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***Municipal Infrastructure Delivery in Ethiopia:  
A bottomless pit or an option to reach the  
Millennium Development Goals?***

**Jan Werner and David Nguyen-Thanh**

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**Municipal Infrastructure Delivery in Ethiopia:  
A bottomless pit or an option to reach the Millennium Development Goals?**

by

**Jan Werner and David Nguyen-Thanh<sup>1</sup>**

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Abstract: The following paper examines the different options to finance local public infrastructure in Ethiopia based on the assumption that the federal government of Ethiopia will not provide any guarantees for local borrowing. Besides a detailed description of the local public finance system and the capital market in Ethiopia, the paper also sets out some international successful practices in municipal infrastructure financing. Based on the observation of the Ethiopian case and the consideration of the international experiences, the paper has two major pillars that very specifically identify actions required for implementation. On the one hand, the paper recommends a number of feasible arrangements to generate a revenue enhancement of the local authorities in the existing intergovernmental framework. On the other hand, the paper suggests a solution - for creditworthy as well as for potentially creditworthy urban local governments (ULG) - to finance their future demand of public infrastructure together with the national finance institutions as well as the international donors.

JEL Classification: H7; H2; R5.

Keyword: Fiscal Federalism, Grants, Ethiopia, Urban and Rural Economies.

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## 1. Institutional and Economic Background of Ethiopia

Ethiopia consists of 75.1 million inhabitants with a population that is increasing by 1.8 percent<sup>2</sup> per annum (see CSE, 2005). The urban areas in Ethiopia are estimated to grow by 6 percent every year and the number of cities is expected to increase by 289 percent until 2020. For this reason, a further investment in local infrastructure is essential.

The Ethiopian economy has readjusted in the last decade to the urbanisation, because the relative contribution of the agricultural sector to the GDP fell from 57 percent in 1991 to 42 percent in 2005, while the services sector has increased from 34 percent to 47 percent. Nevertheless, at 13.3 percent the industrial portion of the GDP is quite low (see Andrews, Erasmus and Powell, 2005) as Ethiopia exports mainly agricultural goods like coffee, vegetables and leather products and imports manufacturing goods, oil and food products. In the last three years, the Ethiopian economy has grown at around 8 % of the GDP,<sup>3</sup> but Ethiopia is still one of the poorest countries in Africa with a per capita gross national income of less than one-fourth of the average of all sub-Saharan countries, and 80% percent of the population live on less than US\$1 per day (see Muñoz and Cho, 2003). Finally, the inflation has recently increased significantly from 6 percent in 2001 to an officially reported level of 12 percent.<sup>4</sup>

### 1.1. Intergovernmental framework

Ethiopia is a federal country with three tiers of government. Besides the federal government, at the subnational level nine regional states (regions)<sup>5</sup> as well as two "special city administrations" representing the two largest cities - Addis Ababa and Dire Dawa - with a status relatively equivalent to regions.. The regions themselves are divided at the local level into 600 woredas and 120 urban local governments (ULG).<sup>6</sup> A further local level exists below the woredas and the ULG with municipalities, emerging towns and kebeles. The following figure 1 describes the current political structures of Ethiopia:

<sup>2</sup> However, the data are based only on projections of the last census of the year of 1994 and further estimates anticipated an even higher population growth.

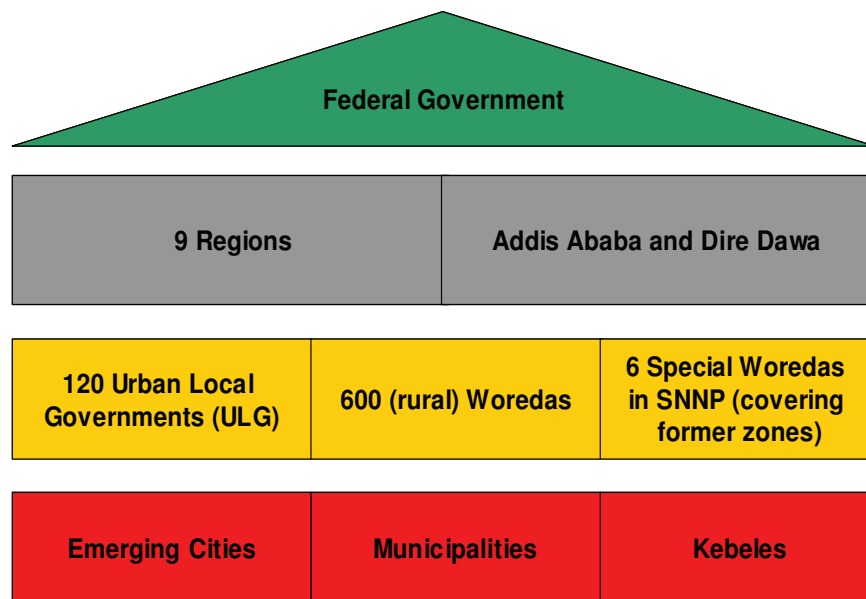
<sup>3</sup> A sharp exemption of this stable growth can be observed in the fiscal year of 2002–2003 with a negative growth of 3.4 % relatively to the GDP and for the current year the economy will slow down to an increase of 5 % (see IMF, 2006, page 231).

<sup>4</sup> The federal government of Ethiopia has not shared its data officially with the IMF for nearly two years.

<sup>5</sup> The nine regions are Afar, Amhara, Beneshangul / Gumuz, Gambella, Harari, Oromiya, Somali, Southern Nations Nationalities and Peoples (SNNP), and Tigray

<sup>6</sup> In the SNNP region six so-called "special woredas" exist which are nearly identical to the former zones.

**Figure 1: Different tiers of government in Ethiopia**



Source: own illustration

The regions received a high level of autonomy through the constitution of 1994, because each region can establish its own administration, enact its own regional constitution and ratify laws as long as they complement federal laws. In contrast, the local authorities do not possess such a strong constitutional status, due to the fact they have not even received a completely their own constitutional status.

Since 2000 the regions have separated larger urban administrations from the woredas and generated a special status for these urban areas. The new urban local governments (ULG) are supposed to represent a new decentralised unit of government with elected councils, their own local tax revenues and expenditure assignments.

## **1.2. Expenditure assignments**

A unique feature of the expenditure assignments in Ethiopia is the distinction between the so-called “state” and “municipal” functions. Both types of expenditures are administered by the ULG<sup>7</sup>, but the state functions are delegated from the region to the local authorities and therefore the ULG receive some grants from the remaining regions to finance the state functions while the municipal functions are funded by their own local revenues. The following table 1 shows the distribution of the accountability for some areas of expenditure between the different tiers of government:

<sup>7</sup> Besides the Amhara region, the local budgets are even separated in state functions and municipal functions.

**Table 1: Distribution of the accountability for some areas of expenditure between federal, regional and local level**

	Federal government	Regions	Urban local governments (ULG)	
			State function	Municipal function
	--	--		
Currency and banking policy	X			
Defence and foreign policy	X			
Immigration	X			
Electricity	X			
Justice	X			
Universities	X	X		
General public transportation	X	X		
Health care			X	
Primary and secondary education			X	
Police		X	X	
Water and Sewerage				
• <i>Capital expenditures</i>		X		
• <i>Current expenditures</i>				X
Waste management				X
Local roads				X

Source: own illustration

### 1.3. Revenue assignments

The Ethiopian Constitution stipulates the distribution of the different tax revenues between the federal government and the regions. Table 2 sets out the revenue assignments of the most important taxes between the federal governments and the regions:

**Table 2: Tax revenue assignments between the federal government and the region according to the constitution**

Article 96: Sources of revenue for the federal government	Article 97: Sources of revenue for the regions	Article 98: Jointly shared revenues
Customs duties, taxes, and other payments levied on imports and exports	Taxes on incomes of regional and private sector employees.	Taxes on jointly-owned enterprises
Taxes on the income of federal employees, and Ethiopian employees of international organisations	Fees for usufructory land rights	Taxes on corporation profits and shareholder dividends
Taxes on federal government enterprises	Taxes on the incomes of private and incorporated farmers	Taxes on large scale mining, petroleum and gas operations
Taxes on the proceeds of national lotteries and	Taxes on the profits of resident merchants	

related ventures		
Taxes on the proceeds of road, air, rail, water, and sea transport services	Sales tax / Turnover Tax	
Rental income from federal Government houses and properties	Water transport fees within the region	
Income from federal monopolies	Rental income from regional government houses and properties	
GOE stamp duties	Taxes on regional government enterprises	
	Taxes on small-scale mining operations	
	Regional licence fees	
	Royalties on the use of forest resources	

Source: own illustration

Even though the regional tax revenues which are mentioned in the Constitution appear to be comprehensive, the main tax yield of around 75 % of the total tax revenues belongs to the federal government, because the most important revenue sources in Ethiopia are customs, excise taxes and the VAT.<sup>8</sup> Table 3 provides a summarised overview of the yield of different taxes in the fiscal year of 2005-2006:

**Table 3: Tax yield in the fiscal year of 2005-2006 and the distribution between the federal and regional level (in millions Birr)**

	<b>Federal government</b>	<b>Regions</b>	<b>Total</b>
Income and profits tax	2381.7	1777.6	4159.3
<i>Personal income tax</i>	498.5	838.7	1337.1
<i>Rental income tax</i>	0.0	62.6	62.6
<i>Business tax</i>	1388.7	653.5	2042.2
<i>Withholding tax</i>	393.7	58.2	452.0
<i>Agriculture income tax</i>	0.0	127.7	127.7
<i>Other income</i>	68.6	11.4	80.0
<i>Interest income tax</i>	32.2	0.1	32.3
<i>Capital gains tax</i>	0.0	25.4	25.4
Rural land use fee	0.0	135.0	135.0
Urban land lease fee	0.0	682.6	682.6
Domestic indirect taxes	2735.0	910.4	3645.4

<sup>8</sup> A general overview of the impact of institutional quality on the tax effort in developing countries with special reference to Ethiopia is located in the appendix.

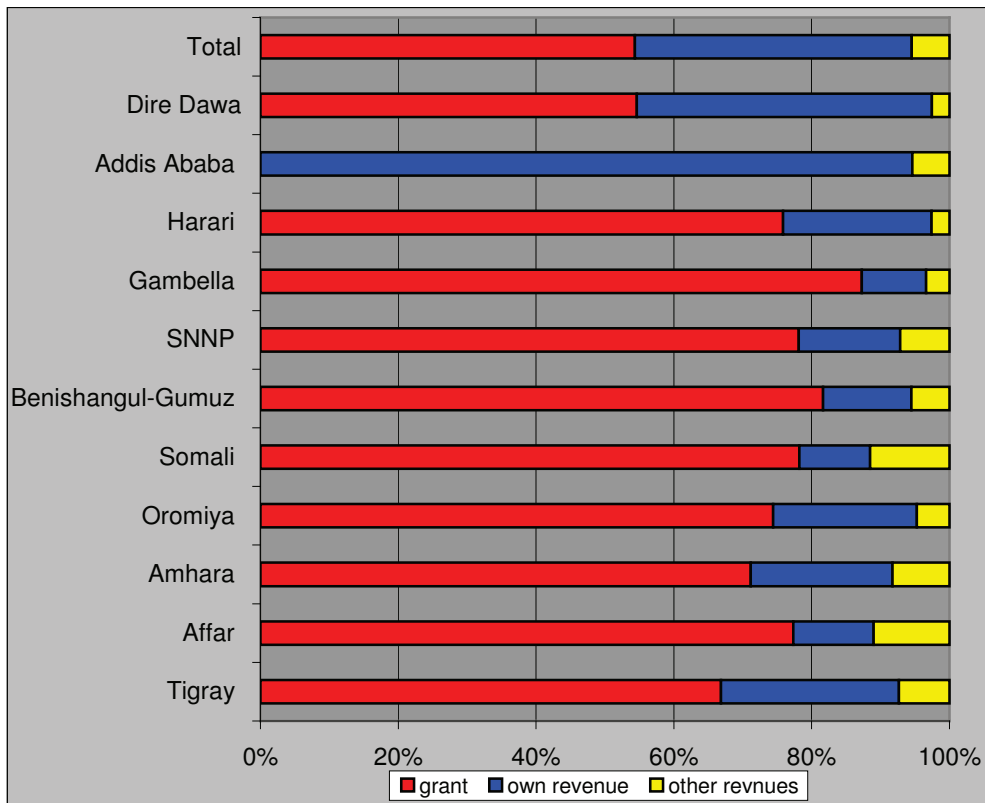
<i>VAT/TOT/excise taxes</i>	2031.7	530.1	2561.8
<i>Alcohol and tobacco</i>	452.7	4.4	457.0
<i>Other goods</i>	1579.0	525.7	2104.8
<i>Services tax</i>	591.3	206.8	798.1
<i>Stamp duties</i>	112.0	173.5	285.5
Import duties and taxes	6887.2	0.0	6887.2
<i>Custom duties</i>	2993.2	0.0	2993.2
<i>VAT/excise taxes</i>	3894.0	0.0	3894.0
<i>Petroleum products</i>	309.3	0.0	309.3
<i>Alcohol and tobacco</i>	58.6	0.0	58.6
<i>Other imports</i>	3526.1	0.0	3526.1
Total tax revenues	12003.9	3505.5	15509.5

Source: MoFED, 2006

#### 1.4. Fiscal imbalance

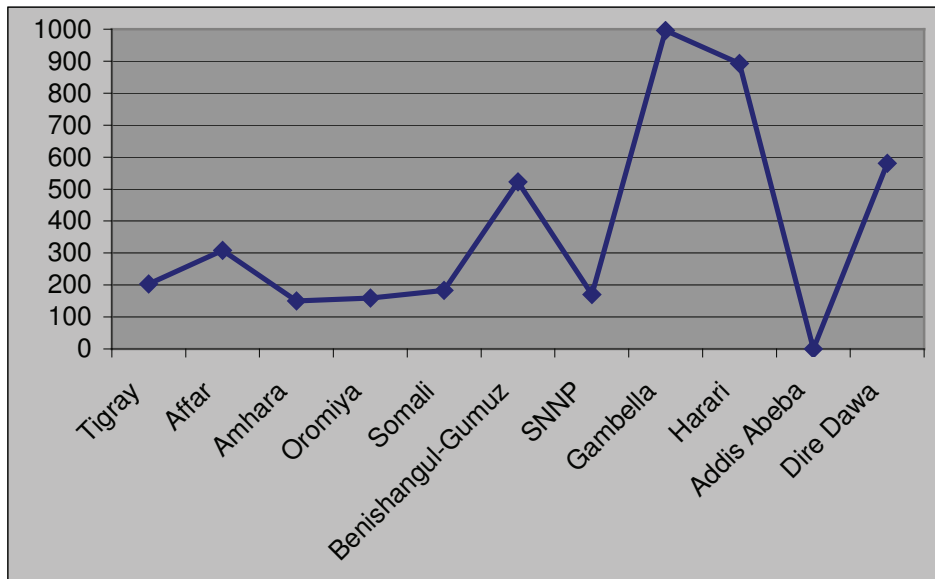
In Ethiopia, significant economic disparities between the capital Addis Ababa and the other regions exist. Therefore, the federal government distributes no grants to Addis Ababa, but the remaining regions benefit from the block grants from the federal government, as can be observed in figures 2 and 3:

**Figure 2: Regional revenue structure in % in the fiscal year of 2005-2006**



Source: own illustration based on various data from the MoFED

**Figure 3: Impact of the federal block grant per capita in the fiscal year of 2005-2006 (in Birr)**



Source: own illustration based on various data from the MoFED

## 2. Local Public Finance in Ethiopia – Revenue Assignments

The decentralisation of expenditure and public functions is only “one side of the coin” of fiscal federalism. Just as well it has to be settled how this delegation is financed and how independent the local authorities are in their provision of public goods and services.

A reasonable local public finance system has to consider the following principles<sup>9</sup>:

- Revenue autonomy, subsidiarity and connectivity (*local accountability*)
- Transparency of the tax system and direct impact of the tax burden (*benefit tax link*)
- Reference to local circumstances and neutrality of the taxes with regards to the private sector
- Tax bases, which are not affected by economic fluctuation and are also viable
- Simplicity of tax system

At a first glance, these five principles seem like wanting to “square the circle” and even at a second glance, neither a federal nor a unitary country in the world has implemented a local public finance system that fulfils these five principles completely. Various countries have chosen different ways to reach these goals and thus the conception of financing the local services differs extremely.

<sup>9</sup> For detailed description see for example Spahn, 1995 as well as Werner, 2006b.



The Anglo-Saxon countries like Canada, the USA and the United Kingdom provide their local authorities with a very extensive system of property taxation. A local property tax has the advantage that a direct link between benefit and cost of the public goods can be established. This direct link between the preference of the citizens in local public goods and the policy makers, who have to provide the local public goods, cannot be created by grants or transfers.

Besides a local property tax, a group of European countries – namely Switzerland, Belgium, Croatia and the Scandinavian countries – give significant tax autonomy to their local authorities and therefore a local surcharge on the personal income tax is common.

Furthermore, a third possibility to finance local authorities has been chosen by Austria, Germany and Poland, which developed a local tax system with its own revenues as well as tax-sharing. Nevertheless, vertical grants are also needed in the Anglo-Saxon model and the Scandinavian model and the German model. Grants and transfers avoid external effects and spillovers; for example a local jurisdiction benefits from services of other local authorities without participating in the cost. This situation often exists in the relationship between a metropolitan city and its suburbs. A reasonable solution of this problem is the FOCJ (*functional, overlapping, and competing jurisdiction*) concept (see Frey / Eichenberger, 1995 and Frey / Eichenberger, 1999), but for developing countries the FOCJ concept is not realisable. Moreover, the school communities of the Swiss canton of Zurich and the North American special districts are the only successful examples of the FOCJ concept.

Sometimes a country restricts the local accountability, because it substitutes local taxation for vertical grants. These negative scenarios can be found in the Netherlands, Wales, Ireland and Scotland. In the case that local authorities cannot generate sufficient finances from taxes and grants, municipalities will use charges and fees to fill the financial gap. These developments do not only occur in China (see World Bank, 2002) but also in such a rich country as Norway, where “since 1980 user charges have been the fastest growing revenue component of Norwegian local and county governments” (see Borge, 2000, page 703).

## **2.1. The different revenue sources of the local authorities**

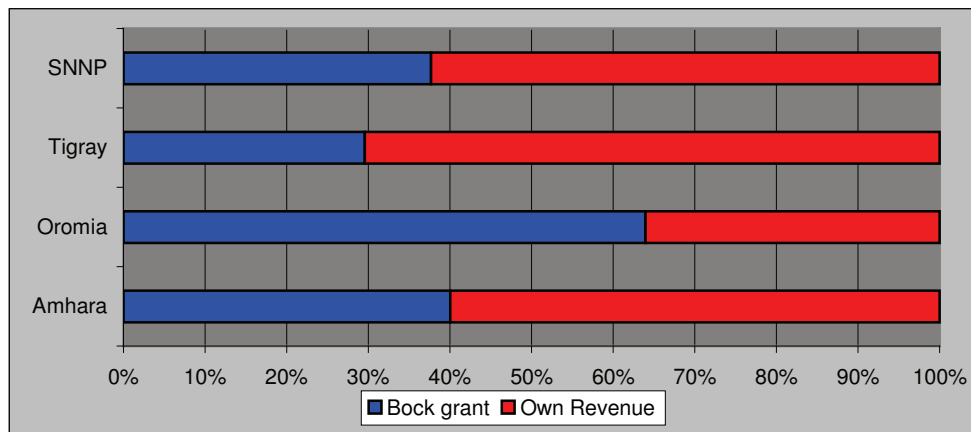
The situation of the Ethiopian local authorities is a “tangled web”, because every region has the right to create its own concept of local authorities and therefore the number of different tiers of local government, the local taxation autonomy as well the calculation of the transfers from the region to the local authorities varies between the regions.

Generally speaking, the (rural) woredas consist of elected councils and it is legally guaranteed that the woredas have the final decision about their expenditure and the right of their own budgets, but on the other hand the woredas do not possess their own tax revenues and therefore their revenues are almost completely funded by grants from the regions.<sup>10</sup>

The urban local governments (ULG) have a greater local revenue autonomy than the woredas. The higher local revenue autonomy is mainly driven by the so-called “land tax”. However, the land tax is not a classic local property tax but rather is a land fee, because the ULG can lease land rights at market value.<sup>11</sup> In Ethiopia no private land right exists as all land is owned by the state. Private households as well commercial and public companies can only lease the land; a private person can lease the land for 99 years, while companies are only able to lease for a maximum duration of 70 years. Furthermore, the ULG are not completely independent in fixing the land lease, due to the region determining a minimum asked price per square metre for different zones.

The following figure 4 provides an overview of the local revenue structure of a sample of 33 local authorities – mainly ULG and some further municipalities – from the four regions of Amhara, Oromia, Tigray and the SNNP regions in the fiscal year of 2003:

**Figure 4: Revenue structure of 33 ULG and municipalities from four different regions in the fiscal year of 2003**



Source: own illustration based on data from GTZ, 2005a, page 89 and GTZ, 2005b, page 92

However, it has to be noted that this figure includes only four of the nine regions and even in the four regions illustrated, not all municipalities and ULG have been taken into account. Additionally, at the local level some unplanned off-budget components exist in Ethiopia like

<sup>10</sup> However, the woredas can indirectly attract some minor own revenues from the population, because the small settlements inside the rural woredas (kebeles) can collect “household contribution” to local public investment (see Hegedüs, Mussa and Peterson, 2006, page 20).

<sup>11</sup> Furthermore, besides the system of a land lease, the old system of land-use-fees exists also.

special funds from international donor groups or NGO as well as the food secure program, but these components have a stronger impact at the woredas level than for the ULG.

