Financing Local Infrastructure –
Linking Local Governments and Financial Markets

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Foreword

Financing Local Infrastructure – Linking Local Governments and Financial Markets addresses capacity development needs from both a public finance and a financial market perspective. Its purpose is to help partners, their advisors, local governments and financial institutions to explore the ways and the means by which local infrastructure can be financed.

This handbook presents a guide to a better understanding and assessment of framework conditions. It will enable more informed decisions to be made in terms of developing and supporting financing options for local services and infrastructure provision involving the local financial sector.

On behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has been supporting decentralisation, the design of intergovernmental fiscal relations and the strengthening of local governments in many partner countries. The application of a systemic approach involving a wide range of financial institutions has also facilitated access to financing and enhanced the development of financial systems over many years.

Since the 1990s, relationships between different levels of governments have been renegotiated in numerous countries. Decentralisation has imposed new responsibilities on sub-national governments, which now have to face rising demands for better local infrastructure and service delivery, despite the fact that the financial resources and competencies assigned to them are often inadequate for this task. Furthermore, in many cases local governments are struggling with limited capacities, e.g. revenue administration, financial management, infrastructure planning and implementation, not to mention corruption and low levels of accountability. Adequate legal frameworks coupled with sufficient capacities are important prerequisites if local governments are successfully to attract additional finance from local financial markets.

In addition, on the financial market side, conditions are often unfavourable for sub-sovereign lending. While financial markets in general have broadened the scope of their financing tools and instruments over the years, their appetite for financing local government investments remains very limited in many countries. In some cases the regulatory and institutional frameworks in place are insufficient or financial institutions do not possess sufficient liquidity to provide such major long-term funding. In other cases there is insufficiently clear understanding of the underlying risks and opportunities of sub-sovereign lending, and this clearly impacts on the ability to develop suitable products and business models.

The global financial crisis has also impacted the financing of local infrastructure. The parties involved have become increasingly sensitive in terms of risk evaluation, and overall transaction volumes have decreased. These complex and interdependent challenges underline the need for a common understanding of the criteria for promoting the integration of local financial markets in the financing of local infrastructure and services.

This handbook has been compiled by GIZ's 'Financial Systems Development' and 'Decentralisation, Regional Governance, Municipal and Urban Development' units in accordance with BMZ. We sincerely hope it will help to bridge the gaps in local infrastructure financing.

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List of Abbreviations

BIS	Bank of International Settlement
BLF	Banco de Credito Local of Spain
BMZ	Federal Ministry for Economic Cooperation and Development
BNG	Bank of the Netherlands
BOT	Build-Operate-Transfer
BOO	Build-Own-Operate
EPC	Engineering, Procurement and Construction
GAAP	Generally Accepted Accounting Principles
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
INCA	Infrastructure Finance Corporation of South Africa
IPSAS	International Public Sector Accounting Standards
LGI	Local Government Infrastructure projects
MB	Municipal Bond
MDF	Municipal Development Fund
MGF	Mutual Guarantee Fund
MIGA	Multilateral Investment Guarantee Agency
MTEF	Medium Term Expenditure Frameworks
O&M	Operation and Maintenance
OTC	Over-the-Counter
PCG	Partial Credit Guarantee
PFI	Private Finance Initiative
PPP	Public Private Partnership
PRG	Political Risk Guarantee
SPV	Special Purpose Vehicle
TOT	Transfer-Operate-Transfer

1. Introduction

The provision of municipal infrastructure and services is essential for sustainable economic, social and environmental development. Local governments[1] provide goods and services such as roads, public transport, water supplies, sewerage, electricity, waste disposal, health care, schools and social housing. They also provide amenities that enhance citizens' quality of life, e.g. recreational parks, sports facilities, youth and cultural centres. All over the world, local governments are facing enormous challenges in satisfying the increasing need in these investments. Increasing infrastructural shortages are exacerbated by the rising demands of a growing population and by urbanisation. Today, over half of the world's population lives in cities, with some 900 million people living in urban slum areas. According to UN estimates, around 1 billion people do not have sufficient access to clean water, and 40% of the world population has no access to adequate sanitation.

This handbook concerns **sub-sovereign lending**[2] – an important instrument with which to reduce shortfalls in the financing of local infrastructure and a vital tool with which to meet rising investment needs by attracting external finance. The main factors favouring the use of sub-sovereign lending are related to **characteristics typical of infrastructure,** namely **long life spans** and **large initial capital investments.**

Debt financing of capital investments can:

- attract external funds to finance or part-finance high initial costs. Meeting investment peaks might otherwise be unfeasible or overburden municipal budgets. Finance gaps can thus be reduced and infrastructure provision enabled;
- spread investment costs over periods of time that more or less match the life span of the infrastructure being financed.[3] Long-term debt repayments can then be serviced from ongoing streams of local income, and the financial burden can be distributed more evenly across current and future generations of beneficiaries instead of falling solely on the taxpayers of a given fiscal period (intergenerational equity).

Sub-sovereign lending, however, carries **substantial risks.** Excessive debt burdens can endanger macroeconomic stability, limit the scope of political action, threaten the solvency of local governments and produce intergenerational inequities. National governments, as well as local authorities, therefore need to be prudent in deciding when and under what circumstances sub-sovereign lending and debt financing should be deployed.

1 *The terms 'local government' and 'local authority' are used interchangeably in this publication and also refer to local government-owned entities such as public utility companies.*

2 *The terms 'sub-sovereign lending' and 'sub-sovereign borrowing' are also used interchangeably and refer to all forms of local borrowing/debt – loans as well as bonds.*

3 *The principle of 'congruent maturities' dictates that long-term investments should be financed long-term and short-term expenditures should be financed short-term.*

Sub-sovereign lending is highly demanding in terms of systemic preconditions and institutional capacities.

On the 'demand side' of external finance, i.e. state and local governments, it requires:

- sound legal and institutional frameworks for sub-sovereign lending and local finance;
- adequate intergovernmental fiscal relations, including functioning oversight, control and audit mechanisms; and
- financially sound and responsible local governments, which are – at least to some extent – financially autonomous and creditworthy, and which have adequate decision-making, planning and implementation capacities for debt financing and infrastructure provision.

On the 'supply side' of external finance, i.e. the local financial market, it requires:

- sound legal and institutional frameworks for financial markets, especially for banking and capital markets; and
- sufficiently developed banking and capital market systems involving intermediaries such as banks or funds that understand the particularities and needs of local authorities, and are able to assess their creditworthiness and the risks of providing them with external finance.

