees in the local budget can be further divided into two categories by the scale of local discretion over fee setting. In the case of Hungary property transfer dues, environmental fines and some other license fees are set by laws, so local governments just apply these regulations. In other instances there are general rules of price setting, which have to be followed by the municipalities, as local price authorities.

Table 3.

User charges, dues and fees of local governments¹

<i>Revenue raised</i>	<i>User charges, dues, fines</i>	<i>Fees, assessment</i>
in the budget	Dues, license and permit fee, environmental fines, construction fine, school revenue from meals, rental of municipal property, user charges on services kept in house	Development fees and contributions (impact fee)
off-budget	Rental of municipal property, user charges and admission fees collected by service organisations	PPP revenues, utility connection fee

This categorisation is in line with the international typology of benefit based levies (Bland, R.L., 1989), which also focuses on local governments powers: as service producer local government charges the users; when the municipality has regulatory powers it levies permit fees or has general taxing powers by using development fee or special assessments.

User charges and fees in the slowly developing system of local government finances can be hardly identified. Significant portion of revenue raising activities is out of the municipal budgets and/or these charges are not regulated. Even the scope of these off-budget revenues at the aggregate level is not measurable in Hungary. According to estimates, based on case studies, user charges raised by off-budget municipal entities are equal to user charges, accounted in the local budget (Hegedűs, 2004). Obviously this raises several problems of lower accountability, potential higher inequalities and lower predictability of local revenues.

Our survey of local utility services reinforced these general concerns only partially. In the case of water, waste water and district heating services the coefficient of variation (standard deviation in percentage of the mean) of user charges has decreased during the past decade. This means, that in the case of network based natural monopoly services, the prices are getting closer to the average, so the local governments as regulators work efficiently. (Table 4.)

However, in the case of solid waste management, the trend is just the opposite: differences in user charges increased over the past decade. This might be explained by differences in service quality, but also shows, that despite the strong competition, service organisations dominate the price setting.

¹ Based on Hegedűs, 2004

Table 4.

Changes in coefficient of variation by communal services

<i>Type of communal services</i>	<i>1995</i>	<i>2000</i>	<i>2004</i>
residential water	50%	42%	41%
industrial water	54%	44%	41%
residential waste water	63%	70%	47%
industrial waste water	375%	62%	48%
residential MSW	354%	318%	379%
industrial MSW	446%	419%	498%
district heating (residential)	138%	125%	121%
district heating (industrial)	595%	487%	443%
hot water, residential	198%	170%	191%

Source: Survey, 2004

3. Decentralisation of price setting

The simple basic rule of municipal finances “whenever possible, levy a charge!”, was well followed by the designers of fiscal decentralisation in Hungary.

New municipal competencies

General principles of price setting are regulated by law. It clearly states, that prices (user charges) should cover the “costs of an efficiently managed company” and should allow a profit required for the operation. (Act LXXXVII. of 1990 on Price Setting). This law has kept the option for state controlled prices, but through decentralisation of public services it has transferred the price setting authority to local governments. So as the water management services and provision of hot water became almost entirely local government functions, the municipal councils are authorised to set these charges. Price of water provided by the national network is still regulated by the relevant ministry.

Municipal solid waste collection and deposition are not subjects of this price legislation, only. Principles and basic requirements for setting municipal solid waste management charges are regulated by government decrees (based on the authorisation of the Law on Solid Waste Management).

By decentralising the charging competencies, the law on price setting has specified also the ways how charges can be regulated. There are two options: (i) defining the actual level of price or (ii) controlling the methods how the prices are calculated. The latter one has allowed the use of formulae, weights, inflation coefficients, etc.. This increased the price stability, predictability and made it possible to build long term economic incentives into the price mechanisms.

Local governments are authorised to set the *service prices* and this way to regulate the relationship between the service producers and the customers. However, this local autonomy does not exclude the national government's right to control some components of price setting or to set the maximum price for local services. The central state is responsible for protecting the interest of all the citizens by ensuring public health, environmental protection, safety regulations or guarantee customer protection rights. These externalities are not always reflected by the local government decrees. In the case of basic communal services, the national government has no price control authority.