The transfers from the regions to the local authorities – mainly to the rural local governments – are mostly formula-based and the grant has the feature of a block grant. In 2003 the four mentioned regions have used the following equalisation formula:<sup>12</sup>

$$T_i = 0.65 * ( POP_i / POP_{region} ) + 0,20 ( Dev_i - Dev_{region} ) + 0,15 ( LocalRev_i - LocalRev_{region} )$$

$T_i$  : receiving transfer of the local authority i

$POP_i$  : Number of inhabitants in local authority i based on the census of 1994

$POP_{region}$ : total population of the region based on census of the year 1994

$LocalRev_i$ : collected own revenues in local authority i per capita (based on census of the year 1994 )

$LocalRev_{region}$ : total collected own revenues in the region per capita (based on census of the year 1994)

$Dev_i$  : Development index<sup>13</sup> of the local of the local authority i

$Dev_{region}$  average, regional Development index

However, the regions have recently revised this formula and are now using a cost-approach formula (see Hegedüs, Mussa and Peterson, 2006, page 39) to subsidise the local authorities.

## 2.2. Problems and pitfalls of a sound local revenue system

The existing public finance system in Ethiopia has some major disadvantages and gaps:

- The local authorities have no significant revenue autonomy, because the majority of the taxes and fees are restricted by the regions and in the long run the observed revenue growth in the last few years of the most important own revenue source – the land lease tax – will also rapidly reduce.<sup>14</sup>
- The local authorities suffer from a high turnover of their staff and due to the lower salary level compared to the regions and the central government they have problems in attracting well qualified administration staff. Moreover, the local administration do not clearly distinguish between taxes, fees and licences, which can be observed for example in the common phrase “local service taxes”.
- The transfer system from the region to the local authorities is based on an old data source (like the census of 1994), it is non-transparent (e.g. even in the Amhara region,

<sup>12</sup> The formula differs a little between the four states; e.g. the population weight varies between 0.60 and 0.65

<sup>13</sup> The development index considers the expenditure side like the pupils in the school, the volume of offered health service or access to water supply.

<sup>14</sup> On the one hand, the number of properties which can be leased are not endless and on the other hand, the annual payments are not inflation-indexed. For a duration of 70 or even 99 years combined with a high inflation rate, the land lease tax will not be a stable revenue source.

one of the “good sample regions”, the “cost coverage ratio” of the actual formula of the state function is only 70 %), and it is inconsistent (the so-called “annual fine tuning” of the formula is not reasonable, because if the transfer formula is changed often through fundamental adjustments, the local authorities are not able to develop their own medium or long term fiscal plans). Furthermore, all transfer formulas do not consider that the capita expenditure costs are higher in a metropolitan city than in a scarcely populated ULG.

- The local authorities collect taxes on behalf of the regions and to a lesser extent on behalf of the central government. But the incentives to attract the full tax potential are quite low, because no general tax sharing exists.
- The majority of the ULG are suffering from underfunding in their budgets and have to request the region to cover their deficit. Moreover, the ULG do not use borrowing to a significant extent to fund long term capital investments.
- Local borrowing, which is not an additional revenue source but rather a “last anchor” if all other revenue sources are exhausted, is restricted by the fact that the regions as well as the central government are not willing to give a guarantee for local loans.

### **2.3. Recommendations to improve local accountability**

The existing local public finance system is not able to generate substantial revenue flows and tax setting restrictions by the region undermine local accountability. Even if the region now update the lower and upper limits of tax rates more regularly, the current own revenue sources are too short winded. For this reason, one of the key issues of the Ethiopian local authorities is to release them from their fiscal dormancy and enable them to generate their own tax revenues.

One reasonable option to resolve this problem is to introduce a local property tax which could exist in addition to the land lease tax and the land-use fee. A general problem of all property tax systems is the question of how to obtain a market based valuation of the property without a costly administration effort.

In the Ethiopian case no nation-wide cadastre exists and due to the fact that all properties are leased and not owned by private households or companies, the possibility of evaluating the property value by the selling prices of the property does not exist either. Therefore, a tailor-made property tax system for Ethiopia should use the following concept. The assessment of

the property has to be shifted to the ULG provided the following general guidelines are set out by the regions:

- Three benchmark indicators could be used to determine the tax assessment base for real property: (a) maximum ground space, (b) maximum floor number, and (c) size of property.<sup>15</sup> All three figures would be multiplied and it would be irrelevant – to attract incentives for an optimal land use – if the property is fully constructed or undeveloped.
- The ULG would divide individual building sections into special building zones, to which they allocate individual building zone factors. The ULG themselves would decide not only how high this building zone factor should be but also how big the zone should be.
- The ULG would also set the local real property tax rates with all zones being subject to the same municipal assessment rate.
- All properties—private property, commercial property, property for agricultural and forestry use, and public property—would be subject to local real property tax. However, for public properties, the zone factor would be 1.0.

Hence, a local real property tax would be calculated in the following manner:

$$\text{Ground space} * \text{Floor number} * \text{Size of property} * \text{Zone factor} * \text{Local tax rate} = \text{Tax liability}$$

A further instrument to improve the local accountability could be to introduce a tax sharing of the VAT.<sup>16</sup> Such a tax sharing would generate incentives for the local authorities to collect higher amounts of the VAT taxes if they directly benefited from this revenue source. Furthermore, the central government and the local authorities will be directly linked in the form of fiscal federalism for the first time.<sup>17</sup>

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<sup>15</sup> Indicator c is measured in square meters, whereas the two indicators a and b are measured in decimal numbers and calculated in relation to the total size of the property. For example, if a property has a size of 400 square meters and the building on this property has two floors, with the ground space of 240 square meters, the respective benchmark indicators are a = 0.6, b = 2.0, and c = 400.

<sup>16</sup> In Austria, Belgium, Germany, Italy, Poland and Spain a tax sharing between the central government and the remaining sub-national governments already exist.

<sup>17</sup> For this reason the central government can guarantee local loans and can use the future tax revenues as security. A similar concept exists already between the central government and the regions. The central government guarantees some loans of the regions and as a “deposit” it will use the transfer to the remaining region to recover any losses if the guarantee is used. In the case that the central government has to provide surety for the region, it will cut the transfer in the following fiscal year accordingly.

A tax sharing of the VAT will provoke a cut of the central government transfers to the region and the region itself will also reduce the transfers to the local authorities, but in the long run such a tax sharing will stabilise the local revenue structure, because the VAT will increase in the future as its tax base is not affected by economic fluctuation.

Besides the introduction of a property taxation and a VAT sharing mechanism, the vertical transfers from the region to the local authorities is another option to improve the local accountability. The goal of the regional as well as the federal transfer formula is to consider the different levels of expenditure needs, but worldwide only the Scandinavian countries are using an all-embracing expenditure need equalisation formula at the local level. However, such an equalisation system needs a lot of data sources (for detailed description see Box 1) and is very costly. Therefore, all expenditure need based formulas in Ethiopia will always only be a basis for determining the real expenditure needs of the ULG and as long as in the formulas an “adjusted” population number is not considered, the densely populated cities will be discriminated relatively to smaller cities.

To develop a transparent and a fair transfer system it is necessary to conduct a new census, because the census of 1994 as an indicator for a transfer system is limited. The new census could be the basis for the transfer formula as well the distribution of the VAT sharing and the remaining population of the ULG could be weighted by a special factor, which will favour the densely populated cities. Such an adjustment of the population figure is quite common and can be observed for example in Austria (see Werner and Shah, 2006), Germany (Spahn, 1998; Werner, 2003) and France (Werner and Shah, 2006).

All the above-mentioned recommendations will strengthen the local accountability considerably, but it is also obvious that some suggestions can be implemented quite rapidly – like the new census and the tax sharing – whereas the new property taxation system needs a transition period of two or three years.<sup>18</sup> Nevertheless it is important to start the reform process as soon as possible, because the ULG are already suffering from the fact that the expenditure is increasing faster than the revenues, and to finance the infrastructure and to reach the Millennium Development Goals (MDG) recommended by the United Nations it is necessary to give the local authorities the fiscal instruments to resolve their challenges.

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<sup>18</sup> In Ethiopia no nation-wide cadastre exists and therefore we suggest an approximation of the market value as basis for the tax base of a future property tax. It is also possible to evaluate all properties like in Denmark or to use the “band-solution” of the United Kingdom, but we believe that such solutions will be too costly for Ethiopia and will over-burden the local administration. Nevertheless, we present the Danish and British property taxation and valuation briefly in a box located in the appendix

### Box 1: Local Equalisation in Denmark

The most important sources of the local Scandinavian authorities are taxes – mainly local surcharges on the personal income tax (PIT) –, while vertical grants do not play such an important role as in other unitary and federal countries.

The Danish PIT (*Indkomst Skat*) is composed by a federal tariff system, which is mainly progressive and composed of three different tax rates, fixed by the central government and a flat tax rate by the counties and municipalities. The local authorities are independent to fix their local flat rate and the only restriction in Denmark is that the total individual tax rate does not pass the limit of 59 %.

Besides the surcharges to the PIT the Danish local authorities (Municipalities as well counties called *Amtskommuner*) can levy some property taxes, which are called *Grundskyld*, *Daekningsafgift* and *Frigorelseafgift*. The value of a property is based on the actual market value:

Furthermore, tax sharing between the central government and the local authorities for the corporate income tax exists in Denmark, but these revenues amount to only 2 % of the complete local tax revenues.

In Denmark the local government grants and equalisation system consists of four elements:

- (1) Equalisation of the expenditure needs between the municipalities
- (2) Equalisation of the tax base between the municipalities
- (3) General grants from the central government
- (4) Various special grants from the central government

The equalisation of the expenditure needs is based on the age of the municipal citizens as well as on some social factors like for example children with a single parent, the number of unemployed people or welfare recipients.

The following table B1 summarizes the different emphasis of the “age factor” and the “social factor” in equalisation needs formula in the different local authorities

Table B1: Emphasis of the “age factor” and the “social factor” in Denmark in the fiscal year of 2002

	age factor	social factor
(rural) municipalities	80 %	20 %
municipalities around Copenhagen	75 %	25%
counties	77.5 %	22.5%

Source: Danish Ministry of the Interior and Health, 2002, page 45

The age factor calculates a special amount for every county and municipality in Denmark, which represents the exact age of every citizen. The highest amounts per capita are assigned for pupils (age class 7-16; € 7,740 for rural municipalities in the fiscal year of 2002) and elder people (age class 85 years and older, € 13,354 for rural municipalities in the fiscal year of 2002). Moreover, the metropolitan municipalities around the capital of Copenhagen received per capita higher amounts.

The social factor does not use actual expenditure, rather it uses unique, fictitious expenditure, and the different weights of the social criteria cost is shown in table B2

Table B2: Emphasis of the different social criteria in the “social factor” in Denmark in the fiscal year of 2002

	(rural) municipalities	municipalities around Copenhagen	counties
# of children of single parents	32.5 %	32.5 %	48 %
# of inhabitants	25 %	--	-
# of rented dwellings	--	20 %	--
# of 20-59-year-olds without job	25 %	25 %	--
# of foreign people	10 %	10 %	--
# of 25-49-year-olds without vocational training	--	12.5 %	--
# of welfare recipient	7.5%	--	--
# of single inhabitants over 65 years	--	--	48.0%
Roads and public areas	--	--	4.0%

Source: Danish Ministry of the Interior and Health, 2002, page 45



The local equalisation of the tax base rests, not on tax revenues or on fees and charges, but on the tax base of the PIT and of all the property taxes. The tax base of a municipality or a county is calculated per inhabitant and is compared with the average national amount per inhabitant. If a local authority has a higher tax base than the average national tax base, it has to pay some grants to the local authorities with a lower tax base. This horizontal equalisation system is similar to the German equalisation system among the states (see Spahn and Werner, 2004). but the German system equalises tax revenues while the Danish system equalises tax bases.

As in the calculation of the expenditure needs, the municipalities around Copenhagen receive a “bonus”, because their tax base is not compared to the national tax base but rather to the average tax base of all municipalities surrounding Copenhagen.

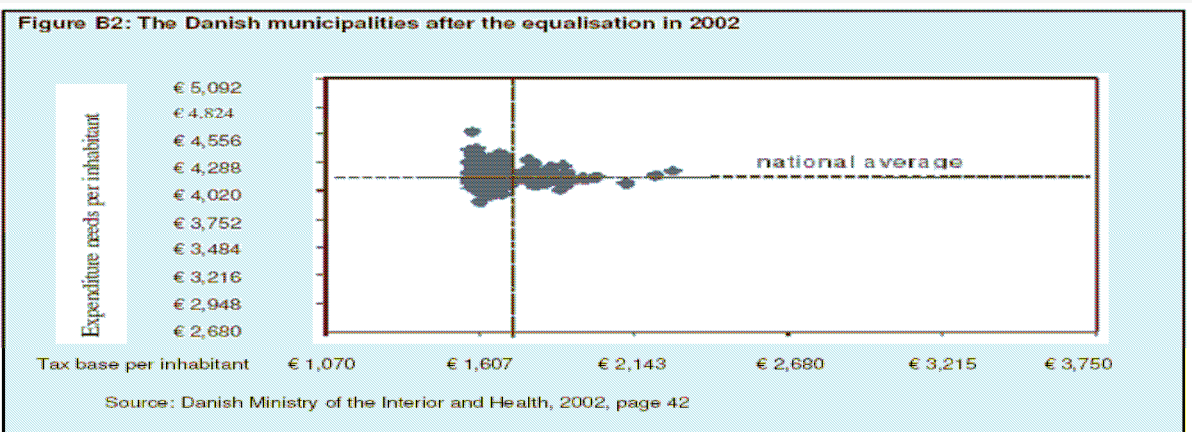
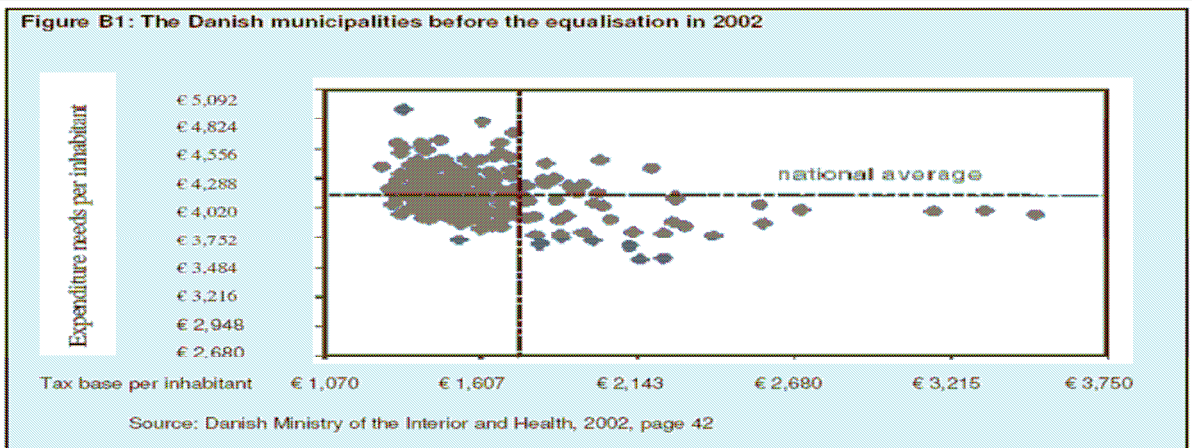
Generally speaking, every “recipient municipality” gets 45 % of the difference between their own municipal tax base and the national average tax base from the “donor municipalities”. Additionally, all municipalities with a tax base lower than 90% of the national average receive horizontal transfers, filling 40 % of the gap to the national average.

Besides the equalisation of expenditure needs and the equalisation of the tax base, some vertical grants from the central government to the counties and the municipalities also exist.

Special grants were disbursed by the central government to local authorities on major islands to balance additional expenditure like ferry transportation costs or to subsidise young people who have to leave the island to get an education. The “island-grant” has amounted to € 5 million in 2002. Moreover, the central government pays a special transfer to the local authorities due to housing costs of asylum seekers

Additionally, all Danish municipalities and counties get block grants from the central government and the annual amount is fixed by the central government independently for every fiscal year. These block grants amounted to € 3.3 billion for the municipalities and to € 1.1 billion for the counties in the fiscal year of 2002.

The following figure B1 illustrates the Danish municipalities before the equalisation and figure B2 shows the municipalities after equalisation measured by expenditure need and tax base in the fiscal year of 2002



Source: Werner and Shah, 2005



### 3. Local Public Finance in Ethiopia – Expenditure Assignments

This chapter deals mainly with the expenditure assignments and, based on the classification between municipal and state function we attempt to determine the probable demand for borrowing by municipalities. We also present some recommendations to that need to be considered at the ULG level to better provide this information.

#### 3.1. Revenue and expenditure flows

The financial decentralisation process in Ethiopia from an ULG perspective is that the local authorities undertake two functions; municipal functions and state functions. Theoretically, the block grant received from the regional government finances the state functions, whereas the revenue generated from taxes and service fees finances the municipal functions. In all of the regions, except Amhara, separate accounting records and administrations are maintained for the state functions and municipal functions, although there are intentions in some of the other states to merge the two separate administrations but still maintain separate accounting records.

Theoretically, the financial resources of the municipal and state functions are kept separate. Capital expenditure for state functions is financed by the block grant and any special purpose grants received from the region or from donors or non-governmental organisations. Capital expenditure for municipal functions is typically financed by municipal function generated revenues but may also be financed by special purpose grants received from the regional state as well as donors and non-governmental organisations. There is a risk that certain capital expenditure financing may, as a result, be off-budget, particularly where donors and non-governmental organisations are concerned.

Information was extracted from a number of reports that set out information on the state and municipal functions to gain a better understanding of the extent of revenues and expenditures that relate to both functions:

**Table 4: Summary of revenue and expenditure in the fiscal year of 2003**

Municipality	Municipal Functions			State Functions		
	Revenue	Expenditure	Surplus/ - Deficit	Revenue	Expenditure	Surplus/ - Deficit
Bahr Dar	12,683,659	8,991,674	3,691,985	9,899,016	12,683,153	-2,784,137
Dessie	8,085,083	6,689,530	1,395,553	13,581,679	14,977,232	-1,395,553
Lalibella	443,590	293,109	150,481	90,411	0	90,411

Woreta	408,195	443,196	-35,001	35,001	0	35,001
Nekemt	7,331,887	2,800,144	4,531,743	1,644,129	6,175,872	-4,531,743
Weliso	3,405,145	1,633,522	1,771,623	2,732,983	4,504,606	-1,771,623
Adama	14,312,521	27,173,916	12,861,395	73,374,827	60,513,432	12,861,395
Ambo	2,029,587	1,859,242	170,345	3,757,006	3,927,351	-170,345
Mekelle	33,679,015	9,128,767	24,550,248	466,223	25,016,471	24,550,248
Rama	257,541	547,212	-289,671	758,471	0	758,471
Wukro	1,021,989	1,598,704	-576,715	5,849,025	5,272,310	576,715
Adwa	4,652,753	3,459,689	1,193,064	5,173,296	6,366,360	-1,193,064
Alamata	1,450,878	1,524,118	-73,240	3,637,269	3,564,029	73,240
Dilla	4,827,366	2,566,049	2,261,317	-1,509,366	451,989	-1,961,355
Durame	1,697,567	632,204	1,065,363	1,175,900	2,241,263	-1,065,363
Yirgalem	2,369,740	1,245,805	1,123,935	-55,468	1,068,467	-1,123,935
Total	98,656,516	70,586,881	28,069,635	120,610,402	146,762,535	26,152,133

Source: GTZ, 2005b

What this illustrates for the urban local governments included in these surveys is that on an overall basis municipal functions generate a surplus that is used to subsidise state functions that incur a deficit. It is only in Adama where the converse scenario occurs. It is uncertain as to why this is occurring; the obvious reason could be that state functions are under-funded but this could also indicate that municipalities are redirecting municipal function generated surpluses to state functions, as there are constraints on municipal functions due to staff shortages or limited services rendered. However, what is obvious from Table 4 is that generally municipal functions generate surpluses and the ability of urban local governments, particularly Bahir Dar and Mekelle, to service borrowings to finance the municipal function infrastructure is great. It is only Adama that is incurring a deficit from its municipal functions.

**Table 5: Summary of revenue and expenditure in the fiscal year of 2004**

Municipality	Municipal Functions			State Functions		
	Revenue	Expenditure	Surplus/ -Deficit	Revenue	Expenditure	Surplus/ -Deficit
Hayk	287,679	287,679	0	0	0	0
Debre Tabor	3,144,360	3,144,360	0	9,282,624	9,282,624	0
Debre Berhan	4,495,996	4,495,996	0	7,813,351	7,813,351	0
Gonder	14,616,962	14,616,962	0	19,120,337	19,120,337	0
Shashemene	13,068,213	8,283,560	4,784,653	4,474,517	4,474,517	0
Mojo	3,332,988	3,332,988	0	0	0	0
Batu	1,935,735	1,935,735	0	0	0	0
Goba	2,974,363	839,778	2,134,584	0	0	0

Shire Endaslassie	4,424,632	4,424,632	0	8,517,608	8,517,608	0
Enticho	377,436	377,436	0	0	0	0
Adrigat	4,308,714	4,074,826	233,888	8,865,300	8,865,300	0
Adi Gutum	331,874	172,115	159,759	0	0	0
Awassa	8,156,850	8,156,850	0	17,232,522	17,232,522	0
Arba Minch	3,097,334	3,097,334	0	12,705,220	12,705,220	0
Jinka	1,734,486	615,941	1,118,545	3,732,563	3,732,563	0
Wolkite	2,242,252	2,242,253	-1	5,008,000	5,008,000	0
Total	68,529,873	60,098,445	8,431,428	96,752,042	96,752,042	0

Source: GTZ, 2005a

Although Table 5 information was extracted from a similar exercise as that performed for 2003, it shows that the urban local governments balanced state function expenditure but generated surpluses from municipal functions, although not to the same extent as in 2003. There is a risk that the data is not reliable but it does indicate that there is probably the possibility for larger urban local governments to generate surpluses from municipal functions (assuming that such surpluses are not being used to finance state functions).