In many countries, these preconditions are still not met. The problems on the **'demand side'** arise through inadequate legal and institutional frameworks. The financial resources and fiscal competencies of local governments are often not corresponding to the tasks and responsibilities assigned to them. They may also be inadequate in meeting even minor infrastructure and service delivery requirements, not to mention demands for larger capital investments. Where resources and competencies are available, local governments frequently lack the capacity to use them effectively. This results in deficiencies in, for example, revenue collection, financial management and accounting, financial and technical planning and the provision of infrastructure and services. Local authorities may also be unaware of the benefits and risks of sub-sovereign lending, and the competencies and capacities required. Moreover, local governments must be held accountable for how they deal with public resources, and must ensure that funds are spent according to actual needs and development priorities. In the absence of strong and effective internal and external controls and oversight, local governments often struggle with low levels of transparency, which in turn creates opportunities for corruption and misspending. As a result of these factors, access to local financial markets can be limited or even impossible.

On the **'supply side',** legal and institutional frameworks to regulate banking and capital markets may be inadequate. Furthermore, local financial markets are often insufficiently developed to meet the demands of local governments. Financial markets might not see local governments as potential clients whereas banks and other financial intermediaries, where they exist, might not be familiar with local government needs and requirements. Respective capacities and information are needed to reduce uncertainties in order to assess credit risk, and to select or design appropriate instruments and procedures for dealing with local governments. Other impediments may be that the equity base of banks and other financial intermediaries is too low to provide larger amounts of long-term finance, or that capital markets, where they exist, do not trade in government bonds. Furthermore, and not least, donor or state-driven municipal development funds can constitute a major hindrance to the promotion of sub-sovereign lending and the development of a corresponding institutional landscape, since if unsuitably designed, they can have a 'crowding out effect' on local financial markets and reduce their incentives to invest.[4]

Given these complex interdependent challenges to the promotion of sub-sovereign lending and the linking of local governments and financial markets, it becomes clear that **capacity development** is required on both the demand and supply sides, and on both national and local levels. **This handbook,** the scope of which is by no means exhaustive, is primarily designed for practitioners working in development cooperation, who deal with these challenges.

It aims to provide:

- An overview of the main determinants of sub-sovereign lending on the local government demand side (Chapter 2), and on the financial market supply side (Chapter 3). The preconditions required when dealing with sub-sovereign lending are discussed, as are its benefits, risks, theoretical aspects and mechanisms.
- An overview of the approaches, instruments and lessons learnt from previous credit enhancement experience (Chapter 4).
- A country assessment and options for the promotion of sub-sovereign lending (Chapter 5 and 6), based on questions derived from the more 'theoretical' section, in order to:
  - assess whether the institutional and legal framework conditions and the capacities of the respective actors involved are favourable for sub-sovereign lending; and
  - identify possible areas for capacity development in order to promote sub-sovereign lending – directly or indirectly – and link local governments with financial markets.

4 *Countries, municipal development funds and local development banks can nevertheless constitute important and necessary elements of local infrastructure financing, especially in transition and development.*

2. The demand side: Framework conditions on the local government

If a sufficiently developed financial market (on the supply side) exists, two main factors determine the ability of a local authority (on the demand side) to incur debt: The regulatory framework for sub-sovereign lending, and the local authority's financial and governance situation. The latter is determined by intergovernmental fiscal relations and local government capacities in financial management and governance, which for example include capacities in revenue administration[5], technical and financial management and implementing infrastructure projects.

The following sections present an overview of the main factors and the criteria that determine the demand side of sub-sovereign lending.

2.1 Legal and regulatory frameworks for sub-sovereign lending

Theoretical and empirical evidence show that **moral hazard**[6] **may lead** local authorities to be more inclined to overspend, under-tax and borrow more excessively than national governments, especially when they do not face hard budget constraints and have no sanctions to fear.[7] Fearing high levels of sub-national debt and the consequent threats to macroeconomic stability, national governments are often reluctant to allow sub-sovereign lending. Where permitted, it is usually subject to restrictions, limitations or other conditions.[8]

It is therefore essential for sub-sovereign lending to be conducted within clear and precise legal and regulatory frameworks. Potential investors need to be assured of the legal authority of local governments to incur debt, the conditions and procedures under which they are allowed to do so, and what happens in the case of default. A major problem in many countries is the sheer number of different laws that come into play, which can regulate everything from, for example, municipally-owned property, to intergovernmental transfers, and defaults on publicly traded securities. This has led experts to recommend that rather than attempting to revise individual laws on a piecemeal basis, a comprehensive municipal debt law should be introduced. Whatever the circumstances and solutions sought, it should be borne in mind that there are many different stakeholders in a municipal credit system, and that legislative and regulatory reform should protect or at least account for all their interests.

The following sections provide a general overview of the main issues covered by regulatory frameworks. There is no formula and no particular legal or institutional arrangement superior to another. Each national government must find the solution that works best in its country.

5 *For example tax coverage and tax collection.*

6 *'Moral hazard' refers to situations in which an individual or institution does not have to face the full consequences and responsibilities of their actions and consequently tends to act less carefully than it would otherwise.*

7 *'An organisation faces a hard budget constraint when it does not receive support from other organisations to cover its deficit, and is therefore obliged to reduce or cease its activity if the deficit persists. Hard budget constraints thus coincide with a situation where the government does not bail out or subsidise a poorly performing or loss-making organisation. If an organisation faces a soft budget constraint one or more supporting organisations are ready to cover all or part of the deficit.' (Kornai, J. et al. 2004:1095)*

8 *For more detailed information on municipal debt legislation and regulation see 'RTI2007: Municipal Deb Legislation' and Plekhanov, Alexander and Singh, Raju (2006): How Should Subnational Government Borrowing Be Regulated? Some Cross-Country Empirical Evidence. Washington, D.C.: International Monetary Fund (IMF Working Paper 05/54).*

2.1.1 Why and when to allow local debt

Infrastructure projects require significant capital expenditure. Local revenues and intergovernmental grants are not usually sufficient to fund larger capital investments. In such cases, external finance can provide the necessary funds. The resulting long-term debt can be serviced from regular streams of local income either directly from revenue-generating projects or indirectly through other sources of revenue. Borrowing funds for infrastructure or other large capital investments and repaying them over a number of years, spreads the financial burden over time and results in **intergenerational equity.** Given that infrastructure projects are generally designed to last for a considerable period of time, it is unfair to burden the taxpayers of one particular fiscal period with all the costs, since the benefits of such projects tend to outlast that fiscal period by far. Where governments allow local borrowing, they therefore usually do so over a long-term horizon and for the purpose of **capital investment.** Incurring debt to cover shortfalls of liquidity in order to fund current expenditures does not provide for intergenerational equity – it is rather a sign of budgetary structural problems and might lead to debt traps. Where short-term borrowing is allowed, it is usually subject to strict limitations, such as threshold limits or repayment within the same budget cycle.