Dues (levied on administrative procedures, property transfer, etc.) are equally allocated to central and local governments: 50% of collected dues goes to the middle tier local governments (county, cities with county rights and the Capital City). Cities with county rights receive all dues raised in their own territory, while the rest of the due is reallocated among counties and the Capital City. Only 35% of the total amount of dues is transferred to the place of origin, the rest are allocated on a per capita basis. This share, reallocated by the number of population is slightly declining over the past years (in 2000 it was 70%). The special offices collecting the dues are run by the county local governments, so the cities with county right contribute to the operational and management costs.

Environmental protection fines levied by local governments, flow exclusively to the municipal budget. Beyond this amount, also 30% of environmental fines levied and collected by the national environmental authorities are allocated to the particular local governments' budget. Other fines stem to local budgets entirely.

Conflicting roles of local government in price setting

The local government, as the price setting authority is faced with three sets of issues. Firstly, as *budget designer* it is mostly interested in collecting revenues from all potential sources. Consequently, the user charges are defined at the highest possible level. For being able to levy the user charges on communal services (municipal solid waste collection, wastewater from septic tanks, etc.) the use of services had been made mandatory. This legal obligation authorised the local government, as the service provider to levy and to collect user charges, so no house-owners could bypass the payment by stating, that no waste is produced in their household.

However, beyond the financial incentive to collect as high budget revenues, as it is possible, there are some other factors, which influence the level of prices. Externalities, like illegal dumping caused by high solid waste charges, might limit local governments' policies for price increase. Another reason for moderate prices is, that some of the fees and user charges simply do not produce significant revenues. So collection of these "nuisance" service charges might be administratively rather costly and they are not noticeable for the local budget. This would urge local governments to fund these services from general taxes or other municipal revenues.

Secondly, the local government as *owner of service organisation* is faced with the problem of financing its own service entity. That is, user charges should be high enough to cover the operation and maintenance costs, plus accumulate funds for capital investments. The general regulations on pricing solid waste services provide

high autonomy for local governments by setting two basic – conflicting – principles. On one hand the prices should cover the “justifiable” costs and allow profit for sustainable operation. On the other hand charges should create incentives for efficient use of capacities and provision of safe services at the minimum costs. Here local government’s objectives are mixed: too high prices make the service organisation inefficient, too low prices do not produce sufficient funds for sustainable service provision.

Finally, the local government as *social policy maker* is faced with the political risks of price increase and improperly structured user charges. Despite the fact, that user charges are usually better received by the citizens, than local taxes, local governments are urged to keep the service prices at the lowest possible level.

The present system of user charges of municipal services in Hungary, has been developed through the past decade. These three conflicting roles of local governments had to be accommodated during this period. In the first year of decentralisation, before 1995 the mandatory use of services was the major issue for the citizens. Following the legislation on compulsory use of solid waste services, the level and methods of pricing was often criticised. The volume based charging, equal treatment of various groups of users (e.g. permanent resident and summerhouse owners) were the focus of local debates and Constitutional Court cases.

Changes in intergovernmental transfers

The general grant system introduced in 1990 had one component linked to communal services. It is based on the number of population and allocated on a per capita basis. These are not earmarked grants, local governments are autonomous in spending these transfers. So this mandatory local government function is subject to national budget grants, but at a relatively low level. According to the budget law the grants are assigned for “municipal administrative and communal functions”. In 2004 only 2.3% of total national general grants were allocated to these services.

The level of national budget transfers has decreased during the past decade. Together with the changes in intergovernmental fiscal relations (increasing share of transfers allocated by service capacity indicators and for equalisation purposes) communal transfers have decreased. (Table 5.) The nominal value of grants were HUF 3,820 in 1995, but as transformation of companies and privatisation became more widespread, the per capita grants declined (presently HUF 1,400).

Table 5.