### 3.2. Overall financing of infrastructure and other capital expenditure investments

Loan financing is one part of a general financing strategy that needs to be developed by those municipalities that are potentially creditworthy and which have significant infrastructure investment requirements. It is unlikely that loan financing will, in the shorter-term, be the major source of financing infrastructure investment strategies due to the reasons set out in this and other sections of this report.

Financing strategies will be informed by infrastructure investment requirements and it is these requirements that will be the starting point in better understanding what the probable demand for loan financing and other financing sources will be in the short and longer-term.

An exercise to develop infrastructure and other capital expenditure investment plans has been done and is summarised in Table 6 below<sup>19</sup>.

<sup>19</sup> It should be noted that Table 6 is a combination of two different studies for which different methodologies were used to accumulate data; at 9 municipalities the backlogs summarised in Table 6 were based on a prioritisation basis whereas at the other 9 municipalities, the backlogs included in Table 6 were not prioritised and therefore may be more general. A more detailed analysis of the backlogs for each of the 18 municipalities, distinguishing between new and upgrading investment infrastructure backlogs, is included in the Appendix to this report.

**Table 6: Backlogs in infrastructure and other capital expenditure investments**

<b>SUMMARY OF PROPOSED INVESTMENTS OVER 5 YEARS 2006/07 TO 2010/11</b>	<b>Total estimated cost (Birr)</b>	<b>% of total</b>	<b>Average per city per annum (Birr)</b>
<b>Main Municipal Infrastructure</b>			
Roads	1,803,554,056	34%	20,039,490
Street lighting	119,477,780	2%	1,327,531
Bridges	29,264,676	1%	325,163
Pedestrian Walkways	8,661,850	0%	96,243
Water supply	1,041,216,491	20%	11,569,072
Urban upgrading	69,000,002	1%	766,667
Industrial zone infrastructure	185,873,000	4%	2,065,256
Drainage & flood control	178,892,766	3%	1,987,697
Liquid waste/ Sanitation	159,411,540	3%	1,771,239
Solid waste	135,189,427	3%	1,502,105
Plant & Equipment	79,629,500	2%	884,772
<b>Subtotal (A)</b>	<b>3,810,171,088</b>	<b>72%</b>	<b>42,335,234</b>
<b>Housing</b>			
Housing	724,100,000	14%	8,045,556
<b>Subtotal (B)</b>	<b>724,100,000</b>	<b>14%</b>	<b>8,045,556</b>
<b>Other Local Services</b>			
Schools	233,880,000	4%	2,598,667
Markets	161,964,111	3%	1,799,601
Other	109,080,000	2%	1,212,000
Emergency preparedness	36,383,772	1%	404,264
Recreational facilities	69,988,000	1%	777,644
Slaughterhouses	44,548,650	1%	494,985
Municipal buildings	45,410,000	1%	504,556
Bus stations	17,750,000	0%	197,222
Public libraries	3,600,000	0%	40,000
Public protection services	7,350,000	0%	81,667
Cemeteries	2,000,000	0%	22,222
Health centres	15,143,996	0%	168,267
MSE Training centres	14,000,562	0%	155,562
<b>Subtotal (C)</b>	<b>761,099,091</b>	<b>14%</b>	<b>8,456,657</b>
<b>OVERALL TOTAL [(A)+(B)+(C)]</b>	<b>5,295,370,179</b>	<b>100%</b>	<b>58,837,446</b>

Source: own illustration based on various data provided by John Metcalfe

The major infrastructure investment needs are in respect of roads, water supply and housing, which together account for 68% of the total infrastructure investment identified. During site visits to Bahir Dar, Awassa and Shashemene undertaken during the course of this study, politicians and officials interviewed confirmed that roads, water and housing were pressing needs at the municipal level.

There are also significant investment needs in respect of state functions, such as classrooms and new schools based on the interviews held with the various city representatives in the

course of this study. Whilst schools are reflected in Table 6 above, there is the possibility that most of the investments required for state functions are not accurately reflected by city managers due to the separation of state and municipal functions.

How these infrastructural investments will be financed and whether the municipalities' whose information is included in Table 6 above have the capacity to implement annual capital spending of approximately Birr 59 million per annum requires consideration. Based on the financial benchmarking study that was undertaken in June 2005 the average annual capital expenditure for municipalities in the four regions of Amhara, Oromia, Tigray and Southern Nations was Birr 5.5 million (versus a budget of Birr 6.8 million) in the 2002/03 financial year (see GTZ, 2005b) and Birr 4.0 million (versus a budget of Birr 5.1 million) in the 2003/04 financial year (see GTZ, 2005a), for the four regions in total. From this, it can be concluded that there is limited capacity to increase capital investment spending in the short term and until the reasons are known as to why actual spending versus that budgeted is low, the ability of municipalities to commission large infrastructure investment programmes is limited.

It should be noted that there appears to be off-budget capital expenditures. During the visit to Awassa, the municipality had received Birr 35 million from the Regional State for internal roads, and had spent a significant portion of this in improving the road network in the City. However, it does not appear that these amounts are included in the budget of the City. Furthermore, studies on the status of financial management practices in the SNNP and Oromia Regions indicate that under-spending against the budget in one financial year is not included in subsequent year budgets. It appears that expenditure against previous years' budgets is spent in subsequent years but is not recorded in the financial reports that are prepared. This may indicate that municipalities have a greater capacity to spend than the studies referred to above imply but it is unlikely to be at the level summarised in Table 6 that is required to significantly reduce backlogs that have been identified.

A key point that requires consideration is how the proposed infrastructure investment requirements set out in Table 6 will be financed. None of the reports from which this information was extracted indicate how these infrastructure investment requirements will be financed. This makes understanding what the probable demand for borrowing by municipalities will be virtually impossible to determine.

As indicated above, it is virtually impossible to determine what the demand for infrastructure investment will be for the municipalities that are potentially creditworthy. Disregarding the lack of possible or potential financing of infrastructure information referred to in the section above, there are additional factors that will influence the probable demand for borrowing by municipalities which were obtained from consultant's reports prepared under the auspices of the Urban Development Capacity Building Office that focussed on the Amhara, Oromia, Tigray and Southern Nations regions.

In summary, these reports indicate the following matters that influence the possible demand for infrastructure financing:

- There is a significant portion of operating revenues that are appropriated to finance capital expenditure. The ratio of capital budgets to operating revenue budgets confirms that a significant percentage of operating revenues are being appropriated to finance capital expenditure. For as long as municipalities are able to appropriate operating revenues to finance capital expenditure, there will not be a demand for other financing sources, including borrowings. Table 7 shows the level of capital expenditure in relation to total revenues for a number of municipalities for which data could be obtained. It needs to be acknowledged that operating revenues are unlikely to be sufficient to finance large infrastructure projects that are required to facilitate development.

Table 7: Illustration of percentage of municipal capital expenditure to total municipal revenues

<b>Municipality (fiscal year)</b>	<b>Actual Municipal Revenue (Birr)</b>	<b>Total Actual Capital Expenditure (Birr)</b>	<b>Percentage of Capital Expenditure to Total Revenue (%)</b>
Awassa (2003)	10,053,304	1,423,733	14
Arba Minch (2003)	2,755,261	1,303,729	47
Dila (2003)	2,704,557	788,829	29
Sodo (2003)	1,586,267	97,725	6
Adama (2003)	16,472,016	7,116,829	43
Bishoftu (2003)	6,780,083	3,811,566	56
Jimma (2003)	5,547,680	2,215,174	40
Bahr Dar (2003)	12,755,443	8,367,271	66
Dessie (2003)	8,085,083	2,142,793	27
Lalibella (2003)	443,590	77,767	18
Woreta (2003)	408,195	0	0
Nekemt (2003)	7,331,887	787,540	11
Weliso (2003)	3,405,145	224,453	7
Adama (2003)	14,312,521	19,634,709	137
Ambo (2003)	2,161,587	620,885	29
Mekelle (2003)	33,679,015	3,228,300	10

<b>Municipality (fiscal year)</b>	<b>Actual Municipal Revenue  (Birr)</b>	<b>Total Actual Capital Expenditure  (Birr)</b>	<b>Percentage of Capital Expenditure to Total Revenue  (%)</b>
Rama (2003)	257,540	535,002	208
Wukro (2003)	1,021,989	859,594	84
Adwa (2003)	4,652,753	1,081,531	23
Al amata (2003)	1,450,878	737,712	51
Dilla (2003)	4,827,366	0	0
Durame (2003)	1,697,567	0	0
Yirgalem (2003)	2,369,740	0	0
Alaba Kulito (2003)	977,835	224,276	23
Hayk (2004)	287,679	0	0
Debre tabor (2004)	3,144,360	1,397,045	44
Debre berhan (2004)	4,495,996	285,233	6
Gonder (2004)	14,616,962	3,128,403	21
Shashemene (2004)	13,068,213	8,110,000	62
Mojo (2004)	3,332,988	1,362,650	41
Batu (2004)	1,935,735	0	0
Goba (2004)	2,974,363	603,000	20
Shire indaselassie (2004)	4,424,632	3,424,417	77
Enticho (2004)	377,436	187,581	50
Adigrat (2004)	4,308,714	3,319,675	77
Adi gudum (2004)	331,874	40,699	12
Awassa (2004)	8,156,850	4,826,578	59
Arba minch (2004)	3,097,334	3,177,800	103
Jinka (2004)	1,734,486	0	0
Wolkite (2004)	2,242,252	272,000	12
<b>TOTAL</b>	<b>214,267,175</b>	<b>85,414,499</b>	<b>40</b>

Source: GTZ, 2006a ; GTZ,2006b ; GTZ,2005b ; GTZ,2005a

- There is a relatively low level of actual capital expenditure spending in relation to that budgeted for municipal functions. The extent of the under-spending of the capital expenditure budget for a sample of municipalities from which financial data could be obtained is set out in Table 8. The reason for the under-spending is not known, as none of the numerous assessment reports reviewed and referred to above have provided reasons. However, what this does indicate is that there is a lack of capacity to spend capital amounts budgeted. Therefore an understanding of why there is a lack of capacity to fully implement budgeted capital projects will be required prior to increasing the size of capital budgets through the inclusion of major infrastructure capital projects. This matter could also explain why operating revenues are sufficient to finance capital expenditure.

**Table 8: Actual Municipal Capital Expenditure to Budgeted Municipal Capital Expenditure**

<b>Municipality</b>	<b>Budget Municipal Capital Expenditure</b>	<b>Actual Municipal Capital Expenditure</b>	<b>Percentage of Capital Budget Expended</b>
Bahr Dar	12,244,888	8,367,271	68
Dessie	2,692,600	2,142,793	80
Lalibella	89,446	77,767	87
Woreta	0	0	0
Nekemt	885,000	787,540	89
Weliso	1,601,367	224,453	14
Adama	34,178,542	19,634,709	57
Ambo	640,676	620,885	97
Mekelle	3,950,967	3,228,300	82
Rama	535,002	535,002	100
Wukro	946,122	859,594	91
Adwa	2,603,488	1,081,531	42
Alamata	1,084,186	737,712	68
Dilla	0	0	0
Durame	0	0	0
Yirgalem	0	0	0
Alaba Kulito	743,185	224,276	30
Hayk	0	0	0
Debre tabor	1,989,095	1,397,045	70
Debre berhan	3,335,512	285,233	9
Gonder	3,570,696	3,128,403	88
Shashemene	8,110,000	8,110,000	100
Mojo	2,045,415	1,362,650	67
Batu	0	0	0
Goba	603,000	603,000	100
Shire			
Endaselassie	3,094,721	3,424,417	111
Enticho	270,114	187,581	69
Adigrat	5,419,772	3,319,675	61
Adi gudum	296,100	40,699	14
Awassa	16,941,533	4,826,578	28
Arba minch	5,846,045	3,177,800	54
Jinka	0	0	0
Wolkite	272,000	272,000	100
<b>TOTAL</b>	<b>113,989,471</b>	<b>68,656,914</b>	<b>60</b>

Source: GTZ,2005b and GTZ,2005a

- The under-spending on budgets in one financial year is not carried forward to subsequent budgets in the subsequent year. There is the possibility that unspent funds are utilised in subsequent years but that this is not matched to the correct year's budget. Alternatively, there is a possibility that unspent budgets on municipal functions are used



to finance overspending on state function budgets, which is not reflected as a formal budget virement in either the municipal or state function budget.

- Feasibility and affordability studies are not undertaken for expenditures included in the capital budget. Nor does it appear that there are any financing strategies that are prepared as to how budgeted capital expenditures will be financed, other than through the use of operating revenues.

Again, these weaknesses in public financial management processes, which are being addressed under programmes commissioned by the Urban Development Capacity Building Office, make it difficult, if not impossible, to quantify what the potential demand for borrowing will be by potentially creditworthy municipalities.

Due to the implications that this may have on financing options for infrastructure development, it is important that further research be done to establish the reasons why there is under-spending so that an appropriate action plan can be formulated to address whatever challenges ULG are encountering in this regard. If this is not done, then it will not be possible to determine the effective demand for infrastructure development.

The recommendations set out below indicate what such action plans could include and which all ULG should undertake to identify the effective demand for infrastructure development and the financing thereof.

### **3.3. Recommendations to identify the effective demand for infrastructure financing**

Ideally, prioritised and logical infrastructure plans should be developed that set out the expenditure that is proposed for a 3 to 5 year period, taking into account the affordability and feasibility of the proposed capital expenditure. This process will be used to determine not only whether the proposed infrastructure plans are feasible but what are the most appropriate and realistic options to finance such plans. Proposed financing should be a mixture of own revenues, grants and donations as well as borrowings from financial institutions. Ultimately, it is only when these processes have been completed, can the probable demand for loan financing be estimated.

Each of the recommended processes referred to above are discussed in more detail in this section of the report.

- **Development of an infrastructural and other capital expenditure investment plan**

Each municipality will have to develop a long-term (3 to 5 years) infrastructural and other capital investment plan that sets out key investment priorities over the longer term. These investments will need to be prioritised and should be linked to key political objectives of the municipality concerned regarding the delivery of key services needed to develop the municipality.

Table 6 referred to earlier in this report is an example of such a plan.

Apparently, there are pilot projects to introduce “Integrated Development Planning” in some Ethiopian Cities, which are also good approaches to identify the demands of citizens for services and infrastructure through community participation, facilitate the integration of various sector plans and to create linkages with the financial resources and budget of the applicable cities.

- **The development of appropriate financing strategies**

An overall financing strategy will need to be developed for financing infrastructure and other capital investment backlogs. There are a number of financing strategies that can be considered, including borrowings from financial institutions, and each municipality will need to develop their own strategy based on individual circumstances.

Figure 5 is an example of a strategy that can be considered for financing infrastructure and other capital investments. Each municipality is different and strategies that cater for individual circumstances will need to be developed.

**Figure 5: Example of an infrastructure and other capital asset financing strategy**

Possible Source of Financing	Explanation
Own Revenue Sources	<b>Land lease receipts:</b> The urban municipalities receive substantial revenue from the land lease system. These amounts, which are once-off receipts, should be set aside to specifically finance infrastructure, such as new roads, bridges, street lighting, drainage and flood control as well as general urban development projects. These investments are typically non-revenue generating and using one-off revenue receipts to finance such investments is a logical use of financing
	<b>Proceeds from the disposal of existing capital assets:</b> These proceeds should be used to finance the replacement of infrastructure or other capital assets.
	<b>Connector services:</b> As property developments take place, developers should be charged a fee to connect to existing infrastructure that has been developed from user charges and service fees generated from existing users. These amounts, if considered, should be used to upgrade existing infrastructure that is needed to connect new developments to existing infrastructure such as water and roads. Alternatively, developers should be required to make the necessary upgrading to existing infrastructure directly themselves, provided that the upgrading is done in accordance with pre-determined acceptable standards.
	<b>Tax, user and service fees:</b> A predetermined allocation of tax, user and service fees should be set aside to finance minor capital investments. An example of such a pre-

Possible Source of Financing	Explanation
	determined percentage would be say 5% of revenues from these sources.
Donors	The availability of financing from donors, or participation in donor funded programmes, will be a variable source of financing. However, this will be an important financing source that should be used where available and importantly, where appropriate.
Special purpose grants	The use of special purpose grants received from the regional states to finance infrastructure is also an appropriate financing source. Alternatively, where specific purpose grants are received, for example from the Water Fund or the Road Fund, these will have to be allocated to the financing of infrastructure.
Loans from financial institutions	Borrowings can be used to finance a certain percentage of infrastructure investments or other capital assets that would otherwise be financed from own revenue. An ideal revenue to loan financing ratio (say 30% – 40%) can be determined based on individual municipal circumstances, but only using predictable and constant sources of revenue, to ensure that municipalities do not over-borrow thereby undermining their future financial viability.

Source: own illustration

In developing financing strategies, the identification of predictable and constant annual revenue streams is paramount. The reason is that potential lenders will make their lending decisions on current and recurring revenue streams when assessing the creditworthiness of municipalities.

Presently, there is a significant portion of operating revenues that are used to finance capital expenditure. For as long as municipalities are able to use operating revenues to finance capital expenditure, there is unlikely to be a demand for other financing sources. Therefore it is only when capital expenditures can no longer be financed by operating revenues that other sources of financing will be considered.

However, the use of operating revenues to finance capital expenditure limits the quantum of the investment that can be made in infrastructure. It is unlikely that significant capital investments in infrastructure can be financed from the operating revenue budgets and thus the focus of the capital budgets will likely be on non-infrastructure spending.

- **The preparation of feasibility and affordability studies**

Feasibility and affordability analyses need to be performed for each of the major infrastructure and other capital investments that are planned. The financing strategy referred to above will inform the preparation of such studies. The current cost of each envisaged project together with the envisaged recurrent revenues and expenses will need to be set out taking into account the proposed source of financing.

Unfortunately, it appears that few municipalities, if any, are preparing feasibility and affordability studies for projects included in the capital budget. Without this information, it will not be possible to widen the scope of financing, including the consideration of borrowing

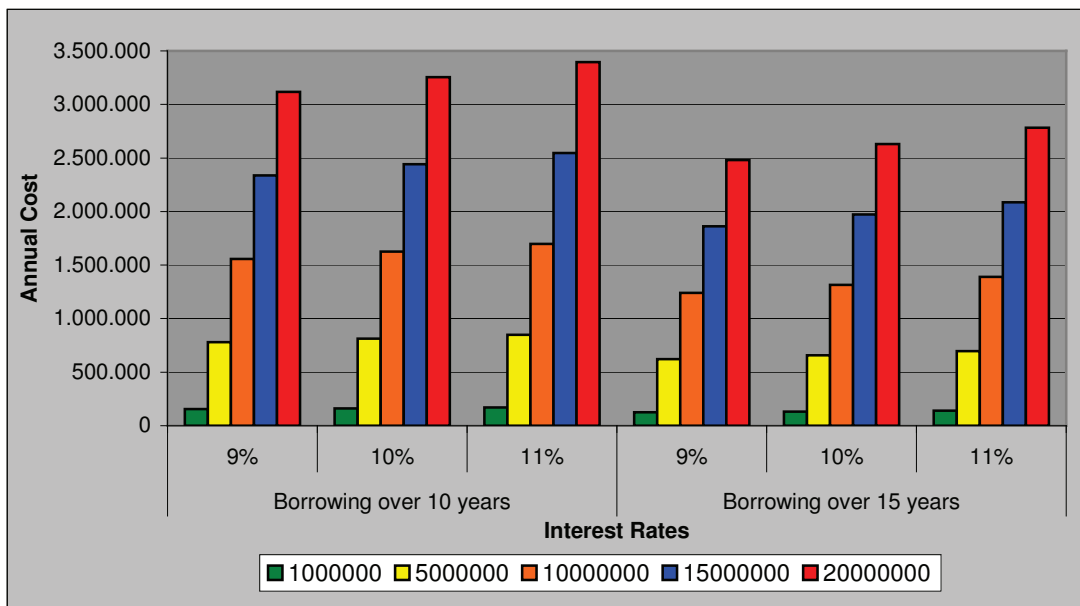
as a financing source, as lenders will require feasibility studies prior to making loans to municipalities, particularly as general financial management is weak.

There is little doubt that municipalities can accommodate the cost of borrowing in their municipal function budgets. As stated above, it appears that most municipalities are able to finance significant capital expenditures from their operating revenue budgets and to use some of these financial resources to repay borrowings over a 10 or 15 year period can easily be achieved without the need to restructure the operating budget. This is dependant, however, to the extent that revenue generated from municipal functions is not used to finance deficits arising from undertaking state functions.

The annual cost of borrowing is illustrated in Figure 6 for borrowings of Birr 1 million, 5 million, 10 million, 15 Million and 20 million, at various interest rates, over a period of 10 years and 15 years, assuming that the borrowings is repaid on an annual basis over the period of the borrowing.

Whilst not all infrastructure investments will generate revenue, for example the construction of roads and street lighting, investments in water supply and other revenue generating infrastructure should increase the recurrent revenue base of municipalities, a portion of which can be used to finance the cost of borrowings and generate the necessary revenue to repay such borrowings on their redemption dates.

**Figure 6: Annual Cost of Borrowing**



Source: own illustration

- **Implementation strategies**

Once the feasibility and affordability studies have been completed, the infrastructure and other capital investment plan can be finalised setting out the proposed sources of financing. This finalised plan will then need to be implemented to achieve the development objectives of the municipality concerned.

It is this finalised plan that will be used as the basis of negotiating borrowings from financial institutions if loan finance has been included in the financing strategy as a source of financing for infrastructure and other capital investments. Clear implementation strategies will need to be developed to support budgeted capital budgets. Without this, it is unlikely that infrastructure investments will materialise and the financing of these will, to all intents and purposes, become irrelevant.