2.1.2 Restrictions and limitations

The most common restrictions and limitations on sub-sovereign lending are:

- **No debt in foreign currencies:** Debt in foreign currencies incurs foreign exchange and interest rate risks. Many countries therefore prohibit the incurrence of local debt in a foreign currency, especially if that currency is unstable.
- **Ceilings:** Limits in the debt burden can be set as a percentage of the budget (overall or annual), local revenues, accumulated sub-national debt or at a maximum debt-service ratio. If limits are not applied to 'off-budget' items, such as enterprises owned or partly-owned by local governments, unrestricted debt can quickly accumulate.
- **Preconditions:** Preconditions may be fairly simple (e.g. no current debt obligations in arrears, a balanced annual operating budget, an unqualified audit, inclusion of the project to be debt financed in the annual local budget); or more elaborate, such as the requirement to adopt a formal local debt policy or a multi-year capital investment plan.[9]
- **Type:** Sub-sovereign lending can be restricted to the type of instrument used to incur debt, i.e. either loan or bond. (The issuing of municipal bonds in particular requires clear rules and procedures.) Restrictions may also apply according to the type of project: sub-sovereign lending is sometimes only allowed for revenue-generating projects.
- **Entitlement:** This might involve authorising individual borrowings, or centralising borrowing operations with on-lending to local governments for approved purposes (usually for investment projects).

9 *In the case of larger capital investments, loan approval often also requires a cost-benefit analysis.*

- **External approval:** To guarantee adherence to rule-based controls, sub-sovereign lending in many countries is subject to the approval of central government or other bodies in charge of local government oversight. Clear and precise procedures are required for this purpose.
- **Market discipline:** In some countries, control is not based on rules, but subject only to market forces, i.e. the rule of supply and demand (self-imposed rules).

2.1.3 State guarantees and bailouts

One of the most important issues facing regulators is how to deal with default or insolvency. There is no clear answer as to whether or not regulations should prescribe central government bailouts in cases of local government default. One point of view is that national regulations should not contain prescriptions for bailouts in order to avoid the potential moral hazards such legislation might entail. The question then remains as to what can be done if local governments are 'too big to fail'. Such an assessment suggests that a greater 'hazard' exists, and that a bailout or state guarantee is likely to be necessary (i.e. that there is an implicit state guarantee). On the other hand, prescribing central government bailouts or state guarantees in national regulations can lead to improved credit ratings and interest rates, and thus to better access to financial markets. Such regulations exist in countries such as Germany, but state guarantees and central government bailouts for defaulting or insolvent local governments are accompanied by severe sanctions, such as the (partial) loss of financial and/or administrative autonomy and submission to central government control.

2.1.4 Financial guarantees for debt obligations

Potential investors want and need loan repayment pledges or guarantees. Local governments can provide various types of loan repayment guarantees: They can pledge physical assets, such as land or buildings, general revenues from taxes and transfers, project-generated revenues from user fees or charges collected from the project's beneficiaries.

Pledging physical assets rather than revenues has certain disadvantages:

- local governments may need to pledge physical assets that have a higher value than the debt being secured;
- a pledge on land or building is prone to corruption;
- municipalities might pledge assets that are needed for providing essential public services;
- securing loans only with physical assets can reduce concern for revenue streams and cash flows, and whether these are sound enough to allow borrowing.

Revenue interception is a special form of pledge. As an instrument, it is particularly credit-enhancing since it is highly effective in reducing credit risk.[10] Where local governments are not able to meet their debt obligations, revenue interceptions authorise the creditor to collect debt repayments directly from higher levels of government. Revenue interceptions are therefore usually taken from intergovernmental transfers.

10 *There is empirical evidence that municipal development funds that use intercept arrangements have much fewer non-performing loans than funds that do not (see Peterson, 1998, p.21).*

Local governments may also provide guarantees for third party debt repayments, such as those of local public enterprises.

Such guarantees should be:

- authorised in the same manner as sub-national debt;
- restricted to projects in the public interest; and
- limited to third parties created or controlled by local government.

2.1.5 Reporting and disclosure of local government debt

Clear, fair and enforceable disclosure is fundamental for the efficiency of local credit markets. Standardisation of disclosure requirements is an incentive to local governments and obliges them to invest the time and resources needed for successfully preparing a debt issue. When designing disclosure regulations, attention must be paid to what information needs to be disclosed when, by whom and to whom.

Three parties require information:

- financial intermediaries, such as banks and/or other investors, so that the entrepreneurial risk of giving a loan or buying a bond can be assessed;
- central government, for approval and/or debt registration[11]; and
- local citizens, either via the publication of annual budgets or where voter approval is required for taking on debt.

2.2 Intergovernmental fiscal relations and frameworks

Intergovernmental fiscal frameworks define the assignment of revenues, expenditures, the financial autonomy and fiscal authority of local governments, e.g. in setting taxes, tariffs and fees.[12] They are therefore crucial in determining the potential solvency and creditworthiness of local governments. The design of these frameworks is of the utmost importance to sub-sovereign lending.

The following sections present an overview of the challenges involved, the main guiding principles of intergovernmental fiscal relation frameworks, and what these relations should provide in order to benefit local governments with access to financial markets. There are no optimal or ready-to-use concepts for legal frameworks, as there are major variations in intergovernmental fiscal relations and assignments of revenue, expenditure and responsibility across countries.

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11 *In order to ensure that all local government debt is fully disclosed, a central registry is recommended, so that all debt issues are recorded. Such notification would allow the central government to maintain a current inventory of outstanding municipal debt for the purposes of: a) enforcing the municipal debt limit, and b) monitoring aggregate municipal borrowing in conjunction with overall public debt and risks to macroeconomic stability.*

12 *For a more detailed discussion of intergovernmental fiscal relations see McLure, Charles E. and Martinez-Vazquez; Jorge (2000): The Assignment of Revenues and Expenditures in Intergovernmental Fiscal Relations. Washington, D.C.: World Bank.*

2.2.1 Unfunded mandates and the principle of connexity

A basic problem facing local governments is that their financial resources and fiscal authority do not often match their assigned tasks and responsibilities, thus violating 'the principle of connexity'. As a consequence, local governments are not able to fund rising demands for infrastructure and public services. In such cases, debt financing of capital investments can be difficult because few or no resources are available for debt repayments. Moreover, where loans can still be accessed, local governments often have low levels of creditworthiness, and high interest rates are incurred as a result.

The principle of connexity indicates that a regulatory decision-making body must not assign functions to other levels of government (or public bodies) without assigning appropriate funding. Although the principle of connexity constitutes a 'golden rule' is in most industrialised and developing countries, it is not codified in law.

2.2.2 Transfer systems

In many cases, transfers either from upper levels of government (vertical transfers) or between rich and poor regions to equalise fiscal disparities (horizontal transfers), are among the most important sources of revenue for local governments.