Per capita grants for communal services	
Year	General grants for administrative, communal and road maintenance functions (HUF/inhabitant)
2006	1,400
2005	1,254
2004	1,607
2003	2,261
2002	1,439
2001	1,282
2000	1,237
1999	1,015
1998	1,200
1997	2,154
1996	3,898
1995	3,820

Source: National Budgets of Hungary, 1995-2006

Beyond these general grants, local government also receive subsidies for capital investment purposes. Public utilities, like water, waste water network and sewage plants, construction of municipal landfills were always subsidised by matching grants. Financing capital investments is regarded as a joint responsibility of local governments and the service organisations. So municipalities could apply for specific capital investments grants, which were allocated with a matching ratio in the range of 40%-60%.

4. Pricing issues

As user charges increased, methods of pricing became more important both for local governments and for the customers. There are three basic issues: metering, costs structure and method of pricing.

Metering: basis of charging service users

There was an increasing pressure on local governments to move from the usual flat fees towards volume based charges. As charges took higher share of household income, users were more interested in paying charges proportional to the volume of services consumed. In some services, like water provision it was simpler to introduce metering. The only task was to install sub-metering devices in large apartment buildings and to agree on cost sharing among members of condominiums.

In district heating technical problems had to be solved, as single-pipe-systems did not allow full control over consumption. Here various technical solutions were gradually

introduced, allocating among apartments the total heat consumed by a larger unit (building, block).

In municipal solid waste collection the basic principles of pricing are set by the Law on solid waste. According to this regulation user charges should be proportional to services received. Service quantity is usually measured by the volume of waste containers and the frequency of collection. Sometimes it is combined with other methods like pre-paid bags, etc..

Cost information produced by the accounting system

On the local governments' side calculation of service costs depends on the information produced by the accounting system. When the utility services are provided by budgetary organisations public accounting rules are followed. This causes problems, as there is no practice of accrual accounting in the public sector and depreciation is not taken into account.

Service companies, under the private sector accounting rules are able to calculate full operational and maintenance costs. So labour, power, fuel, materials, equipment and miscellaneous costs (rent, lease, bad debt, reserve) plus capital funds are taken into account. The Law on solid waste management specifies all these components, including such cost elements as capital investments, deposition, rehabilitation and monitoring of already closed landfills.

Under the public and private accounting regulations, the cost allocation is the critical issue. For making multi-function service organisations more efficient, the first task is to clarify cross-financing within large service entities. This was the case in the early period of transformation, when cost centres were created in companies with mixed, profit and loss making functions. As company profiles were gradually cleaned from the less profitable services, cost allocation was needed between groups of users (industrial-residential).

Cross financing is acceptable, until accounting information is transparent for the decision makers, the local administration and councillors. Consequently service prices might be different for various groups of customers. One typical form of differentiation among groups of water users is presented in Table 6..

Water and sewage charges by categories of users, 1999, 2004

Table 6.

Charges by categories of user	<i>1999</i>	<i>2004</i>	<i>2004 charges at 1999 price level</i>
Water charges, residential (Ft/m ³)	107	164	106
Water charges, non-residential (Ft/m ³)	115	177	114
Sewage charges, residential (Ft/m ³)	86	149	96
Sewage charges, non-residential (Ft/m ³)	99	174	112
Water and sewage charges, total, residential (EUR/m ³)	0.77	1.24	0.80
Water and sewage charges, total, non-residential (EUR/m ³)	0.86	1.39	0.90

Source: Association of Water and Sewage Companies (<http://www.vcsoszs.hu/>)

Municipal audit reports showed, that detailed cost based price calculation is required by approximately one third of local governments in solid waste management. The rest of the local governments used simple multipliers (based on national inflation rates) or service contracts specified the level of prices for a longer period.

These communal services are subject to value added tax. The VAT rate has increased from 6% (1993) to 20% by now. According to general accounting regulations service companies had to pay VAT also on issued, but uncollected bills. This has raised the need for local government subsidies to compensate companies for accumulated delinquencies.