#### **4. Local Capital Markets in Ethiopia**

The aim of this chapter is to describe the capital market in Ethiopia and to determine if the private and public banks are able and willing to lend creditworthy local authorities infrastructure financing. Firstly, we mention the current discussion about the legal status and external credit rating and observe the expectations of the financial institutions to lend funds to the ULG. Finally we summarize the implications for the municipal borrowing.

##### **4.1. Legal status of municipal borrowing and creditworthiness of local authorities**

Some of the basic requirements of a capital market are the legal status of municipal borrowing and the full creditworthiness of the local authorities. A complete examination of these requirements would overstretch the volume of this report and additionally two other studies entitled - “Analysis of the Legal and Regulatory Environment for Municipal Finance” and “Credit Rating of Ten Urban Local Governments (ULG) in Ethiopia” are being undertaken as separate consultancies.

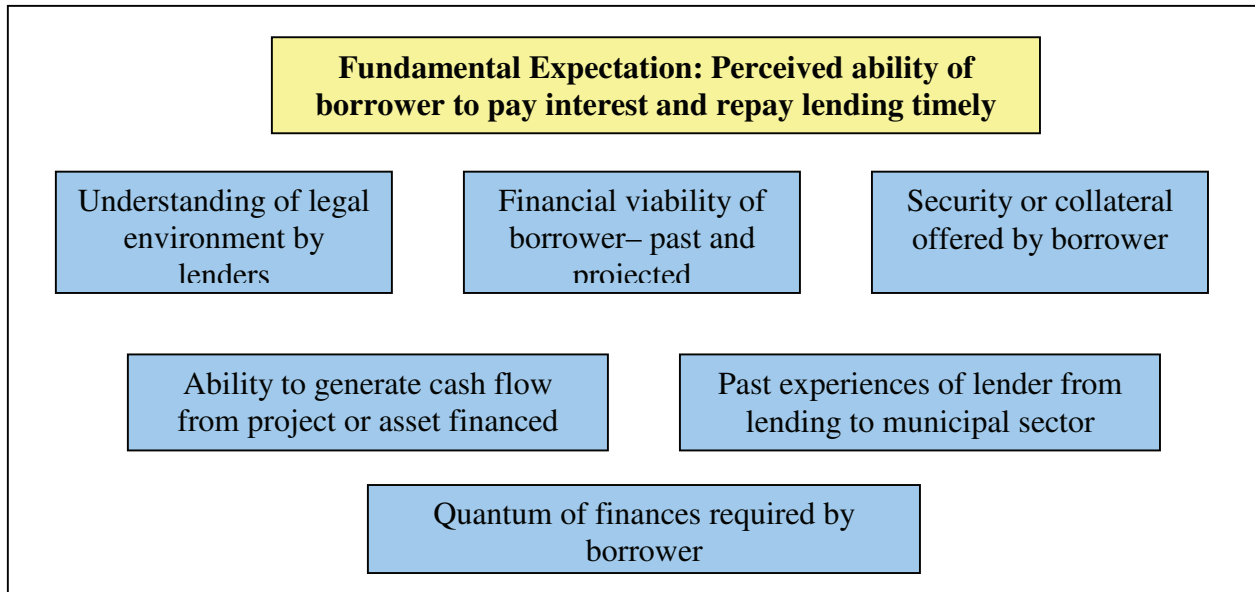
The legal study will assess the current legislative and regulatory framework regarding the question of whether Ethiopian municipalities are allowed to borrow and if so, under what circumstance. A further pillar of the legal study is which financial institutions are authorised to lend funds to local governments and what are the legal restrictions, if any. The credit rating study will provide an individual credit rating of each of the ten ULG included in the study and give some guidance to the stakeholders on the potential applicability of municipal credit enhancement strategies that need to be implemented.

The findings of these studies will inform this study.

#### 4.2. The expectations of financial institutions to lend funds to the ULG

The expectations of lenders can be summarised in a simple manner to be the perceived ability of the borrower to repay the interest and borrowing in full and on time. This perception will be informed by a number of factors from a municipal perspective as set out in Figure 8 below.

**Figure 8: Factors that will influence lending to the municipal sector**



Source: own illustration

A number of officials from financial institutions were interviewed to ascertain what the expectations and requirements of lenders are to make loan financing available to municipalities in Ethiopia. The results of these interviews are summarised below:

- There is a general lack of understanding of the legal environment relating to lending to the municipal sector. In certain instances, officials from the financial institutions interviewed indicated that lending to municipalities could be prohibited in terms of current legislation. Most financial institutions indicated that they would require authorisation from regional states as a minimum before considering lending to municipalities. This finding confirms the need for the envisaged legal study on the legality of lending to the municipal sector, which will be funded by the World Bank, to be completed and publicised to eliminate the legal uncertainty of financial institutions lending to the municipal sector.

The need to confirm the legal status of borrowing from financial institutions by the municipal sector is the conflicting opinions that were obtained from an independent

legal consultant and the legal advisor based in MoFED. The MoFED legal advisor believes that all borrowing by municipalities required the authorisation of the regional governments, who in turn require the approval of the Minister of Finance and Economic Development prior to exercising such authorisation. The independent legal consultant believes that the financial proclamations issued by the various regional states establishing and regulating urban local government councils provide the legal basis for borrowing by municipalities. Despite the two different legal interpretations set out above, there do not appear to be legal impediments for municipalities to borrow from financial institutions.

There also does not appear to be any legal impediment for the offering of security, whether in the form of assets or precepts on future revenue flows. The justification for this assertion is contained in the various financial proclamations that were issued by the regional governments<sup>20</sup>.

One of the financial institutions indicated that there was little knowledge of the public sector and before considering lending to this sector, an investment in improving their understanding of the municipal sector in particular would be required.

- All financial institutions required security for any lending that would be made to municipalities. It should be noted that this requirement was not specific to lending to public sector entities in particular; it appeared that most lending, whether to the corporate sector or private individuals, is only done based on adequate security being provided by the lender. Most of the officials of the financial institutions interviewed indicated that the credit market in Ethiopia was relatively new and the level of non-performing advances previously made was considerably high; all but one of the banks had non-performing advances, expressed as a percentage of advances made, in double figures. The focus of the financial institutions was to reduce this percentage to single digit amounts. Municipalities were considered as having a similar risk profile as any other corporate lender and thus exceptions for the need for security would not be made. If a loan was not secured by a disposable asset, security would be required in the form of a guarantee from either the regional or federal government.
- The only lending that will be provided to municipalities will be to finance a revenue generating asset that will also be the security for the lending provided. The asset

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<sup>20</sup> For example, see Sections 21 – 26 of the Amhara Region Proclamation: Regulation No. 37/2005 that deals with short-term and long-term loans as well as guarantees for loans.

financed has to be tradeable so that in the event of the municipality defaulting, the asset can be disposed of by the lender to recoup the borrowing used to finance the asset concerned. This is an impediment to providing financing to infrastructure assets as in practice infrastructure is not a tradeable asset. Certain of the financial institutions had previously lent funds to municipalities, on a limited basis, but these were to finance assets such as markets and abattoirs due to their tradeability as security. None of the finance institution officials interviewed indicated a preparedness to provide financing for general municipal infrastructure.

- A condition for asset based lending is that municipalities present feasibility studies setting out the costs that will be incurred relative to the asset being financed and the future revenue and cash flows that will be generated from the acquisition or construction of such asset. The financial institutions will use their own technical experts to interrogate such feasibility studies and then make their lending decisions based on the results thereof. Thus municipalities will have to be in a position to provide such information and ring-fence the revenues, expenses and cash flows relating to the acquisition or construction of the asset for which the proposed borrowing will be used to acquire or construct. This will be a challenge to some municipalities but the fact that limited lending has taken place previously indicates that this is a barrier that can easily be overcome.
- General financing is not considered to be a viable option unless state guarantees are provided. One of the reasons provided for the reluctance to consider general financing is the lack of development of accounting standards and external audit standards. Surprisingly, financial institutions do not place reliance on audited annual financial statements received from the corporate sector due to the absence of such accounting and auditing standards. Instead, financial institutions had their own technical resources who undertook due diligence reviews on entities' financial information before considering non-asset backed lending. Comments were made that until the reforms in public sector financial management were fully implemented and credible external audits were performed on public sector entities, general financing was not considered a viable lending option. This also limited the opportunities for a municipal bond market developing in the short to medium term. Clearly, the financial management capacity building programmes being undertaken under the auspices of the Ministry of Urban



Works and Development are crucial to the further development of a municipal lending market.

- Officials from the financial institutions were asked what influence would the availability of credit rating reports would have on lending decisions to urban municipalities. All respondents indicated that the availability of such reports would be useful but will not detract from the need to provide asset backed and secured lending. Likewise, limited exposure to financing assets, such as only providing finance for say 20% of the asset being financed, did not limit risk from a financial institution's perspective, and reliance would still be placed on adequate security being provided by the borrowing municipality.
- The financial institutions will make advances for a relatively long period of time, between 10 and 15 years in duration, which, although it is the shorter than the useful economic life of infrastructure assets, is an acceptable period of time if borrowings are used by municipalities to finance infrastructure.

Most lenders confirmed that they were relatively liquid and have the capacity to provide substantial financing where required. A representative of a financial institution indicated that the advance to deposits ratio is only 45%, which indicates that there is substantial financial capacity to make significant advances. The privately owned banks in particular were currently focused on providing advances to profit orientated corporate entities, where lending risk is considered more manageable. The availability of finance in financial institutions does not appear to be a limiting factor in the provision of finances to the public sector.

**Box 2: The financing of housing by the Addis Ababa Municipality**

It appears that one of the biggest financing deals will relate to the financing of housing developed by the Addis Ababa Municipality. This municipality has developed a number of houses that will be sold to private individuals. One of the banks will provide housing finance to individuals that purchase such housing. The financial institution will pay over the proceeds of the sale to the Addis Ababa Municipality and recover the proceeds and interest from the purchaser in terms of a financing agreement. The house financed by the financial institution will be the collateral for the loan. Whilst this financing arrangement is an appropriate use of borrowing from a financial institution, it should be noted that this arrangement does not constitute the provision of credit to the Addis Ababa Municipality but rather to the purchasers who are effectively borrowing from the financial institution. However, it is a mechanism that does benefit the Addis Ababa Municipality, which would otherwise have had to provide credit to the purchasers. Similar opportunities to provide financing will attract support from most of the financial institutions interviewed during the course of this study.

### **4.3. The implications for municipal sector borrowing**

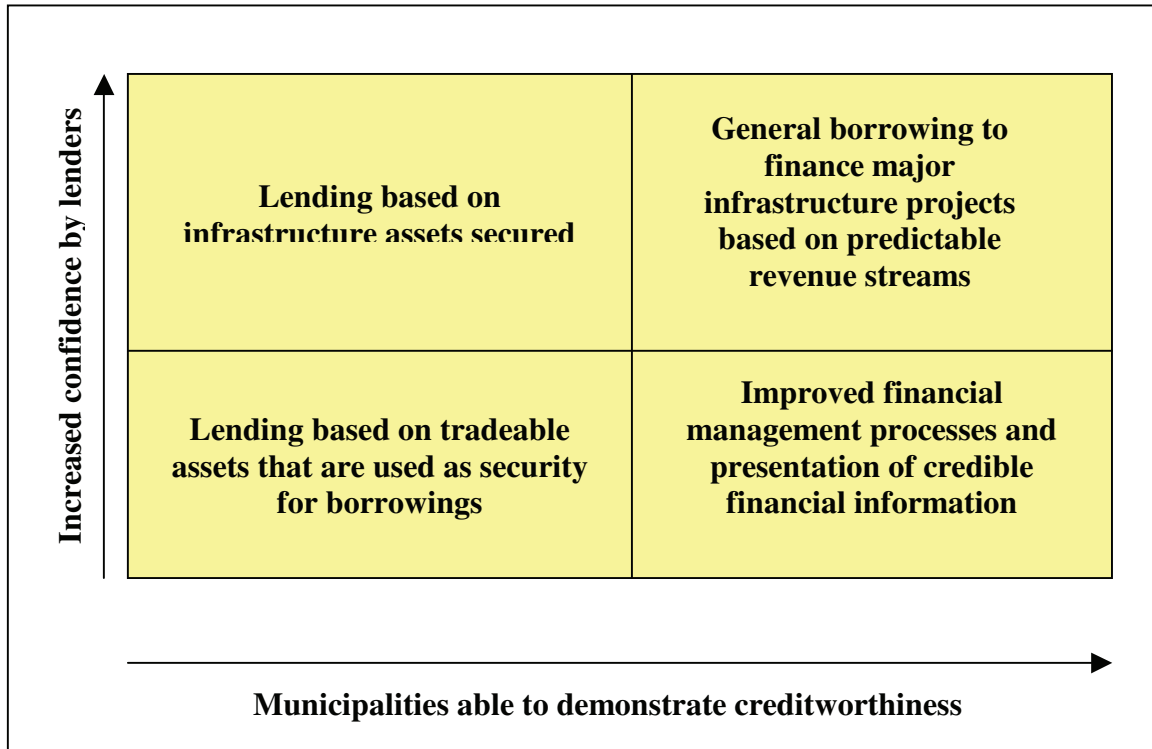
Confidence in the municipal sector by potential lenders is paramount to the development of a municipal lending market. Lenders will require some form of security, whether in the form of collateral or regional or federal guarantee until they are assured that municipalities will be responsible and reliable lenders. The municipal sector has to demonstrate that it is a responsible borrower of funds and that it can repay borrowing on time in terms of any financing agreement that may be entered into to also build confidence in the financial institutional sector. Unfortunately, this will take some time as the credit market in Ethiopia still needs to mature and financial institutions still need to reduce their non-performing advances. A starting point will be secured asset based lending by municipalities, which over time will contribute to increasing confidence in the municipal sector, and hopefully more.

Figure 9 below demonstrates how the lending sector is likely to develop over time, if there is no external support intervention. Initially all lending to creditworthy municipalities will be based on tradeable assets, which is currently occurring, and which are likely to exclude infrastructure assets due to the inability of financial institutions to use these assets as security. Over time municipalities should be in a position to borrow funds for infrastructure assets, whose borrowing will likely need to be secured by other tradeable assets. The implementation of improved financial management processes and the ability to present credible feasibility studies to show that the municipality can repay the borrowing based on its financial position and forecast revenue and cash flows will facilitate this type of lending. Once confidence has been built in the municipal sector, more general borrowing will be offered to those municipalities that have been able to demonstrate an ability to borrow funds responsibly.

However, the timeframe for the evolution of a municipal lending market is unknown. There does not appear to be a doubt that those municipalities that can prepare feasibility studies and who require financing for tradeable assets such as housing, markets and abattoirs, can currently access limited borrowing from financial institutions.

It is not known to what extent more elaborate forms of borrowing, such as private finance initiatives whereby financial institutions together with technical experts, finance the construction and operation of infrastructure assets on behalf of municipalities, or the issuing of bonds. However, until confidence is built in the municipal sector and financial management processes improve, the more traditional form of asset based lending is likely to be the most viable option available to municipalities in the longer-term without some form of support.

**Figure 9: Likely scenarios for a municipal lending market to evolve without support**



Source: own illustration

In order to accelerate the use of lending as a viable option, some form of support will be required and this study sets out what these options could be. Support instruments to mitigate the risk to lenders will be required in the shorter-term and in considering the options available to finance infrastructure, this will need to be taken into account.

Additional support will be required to stimulate the effective demand for infrastructure development. The recommendations to improve infrastructure planning, the development of feasibility studies and logical as well as credible financing plans should also stimulate the effective demand for infrastructure development. It should be noted that this is not only to facilitate infrastructure demand but will also enable ULG to engage effectively with potential lenders if borrowing is identified as a possible source of financing by creditworthy ULG.

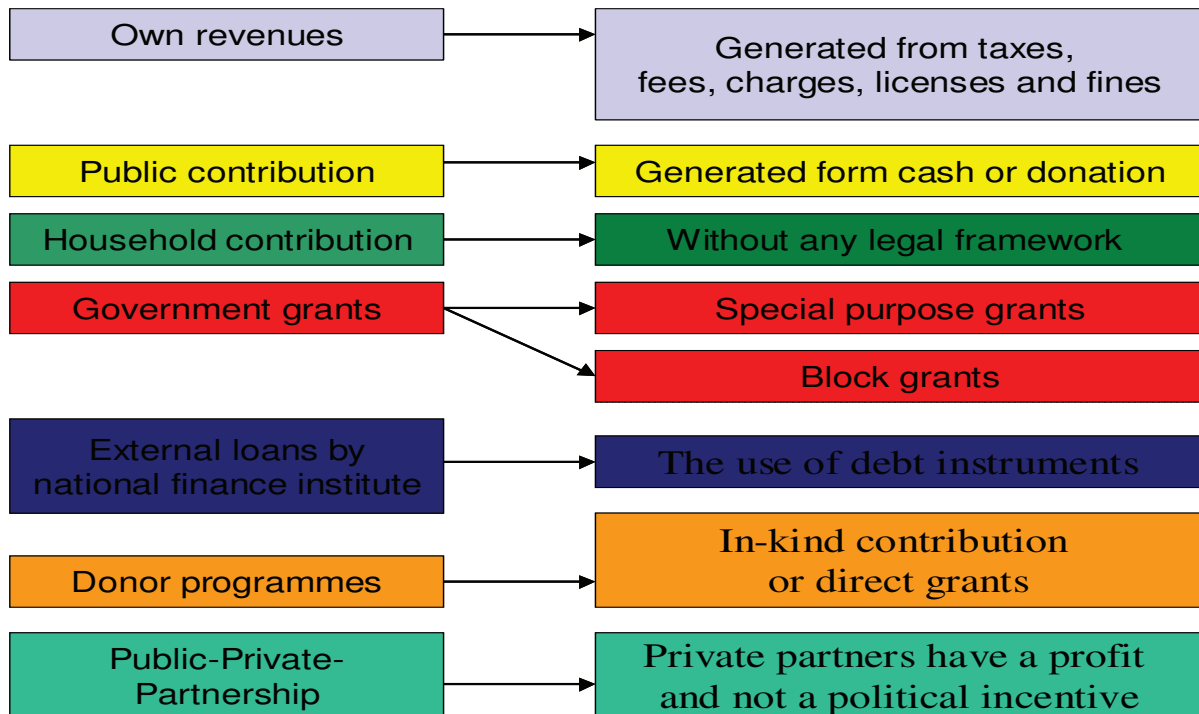
However, an added incentive to encourage creditworthy ULG to borrow, again where this source of financing has been identified in the financing plans, is to mobilise some form of donor financing support for the larger infrastructure projects that will need to be undertaken. This will not only encourage infrastructure development but will also accelerate the implementation of the necessary planning and feasibility studies that will be needed to engage with potential lenders and to improve overall financial management processes.

## 5. Options for Finance and Grants to Support Local Infrastructure Delivery in Ethiopia

### 5.1. Potential financing sources

The options available to finance infrastructure are summarised in Figure 10 below. This study has focused on own revenues and borrowing (external loans) for the reason that these are the two areas that are within the direct control of creditworthy ULG. Government grants are subject to the policy initiatives of either the federal government or the regions and are largely outside the control of the ULG.

Figure 10: Possible sources of infrastructure financing



Source: own illustration

Donor programmes are also outside the control of ULG and the only focus in this study has been how to mobilise donor funding to achieve the objectives of facilitating significant infrastructure developments in the ULG. This study does not attempt to dictate to donors on how their individual programmes must be designed or structured.

Furthermore, we have rejected Public-Private Partnership (PPP) as well as household contributions as a source of infrastructure financing. PPP require extensive contract management capacity, because the private partners are profit orientated, do not take local circumstances into account and sometimes can even undermine key political goals. Such a contract review will overburden the local administrations in Ethiopia which additional suffer from a extreme staff turnover. The household contribution will not generate enough funds to

finance all infrastructure projects and the money is sometimes collected without any necessary legal framework.

## **5.2. Overview of the options considered**

The options set out below are possibilities that can be explored in Ethiopia to facilitate lending by banks to the municipal sector. A brief description of each of the options is summarised and the advantages and disadvantages of each option are also set out. It must be noted that all of these options are based on the premise that there is sufficient demand for lending by the municipal sector and that there will be relatively strong competition amongst banks to lend to the municipal sector. It should be noted that this premise still needs to be tested.

A key limiting factor in considering each option is the quantification of financing that could be made available to ULG by the Ethiopian banking sector. The reason is that it would be prudent for any bank to limit its lending exposure to individual borrowers and to limit exposure to sectors, such as the public sector, to minimise risk. Although this may impact on the options for financing municipal infrastructure, it has not been taken into account in assessing any of the options set out below in this report.

It must be noted that when the advantages and disadvantages of each option are assessed, it is in the context of stimulating a municipal lending market only. Certain options may not be feasible from a municipal lending perspective but may be effective from a capacity building objective, for example.

## **5.3. Municipal Credit Enhancement Facility**

A Municipal Credit Enhancement Facility is a mechanism whereby borrowings from lenders are secured by a claim against a fund, which could be administered on an outsourced short-term insurance basis or through the banking sector. In terms of this fund, a contribution is made to start up capital through a donor or state contribution. Borrowers make a contribution as a percentage of the borrowings made, as do lenders, who also make a contribution to the fund on the same basis. These contributions effectively constitute an “insurance premium”. The potential liabilities of the fund should be underwritten to spread the insurance risk amongst short-term insurers on a national or possibly an international basis.

Figure 11 illustrates how such a credit enhancement facility could operate. Should a ULG default, the lender would make a claim against the fund. The claim would be assessed by the

fund's administrators to ensure that the lender had applied prudent lending policies when the borrowing was originated and compensation would be paid to the lender from the fund. Excesses would be deducted from the compensation depending on the extent to which the lender had applied prudent lending policies. In the accounting records of the borrowing municipality, the borrowing would be written off. The ULG would be barred from underwriting any future borrowings for a specified period of time or, from an insurance perspective, would be penalised through the payment of higher premiums in the event that it intended to borrow funds again.