A system for transfers should fulfil several criteria, independent of whether it is favourable for sub-sovereign lending:

- **Transparent, rule-based and predictable:** Transfers (their amount and timing) are often allocated in an unreliable or ad hoc manner, especially in developing countries. This is clearly disadvantageous. In order to reduce uncertainty regarding future financial situations and thus better to assess the risks of sub-sovereign lending on both the demand and the supply side, the allocation of transfers should be transparent, rule-based and predictable.
- **Discretionary power:** Transfers may be either **earmarked or unconditional.** Earmarked transfers have the advantage of ensuring funding for predetermined purposes, such as investments in sectors subject to high demand or high levels of public concern. Earmarks can also determine whether transfers have to be spent for current expenditures or for capital investment. But earmarking of particular sectors may also have negative effects as it may prevent needs-based allocation of funds:

  a) to other sectors when further investment in the earmarked sector is less important than investment in other sectors;

  b) in order to reduce the amount of debt necessary to finance investment in other sectors; or

  c) in order to reduce the interest rates of loans by using transfers as security.

It is therefore advantageous for sub-sovereign lending to have discretionary powers over a significant number of transfers.

- **Incentives:** Transfers entail risks of moral hazard. Where local government budgets are largely dependent on transfers and good financial management cannot significantly improve the revenue situation of a local government, they can be a poor performance incentive. Heavy dependence on such transfers may also undermine the fiscal discipline of local governments in other ways: instead of trying to be more cost-effective, local governments may blame the central government for unfunded mandates (see also 'common pool problem' in Section 2.2.5.), and because of information asymmetries between central and local governments, it can be difficult for central governments to counter such allegations. To avoid negative incentives, not only needs-based, but rather **performance-based criteria** should be used in the design of transfer allocation mechanisms.

2.2.3 Tax assignment and local taxation[13]

Having the right to set and levy their own taxes improves the financial autonomy and margins of local governments. This is regarded as positive for local government creditworthiness. The assignment of taxes from local sources may also improve local accountability. Where the people who pay local taxes are the same as those who benefit from the public goods provided by local governments **(benefit taxation),** this shows that taxation and services are tangibly connected **(fiscal equivalence).** Local taxpayers can then hold local governments directly accountable for how they use their taxes through the power of the ballot box, which is a strong incentive for responsible and citizen-oriented use of local tax revenues. However, local taxation can also lead to a 'race to the bottom', where administrations compete to improve the attractiveness of the local jurisdiction by setting low tax rates. Minimum rates and thresholds might therefore need to be regulated.

In general, higher levels of government can administer almost any tax that can also be administered by a lower level of government. Whatever the gains of economies of scale, they have to be balanced against the loss of local autonomy and accountability. As a rule of thumb, therefore, any tax should be assigned to the lowest level of government that can implement it in an economically appropriate manner. Another rule of thumb is that where benefit taxation is possible, local taxation should be linked as directly as possible to the immediate beneficiaries. In addition, local tax assignments should consist of relatively stable and constant revenue bases (e.g. property taxes) to fund fixed costs. They should also include revenue sources related to local economic development in order to set incentives for good governance performance.

13 *For a detailed discussion of local taxation and the suitability of assigning various taxes to local governments, see Bird, M. R. (1999): Rethinking Subnational Taxes: A New look at Tax Assignment. Washington, D.C. International Monetary Fund (Working Paper 99/165).*

2.2.4 Tariffs and fees

Based on similar principles to those that apply to taxes, local governments should also enjoy the legal right to set and levy fees, tariffs and user charges. On the one hand, setting and levying tariffs and fees can stimulate competition and thus lead to reduced consumer prices. On the other, they are a potential (in some municipalities the largest) source of income, and can improve the local government's financial situation and autonomy, and thus its creditworthiness.

2.2.5 Financial autonomy and fiscal imbalance

Shortfalls between locally generated revenues and assigned expenditures – known as vertical fiscal imbalances – are usually filled by transfers from the central government. Heavy dependence on transfers (i.e. high vertical fiscal imbalance) can lead to separation between the costs and the benefits of public services and infrastructure provisions. If a municipality benefits from the provision of a public service, but receives financing through a common pool of taxes collected from the whole country, as in the case of transfers, it ends up paying a small fraction of the costs while enjoying a large share of the benefits. The lack of full local government responsibility for the costs of a provision or investment can result in excessive spending and creates strong incentives to compete for transfers from the common pool. This lack of responsibility can lead to moral hazard (the so-called **'common pool problem').** High levels of fiscal imbalance may therefore lead to low fiscal discipline, poor financial management and governance. Meanwhile, the financial autonomy of local government is diminished since it is often unable to prevent the central government from cutting or denying transfers. Potential investors consider a high dependence on intergovernmental fiscal transfers and low levels of financial autonomy as risk factors, especially in countries where past allocations of transfers have been arbitrary and unpredictable.

2.2.6 National standards for local financial management and accounting

National standards for local financial management and accounting are a fundamental part of the fiscal frameworks which need to be established. They set the rules and procedures for local budgeting, accounting, financial reporting and control, and are therefore a prerequisite for transparency and accountability. Furthermore, they can, or at least should, ensure that national and local budgets, financial management and planning procedures are coherent.[14] The definition of national standards of accounting and financial reporting should therefore be a high regulatory priority: international accounting and reporting standards are a good starting point for designing national regulations. Where regulations are already in place, they should at the very least comply with internationally recognised minimum standards.[15]

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14 *For a more detailed discussion of local budgeting and different accounting standards see Section 2.3.2 'Financial management' below.*

15 *For further information see: www.imf.org/external/standards/agency.htm.*

2.2.7 Financial control and audits

Local governments must be accountable for how they deal with public resources. Effective external and internal control and oversight mechanisms, combined with appropriate sanctions for non-compliance or other irregularities, are required in order to reduce moral hazard, prevent fraud and ensure that local authorities exercise effective, efficient and sustainable financial management and governance. Effective management and governance are also crucial to sub-sovereign lending and the question of when and under what circumstances local governments incur debt.

Control can take various forms:

- **Administrative control:** Control and oversight by a higher level of government and/or an independent body such as an audit court.
- **Political control:** By the local council.
- **Civil control:** Via social auditing or participatory budgeting processes.

Functioning control mechanisms are essential for potential investors as they reduce uncertainty by increasing the probability of a local authority exercising good financial management and governance and facilitating risk assessment. This applies in particular to administrative control. Reports from an **effective and independent audit** court can be regarded as reliable quality checks of the financial management and the fiscal performance of local governments, and provide information on accounting, transparency, application of national standards and procedures, etc. Similar quality checks are provided by the oversight and control of higher levels of government or other bodies, especially where sub-sovereign lending is subject to rule-based restrictions and requires central government approval.

2.3 Local financial management[16] and governance

The capacity of a particular local government to incur debt and engage in sub-sovereign lending is mostly determined by its creditworthiness, regardless of whether the criteria for creditworthiness are defined by the investor or by regulatory authorities. **Creditworthiness** is based on assumed **credit risk,** and is thus an assessment of the assumed willingness and ability of the creditor to repay debt. Higher credit risk is reflected in higher interest rates. Although no absolute level of credit risk can be said to constitute creditworthiness, it can be regarded as 'the dividing line between rejection and approval of a credit'.[17]

Obviously the creditworthiness of local government is affected by a number of factors beyond its control, such as the general economic situation, legal and regulatory frameworks and intergovernmental fiscal relations. However, there are many other factors determining creditworthiness that local governments can influence directly through management and governance performance. This should be considered before taking a loan or issuing a bond, as good local financial management and governance not only improve creditworthiness, but reap much wider rewards.