Types of user charges

Various pricing *methods* and *strategies* have been developed in the public sector (Bland, 1989). Full cost pricing (covering operational, maintenance, capital investment; direct and indirect costs) as usually set target is rarely followed in local communal services. Partial cost pricing practices are more often accepted, as service providers have to be subsidised for externalities or because enforcement costs are too high. In this case the difference between actual costs and social prices is supposed to be covered for the service companies by the local budgets. Utility service prices also include profit component for capital investments. In the water sector the profit rate varies between 0-4% in Hungary.

Price setting might be based on comparison with neighbouring cities or alternative service providers. Competitive pricing is more often used for services in a market environment (e.g. solid waste collection)

Several forms of pricing *techniques* have been developed in various local service. In the case of municipal solid waste management the user charges should reflect the volume of the waste collected and processed. However, in the case of water and district heating services, charges proportional to other indicators (e.g. area) are acceptable.

The basic fee - covering the costs of network maintenance and repair – might be levied as flat fee or on indicators proportional to consumption (e.g. HUF/m³/year for district heating). The variable component is usually volume based (e.g. in the case of district heating this is also divided into two components - HUF/MW/year and HUF/GJ - in the Capital City of Hungary).

The Constitutional Court has ruled out the two component pricing in the case of municipal solid waste management. Unlike to the water services, where it is the typically used form of financing large, network based maintenance costs. Number of water companies introducing two-component-charges has increased during the past years. (Table 7.)

Type of user charges by number of water companies

Table 7.

	<i>Number of water companies</i>		
	<i>2004</i>	<i>2003</i>	<i>2002</i>
One component water charges	60	68	71
Two components water charges	32	30	25
One component waste water charges	76	83	82
Two components waste water charges	17	12	11

Source: <http://www.vcsoszsz.hu/>

Block rate pricing is a further refinement of user charging techniques. Usually additional blocks of consumption are charged at lower rates, as variable unit costs decline with increased consumption. There are also examples for combining social objectives with block rate pricing, when charges for a minimum level of services are set at a lower level, while “luxurious” consumption is priced at higher level (e.g. for electricity). Peak period pricing is also used, as a special form of block tariffs (e.g. for water services).

In a stable and generally accepted tariff system the most important regulatory issue is the calculation of *price increase* between years or contract periods. In Hungary typically the service companies’ planned rate of return is taken into consideration. Under contractual arrangements often price indices are used. Complex formula on the multipliers by types of expenses (assets, maintenance, fuel, labour, etc.) is agreed between the local government and the contractor. The other generally accepted method of price regulation (inflation minus profit rate, RPI-X) is rarely applied in Hungary.

Revenue administration

The user charges are usually collected by the service organisations, which should have financial interest in efficient revenue administration. Billing techniques were gradually improved in the Hungarian communal service sector by introducing better targeted mailing practices, allowing various form of payments or even contracting out collection (mostly in large cities).

However, in many cases still the local government is responsible for the revenue collection: according to a sample based audit report in 42% the local tax administration, in 54% of cases the service organisation and in 4% a contractor was responsible for collecting user charges.

5. Affordability: arrears, subsidies, managing delinquencies

Privatisation of social housing stock, elimination of subsidies in local utility services and increasing energy prices had significant impact on subsistence costs. The gross housing expenditures (primarily rent or mortgage payment, maintenance and energy costs) in percentage of households' net income varies between 21%-23% in the richest and the poorest regions of Hungary. This ratio increased by 13-20% annually during the past years. In the poorest fifth of the population the total housing costs might reach 30% of the household income. (TARKI, 2005)

This is close to the accepted level of affordability in other countries (Frankhauser-Tepic, 2005). According to their careful literature review, in the case of electricity services the limit is 10-15%, in heating 10-20% and 3-5% of water services. Based on household surveys the utility expenditures in Hungary are below the average of the new EU member states for heating, which is typically an urban service. (Table 8.) But electricity and water service costs in percentage of household expenditures are above the CEE-Baltic averages. The average household income in vulnerable groups is higher and/or the social policy measures seem to be better targeted, than in the CEE-Baltic countries.

Affordability of utility services

Table 8.