The fund administrator would need to be paid an annual management fee, which would need to be funded from the premiums earned by the fund. The surplus/deficit of the fund would need to be ring-fenced to assure its future sustainability.

The fund would need to be operated on a commercial basis, but the fund itself would be a non-profit entity. This would enable the fund to build up sufficient capital and be available as a credit enhancement facility when more ULG become creditworthy over a period of time. In this way, sustainability would be assured.

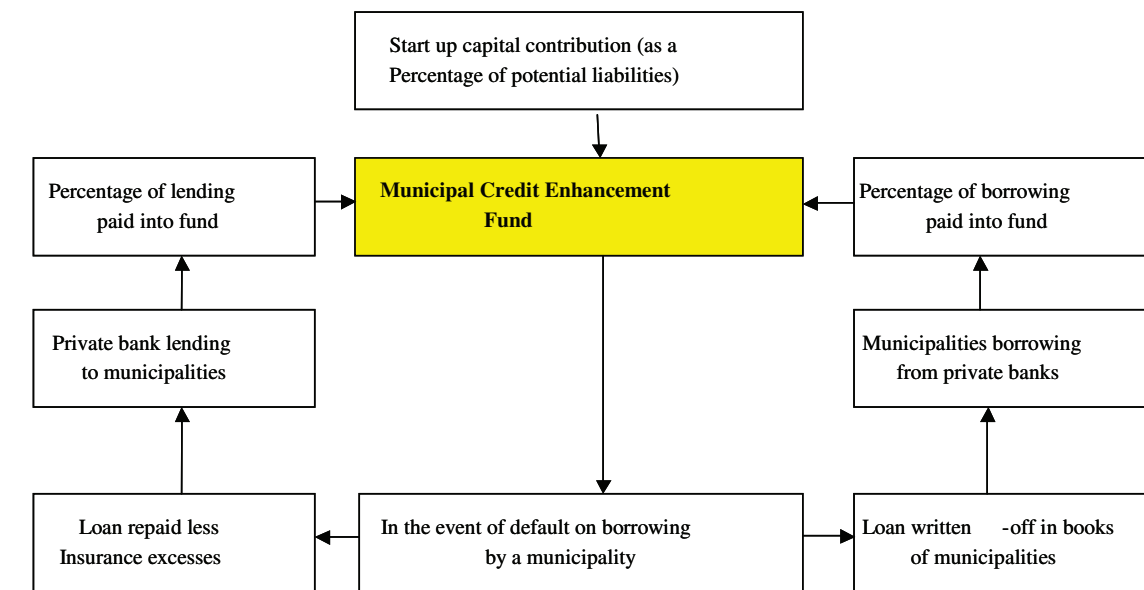
An alternative to the fund would be a credit enhancement instrument being issued by a donor or the state. However, this has a number of disadvantages in that it does not encourage a viable lending market and will not be sustainable in that the instrument will typically only be valid for a limited period and may not be available to those municipalities that become creditworthy at a later date. The instrument itself will not be able to grow in value, which credit enhancement fund will be able to do.

The advantages of a Municipal Credit Enhancement Facility :

- Lenders and borrowers contribute to the fund. The percentage of the contribution to be made will be dependent on the fund's administrator's perception of risk. The greater the perceived lending risk, the higher the contribution. From a lender's perspective, this will promote responsible borrowing, as the level of contribution will erode lending margins or a higher interest rate will be demanded from the borrower. From a borrower's perspective, the level of contribution will be a reflection of good financial management practices and financial soundness. Good financial management practices will in essence be rewarded.

- Lenders will be able to lend for infrastructure projects where opportunities to physically secure the infrastructure as collateral are not possible. The Fund in essence provides collateral.
- Excesses can be charged to lenders that made poor lending decisions, again encouraging responsible and managed risk decisions.
- Contributions from donors or the state could result in a sustainable lending market being developed, provided that the Fund is administered on sound insurance principles.
- Risk will be apportioned on a market basis in that levels of contributions by lenders and borrowers will depend on perceptions of risk by the fund’s administrators.
- Logical and comprehensive project plans will need to be developed by the ULG for each project for which borrowed financing is required. This will improve overall financial management practices and will require the ULG to consider the long-term feasibility of the project for which loan financing is required.

**Figure 11: Illustration of a Municipal Credit Enhancement Facility**



Source: own illustration

The disadvantages of a Municipal Credit Enhancement Facility are:

- Economies of scale are needed for a guarantee fund to operate. The smaller the number of participants, the higher the risk of administrating the fund and the less sustainable the fund will be.

- There will be a high cost of administration, which has to be recovered from lenders and borrowers.
- The ability to mitigate lending risks may be limited due to the relatively small size of the financial sector in Ethiopia.
- Credit enhancement instruments are being provided to secure lending. This may be seen as undermining the development of a municipal borrowing market but in reality, there will initially need to be some form of credit enhancement instrument until a municipal lending market is fully developed.
- The premiums paid by the lender could erode lending margins, which would make loan financing expensive. Alternatively, premiums could be recovered from the capital amount lent. However, this will mean that the borrower pays the cost of the instrument in full.
- The participation of the banks and municipalities is not assured. Alternatively, only higher risk lending will be insured through the facility. To be sustainable, the facility will also require low risk lending to balance out high risk lending.

#### **5.4. Sinking Fund Investment Bond**

In terms of this option, the lender uses a portion of the borrowing to secure the repayment of the loan provided through a self insurance mechanism. This option is best illustrated through a hypothetical example which is set out in Box 3 below:

##### **Box 3: Illustration of a sinking fund investment bond**

*A municipality requires lending of Birr 10 million to finance a project. The lender advances an amount of Birr 13 million, of which Birr 10 million is used to finance the project and Birr 3 million is invested in an interest bearing account or to purchase an interest bearing bond. The period of the advance is 10 years. The Birr 3 million is invested so that at the end of the period an amount of Birr 13 million is available to repay the loan. The municipality who has borrowed the finance will pay interest on the Birr 13 million borrowed but will not have to generate the cash from its operating revenues to repay the lending.*

This is a common financing mechanism in South Africa, used by both the private banking sector and the state owned development bank, where lenders use such instruments to mitigate the risk of lending to municipalities in that country which have a perceived relatively high risk profile.

It does assist in mitigating lending risk and requires the municipality to assume the risk of lending. The lender will still have to ensure that the cost of servicing the borrowing is affordable.



The advantages of a Sinking Fund are:

- This is an effective method to mitigate the risk of lending from a lender's perspective. It also simplifies borrowing from a municipal perspective in that municipalities will not need to set aside cash to repay borrowing; this will be done by the sinking fund investment.
- There is no administrative cost involved in this financing mechanism. If the sinking fund investment is deposited in the financial institution that provided the borrowing, lenders will be able to manage and monitor their risks on an ongoing basis.
- Logical and comprehensive project plans will need to be developed by the ULG for each project for which borrowed financing is required to ensure that the cost of servicing the borrowing is financed appropriately. This will improve overall financial management practices and will require the ULG to consider the long-term feasibility of the project for which loan financing is required.

The disadvantages of a Sinking Fund are:

- Can only be applied to a fixed term borrowing rather than an annuity based financing instrument.
- The cost of servicing the loan will be higher due to the excessive amount borrowed in relation to the amount utilised by the lending municipality in infrastructure development. However, the additional interest amount paid does constitute a partial repayment of the loan, which partially mitigates this disadvantage.
- Lender's loan exposure periods are retained throughout the lending period rather than reducing over the period of the lending.
- Interest rate volatility may impact on the success of this lending mechanism in that interest earned or the financial returns on the secured investment may not be sufficient to match the outstanding value of the lending at repayment date.
- There may be little opportunity to invest in growth financial instruments in Ethiopia. If the Sinking Fund is in the form of a financial deposit rather than a more diversified investment mix, the ability to earn the returns necessary to grow the sinking fund investment may be limited. In addition, capital profits will need to be realised to grow the investment sufficiently.

- Little options for donor funding unless donors contribute to the establishment of the investment that will be created at the outset of the lending when it is raised.
- The municipality will bear the full cost of interest, which it will have to recover from the revenue that it generates.

### 5.5. Intermediary lending institution

An intermediary institution is one that accumulates capital for the specific purpose of lending to the municipal sector to finance infrastructure development. This is a relatively common mechanism that is used to accumulate funds that can be made available for financing. Typically there is a contribution as start-up capital, which is then subsequently used for making loans to municipalities.

Typically such institutions will be classified as part of the “public sector” and will not have private sector ownership.<sup>21</sup> The only exception is where private sector banks pool funds to establish their own intermediary lending institution. However, this could be uncompetitive and ultimately stifle the development of a local government lending market in the longer-term.

The concept of the environmental funds in Poland, which is described below in the box 4, is a successful example to attract infrastructure demand for a certain area:

#### Box 4: Illustration of the environmental funds in Poland

*The legal regulations in Poland do not specify any purpose of borrowing and therefore the local authorities can borrow – without any consideration of the “golden rule” – both for capital as well as for operational expenses. But due to macroeconomic stabilisation purposes, the individual local debt is restricted to a maximum of 60 % of the total annual local budget revenues and the debt service is also limited in a given year to a maximum of 15 % of local budget expenditure.*

*The local borrowing is mainly funded by loans from commercial banks with the remaining borrowing funded by municipal bonds, because there is no public institution which offers financing support to local government’s capital projects. An exception is the Environment Protection and Water Management Funds (FOŚ). The FOŚ provide a mix of non repayable grants and loans with lower interest rates than the commercial banks if the project of the local authority is related to environment protection.*

*Source: Kopańska, 2005; Swianiewicz, 2006 and Werner, 2006b*

The intermediary lending institution will only focus on lending to the municipal sector and will develop lending criteria that are appropriate and tailored to ULG. The intermediary lending institution would need to be operated as a corporative entity that had its own governance arrangements. Surprisingly, a number of the banking institutions that were

<sup>21</sup> In some countries in Western Europe like Belgium, France, Germany and Spain exist so-called “public-owned” saving banks. However, some of this institutions were privatised in the last years and are performing like the DEXIA very successful.

interviewed as part of this study favoured this as a realistic option to make lending accessible to the municipal sector.

The advantages of an intermediary lending institution are:

- Donor community funds can be used to establish the start-up capital. Donor funding can also be used to subsidise the cost of borrowing.
- There is a lending institution that is focussed on its mandate, which is to lend finance to ULG. The institution would be knowledgeable regarding the municipal sector and will be able to develop lending instruments that are suitable.
- The intermediary lending institution will have a better understanding of sectoral legislation and risks and will therefore be in a better position to tailor lending products that specifically deal with sectoral challenges and problems.
- Due to the number of municipalities in Ethiopia, the potential for an intermediary institution is significant. However, this has to be tempered by the realisation that few of the municipalities are creditworthy.
- Logical and comprehensive project plans will need to be developed by the ULG for each project for which borrowed financing is required. This will improve overall financial management practices and will require the ULG to consider the long-term feasibility of the project for which loan financing is required.

The disadvantages of an intermediary lending institution are:

- Experience has shown that intermediary lending can crowd out the private banking sector. The reason is that intermediary institutions have to compete for applications to meet their mandate and in order to do so, tend to have lower lending requirements and lending costs than the private banking sector.
- There is a significant administrative cost that is incurred in establishing and operating such intermediary institutions.
- This option addresses the supply of finance to municipalities. There may be a need to stimulate borrowing from municipalities in order to achieve the institutional mandate. Typically, this is where such institutions are not able to achieve the necessary results.

- The intermediary institution may take risks that it would not otherwise take due to its primary function and lack of profit accountability to its stakeholders.
- There are estimated to be few municipalities that are creditworthy and thus economies of scale will not be realised to make this a realistic option in the shorter term.

There may need to be consideration of this mechanism once the numbers of creditworthy municipalities increase over time or there is a lack of participation by the banking sector to consider public sector borrowing.

### **5.6. Municipal borrowing subsidisation grant**

This is a concept that has been developed by the World Bank in its concept note. Figure 12 is a diagrammatic illustration of this concept using hypothetical percentages. In essence, lenders will fund a limited percentage of the municipally financed project on commercial terms and unsecured. The municipality will fund a predetermined percentage of the infrastructure project to be financed from its own operating revenues. Donors will contribute the balance of the funding through direct transfers to MoFED. As the municipalities require the funding, a draw-down request will be made to MoFED who will disburse the financing to the municipality in accordance with an approved project spending plan.

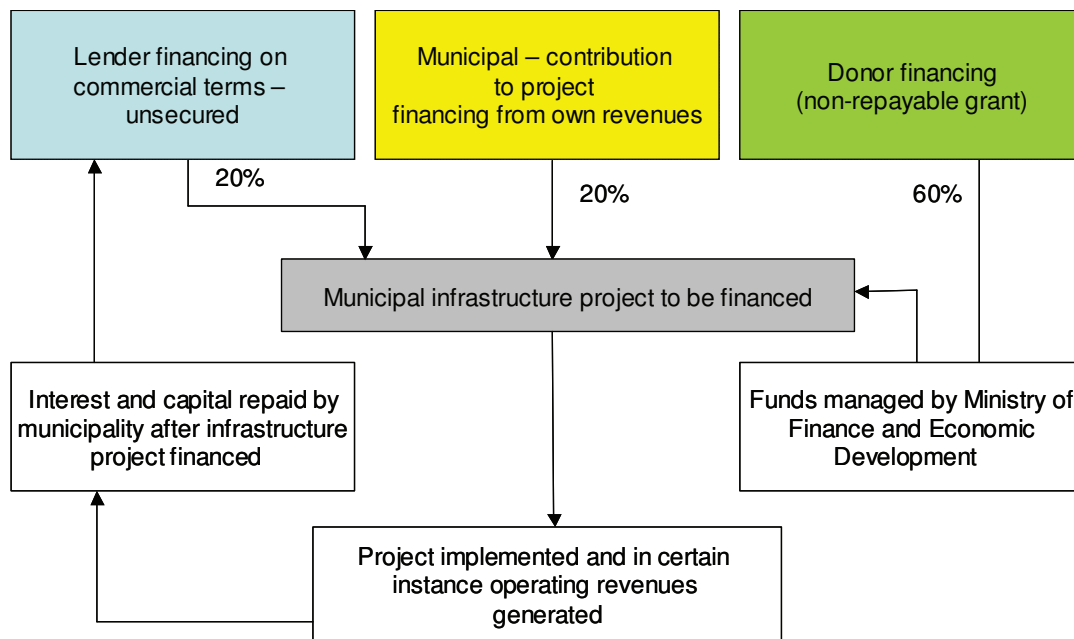
The advantages of the municipal borrowing subsidisation grant are:

- Provided that the subsidisation from the donor community is done for a limited period of time and has the sole objective of building confidence for the development of a ULG lending market in the longer-term, this mechanism should achieve the desired objective.
- There are limited administrative arrangements and costs required to manage such a financing arrangement. Provided that a project plan is prepared at the commencement of the project and which is approved by the lending institution and the ULG and meets the donor conditions, there are minor administrative costs that will be incurred.
- The outcome of such a mechanism is to build confidence in the ULG sector so that the banking sector will lend to ULG without the necessity for federal or regional governments' guarantees in the longer-term. This mechanism will achieve this objective.
- Logical and comprehensive project plans will need to be developed by the ULG for each project for which borrowed financing is required. This will improve overall financial

management practices and will require the ULG to consider the long-term feasibility of the project for which loan financing is required.

- The provision of donor financing should stimulate a demand for infrastructure development by creditworthy ULG. This is an important component of this option as there is a need to stimulate a demand for infrastructure borrowings just as much as there is a need to develop a lending market.

**Figure 12: Illustration of a municipal borrowing subsidisation grant**



Source: own illustration

The disadvantages of a loan subsidisation grant are:

- Due to the limited exposure faced by lenders, lending risk is mitigated. There is a risk that lenders will not change their lending proportions, even in the longer-term unless there is continued external or donor funding provided.
- Lenders have indicated that all lending exposure will need to be secured by collateral with the result that the municipalities will still need to provide some form of security to lenders.
- The support of donors over a relatively long period of time is required.

## 5.7. Municipal Bond Market

In terms of this option, ULG issue bonds for relatively long periods of time with a duration of 7 to 10 years,<sup>22</sup> attracting market related or variable interest rates, which are issued to subscribers at face value. At the bond redemption dates, the ULG face the value of the bond from the owner of the bond at that point in time. The original purchasers of the bond may have to dispose of the bond as a response to changes in liquidity and thus a secondary market will be required to bring buyers and sellers together. Whether this has to be a regulated formal market or an informal market will not be fundamental to the success of a municipal bond market, although a formal market will improve the attractiveness of such bonds.

The advantages of a municipal bond market are:

- Provided that the bond is issued in small denominations, there is an opportunity to encourage the participation of smaller individual investors, in addition to the banking sector, in the financing of municipal infrastructure.
- Private banks will be able to provide financing through a tradable instrument and thus should be more willing to participate in a bond market.
- A sustainable lending market for ULG can be established.
- There are relatively low administrative costs involved.

The disadvantages of a municipal bond market are:

- There is no direct linkage between the infrastructure to be financed and the financing raised through a bond issue. There is a risk that bond financing raised will not be used to finance infrastructure but used for other purposes. This is particularly relevant due to the vast financial management reforms that are still being implemented in Ethiopian ULG.
- There are no developed capital markets in Ethiopia. Whilst that in itself is not a limiting factor, the extent to which the financial sector is able to support a bond market is not known. This has two risks; firstly there is a risk that there will be competition by ULG that issue bonds to attract limited financing, which may require premiums on interest rates paid on bonds to be higher than market rates to attract the financing that is available. Secondly; there is a risk that the issuing of municipal bonds may undermine

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<sup>22</sup> As a matter of fact, a municipal bond with a duration of less than 13 months – a municipal note – can also be issued by the ULG. Due to the fact that no developed capital markets exist in Ethiopia, we do not consider this sub-option in detail.

the market for federal government treasury bills, creating competition between the two tiers of government.

- The purchasers of the bonds are likely to be the banking sector. There may need to be variable bond periods to encourage participation by the banking periods. Whilst banks may be relatively liquid at the present time, banks will need to profile their advances, including bonds, to maintain the necessary levels of liquidity for ongoing sustainability.
- A secondary bond market may not emerge which will undermine this as a viable financing source for municipalities.
- Financial management practices may not be adequately developed to provide the necessary confidence to purchasers of municipal bonds.

### **5.8. Urban development fund**

An urban development fund is an instrument whereby funding is accumulated and allocated to municipalities based on an assessment of pre-qualifying projects. Around 200 urban development funds exist worldwide and vary considerably. For this reason, box 5 is one example of an urban development fund from India which is one the better examples but it could not be adapted by Ethiopia, because the polling instrument of the Tamil Nadu Urban Development Fund needs significant confidence in the municipal sector by potential lenders.<sup>23</sup>

The urban development will typically accumulate capital, in the form of donor funding, which would be available to municipalities to finance infrastructure. The urban development fund will contribute project management and other capacity building expertise as well as provide financing. In turn, the urban development fund provides financing in the form of a repayable loan to qualifying municipalities. The fund is able to use the loan repayments to make further repayable loans to other municipalities. The interest charged on the Fund will increase its capital.

Figure 13 illustrates one way that an urban development fund could operate. By accessing donor funding and using the funding to develop capacity and infrastructure, the financial capacity of municipalities should increase as the infrastructure is developed and commissioned through increased revenue generation. This mechanism will not necessarily help

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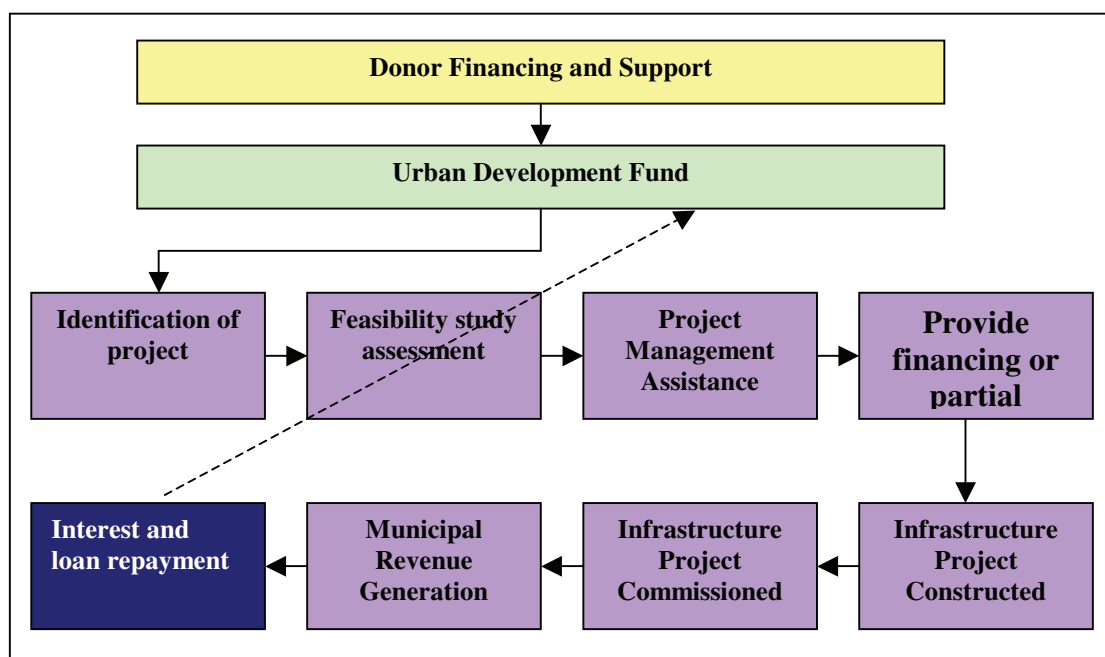
<sup>23</sup> However, this concept could be implemented for the Woredas in the long run, if the capital market has a positive experience with local loans.

those municipalities that are already creditworthy but may assist those municipalities that need to increase their self-generated revenues to become creditworthy, do so.