2.3.1 Solvency and fiscal performance

Solvency and fiscal performance are at the core of local creditworthiness. In order to assess local government creditworthiness, potential investors rely heavily on a comparative analysis of its expenditures and revenues. Other available information can also help to assess financial situations. Good performance in financial administration and governance on the expenditure and revenue sides is therefore necessary if local governments are to access local financial markets. Although approaches vary considerably, the following table offers an overview of the typical key financial indicators used to assess the financial situation of local government and to determine the existence if any of structural problems. In order to improve their reliability and significance, data assessments should rely as far as possible on time series analyses and comparisons with data from other local governments.

16 *The term 'local financial management' can be understood either broadly or narrowly. The narrow sense refers mainly to local budgeting and accounting. In the broader sense, it refers to all activities related to municipal finance, such as revenue administration, financial decision making, planning and budgeting, etc. This publication uses the term in both senses in different contexts.*

17 *For a more detailed discussion of creditworthiness and the assessment of credit risk see Jackson, Barry (2006): Obtaining a Municipal Credit Rating. Johannesburg: Development Bank of Southern Africa (CLGF Research Series) and Peterson, George E. (1998): Measuring Local Government Credit Risk and Improving Creditworthiness. Washington, D.C.: World Bank.*

Table 1: Typical key financial indicators used to assess local governments	
Indicator	**Explanation**
Total revenues	The total amount of funds arising from revenues is an indicator for sizing a loan.
Total and/or operating surplus in the local government budget Revenue analysis (tax receipts/total revenue; non-tax receipts/total revenue; transfers/total revenue)	A total and/or operating surplus is a strong indicator of a good financial situation. It also demonstrates the capacity to absorb unexpected fiscal downturns and finance debt, especially where there have been budget surpluses for several years. Revenues are grants (transfers), tax and non-tax revenues. Tax revenues include both own taxes and shared taxes. In general, higher reliance on own revenues is regarded as positive, since they fall under the direct control of local governments. Ratios (e.g. of tax/non-tax receipts to total revenues) are only meaningful if comparative data are available.
Tax coverage rate	To what extent are potentially taxable objects covered?
Tax collection rate	To what extent are receivables collected?
Cost recovery rate of fee-based services	Revenue receipts are tax and non-tax revenues. Tax revenues include own taxes and shared taxes. Typically, most rating agencies and potential lenders consider own tax revenues as a more stable revenue source. A higher degree of reliance on tax-based revenues in general is often regarded as positive.
	The cost recovery rates for technical services, which are often fee-based, show how many general funds are used to cross-subsidise fee-based services. The less general funds are needed for cross-subsidies, the more there are available for interest and debt repayments, which thus positively influence local credit risk assessment.
Growth rates and volatility of revenues	Growth rates and the volatility of revenue streams are used to assess whether financial situations are stable, but might also indicate weaknesses in financial management and governance. Volatility may also be an indicator of political instability or interference, or of a high local economy dependence on a single sector – factors that can increase uncertainty and reduce creditworthiness.
Capital expenditure/total expenditure and capital account analysis	The share of capital expenditure compared to the total budget or total expenditures is an indicator used to assess i) whether there is a financial margin or whether the budget is depleted by recurrent expenditures; and ii) whether the local government has experience in infrastructure provision. Assessments of capital expenditures over time are often used to identify whether cutbacks in capital expenditure have been used to fund general revenue deficits. Consistent and rising capital expenditures over previous years, and high ratios of capital expenditures to total expenditures are regarded as positive, since they are indicators of financial stability, good financial situations and management capacities.
Recurrent expenditures/total expenditure.	The ratio of recurrent expenditures to total expenditures is an indicator used to assess financial margins and whether there are structural problems in the budget. Proportionally high expenditures on wages and salaries may indicate small financial margins, excessive bureaucratic overheads or other structural problems.
Debt burden and debt structure	Typical debt ratios used to assess whether existing debt burdens are too high to permit new debt are: ■ Debt/total budget ■ Debt per capita ■ Debt/tax-base ■ Annual debt/annual revenue ■ Debt servicing costs/revenues Debt structures are also significant since it is important to know when repayments are due and whether debts are short or long term with regard to recurrent expenditures or capital investments.
Debt record/history	A history of default or irregularities in debt repayment may increase uncertainty. Respective data are therefore crucially important for potential investors

Source: Author's design.

2.3.2 Financial Management: budgeting, accounting, reporting and audits

The availability of accurate, coherent, timely and reliable financial data and information forms the basis for all credit analysis. It is also required for sound local government decision-making and financial control, regardless of whether it is administrative, political or public. Adequate capacities in financial management are therefore essential not only for good local financial governance, but also for sub-sovereign lending.[18]

Budgeting

A budget is probably the most important legal financial document produced by a local government. In simple terms, it is a plan of how financial resources are to be allocated and used during a specified period of time. The budget is thus a type of operating plan that covers (or at least should cover) all financially relevant information on revenue and expenditure. At the same time, it serves as the basis for financial reporting to the mayor and the local council, to superior levels of government, to other public entities subject to local government control such as audit courts, and to the public. The preparation and implementation of a budget calls for close cooperation between the sector departments and the financial or equivalent department – sector requirements, for example, must be declared by a predefined date in the budgetary cycle so that they can be accounted for in the preparation of the following year's budget. A sound budget that adheres to national or international budgetary standards and procedures is a good indicator of strong financial management capabilities. In order to be not only favourable for the assessment of credit risk and local creditworthiness, but also to support and guide local government decision-making, a budget should be:

- **Complete and comprehensive:** The budget should include all assets (cash as well as fixed assets, including immobile assets such as real estate), incomes, revenues, and all expenditures and liabilities, thus giving a complete overview of the financial situation. Competence in asset and property management is required.
- **Realistic and credible:** The budget should be based on realistic estimations rather than assumptions or wish-lists.
- **Transparent and comprehensible:** Financial information should be aggregated, and presented in an understandable way. The budget should provide adequate information about where the money comes from and the purposes for which it is to be spent.
- **Adherent to established budgetary standards and procedures:** Bookkeeping and accounting standards, if they are in place, should be adhered to, as should timeframes and deadlines.

Aside from normal annual budgets, there are two other important budget-related documents. While these are not necessarily required for sub-sovereign lending, as long as they generally fulfil the above criteria, they can likewise contribute positively to local government creditworthiness and at the same time, support and orient local government decision-making processes.