	<i>Electricity</i>	<i>Heating</i>	<i>Water</i>
	<i>expenditures in percentage of total household expenditures</i>		
<u>Average household:</u>			
Hungary	5.3	1.9	4.1
CEE and Baltic	3.8	3.7	1.6
<u>Bottom decile:</u>			
Hungary	6.3	1.3	4.0
CEE and Baltic	6.5	5.7	2.3
<i>All utilities</i>			
<u>Vulnerable groups: pensioners</u>	<u>Vulnerable groups: social beneficiaries</u>		
Hungary	4.9	Hungary	
CEE and Baltic	6.7	10.3	
		CEE and Baltic	
		17.9	

Source: Frankhauser-Tepic (2005)

During the past two years the national statistics on dwelling and public utilities have provided more detailed information on housing maintenance costs. According to these more refined data, charges of water and waste water services account for 35% of dwelling maintenance costs. Municipal solid waste collection is only 5.4% of total maintenance costs and it has not increased, unlike to water charges, which raised from 18% to 22.5% of dwelling costs.

Table 9.

Annual per capita dwelling maintenance expenditures						
<i>Year</i>	<i>Dwelling maintenance, total</i>	<i>Of which:</i>			<i>District heating costs</i>	<i>Household expenditures, total</i>
		<i>water service</i>	<i>refuse collection</i>	<i>sewage collection</i>		
<i>HUF</i>						
2004	47,974	10,797	2,608	6,102	9,171	607,871
2003	41,688	7,447	2,251	5,095	8,287	557,875
<i>Utility costs in percentage of dwelling maintenance</i>						
2004	100.0%	22.5%	5.4%	12.7%		
2003	100.0%	17.9%	5.4%	12.2%		
<i>Dwelling maintenance and district heating costs in percentage of total expenditures</i>						
2004	7.9%	1.8%	0.4%	1.0%	1.5%	100.0%
2003	7.5%	1.3%	0.4%	0.9%	1.5%	100.0%
Memo item: exchange rate HUF 250=EUR 1						

Source: Regional Statistical Yearbook, 2003-2004, CSO

These relatively fast changes in dwelling maintenance cost had to be compensated by social benefits and housing related subsidies. The typical income related regular social benefits dominate the cash payments (70% of all social benefits).

Table 10.

Social benefit payments, 1998-2002					
<i>Type of benefits (HUF Million)</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>
Income related benefits	55,514	65,549	66,748	71,206	71,085
Compensation of costs and accidental expenditures	22,966	23,701	25,264	27,196	30,666
of which:					
housing maintenance subsidies	3,881	3,654	3,551	3,587	3,762
Total	78,480	89,250	92,012	98,402	101,751
<i>Total, in real value</i>	78,480	81,136	76,169	74,603	73,255

Source: TARKI, 2005

The specific dwelling maintenance subsidies account only for 3.6% of total benefits and their share is declining. In the highly decentralised social assistance system in Hungary, the means tested income related benefits are more easily provided. The housing subsidies are more complicated and they cover only 8% of basic dwelling maintenance costs. The relatively low level of direct housing subsidies and decreasing number of cases might also indicate, that user charge and rents are usually paid and families in need use other sources of income for paying these costs. The declining real value of housing maintenance subsidies also discourage the potential beneficiaries to apply.

Table 11.

Housing maintenance subsidies, 1995, 2002

	1995	2002
<i>Persons receiving housing maintenance subsidies</i>	234,727	175,055
<i>Cases of housing maintenance subsidies</i>	1,037,984	843,312
<i>Paid housing maintenance subsidies (HUF Million)</i>	2,332	3,762
<i>Per capita monthly housing maintenance subsidies (HUF)</i>	828	1,791
<i>Per capita monthly housing maintenance subsidies in real value (HUF)</i>	828	703

Source: TARKI, 2005

Beyond these targeted dwelling maintenance subsidies there are other forms of transfers. The across-the-board price subsidies are still used in the water sector. However, they are more targeted to local governments operating unfavourable geographical conditions. Water charge subsidies often follow the urbanisation slope, but that does not mean, that municipalities with poorer population are more often eligible for these subsidies.