The advantages of an urban development fund are:

- It will address the capacity constraints that face a number of municipalities in developing infrastructure and in spending their capital budgets.
- For those municipalities that are not quite creditworthy, this should be an effective mechanism to develop capacity. This will also address some of the weak financial management processes that have been identified in the municipal sector.

**Figure 13: Illustration of an urban development fund**



Source: own illustration

- If there is a lending element introduced to the financing of infrastructure projects, the repayment of the “loan” can be used to sustain the fund. It will not, though, contribute to the development of a municipal lending market.
- This mechanism will stimulate infrastructural development, although this will not necessarily be on a sustainable basis.

The disadvantages of an urban development fund are:

- This does not stimulate the development of a sustainable lending market.
- Sustainability is dependent on the continued availability of donor financing and support.
- As capacity building support is required in the form of provision of technical support, this can be a relatively expensive mechanism to use.



- Typically, an urban development fund is a quasi-government entity and therefore is subject to political influence in respect of the allocations of loan financing to municipalities as well as in the enforcement of lending terms and conditions.
- It usually subsidizes lending, which can “crowd-out” other lenders, who cannot compete with the Fund.

**Box 5: Illustration of the Tamil Nadu Urban Development Fund in India**

*The Tamil Nadu Urban Development Fund (TNUDF) was established in 1996 and is mainly financed by the regional government of Tamil Nadu as well as the World Bank. The fund manager of the TNUDF is Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL). The regional government holds 49 % shares of the TNUIFSL and remaining 51 % shares belongs to three national banks. The daily management responsibility of this fund belongs to the ICICI Bank, which holds with 21 % the biggest share of all three Indian banks. Moreover, the TNUDF uses - besides capacity building – also the concept of “polled financing” for the infrastructure financing. The idea of “polled financing” means that several projects are pooled and lumped together in a bond issuance and this can provide a significantly reducing transaction costs and improving pricing. Especially for smaller and less creditworthy local authorities is this concept reasonable.*

*Source: Prahan, 2004*

### **5.9.Comparative assessment of each of the possible options**

The advantages and disadvantages of each possible option have been summarised above and take into account lenders perspectives on borrowing to this sector which have been summarised in the subchapter 5.2 of this report. The options described above have been scored in a matrix to determine what the most appropriate options are to urban local governments. Two scoring matrices have been prepared; one for those ULG that are creditworthy and one for those municipalities that are not yet creditworthy but should in a relatively short period of time be able to be ranked as creditworthy if given sufficient capacity support.

#### **The scoring matrix for creditworthy ULG**

The following criteria have been included in assessing the various options:

- Affordability to ULG – will the cost of borrowing be affordable to ULG
- Promote the development of a sector wide lending market that will encourage the financial institutions to participate in the provision of loan finance to ULG or alternatively to build confidence of lenders to lend into the market
- Facilitate the raising of significant amounts for infrastructure spending
- Limits the necessity to provide collateral
- Likely to be supported by the financial institutions in Ethiopia

- Enable borrowing by ULG for relatively long periods of time (5-7 years)
- Low cost of administration (either by lenders/institutions/ULG) and ease of implementation

Each criteria was given a similar weighting and the extent to which the option meets the criteria was scored on a scale of 1 - 5; a score of 5 being that the option would achieve the criteria in full, a score of 1 meaning that the option does not meet the criteria. The results of the matrix are recorded in Table 9 below.

The matrix indicates that a municipal credit enhancement facility and the loan subsidisation grant score the highest, which is not surprising given that there are only subtle differences. Ultimately, the municipal credit enhancement facility could be more sustainable in the longer-term provided that the number of municipalities that become creditworthy increases steadily over time and provided that those municipalities that have a relatively lower risk than other municipalities that borrow continue to use the credit enhancement facility. The loan subsidisation grant may not be that sustainable in the longer-term unless lenders increasingly take a higher risk in the medium to long-term. That period of time may be insufficient to establish a sustainable lending market.

To address the risks associated with the municipal credit enhancement facility and loan subsidisation options, it is recommended that a hybrid of both options be developed. This recommended option is referred to as the “credit enhancement facility and borrowing subsidisation” in this section of the report.

**Table 9: Recommended option for creditworthy municipalities**

Refer	Assessment Criteria  Options and score	Affordability to ULG	Facilitate the development of a broader lending market	Facilitate the raising of significant amounts for infrastructure spending	Dependent on the provision of collateral (scored low if collateral required)	Likely support from the capital markets in Ethiopia	Enable borrowing by municipalities for relatively long period (5-7 years)	Low cost of administration
5.3	<b>Municipal Credit Enhancement Fund (23/35)</b>	2- Ultimately premiums paid by borrower	5 - This mechanism will encourage the development of a lending market	5 – The Fund is dependant on high volumes of lending and numerous lenders	1- This mechanism is a form of collateral and does not promote unsecured borrowing	5 – This mechanism broadens the involvement of the financial sector in Ethiopia	4 – This should promote relatively long-periods of borrowing	1 – There will be considerable administrative costs
5.4	<b>Sinking Fund Investment Bond (22/35)</b>	2 – There is an additional cost to the borrower being the differential between interest paid and the investment return on the initial sinking fund investment	4 – This mechanism will facilitate the development of a lending market	3 – The greater the borrowing, the greater the initial sinking fund investment. There is likely to be an optimal level of funding whereafter the costs of borrowing will be too higher	1- This mechanism is a form of collateral and does not promote unsecured borrowing	3 – There is unlikely to be the opportunity to obtain the necessary investment returns on the sinking fund investment to offset the borrowing	4 – This should promote relatively long-periods of borrowing	5 – There will be no administrative costs

Refer	Assessment Criteria  Options and score	Affordability to ULG	Facilitate the development of a broader lending market	Facilitate the raising of significant amounts for infrastructure spending	Dependent on the provision of collateral (scored low if collateral required)	Likely support from the capital markets in Ethiopia	Enable borrowing by municipalities for relatively long period (5-7 years)	Low cost of administration
5.5	<b>Intermediary Lending Institution (21/35)</b>	5 – There will be no additional cost to municipalities in relation to conventional asset backed lending	1 – This will not build broad financial market confidence. Lending opportunities will be restricted to the intermediary lending institution	4 – The institution should be able to lend significant amounts – it will be limited by its own capital and funding structure	4 – The intermediary lending institution may not require the same extent of collateral as other financial institutions may require	1 – This will not involve the wider financial sector in Ethiopia	4 – This should promote relatively long-periods of borrowing	2 – There will be considerable administrative costs incurred in establishing and managing such an institution
5.6	<b>Municipal Borrowing Subsidisation Grant (25/35)</b>	5 – This is very affordable to municipalities as not very much cash will need to be generated from the infrastructure development to repay financing	3 – This mechanism will facilitate the development of a lending market but over a relatively long period of time	3 – The limiting factor on the quantum of lending will be the duration and extent of donor support	1- This mechanism is a form of collateral and does not promote unsecured borrowing	5 – This mechanism broadens the involvement of the financial sector in Ethiopia	4 – This should promote relatively long-periods of borrowing	4 – If structured appropriately, such a mechanism can be instituted with a relatively low administrative cost
5.7	<b>Municipal Bond Market</b>	1 – Unless excessive rates offered on the	2 – There is unlikely to be support for	3 – Bonds are one way of attracting	2 – Due to the lack of financial	1 – Unless excessive rates offered on the	4 – This should promote relatively long-	1 – Municipalities that issue

Refer	Assessment Criteria  Options and score	Affordability to ULG	Facilitate the development of a broader lending market	Facilitate the raising of significant amounts for infrastructure spending	Dependent on the provision of collateral (scored low if collateral required)	Likely support from the capital markets in Ethiopia	Enable borrowing by municipalities for relatively long period (5-7 years)	Low cost of administration
	(14/35)	bonds, unlikely to attract support	bonds because of the limited financial management practices. However, A successful bond issue will contribute to the building of confidence	significant funds. However, unless attractive returns provided to bondholders, unlikely that potential investors will take risk.	management practices, unlikely that bond issues will be unsecured	bonds, unlikely to attract support from the broader financial sector	periods of borrowing	bonds will have to invest in systems and develop procedures to provide information to bondholders to provide assurance that bonds can be repaid.
5.8	<b>Urban Development Fund (16/35)</b>	5 – This is very affordable to municipalities as not very much cash will need to be generated from the infrastructure development to repay financing	1 – This will not directly facilitate the development of a lending market	2 – Typically such funds have limited resources and therefore cannot provide significant sources of infrastructure financing. They are also dependent on the repayment of financing	5 – There will not be a need to provide collateral	1 – This will not involve the wider financial sector in Ethiopia	1 – The focus of such funds is not to encourage borrowing. Support will typically be short-term	1 – There is usually a high administrative cost associated with these funds

### **Recommended option for creditworthy ULG: Credit Enhancement and Borrowing Subsidisation Grant**

Figure 14 below illustrates how the Credit Enhancement and Borrowing Subsidisation Grant will operate. Initially the Credit Enhancement Facility will need to be capitalised by a one-off capital contribution. This amount will be needed to initially underwrite the risks that will be carried by the facility until it has a steady source of premium revenue. Importantly, the facility will be administered as a non-profit making entity but should be administered by a professional short-term insurance expert to manage the risk exposure of the facility and to invest the assets of the facility. All underwriting results will be used to increase the capital of the credit enhancement facility or to offset future premiums, thereby making it more affordable to local authorities in future years.

The ULG will need to contribute a portion of the infrastructure amount (illustrated as 5% in Figure 14 below) over the period of the lending. The donors could also underwrite the risk and contribute an amount of say 5%, also illustrated in Figure 14 to the fund. If this was made upfront, the actual contribution could be discounted over the period of the loan to compensate for the upfront payment.

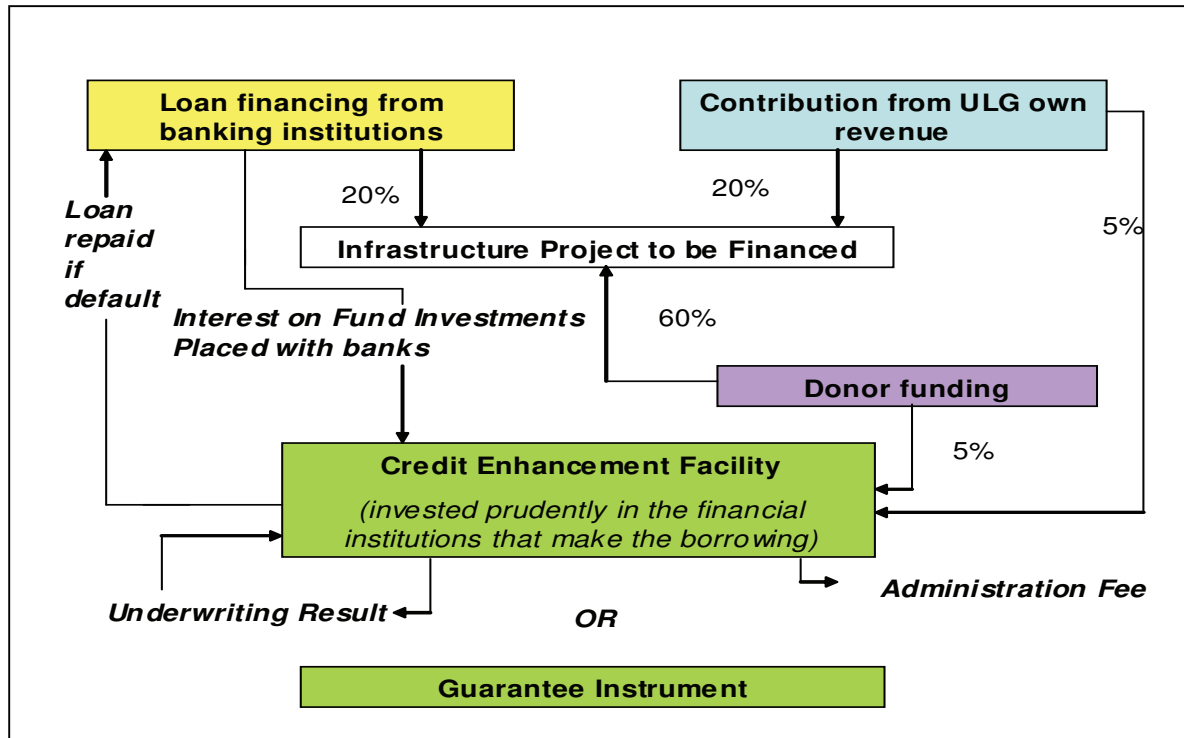
Lenders will make finance available for infrastructure, after applying traditional lending assessment procedures, but instead of requesting collateral from the borrowing municipality, a credit enhancement instrument will be issued by the facility. The credit enhancement facility will, as an incentive to lenders, invest a portion of its capital in the banks that participate through the provision of finance.

Donors will subsidise a portion of the capital cost of the infrastructure to be financed to effectively subsidise the amount that has to be financed from borrowings and to facilitate infrastructure development.

This option should promote sustainability, as lenders will gain more confidence in the municipal sector. As more municipalities become creditworthy, the credit enhancement facility will have sufficient capital to mitigate the risks associated with their proposed borrowings. An important matter to note is that lenders will still need to undertake comprehensive credit assessments and will not be relieved of this responsibility through the credit enhancement facility, as lending decisions will be verified if the instrument is called in

by the facility's administrators. ULG that intend to borrow will need to do feasibility studies and demonstrate that they will be in a position to repay the borrowing when due.

**Figure 14: Recommended option for creditworthy local authorities**



Source: own illustration

It is likely that initially all borrowings will be repayable on an instalment basis, so the risk faced by lenders and the fund will reduce over the period of the borrowing. This will impact on the premiums that will need to be paid to the facility by borrowers and donors.

The main advantage of this option is that ULG themselves will not have to provide collateral, thereby being limited to what type of asset can be financed from borrowing, as the asset financed typically will be the collateral that is provided for borrowings.

There are administrative cost implications to this option but these are outweighed by the long-term sustainability of such a facility.

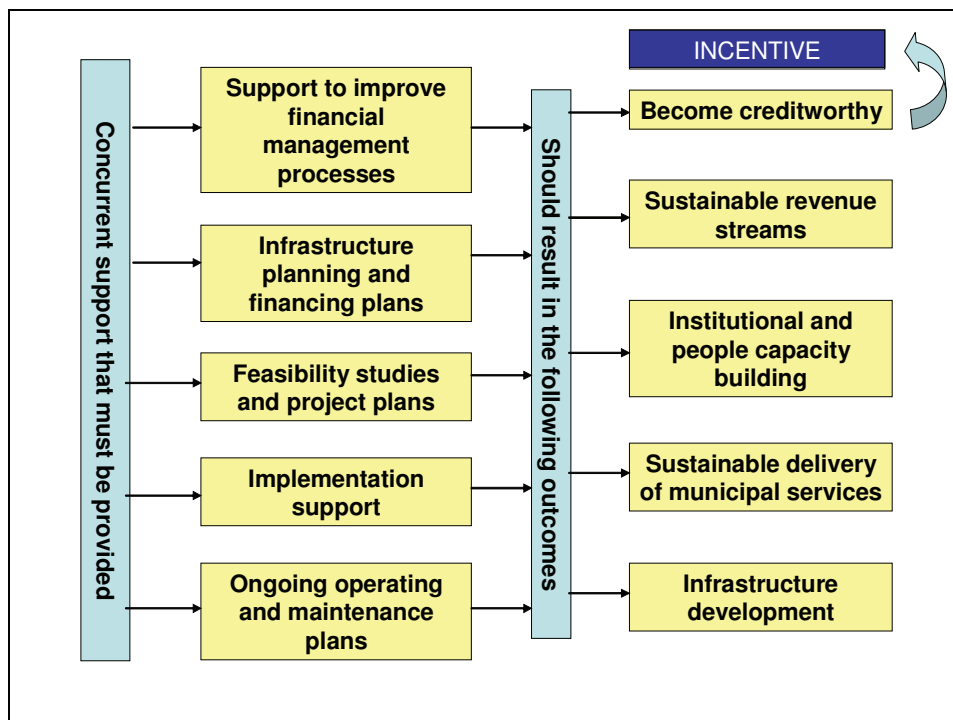
Initially, though, the creation of the facility will take some time and there may not be sufficient demand for borrowing financing due to the limited number of ULG that are considered creditworthy. Therefore a credit enhancement instrument will need to be considered for each borrowing. As more ULG become creditworthy and the demand for borrowings increase, the facility described above can be implemented. In this way, the recommendation can be implemented with minimum administrative effort and the facility developed when the demand for borrowing increases.

## Recommended option for potential creditworthy ULG: Urban Service Improvement Programme

The recommendations in this section of the report have mainly focussed on those ULG that are considered to be creditworthy and which should be able to access lending from financial institutions. Those municipalities that are assessed to be potentially creditworthy will need various support processes to assist them become creditworthy over a relatively short period of time. A number of these support processes will need to be conducted concurrently to achieve the objective of increasing the number of municipalities that will become creditworthy.

The support processes that need to be undertaken are illustrated in Figure 15 below, together with the outcomes that can be expected from such support.

Figure 15: Support processes and expected outcomes



Source: own illustration

Once ULG are able to prepare feasibility studies and project plans and can thereafter demonstrate that they have sustainable revenue streams, their creditworthiness will improve and there is the possibility that they will be able to borrow funds from financial institutions to further develop infrastructure.

A concept similar to the urban development fund option set out in section 5.8 of this report is an option that can be used to provide the support that is necessary for the envisaged Urban Service Improvement Programme (USIP). This option will need to be supported by the broader capacity building programme that is being conducted under the auspices of the



Capacity Building for Decentralised Service Delivery Project (CBDSD), funded by the World Bank, the multi-donor funded Public Sector Capacity Building Programme (PSCAP) and GTZ. It is important that the USIP has as one of its own objectives and performance measures the improvement in the creditworthiness of the municipalities that it supports. It is also important that work of the USIP is supplemented with capacity building initiatives that improve the financial management capacities of the targeted municipalities. In this way the potential to increase the number of creditworthy municipalities will increase over time. The achievement of this objective is necessary for the success of the recommended option set out earlier in this report for creditworthy municipalities.

Ultimately, starting with an assessment of creditworthiness, a “step back” approach was developed that identifies the processes and procedures that would need to be in place before a potentially creditworthy ULG would be able to access borrowings. These were identified as having a predictable and constant source of revenue, limited infrastructure as well as the capacity to plan, finance commission and implement projects. By understanding the unique and specific challenges faced by individual potentially creditworthy ULG, tailored support programmes will need to be developed to assist potentially creditworthy ULG implement the processes and procedures needed to access loan financing as and when appropriate. It is important to reiterate that the support programme has to have as its key outcome, the attainment of creditworthiness by the targeted ULG.

To encourage municipalities to attain creditworthiness, an incentive will need to be developed, which will be in the form of focused donor support. Ideally, the ability to accelerate development and access to borrowings will need to be incorporated into the incentive developed.

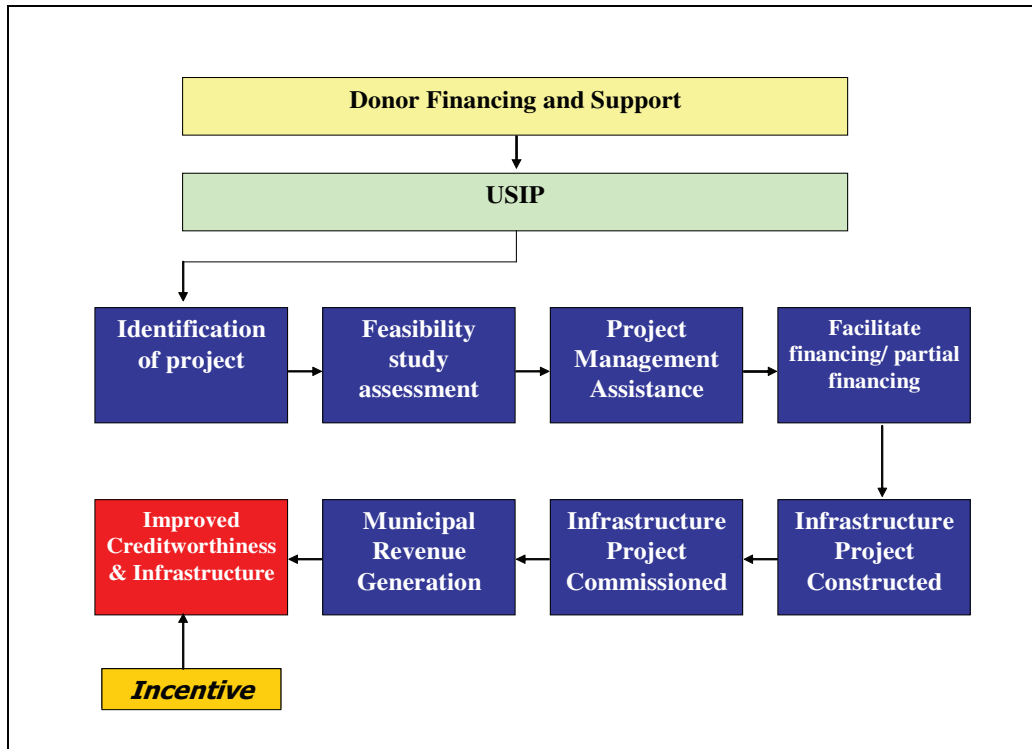
The “step back” approach is referred to as the Urban Service Improvement Programme (USIP) in this report.