18 *While the focus here is on issues regarding local and national financial management and accounting standards, these questions also form part of regulatory frameworks (Section 2.2.6).*

These documents are:

- **Medium term expenditure frameworks** (MTEF) – medium-term financial plans for future budgets and resource allocations. They provide potential investors with relevant information on items such as revenue estimates, spending priorities, financial stability, strategic planning capacities, sustainability of financial decisions, etc. If MTEF data are reliable and assessments are positive, uncertainty and thus credit risk are reduced.
- **Local development plans.** Provided they fulfil quality criteria similar to the above, and are **related to financial planning,** local development plans contribute to strategic local government decision-making and resource allocation that is responsive to the needs and priorities of the local citizens and the local economy. In some countries, the existence of local development plans may also be a prerequisite for national transfers.

Accounting

The way financial data is aggregated and presented in local budgets, financial statements or other finance-related documents is mostly determined by the accounting system in place. There are two basic accounting systems: cash accounting, and commercial or accrual accounting. Regardless of the system in use – which should at the very least comply with internationally recognised minimum standards[19] – the most important and necessary condition for sub-sovereign lending in this respect is that it adheres to national accounting standards for local governments (where they exist), as these determine whether financial documents and reports are readable and transparent (even if only to experts), and are comparable within individual countries.

- **Cash accounting** is generally regarded as the more simple accounting system. Traditional cash accounting is focused on actual cash flow in a predetermined period of time (the budget year), and records incoming and outgoing payments. Transactions are only recognised when there is an exchange of cash. This leads to credit being viewed as an incoming payment. Traditional cash accounting (if not modified) does not require the recording of asset values nor does it account for depreciation. Critics therefore argue that the information it provides does not support sound decision-making because the real financial situation is disguised and there is little or no information about actual consumption of wealth and resources.
- Accrual accounting records revenues and expenses as they occur, regardless of whether or not cash has actually been transferred. Accrual accounting therefore tries to measure actual financial performance and thus accounts not only for profits and losses, but also for assets and liabilities. The system allows for depreciation, and if all fixed and mobile assets are recorded, which is normally required, the yearly balance sheet gives decision-makers an accurate picture of the actual consumption of wealth and resources, and therefore the real financial situation. Since accrual accounting generates information essential to potential investors, it is regarded as the more appropriate accounting system for sub-sovereign lending.

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19 *Public sector accounting standards based on International Public Sector Accounting Standards (IPSAS) or Generally Accepted Accounting Principles (GAAP) require information to be reliable, understandable, timely, relevant, and comparable across governments.*

Financial reporting, disclosure and audits

As described in Section 2.2.7, *'Financial control and audits',* local governments must usually satisfy reporting requirements so that the way they deal with public resources can be controlled and audited. Financial reporting and the disclosure of local budgeting are **essential for credit risk assessment,** as well as for local accountability. Potential investors, who take a diligent approach, will always include a detailed breakdown of financial statements and audits in their risk analysis. However, the financial statements submitted to supervisory bodies or audit courts (or the equivalent) do not necessarily include the information required by potential investors, especially when a non-accrual accounting system is used. Since banks or other financial intermediaries are not always familiar with the structures, processes and financial management of local governments, the opinions of supervisory bodies and independent audit courts are important in order to help **reduce information asymmetry and uncertainty.** Statements on compliance with legal requirements and standards help in assessing the capacities and performance of local governments; while audits provide primary evidence of the soundness of financial operations since they deal with bookkeeping quality, accounting methods, and adherence to budgetary rules.[20] Potential investors are also interested in whether local governments have complied with any correctives recommended by auditors or supervisory bodies. If local governments do not publish reports, or submit reports that are outdated, their creditworthiness decreases. Poor reporting may also be a strong indicator of low levels of accountability and poor, inadequate financial management and governance, regardless of whether the reports in question were intended for administrative, political or civil purposes.

2.3.3 Capacities for technical and financial planning and implementation

The capacities required for the technical and financial planning and implementation of infrastructure projects **(absorptive capacities)** might be more important for local decision-makers than for potential investors, but they remain crucial. Many local governments fall short in the area of implementing planned capital expenditures. The execution rate of budget allocations for capital investment is therefore often used as an indicator of a local government's respective capacities.

If capacities are not sufficient, costs might rise and the potentially cost-effective advantages of debt financing might be lost. This is especially the case when debt is used to finance revenue-generating projects whose anticipated revenues are expected to cover debt repayments.

20 *An unqualified audit report or auditor opinion is equivalent to full compliance with the financial standards in place. A qualified report points to minor deficits in the financial statement, a disclaimer is given when there are severe deficits, and an adverse opinion signifies that there has been no compliance with financial standards whatsoever.*

Technical and financial planning provides a basis for local decision-making. It is required in order to decide:

- whether, where and the dimensions according to which a particular piece infrastructure should be built. This calls for strategic planning, sound feasibility studies and the ability to determine and evaluate the design and technical aspects of a planned capital investment, plus an assessment of the time needed for its preparation and implementation. Technical and financial capacities are also needed to manage the asset, in order to maintain its value and operational viability over its expected lifetime;
- whether debt financing is a suitable, necessary, or financially feasible method for financing a given project. Debt financing always carries risks of excessive indebtedness or insolvency, and these risks must be balanced against potential advantages and the overall local financial situation. In addition to the costs of implementation, those for project preparation need to be borne in mind. All important resources must be calculated as precisely and realistically as possible in order to determine:
  - the overall project costs;
  - the funds required per year;
  - an optimum proportion of debt financing; and
  - the costs needed for future **operation and maintenance.** (Operation and maintenance costs are often underestimated or even overlooked, leading to financial overburden and placing stress on the local budget. Many local governments already face problems in allocating sufficient funds to maintain previously created infrastructure assets.)