Subsidies of water charges

Due to high differences in water management costs, some local governments are eligible for subsidies. Subsidies are provided for residential water services to local governments by the national budget as special earmarked grants. However, local governments only indirectly benefit from these subsidies, because the water and waste water management companies receive these transfers within the framework of an agreement with the municipality. In 2004 the scale of water price subsidies was HUF 5.9 Billion, which is 1% of local own source current revenues. In 1992 it was only HUF 1.5 Billion, since the mid 1990s the subsidies have increased by 15-20% annually.

This amount is rather low, but it supports almost one third of municipalities (2004: 1229 local governments). Recently the number of water companies applying for this subsidy slightly declined from 131 (2001) to 123 (2004). These water companies provide approximately 13% of residential water consumption, so the impact of price subsidies is important at those municipalities, which are eligible for these funds.

Allocation of water charge subsidies is based on the price of water services. The Ministry of Environmental Protection and Water Management specifies thresholds for water prices and those local governments receive subsidies, where the water, waste water charges are above these levels. During the past four years both in the case of water and waste water services, the threshold values were harmonised. By now, as the sewage networks became more extended and capacity of waste water treatment plants increased, need for waste water subsidies has increased. So in fiscal year 2004, the limits for both types of services were 169% of the average charges.

Table 12.

Threshold of national budget subsidies for user charges in the municipal water sector

<i>Charges (HUF/m³)</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
Water	225	240	255	277	319
Waste water	127	194	210	245	282
Threshold/average: water	169%	168%	151%	169%	n.a.
Threshold/average: waste water	118%	159%	160%	169%	n.a.

Obviously this system of price subsidies does not create proper incentives for efficient service provision. Local governments with higher user charges get more state budget funds, consequently they are less interested in savings and improvement of technology and management. This inherited practice of state subsidies shows the strong influence of the water sector in the budget allocation process.

Method of allocating water charge subsidies is based on the control of various cost elements. This practice makes the allocation process politically biased and less transparent. The following factors are taken into consideration:

- Detailed analysis of cost factors when annual price increase is above 8% at local governments with water charges above the threshold (6% for labour, 2% for materials);
- The costs are proportionally allocated for residential and institutional users (which are not eligible for subsidies);
- Estimated amortisation costs are in line with the planned reconstruction work;
- Factors of unit cost increase, assuming, that fixed costs are 70% of total costs;
- At least 60% of households in the city are connected to the sewage network;
- Maximum ratio of leakage (unaccounted water services) is 20%;
- Quantity of waste water should not exceed the volume of billed water;
- Previous capital investment grants from the national budget did not exclude the local governments from price subsidies for five years;
- Specific and detailed analysis of water companies with extremely high water prices (above 210% of the set threshold values for combined water and waste water charges);
- VAT and other environmental taxes are not parts of the cost calculation.

For making this cost analysis feasible, local water companies have to present 15 different types of datasets and declarations from the municipalities serviced by them. This huge administrative and analytical task is managed by independent consultants, contracted by the ministry. Interestingly for several years the ratio of assigned subsidies is unchanged: on the average local governments always received 80% of the requested amount.

Managing delinquencies

In the water sector arrears are 9% of total revenues of water companies (2000: HUF 9 Billion). Two thirds of these delinquencies were due from residential users. The size of unpaid bills is increasing. There are other utility service areas, where the delinquencies are equally significant (electricity, natural gas, district heating). The

highly indebted customers have accumulated arrears for a long period, often longer than three months.

This had a serious impact on service companies, as uncollected user charges have increased their costs. These costs are often allocated automatically on the user charges for the next charging period. So the disciplined users pay more, as these arrears are accounted in the new charges. This also opens up a negative feedback, as higher prices result more non-payments.

In a market environment, under contractual relationship between service producers and customers non-payment should lead to limitation of services received. But in the case of local utility services simple cut-offs are not always manageable. There are two basic reasons. Firstly, in the case of some services, identification of customers is *technically not feasible*. In condominiums with one single metering points or in real estate blocks, where district heating of the apartments are organised along one line (where exclusion of one customer would stop the service for others, who properly pay), the simple cut of the service is not manageable.