A critical part of the USIP is that only ULG that are considered to be potentially creditworthy will be invited to participate in the programme. The reason is that it is only these ULG’s that will achieve the objective of USIP. From a practical perspective, the outcome of the credit rating study that will be undertaken shortly under the auspices of the World Bank will assist identify the criteria that could be used to determine which municipalities will be invited to participate in USIP.

In summary, the USIP will therefore be a mixture of focused technical support together with an incentive in the form of donor support for infrastructure development. Figure 13 illustrates the USIP.

Figure 16 shows the stepped approach in more detail to explain the typical support processes and the steps that will have to be put in place.

**Figure 16: Illustration of step back approach recommendations**



Source: own illustration

To encourage municipalities to attain creditworthiness, an incentive, such as access to donor funding, will need to be developed. Ideally, the ability to accelerate development and access to borrowings will need to be incorporated into the incentive developed.

## **6. Recommendations**

Financing infrastructure development can be done from numerous sources, which can include special purpose regional state grants, own revenue sources, donations and borrowings. Borrowings are the most expensive form of financing and also the most difficult financing source to access because of the limited capital markets in Ethiopia. Own revenue sources are the easiest and the only unrestricted financing source to access and therefore the more revenue that can be generated, the more development can be funded from such revenue. This requires that municipalities develop predictable and sustainable sources of revenue not only to finance infrastructure development but also to finance the resultant operating and maintenance costs that emanate from increased infrastructure development. It is only when predictable and sustainable sources of revenue are maximised that the options to access other, more substantial sources of financing become more realistic.

Certain of the recommendations in this section of the report are therefore focussed on assisting local authorities in achieving this objective, as this will ultimately contribute to infrastructure development.

However, it is unlikely that there will be sufficient revenue sources to finance the extent of infrastructure development that is required in municipalities. Regardless of the extent to which revenue is maximised and effective collection systems are put in place, revenue will need to be used to operate and maintain infrastructure that is developed and the more development that takes place over time, the less revenue that will be available to finance infrastructure development. Alternative sources of financing, particularly borrowings, will be required to finance infrastructure development in the future.

### **Lending recommendations**

Initially, without any form of intervention support, local authorities will be able to access asset backed lending, provided that detailed feasibility studies are done and a commercial proposition is made to potential lenders. Once the legal uncertainty of lending to the municipal sector is clarified, the opportunities for asset backed lending will increase.

There are also opportunities to conduct other financing activities, such as post development housing finance. Again, those opportunities that have a sound commercial business case for lenders and opportunities to provide finance will continue to arise.

However, these are not infrastructure financing opportunities and will not provide the quantum of financing that is required to accelerate significant investment financing. Therefore, there is going to be a need to develop interventions that will facilitate the development of a sustainable lending market. The recommendations in this section of this report are aimed at achieving this objective.

### **Asset backed lending**

The opportunity to finance certain assets such as housing, markets, abattoirs and short-life assets such as vehicles and equipment exist at present. Provided a municipality can present a financial feasibility study and the asset being backed is marketable and can be used as collateral, borrowing will be a viable financing source.

Assisting municipalities in preparing feasibility studies will be required to improve access to this financing source by municipalities. This should be done as part of the financial management capacity building programme that is being supported by the CBDSD Project, the PSCAP and GTZ Ethiopia. The improvement in municipal financial management practices will enable more municipalities to undertake asset backed lending.

### **Creditworthy ULG should be supported by a combination of a Credit Enhancement and Borrowing Subsidisation Grant**

This recommended option is described in section 5.7 of this report in detail. The Credit Enhancement and Borrowing Subsidisation Grant option can be implemented relatively easily once a sufficient capital contribution is sourced and an administrator appointed. Guidelines will need to be written to guide the administrator on the management and financing of the guarantee fund component of this option. In addition, once the legal status of such a fund has been clarified, communication processes with the banking institutions will need to be undertaken.

The fact that lending risk is mitigated through the Credit Enhancement and Borrowing Subsidisation Grant, on the condition that responsible lending is done by the banking institutions, will address the current focus of the banking sector to reduce the non-performing component of loans made, and enable municipalities to access loans on the same terms and conditions as are afforded to the corporate sector in Ethiopia. Unless some form of security is provided, it is unlikely that lenders will provide infrastructure financing.

Once there is greater confidence in the municipal sector, the necessity for credit enhanced lending will diminish over time, provided that there is responsible borrowing by the municipal sector. The credit enhancement component of this option should provide safeguards in this regard, as some form of due diligence will need to be done on the municipality intending to borrow before a credit enhancement instrument is issued.

In respect of the loan subsidisation component of this option, the contribution to infrastructure development will accelerate the development of a lending market by facilitating a demand for significant infrastructure projects, defined in terms of value, to be undertaken and limiting the risk exposure of lenders. The sooner that there is infrastructure development, the easier it will be for municipalities to generate predictable and sustainable revenue sources and further improve their creditworthiness. This will eventually further reduce lending risk and encourage lenders to make more finance available to municipalities.

The implementation of the loan subsidisation component is relatively easy. As soon as the borrowing municipality has accessed loan financing and obtained a guarantee, a draw down payment will be made by the donor through MoFED. No additional vetting procedures will be necessary. This component can therefore be implemented with minimal administrative or institutional costs being incurred.

### **Potentially creditworthy ULG should be supported by the USIP**

The concept of the USIP is also explained in section 5.7 of this report. This mechanism will provide support to ULG to develop infrastructure but will be dependent on ongoing and substantial donor support to ULG in the form of technical assistance. However, the outcome of this support has to be improving the creditworthiness of beneficiary municipalities.

There is a significant cost attached to this option and numerous institutional arrangements need to be made, including the procurement of technical expertise.

### **National policy initiatives**

Besides the private and public banks in Ethiopia and the foreign donors, the political decision makers in the federal, regional and local government have to fulfil some obligations to generate a sound local public finance system which enables the local authorities to improve the local infrastructure as well as to finance the resultant operating and maintenance costs.

In a short term of a one year period, the remaining tasks – which were highlighted in chapters, two, three and four of this report – are:

- The federal government should clarify the legal status of municipal borrowing,
- The federal government should conduct a new census,
- The ULG should start to collect data for a municipal cadastre as a basis for a future property tax,
- The ULG should develop of an infrastructural and other capital expenditure investment plan,
- The ULG should create appropriate financing strategies and
- The ULG should generate the preparation of feasibility and affordability studies

For the medium term with a two to five year perspective the issues to solve are:

- The federal government should introduce a tax sharing of the VAT,
- The regions should allow the remaining ULG to introduce a property tax and
- The ULG should to finish their implementation strategies

## Appendix

### The impact of institutional quality on tax effort in developing countries with special reference to Ethiopia

Already in 1963 Nicholas Kaldor asked the question of whether underdeveloped countries will learn to tax (see Kaldor, 1963). Nowadays this core question can be modified to whether developing countries can tax more than they do or whether they have the capacity to collect a relatively larger share of the national income. Such questions are essential when investigating the situation in Ethiopia, because Ethiopia needs to spend more on public infrastructure - especially on education - and to finance such additional expenditures more tax revenues are necessary.

However, it is often not in the interest of those who dominate the political institutions of such countries to increase taxes (see Bird, Vasquez and Torgler, 2006). What matters is not only how high taxes are, but also how the tax level has been chosen,<sup>24</sup> how the taxes are imposed, and how the funds thus raised are used. The historical evidence appears to suggest that it is critical to ensure that the linkage between expenditure and revenue decisions is clearly established in the budgetary and political process. Moreover, the level of tax effort takes into account 'demand factors' such as societal institutions like governance and corruption, and 'framing' institutions such as the size of the shadow economy, inequalities in the distribution of income and tax morale. If taxpayers perceive that their interests (preferences) are properly represented in political institutions and consider government to be not wasteful but helpful, their willingness to vote for higher levels of taxation and comply with their tax obligations will increase. 'Societal institutions' are used as an indicator of the extent to which citizens feel they have a meaningful 'voice' in influencing the state. In general, the greater the 'voice', other things equal, the higher the tax effort will be.

One of the vexing problems for policy makers in developing economies is encouraging high levels of tax compliance. High tax compliance is necessary for efficiency and equity as well as for the development of social capital (see Slemrod, 1998). While reducing evasion improves the government's revenue, it is a broader issue for the development of a civil order (see Knack and Keefer, 1997).

Table A1 shows the size of the shadow economy in 36 African countries. The countries are ranked according to the level of their shadow economy in 2002/2003. Ethiopia is ranked in position 16 out of 37 countries showing therefore neither high nor low levels of a shadow economy. In general, the values are a little below the average. Relatively low values are observable for countries such as South Africa, Lesotho, Namibia and Botswana.

**Table A1: The Size of the Shadow Economy in African Countries in % of the GDP**

No.	Country	Shadow Economy in % of GDP		
		1999/2000	2001/2002	2002/03
1	South Africa	28,4	29,1	29,5
2	Lesotho	31,3	32,4	33,3
3	Namibia	31,4	32,6	33,4
4	Botswana	33,4	33,9	34,6
5	Cameroon	32,8	33,7	34,9
6	Algeria	34,1	35,0	35,6
7	Kenya	34,3	35,1	36,0
8	Egypt, Arab Rep.	35,1	36,0	36,9
9	Morocco	36,4	37,1	37,9
10	Mauritania	36,1	37,2	38,0

Source: Schneider, 2005, page 22

<sup>24</sup> The experience in Ethiopia with the tax rate reduction of rental income underlines such predication, because after this tax reform the tax yield is even higher than before.

No.	Country	Shadow Economy in % of GDP		
		1999/2000	2001/2002	2002/03
11	Burundi	36,9	37,6	38,7
12	Tunisia	38,4	39,1	39,9
13	Togo	35,1	39,2	40,4
14	Guinea	39,6	40,8	41,3
15	Madagascar	39,6	40,4	41,6
<b>16</b>	<b>Ethiopia</b>	<b>40,3</b>	<b>41,4</b>	<b>42,1</b>
17	Malawi	40,3	41,2	42,1
18	Rwanda	40,3	41,4	42,2
19	Mozambique	40,3	41,3	42,4
20	Burkina Faso	41,4	42,6	43,3
21	Ghana	41,9	42,7	43,6
22	Niger	41,9	42,6	43,8
23	Sierra Leone	41,7	42,8	43,9
24	Mali	42,3	43,9	44,7
25	Angola	43,2	44,1	45,2
26	Cote d'Ivoire	43,2	44,3	45,2
27	Uganda	43,1	44,6	45,4
28	Central African Republic	44,3	45,4	46,1
29	Senegal	45,1	46,8	47,5
30	Chad	46,2	47,1	48,0
31	Benin	47,3	48,2	49,1
32	Congo, Dem. Rep.	48,0	48,8	49,7
33	Congo, Rep.	48,2	49,1	50,1
34	Zambia	48,9	49,7	50,8
35	Nigeria	57,9	58,6	59,4
36	Tanzania	58,3	59,4	60,2
	Unweighted Average	<b>41,3</b>	<b>42,3</b>	<b>43,2</b>

Source: Schneider, 2005, page 22

Thus, it may be interesting to compare Ethiopia with conditions found in countries such as South Africa and Botswana. Figure A1 indicates the historical development of tax effort in these three countries:<sup>25</sup>

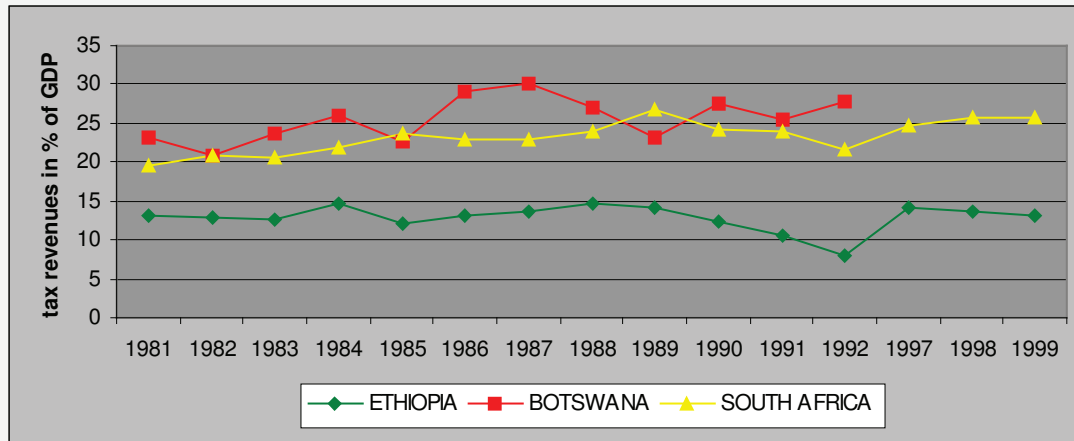
As can be seen, Ethiopia has considerably lower tax effort values than Botswana and South Africa. The values are never going beyond the 15 percent level. This requires the need to take a closer look at the determinants of tax. Thus, it is worthwhile to compare in Table 2 the institutional quality between Ethiopia, South Africa and Botswana.

These results are consistent with previous findings. Overall, the values of these six governance dimensions for the periods 1998 and 2000, based on several hundred variables measuring perceptions of governance and derived from 25 different data sources, clearly indicate that Botswana and South Africa have higher institutional quality values than Ethiopia. These results are consistent among all the used indicators for institutional quality (except political stability, where South Africa shows low values in 1998). Thus, improving the institutional quality in Ethiopia might be a key strategy to improve the level of tax effort.

<sup>25</sup> The full set of observations were not available for Botswana.



Figure A1: Tax Effort in Ethiopia, Botswana and South Africa measured in tax revenues relatively to GDP



Source: World Development Indicators

Table A2: Institutional Quality in Ethiopia, Botswana, and South Africa

GOVERNANCE INDICATORS	Ethiopia	Botswana	South Africa	Year
Control of Corruption	<b>-0.25</b>	0.53	0.42	1998
	<b>0.06</b>	1.02	0.57	2000
Rule of Law	<b>-0.23</b>	0.66	0.21	1998
	<b>-0.38</b>	0.67	0.28	2000
Regulatory Quality	<b>-0.14</b>	0.69	0.33	1998
	<b>-0.62</b>	0.79	0.12	2000
Government Effectiveness	<b>0.02</b>	0.52	0.17	1998
	<b>-0.60</b>	0.98	0.43	2000
Political Stability	<b>-0.25</b>	0.89	-0.80	1998
	<b>-0.83</b>	0.9	-0.13	2000
Voice and Accountability	<b>-0.69</b>	0.77	0.87	1998
	<b>-1.00</b>	0.78	1.05	2000

Source: Kaufmann, Kraay and Mastruzz, 2003

Moreover, in a comparison between Botswana and South Africa, Cummings et al. (2005) find that tax compliance increases with individual perceptions that the tax system is fair and that the government is providing valued goods and services with the revenues. To the extent that the trust in the fiscal exchange contributes to the social norm of paying taxes, these norms are a proximate cause of higher compliance.

Furthermore, if taxpayers perceive that their interests (preferences) are properly represented in political institutions and they receive a desirable mix of public goods, their willingness to pay taxes increases. On the other hand, a state in which corruption is rampant is one in which citizens have little trust in authority and thus a low incentive to cooperate. A more encompassing and legitimate state will lead to higher tax compliance. Such a state may tend to increase taxpayers' positive attitudes and commitment to the tax system, with an accompanying positive effect on tax compliance. Taxes are the price paid for government services and taxpayers generally are sensitive to the way the government uses tax revenues. Therefore, taxpayers perceive their relationship with the state not only as a relationship of coercion, but also as one of exchange. Individuals will feel cheated if taxes are not spent efficiently. In general, we can expect that such conditions and factors also influence the compliance level in Ethiopia.<sup>26</sup> Torgler (2007) shows that these factors are essential to understand citizens' willingness to pay taxes in different regions around the world. Thus, reforms in Ethiopia should carefully take into account such determinants that not only help to improve the level of tax compliance but also contribute to higher level of tax efforts which are the basis for a sustainable tax system.

<sup>26</sup> A recent study has also investigated the relationship between decentralisation on tax morale (see Torgler and Werner, 2005), but this empirical study has observed the tax morale in Germany.

## International Good Practices in Local Infrastructure Financing

In an international comparison of good practices to finance local infrastructure a distinction between the external financing of local authorities and the intergovernmental fiscal relation framework is necessary. Based on this approach, we will briefly present in the appendix the country cases of the USA and Germany for external financing of local authorities as well as France and South Africa regarding intergovernmental fiscal relations framework.

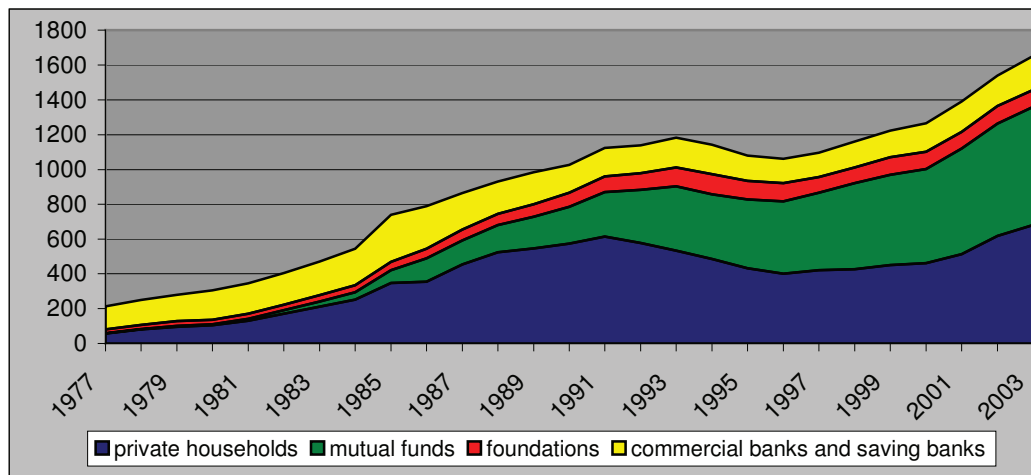
### ➤ US municipal bonds

Municipal bonds are – after vertical transfers and own taxes – the third biggest revenue source of the local authorities in the USA and have even a higher revenue volume than charges and fees.<sup>27</sup> Municipal bonds are used for general capital investment or short term bridging operations as well as to finance a single project like a sewage treatment plant, a school building or a bridge.

The first municipal bond was already issued in 1812 (see Marlin and Mysak, 1991, page 36), but since the end of the World War II the municipal bonds have received its huge influence to finance the local infrastructure in the USA. Municipal bonds can be divided into short-term bonds, medium-term bonds and long-term bonds; if a municipal bond has a duration of less than 13 months, it is sometimes also called municipal note.<sup>28</sup> A further classification criteria is the taxation of the municipal bonds, because the majority<sup>29</sup> of the municipal bonds are so-called “tax-exempt municipal bonds” and the buyer of these municipal bonds does not have to pay any personal income tax or tax on capital gains for the interest from the bonds.<sup>30</sup>

Furthermore, municipal bonds can be grouped according to the collateral in the general obligation bonds (GO) and revenue bonds. The GO bonds are the traditional<sup>31</sup> form of municipal bonds and they are used for local infrastructure projects from which the majority or all inhabitants of a municipality benefited. For this reason, a portion of the future tax revenues – mainly from the local property tax – will be used as collateral by the issuing municipality. Revenue bonds generally cover the cost of projects which after their implementation will generated some fees revenues – like a toll bridge, a power plant or a slaughter house – and for this reason they use future fee revenues as collateral. Figure A1 points out the structure of the holder of municipal bonds from 1977-2003:

**Figure A1: Structure of the holder of municipal bonds from 1977 to 2003 ( in US-\$ million)**



Source: Werner, 2005, page 68

### ➤ German Savings Banks

<sup>27</sup> In the fiscal year of 2001-2002 municipal bonds with a volume of US\$ 282 billion were issued, own local tax amounted to US\$ 370 billion and vertical grants to the local authorities aggregated US\$ 398 billion. Charges and fees have generated only US\$ 152 billion in the same fiscal year.

<sup>28</sup> Short-term municipal bonds have a maturity of one to four years and long-term municipal bonds can be arranged with a 30 years maturity.

<sup>29</sup> Around 85 % of all issued municipal bonds are not taxed by the federal government.

<sup>30</sup> The tax exemption is only relevant for the federal taxation and for this reason it is possible that the owner of a municipal bond has to pay taxes to his residence state or even municipality. However, the tax exemption is one of the mayor reasons for the success of the municipal bond.

<sup>31</sup> Until 1976 the volume of issued GO bonds was always higher than revenue bonds. The reason for the shift from GO bonds to revenue bonds is that in some US states the local administration needs the permission of the voter to issue GO bonds. Generally speaking, the conception of the revenue bond needs a higher interest rate, because GO bonds were evaluated as safer instruments by the market.

In the course of Germany's reunification, the central government devised a number of "shadow budgets" to finance the burden of German reunification. Consequently, the financial situation of the central government became less constrained during the past few years, whereas the 16 federal states incurred enormous amounts of public debt during the first decade after reunification. Local authorities do not suffer from a strong burden of interest payments like the central government, but since the German reunification, the debt of eastern local authorities especially has risen rapidly (similar observations can be made between the western and eastern federal states; for the bailout issue in the equalisation system among the federal states, see Spahn and Werner, 2004).

Compared with the central government and the states, creditors of local governments are quite clear and unilateral. More than 90 percent of local borrowing is financed directly by the banking sector; however, municipal bonds do not play a major role in Germany. Moreover, the majority of the direct loans originate from public savings banks and their state clearinghouse banks, the *Landessparkassen*.