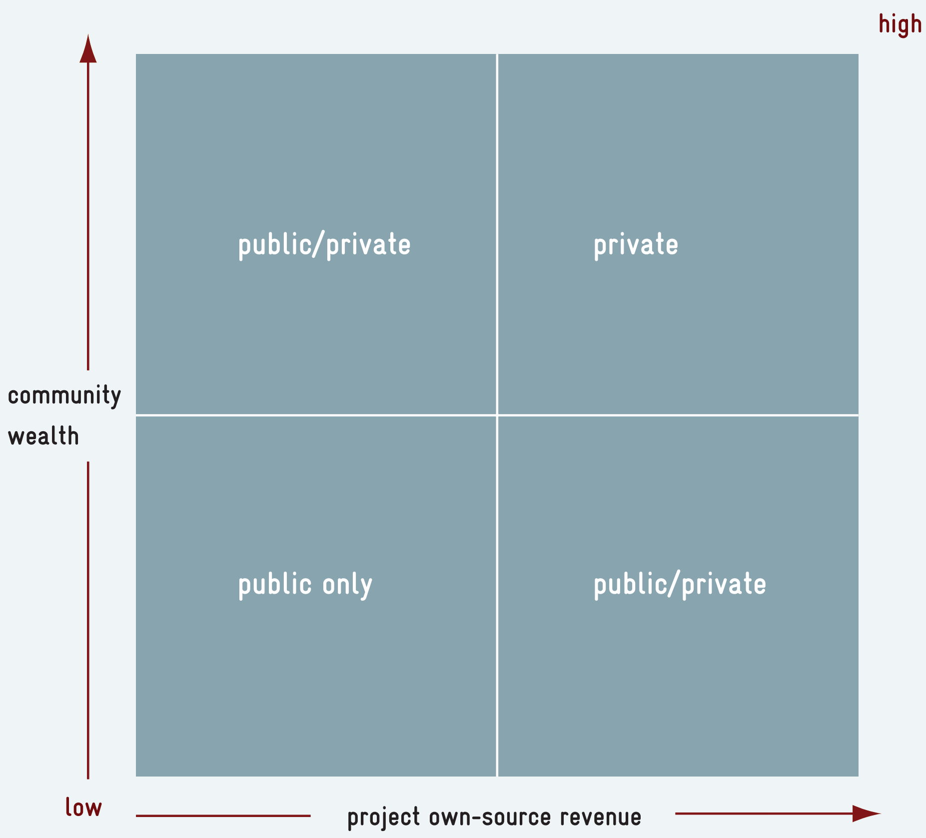
Implementation capacities, such as those needed for procurement, contracting and project management (monitoring, steering, cost control, etc.), are required to ensure:

- infrastructure implementation that keeps within predetermined cost limits and scheduled time frames. Delays can result in increased debt and other costs: for example, debt can be taken on too early, triggering unnecessary interest payments, or employees' contracts might need to be overextended. Such consequences can increase the amount of debt financing required;
- adherence to national technical standards and regulations, and to the use of adequate construction practices and good quality materials.

A lack of technical and financial planning and implementation capacities leads to unsound decision making, miscalculations and misallocations of resources; a reduction in sustainability and unnecessary increases in costs and the debt burden.

A general rule, which might be applied when deciding whether or when to incur debt for capital investments, is that where poor local governments use debt financing for infrastructure provisions, this should be for revenue-generating projects only, whereas wealthy local governments are in a position to use debt financing for any projects or provisions (see Figure 1).

Figure 1: **When to borrow?**



Source: Author's design.

3. The supply side: Financial markets

Financial markets must satisfy a number of minimal criteria in order to be able to offer adequate products for financing local governments. However, as conditions differ from country to country and are determined by the historical development of institutions in each country, the following overview does not set out to list "do's and 'don'ts", but offers a number of good practices and references, combined with a discussion of the contexts in which financial markets operate, and their relation to long-term local government finance, so as to explain the issues involved and perhaps open up new avenues of thinking.

This chapter attempts to link the topic of local government finance to that of local financial markets in order to examine and promote the concept of external financing for local government infrastructure projects (LGI). It describes the pre-conditions for financial markets to be able to finance LGIs. It also offers readers unfamiliar with financial markets information to help them classify the status of financial markets in individual countries as well as understanding why and where impediments exist.

3.1 Financial markets: An overview

3.1.1 Definition

The term 'financial market' is often used, but has no universal definition. For the purposes of this handbook, a financial market is understood as a platform for the meeting of supply and demand sides of monetary funds through the intermediation of banks and other financial institutions (see Figure 2). This allows connections to be made between market participants on an institutional basis so that funds can be obtained for investments and the extension of business activities – especially helpful in countries with limited trade opportunities. The following description of financial markets is based on the assumption that local governments[21] wish to tap such markets for the financing of LGIs. The ability to do so depends on legal and regulatory frameworks, the parties involved (lenders[22], borrowers, financial intermediaries etc.), and the systems that the market operates.

21 *The terms 'local', 'municipal', 'sub-sovereign' and 'sub-national' are used interchangeably.*

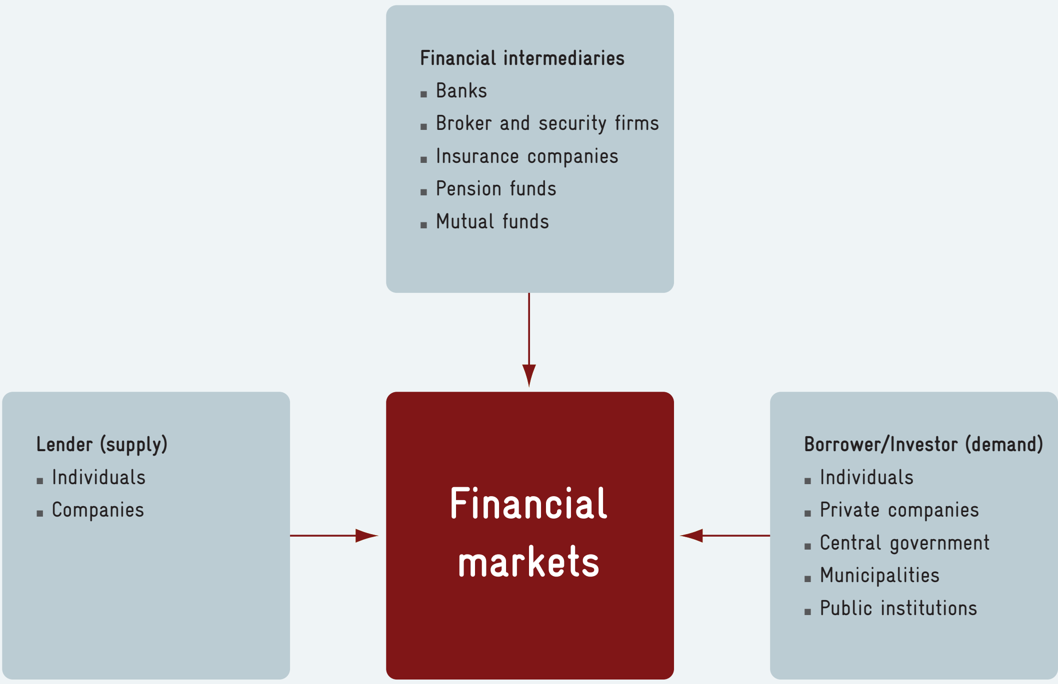
22 *The term 'lender' is used to describe those who have money and lend it to others. It includes the 'savers' or 'depositors' who bring money to banks and financial intermediaries. In a broader sense, it also includes investors, who lend their money by investing it. The difference between a 'saver' and an 'investor' is that the saver does not know where the money will be invested, whereas the investor makes a clear decision.*

Public versus private ownership

Certain development specialists stress the importance of private sector ownership in financial markets, using terms such as 'private capital and debt markets' as well as 'private security markets'. While the positive influence of the private sector on developing economies and in terms of developing financial markets is acknowledged, **financial markets need not necessarily be private as long as they are independent.** Viable financial markets are therefore referred to here as being 'commercial', meaning that they are conducted in a financial and economically efficient and effective manner, whether by private or public financial institutions.