More importantly, local utility services have significant *externalities*. For example, water management or solid waste collection services cannot be stopped for public health reasons: littering due to uncollected garbage, population without water and sewage might increase the environmental risk. Also social policy considerations could prevent local governments and service companies from complete stop of the utility services.

However, during the 1990s, responding on the increasing scale of arrears, the technical and legal conditions of reducing or temporary stopping of services have been set up. It was easier in the case of the energy services, but it was manageable also for the water services. There are clearly regulated procedures for preparing these drastic steps: e.g. in the case of water services cut-offs might be possible only after 3 month of non-payments and with 30 days of prior notice. In practice, only the volume of available service is reduced first.

Despite the possibility to cut non-payers from the utility services, preventive measures have gradually been developed. Beyond the funds created by energy companies and the national government for compensating the poorest families, debt management and counselling were introduced. In the highly decentralised system of Hungarian local government – as many other innovations – this was also initiated by the large cities, which are seriously affected by delinquencies. (Péteri-Tausz, 1999)

Responding on these local initiatives, national government has launched debt counselling services. The local utility companies have also joined these programmes by contributing to NGOs and local funds to support the people in need. The most successful cases of debt management were developed by inviting all the interested local parties: the municipality, the utility companies, non-governmental organisations. Their coordinated efforts -assuming cooperative group of users - helped to stop the debt increase, led to slow elimination of high delinquencies and made the users more disciplined.

6. Local policies matter: a conclusion

The decentralised system of charging municipal services in Hungary provides high autonomy for local governments. Being responsible for price setting, municipalities

are under financial pressure to manage local utility services efficiently. As national budget subsidies and general grants for communal services were cut back significantly, evidently these services were mostly financed by user charges. Due to restructuring, contracting out, privatisation of communal and utility companies, the new pricing mechanisms had to be introduced within the broader regulatory framework.

User charges became significant sources of local government budgets, however for a long time local taxes were considered as primary own source revenues. In the first decade of decentralisation increase of local taxes, mostly business taxes, was higher, than expansion of charges, collected by budgetary institutions. Later, when the local tax revenue potential was fully utilised, municipalities had to increase user charges, as well.

Price setting mechanisms were adopted gradually by local governments. Starting from mid-1990s more complex user charge formulae and related social policy measures have been introduced. Financial benefits and sophisticated techniques of managing arrears helped the vulnerable groups. Despite the fact, that costs of water and electricity services are higher among average household expenditures, compared to other CEE and Baltic countries.

Municipal user charges are sensible local policy issues. Increase in water charges, rents and other communal charges might create tensions, if not properly designed and introduced. Local leaders have different preferences and national averages do not show the diversity in local revenue policies. (Table 13.)

Local fiscal policies by the mayor's party affiliation²

Table 13.

<i>Fiscal targets</i>	<i>Preferences by the mayor's political party (%)</i>		
	<i>independent</i>	<i>rightist</i>	<i>leftist</i>
Capital investments	64.0%	77.8%	59.1%
Equal increase of all current expenditures	28.0%	5.6%	24.2%
Improvement of services in the worst position	6.0%	5.6%	1.5%
Decreasing user charges, local taxes	2.0%	11.1%	15.2%
<i>Total responses</i>	<i>100.0%</i>	<i>100.0%</i>	<i>100.0%</i>

Source: Survey, 2004

Our survey from 2004 proved significant differences in local fiscal policies by the political affiliation of respondents. Mayors, inclined towards leftist parties would decrease own source revenues the most. Mayors of rightist political parties (being in opposition at the national scene) prefer growth, that is capital investments, but they also target decrease in local revenues.

While the independent mayors, rely more on user charges and local taxes (mainly for increasing all current expenditures, meeting the needs of all citizens). These

² „Q53. If national grants for the municipality were increased by 20% next year, how would you spend it?”

independent mayors, who have to be the most responsive on local residents' preferences are ready to use revenue increasing policies more widely. So patterns of balancing the benefit principle and affordability considerations in municipal fiscal policies seem to be rather diverse.

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