Another feature of the link between public savings banks and local authorities has to be considered: local authorities both own public savings banks and at the same time guarantee the credit rating of those banks (*Gewährträgerhaftung*). Savings banks administer the accounts of local authorities and usually offer them borrowing conditions that are below those of private banks. Hence, a situation may arise in which a local mayor as a member of the executive board of a public savings bank has to decide about his or her own municipal loan.<sup>32</sup>

In Germany, the main limitation concerning federal borrowing is contained in article 115 of its federal constitution: "Revenue from borrowing shall not exceed the total expenditure for investment provided for in the budget estimates; exceptions shall only be permissible to avert a disturbance of macroeconomic equilibrium. Details shall be the subject of federal legislation."

Local borrowing differs from central government and state borrowing for several reasons. Nearly two-thirds of public investment in Germany takes place at the local level. The 16 federal states are able to fix local borrowing limits independently, and therefore, the set of laws controlling local borrowing limits differs from state to state. Generally, local borrowing is permitted only to fund investment expenditure, and local mayors are allowed to use borrowing only if all other sources of revenues (taxes and fees) have been used.

Furthermore, local authorities must submit their budgets to the federal Ministry of Finance or its respective regional agencies. In the extreme case of financial incompetence of a local mayor, the ministry does not approve the local budgets, and the mayor has to present a revised budget. Theoretically, the ministry is also able to assume complete control of the local budget. These strict rules are quite reasonable, because, in the case of a local bailout, the federal state must balance the local debt completely; therefore, a municipality cannot become bankrupt.

### ➤ France

France has a four-tier government structure and consists of 26 regions, 100 départements and 36,679 municipalities. Due to the "two decentralization laws" of 1982, the regions and départements received a completely constitutional status for the first time in France.

At the first glance, with the concept of the "four old taxes" (*„Quatre vieilles“*) the French local authorities have a higher tax sovereignty than other European local authorities like for example Ireland, the United Kingdom, Poland or the Netherlands. But at the second glance, the French local tax system has some disadvantages, because the tax base of the local business tax (*taxe professionnelle*) was reduced by the French central government a few years ago and the tax base of the three local property taxes (*taxe d'habitation*, *taxe sur le foncier bâti* and *taxe sur le foncier non bâti*) is mainly based on the result of the 1970 evaluation. Moreover, the tax rate settings of all four local taxes are directly linked to each other. Finally, the central government has abolished some tax rights of the regions and the départements like the tax on vehicles or the tax on undeveloped property (*taxe sur le foncier non bâti*) and therefore the grants of the central government now have a much higher influence on the French local authorities.

The largest grant to the local authorities is the DGF (*Dotation Globale de Fonctionnement*), which was introduced in 1979 and was mainly revised in 1993 and 2004.<sup>33</sup> The DGF is a block grant and the total amount is divided by a fixed portion<sup>34</sup> between the municipalities, départements and the regions. The individual amount

<sup>32</sup> Table A3 in the appendix gives a brief description of the local debt structure from 1950 to 1999.

<sup>33</sup> Due to the revision of 2004, the DGF increased from € 18.9 billion in 2003 to € 36.3 billion in 2004, but on the other hand some other block grants like the equalisation grant due to different revenues from the local business tax (*Fond National de Péréquation de la Taxe Professionnelle*) were abolished.

<sup>34</sup> In 2003 the municipalities have received 72.5 % of the total amount of the DGF and the départements the resulting 27.5 %. The regions have participated for the first time at the DGF in 2004.

from the DGF of a municipality is mainly influenced<sup>35</sup> by the respective population numbers, but not every inhabitant has the same “fiscal value” in the calculation formula, because in 2006 the capita value varies – depending on the total size of the municipalities – between € 61.23 € and € 122.46 and favours bigger cities.<sup>36</sup>

Generally speaking, the DGF does not consider the exact expenditure needs of the local authorities like in the Nordic countries or does not equalise tax capacity between the local authorities, rather the DGF uses the higher per capita value of bigger cities as a proxy for these two goals. For this reason, the DGF as an international sample that a vertical transfer, which uses only the population figure has some positive incentives for local authorities. For the Ethiopian case it is essential to receive a new census as an indicator for a transfer system as soon as possible

In the framework of the decentralisation laws of 1982, the départements gained the responsibility for the maintenance and new construction of the *collèges*, which is the mandatory secondary school for pupils of the age of 11 to 14, while the region have been responsible for the new construction and the maintenance of the second wing of the secondary school; the *lycées* are attended by French pupils from the age of 15 to 18. Because of shift of this fiscal burden from the central government to the upper local authorities, the regions and départements received a transfer called the *Dotation générale de décentralization* (DGD).

A further important block grant in France is the compensation grant due to taxation of local investments by the national VAT (*Fond de compensation de la TVA*, FCTVA) and therefore the local authorities receive a rebate of their VAT payments for investments from the central government. Especially for the new construction of school buildings such a tax rebate for the VAT is significant. One of the major features of the French grant system is the high degree of block grants compared to specific subsidies (see Prud’homme, 2006 as well as Werner and Shah, 2006).

#### ➤ South Africa

The approach to financing infrastructure developments in South Africa is based on a multi-pronged approach. Firstly, minimum service levels and entitlements to receive basic services is a policy objective of the national government. Significant amounts are allocated to municipalities in the form of conditional grants (the major infrastructure grant is referred to as the Municipal Investment Grant (MIG) to finance the provision of infrastructure for basic services. Presently government grant infrastructure financing is the most significant source of financing of municipal capital expenditure. However, there is a significant under-spend on government grants received as the smaller municipalities in particular do not have the technical or project management skills to spend the grants allocated to them. Originally, the predecessor grant system to MIG was supply based in that only infrastructure grants that meet government development objectives were funded. However, MIG allows municipalities some flexibility to tailor the grant to meet infrastructure needs identified by the recipient municipality, which is aimed at increasing the demand and spending of this financing source.

A second important financing source is borrowing. There is an understanding that the only sustainable manner in which infrastructure development can be sustained is through the use of borrowings. To stimulate a lending market, the national government has placed significant emphasis on public financial management processes that are included in legislation. One of the objectives of these legislative reforms is to enable lenders to make informed decisions on whether to lend money to the applicant municipality and to enable the lender to receive reliable financial information at any time subsequent to making the lending to monitor the ability of borrowing municipalities to repay the loan. Matters such as guarantees and the partial liquidation of a municipality are also addressed in the legislation to build lenders’ confidence. The success of these reforms in stimulating a lending market is not yet known as the legislative reforms are still being implemented.

A third important financing source is the use of own revenues to finance capital expenditure. Emphasis is placed on ensuring that taxes and tariffs include the recovery of the capital cost of the infrastructure used to provide the relevant service and in this way, accumulate funds to finance future infrastructure development. However, one of the most successful financing sources was the previous legislative system which required municipalities to set aside a portion of their total annual revenues in a fund, together with the proceeds realised from the disposal of capital assets. These amounts were required to be invested and over a significant period of time, provided a significant source of financing for infrastructure. Due to inter-generational inequalities as this mechanism constituted taxation in advance, these funds are no longer compulsory and will no longer be a significant financing source. It is expected that borrowings will replace these funds as they get depleted over time and the success of the financial reforms will be able to be more accurately assessed.

<sup>35</sup> Besides the population number, the DGF also bears in mind the local area in hectare and the result of the abolishment of the salary component as part of the tax base of the local business tax

<sup>36</sup> Municipalities with less than 500 inhabitants receive € 61,23 € and cities with more than 200,000 inhabitants get € 122,46 per capita.

## The property taxation and valuation in Denmark and the United Kingdom

Besides the surcharges to the personal income tax, the municipalities in Denmark can levy some property taxes, which are called *Grundskyld*, *Daekningsafgift* and *Frigorelseafgift*. The value of a property is based on the market value (see Josten, 2000 as well as Werner, 2006b) and is classified into the following categories:

- the *total value* of a property including all buildings, which are located on the property
- the *ground value* of the property, which is calculated by the market value of the undeveloped real estate
- and *structure value* of the property, which is calculated by the *total value* minus the *ground value*

The *Grundskyld* uses the ground value as a tax base and the municipalities are allowed to fix a tax rate of between of 0.6 % and 2.4%. The counties can levy only a uniform tax rate of 1 %. The *Grundskyld* taxes only private property, while commercial and public properties are exempted.

The *Daekningsafgift* uses the structure value of commercial property as a tax base and only the municipalities can fix a uniform tax rate of 1%. Public property is taxed<sup>37</sup> also by the *Daekningsafgift* with a municipal, uniform rate of 0,4 % and a county tax rate of 0.5%.

The *Frigorelseafgift* tries to capitalize the increase of a property value within the framework of changes in the local development plan, which means that rural land can be used as building land or brownfield. The *Frigorelseafgift* is based on the total value, but the revenues are very small and are divided evenly between the central government and the municipalities.

Moreover, the personal income also regards also the benefit of self-owned property. These tax revenues, which are based on the total value, are distributed equally between the central government, the counties and the municipalities.

A very small tax export exists at the Danish property tax, namely in holiday homes. In some of the coastal village the portion of summer cottages makes up more than 25 per cent of the local housing stock. Blom-Hansen observed for 40 of these coastal municipalities that the average tax rate of the *Grundskyld* among the 40 municipalities is almost 50 per cent<sup>38</sup> higher than the national average in 2000 (see Blom-Hansen, 2002, page 7).

The valuation of the property in Denmark is all-embracing and the Danish cadastre has been already implemented in 1844. Since 1844, the Danish cadastre consists with the Danish cadastral register and the Danish cadastral map of two components. The Danish cadastral register has been digital since 1986, and the digital cadastral map has covered all of Denmark since 1997. The cadastre is maintained by a state agency – the National Survey and Cadastre (*Kort & Matrikelstyrelsen*) -, while the cadastral surveys are provided by private licensed surveyors (a more detailed description of the valuation process in Denmark can be found at Wolters, 2002).

The local authorities in the UK possess some of the smallest tax sovereignty of all industrialised countries worldwide, because they can influence only the tax rate of the property tax of domestic properties (*council tax*) directly. The second property tax, which taxes business property (*business rates* in England and *non-domestic rates* in Scotland and Wales), has a nation-wide uniform tax rate fixed by the central government and therefore the local authorities are not able to control the tax revenues from this tax. Moreover, all tax revenues from the business tax are collected in a common pool and are distributed between the local authorities based mainly on the number of inhabitants. For this reason, this tax is also called the “redistributed” business tax.

Since 1992 the council tax is levied in England, Wales and Scotland and replaced the former poll tax. The council tax is a property tax on the occupants of domestic properties, but the tax base is not the market value of the property rather than each private house is placed in one of eight bands. The “grouping” of every private property is task of an agency of the central government called Valuation Office Agency (VOA). The current bandings are based on assessed market values as at 1 April 1991 in England and Scotland and only in Wales took a revaluation<sup>39</sup> effective at April 2005 based on April 2003 property values. (see Werner, 2006b)

The following table A 1 points out the structure of the bands as well as the multiplier in England:

<sup>37</sup> It has to be mentioned that the tax base for public property is not the structure value but rather the ground value.

<sup>38</sup> 1.9 per cent tax rate compared to the national average of 1.3 per cent.

<sup>39</sup> Besides the revaluation an additional band i exist in Wales since 2005.

**Table A1: Council Tax Bands and multiplier in England in the fiscal year of 2006-2007**

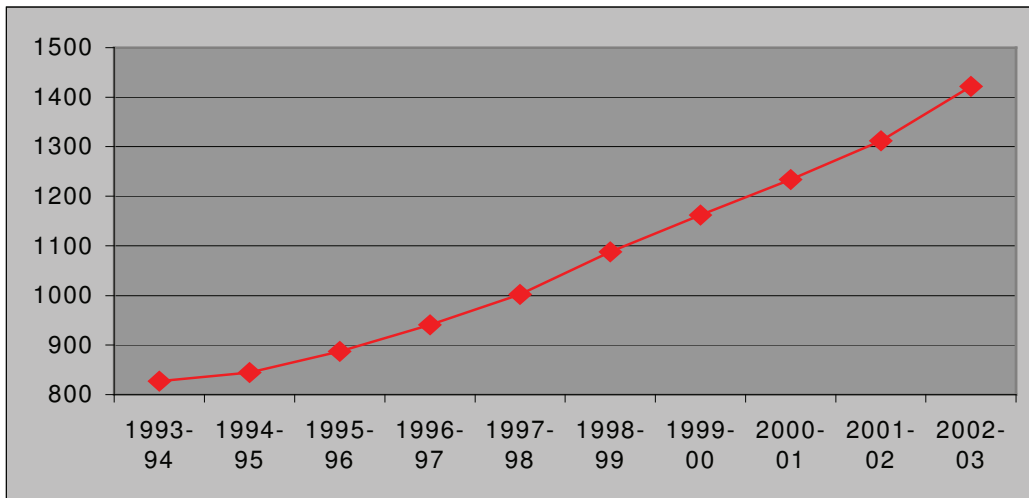
Band	Range of property value	Multiplier
A	up to £40,000	6/9
B	£40,001 to £52,000	7/9
C	£52,001 to £68,000	8/9
D	£68,001 to £88,000	1
E	£88,001 to £120,000	11/9
F	£120,001 to £160,000	13/9
G	£160,001 to £320,000	15/9
H	£160,001 to £320,000	2

Source: own illustration

The British local authorities determine the rate of council tax in their own areas for properties in band D. After fixing this local tax rate for Band D, the tax burden of the remaining seven Bands is affected by the multiplier, which itself is fixed by the central government and is in whole Britain equal. The actual multiplier formula is reflected in the figures in the third column of table A3 this figures show a degression which favours relatively owner with a more wealth property.

Besides the eight Bands and multiplier, a further feature of the council tax is that the complete tax burden have to pay only if a couple, married or un-married, living together in house. There is a 25% discount if the home is occupied by only one adult person and if the house is unoccupied for more than six month in the fiscal year exists a tax reduction of 50 %.

However, the most critical point of the British council tax is the fact that “to each home in each band is the same. So in England, for example, the bill sent to a home worth UK£161,000 is the same as the bill sent to a home worth UK£319,000 because they are each in band G.” (see King, 2006, page 289). The average tax burden of a dwelling placed in Band D in England from 1993 to 2003 can be observed in the following figure A 2:

**Figure A2: Tax burden in British £ for a dwelling placed in Band D**

Source: Werner, 2006b, page 149



Table A2: Summary of backlogs by municipality

Urban Institute	SUMMARY OF PROPOSED MIIP INVESTMENTS Financial Disbursement over 5 Years 2006/07 to 2010/11 by City									Total Estimated Cost	% of Total
	Bahir Dar	Gondar	Dessie	Kombolcha	Adigrat	Axum	Shire Endeselassie	Mekele	Dire Dawa		
<b>NEW CAPITAL WORKS</b>											<b>95%</b>
Roads	290,000,000	152,302,260	211,268,000	84,549,000	86,697,000	44,948,200		281,955,520	38,600,000	1,190,319,980	27%
Streetlighting	10,660,000	20,180,001			30,900,000	29,826,687	2,450,948	7,550,144		101,567,780	2%
Bridges		8,690,000			9,336,000	5,263,076	3,450,000			26,739,076	1%
Water supply	35,299,222		5,002,269	9,000,000	78,366,000	318,450,000	220,000,000	300,000,000	17,664,000	983,781,491	22%
Low Cost Housing				127,000,000	180,000,000		58,000,000	359,100,000		724,100,000	16%
Schools/Education facilities	8,100,000			16,500,000	90,000,000	119,280,000				233,880,000	5%
Drainage & flood control	67,897,360	1,773,750	18,438,700	12,509,400	52,650,000	5,312,096	10,461,460		9,850,000	178,892,766	4%
Markets		9,680,000		9,680,000	94,940,000			1,541,175		115,841,175	3%
Liquid waste/Sanitation	32,914,600	7,500,000	1,158,790	5,922,150		46,980,000	1,200,000	32,000,000	4,500,000	132,175,540	3%
Plant & Equipment	13,739,500			1,500,000	19,910,000	34,400,000	3,480,000			73,029,500	2%
Solid waste	41,552,387	11,000,000	10,064,040	5,070,000	7,100,000		1,160,000	19,100,000	11,680,000	106,726,427	2%
Public protection services								7,350,000		7,350,000	0%
Cemeteries								2,000,000		2,000,000	0%
Urban upgrading	20,000,000				25,000,002			24,000,000		69,000,002	2%
Recreational facilities	5,688,000			6,000,000	45,000,000			13,300,000		69,988,000	2%
Municipal buildings				23,410,000	8,000,000	14,000,000				45,410,000	1%
Industrial zone	22,623,000							163,250,000		185,873,000	4%
Slaughterhouses					14,991,650	14,555,000				29,546,650	1%
Bus stations & transport systems					14,750,000			3,000,000		17,750,000	0%
Public libraries	3,100,000							500,000		3,600,000	0%
Pedestrian walkways		6,040,000					2,621,850			8,661,850	0%
Health centers	7,330,000			2,980,000		4,833,996				15,143,996	0%

Table A2: Summary of backlogs by municipality (continued)

Urban Institute	SUMMARY OF PROPOSED MIIP INVESTMENTS Financial Disbursement over 5 Years 2006/07 to 2010/11 by City									Total Estimated Cost	% of Total
	Bahir Dar	Gondar	Dessie	Kombolcha	Adigrat	Axum	Shire Endeselassie	Mekele	Dire Dawa		
MSE development				1,200,000	12,800,562					14,000,562	0%
Other			109,080,000							109,080,000	2%
Subtotal	558,904,069	217,166,011	355,011,799	305,320,550	770,441,214	637,849,055	302,824,258	1,214,646,839	82,294,000	4,444,457,795	100
<b>REHABILITATION &amp; UPGRADING</b>											<b>5%</b>
Road Rehab. & Upgrading					4,563,000		65,423,330	28,777,746		98,764,076	47%
Bridges					2,525,600					2,525,600	1%
Water supply	11,796,000									11,796,000	6%
Emergency preparedness		36,383,772								36,383,772	17%
Slaughter house upgrading				4,000,000					11,002,000	15,002,000	7%
Markets		4,664,500				15,900,000	6,617,436	3,000,000	15,941,000	46,122,936	22%
Subtotal	11,796,000	41,048,272	0	4,000,000	7,088,600	15,900,000	72,040,766	31,777,746	26,943,000	210,594,384	100
Total	570,700,069	258,214,283	355,011,799	309,320,550	777,529,814	653,749,055	374,865,024	1,246,424,585	109,237,000	4,655,052,179	



Table A2: Summary of backlogs by municipality (continued)

GTZ International Services	SUMMARY OF PROPOSED MIIP INVESTMENTS Financial Disbursement over 5 Years 2006/07 to 2010/11 by City									Total Estimated Cost	% of Total
	Awassa	Arbaminch	Dila	Sodo	Adama	Bishoftu	Shashamane	Jimma	Harar		
<b>NEW CAPITAL WORKS</b>											<b>76%</b>
Roads	43,350,000	22,050,000	10,900,000	34,000,000	62,000,000	54,100,000	34,000,000	48,000,000	54,000,000	362,400,000	75%
Streetlighting	80,000	360,000	410,000	1,170,000	1,310,000	3,770,000	4,550,000	6,000,000	260,000	17,910,000	4%
Bridges										0	
Water supply	0	2,490,000	2,490,000	2,490,000	10,333,000	10,333,000	2,390,000	10,333,000	2,390,000	43,249,000	
Housing										0	
Schools										0	
Drainage										0	
Flood control										0	
Markets										0	
Liquid waste/Sanitation	2,300,000	2,070,000	2,000,000	4,320,000	3,800,000	2,800,000	2,220,000	3,426,000	4,300,000	27,236,000	6%
Plant & Equipment	100,000	1,500,000		600,000		2,000,000	1,200,000	1,200,000		6,600,000	1%
Solid waste	3,280,000	2,110,000	1,880,000	1,949,000	3,030,000	3,528,000	4,626,000	3,110,000	4,950,000	28,463,000	6%
Urban upgrading										0	
Recreational facilities										0	
Municipal buildings										0	
Industrial zone										0	
Slaughterhouses										0	
Bus stations										0	
Public libraries										0	
Pedestrian walkways										0	

Table A2: Summary of backlogs by municipality (continued)

GTZ International Services	SUMMARY OF PROPOSED MIP INVESTMENTS Financial Disbursement over 5 Years 2006/07 to 2010/11 by City									Total Estimated Cost	% of Total
	Awassa	Arbaminch	Dila	Sodo	Adama	Bishoftu	Shashamane	Jimma	Harar		
Health centers										0	
MSE Training centers										0	
Subtotal	49,110,000	30,580,000	17,680,000	44,529,000	80,473,000	76,531,000	48,986,000	72,069,000	65,900,000	485,858,000	91%
<b>REHABILITATION &amp; UPGRADING</b>											<b>24%</b>
Road Rehab. & Upgrading	18,450,000	12,750,000	3,000,000	1,200,000	17,250,000	17,320,000	14,200,000	54,500,000	13,400,000	152,070,000	98%
Bridges										0	
Water supply									2,390,000	2,390,000	2%
Emergency preparedness										0	
Slaughter house upgrading										0	
Markets										0	
Subtotal	18,450,000	12,750,000	3,000,000	1,200,000	17,250,000	17,320,000	14,200,000	54,500,000	15,790,000	154,460,000	100%
Total	67,560,000	43,330,000	20,680,000	45,729,000	97,723,000	93,851,000	63,186,000	126,569,000	81,690,000	640,318,000	191%
<b>OVERALL TOTAL</b>										5,295,370,179	

**Table A3: Local Debt Structure in Germany (in € billion)**

Year	Bonds	Direct loans from financial institutions	Social security system	Other loans
1950	0.000	0.205	0.000	0.051
1955	0.036	1.641	0.235	0.424
1970	0.359	16.527	0.503	3.201
1990	0.077	101.880	1.858	1.307
1995	0.716	96.599	1.715	1.373
1999	1.015	98.864	0.177	1.976

Source: Werner, 2006a

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