In this context, the term 'external finance' refers to funding from sources other than local government own revenues or intergovernmental transfer payments.

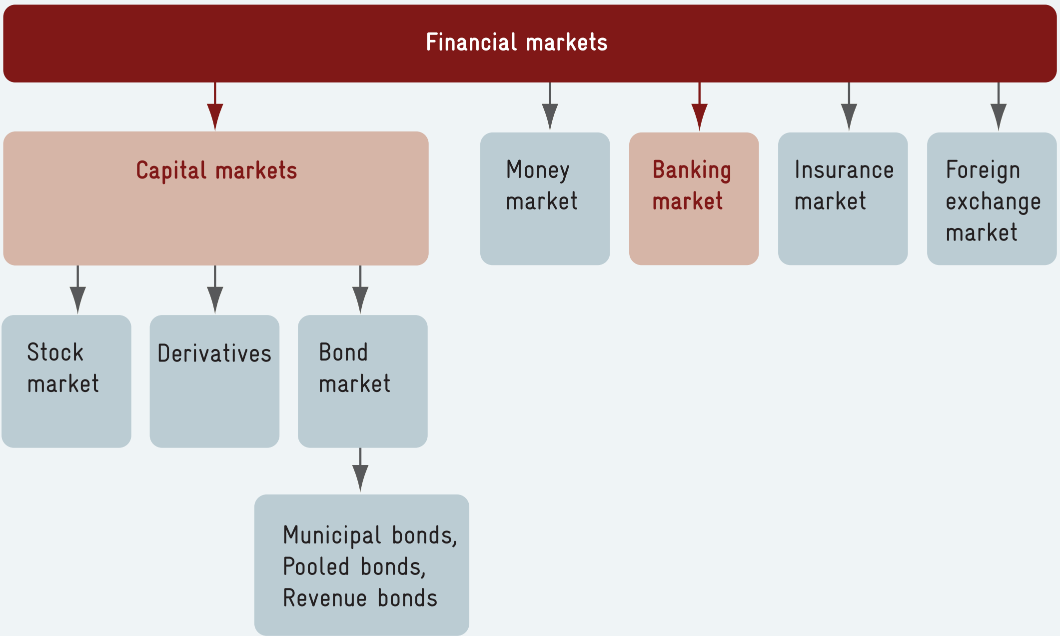
Figure 2: **Major actors of financial markets**



Source: Author's design.

Financial markets include a variety of specialised markets, such as the foreign exchange, banking and capital markets. Figure 3 presents a simplified overview. The most important markets for financing LGIs are the banking and capital markets. Money markets only come into play if governments need to overcome short-term financing bottlenecks (e.g. for up to one year). Foreign exchange markets play a role when other currencies are involved, but cannot be used as a funding base.

Figure 3: Various forms of financial markets



Source: Author's design.

Many developing countries suffer from inefficient financial markets. Due to the variety of financial traditions in different countries, the causes of inefficiencies can vary significantly. However, a general observation may be made that financial markets in developing countries are usually dominated by banks before capital markets develop. This can partly be explained by the fact that, because of the special nature of their activities, the banking sector and capital markets require different enabling environments. The banking business is relationship-based, whereas capital markets are based on abstract market transactions.

3.1.2 Banking market

Role of Banks

Banks convert savings into loans that are extended, for example, to local governments and companies on the basis of client-bank relationships. The main risk for depositors is that they might demand their money back at a time when the bank has invested all their deposits in loans, and therefore cannot pay them back, i.e. when the bank has become illiquid. The risk for the bank arises when they extend a loan that the borrower cannot or will not repay.

Banks have not always been willing or able to mitigate such risks. An institutional framework is therefore required which ensures that banks:

- operate within their business licenses and are supervised in doing so;
- maintain a minimum capital requirement for sufficient liquidity; and
- publicly disclose financial and other relevant information on a regular basis (market discipline).

The last two determinates are internationally applicable and have been formulated in what have become known as the 'Basel Accords'.

Basel 2 Accord[23]

One of the main tasks of the Bank of International Settlement (BIS) is to seek worldwide monetary and financial stability. The Committee on Banking Supervision, established in 1975 by the G7 States, specifically targets the risks of insolvency of financial institutions and regulates competition within the international banking community. Because they are located in Basel, the EU Guidelines for Capital Adequacy are known as Basel 1 and Basel 2. To determine the status of a financial market in any given country, it is vital to understand the way in which it cooperates with the Basel 2 Accord.

Basel 2 requires participating countries to follow three basic principles by adopting domestic rules regarding:

1. **Comprehensive measures and minimum standards for capital adequacy:** This requires banks to put aside a certain amount of capital depending on their rating and the kind of loans they provide.
2. **Supervision of bank risks:** Authorities must be able to supervise the ability of individual banks to control and manage their risks.
3. **Transparency of information to enhance market discipline:** Based on the consequences of the recent financial crisis, a package of amendments (Basel 3) has been designed by the BIS and endorsed by the G20 Summit in Seoul. Major reforms include higher amounts of capital required by the banks as well as a number of new constraints on bank activities. While, many developing countries claim that the standards of the Basel Accord are too strict for their own capacities, an international survey from 2010 revealed that more than a hundred countries worldwide have implemented or are planning to implement Basel 2.[24]

23 *For more information on Basel 2 see http://www.bis.org/publ/bcbsca.htm.*

24 *See Financial Stability Institute (2010): FSI Survey on the Implementation of the New Capital Adequacy Framework. Basel: Bank of International Settlements (Summary of responses to the Basel II implementation survey (Occasional Paper, No. 9); August 2010.*

Common impediments to banking sector lending

The reasons a banking sector does not or cannot make long-term loans to local governments often lie in a combination of impediments:

- **Market underdevelopment**
  - The lack of a sufficiently strong, long-term oriented funding base. The savings rate in many developing countries is too low, and deposits are often short-term because, in situations of high inflation, money left in banks decreases in value. Banks must then rely on their private owners, shareholders, governments or donors to inject capital.
  - Little or no competition between banks and financial institutions.
  - Lack of diversification and specialised financing institutions, and/or products and instruments.
- **Regulatory and legal frameworks**
  - Over-regulation (e.g. interest rate ceilings that might hinder the ability of financial institutions to cover their costs). Legal frameworks for sub-sovereign lending that might prevent banks from lending to municipalities.
- **Lack of knowledge**
  - Weak institutional capacity in planning long-term finance, assessing the risks of municipal finance and supervising loans.
  - Bank personnel are not sufficiently qualified to perform essential tasks (e.g. risk assessment).

3.1.3 Capital markets

Characteristics of capital markets

Capital markets are securities markets where the private and the public sector can raise long-term funds. Their operations are different to those of banks. The buyer of a bond or stock is distanced from the seller and has to rely on the information provided in order to make a decision. **Transparent information** is therefore essential, not only to determine the value of a bond or stock, but also to enable investors to assess investment risk. The less information available, the more uncertain the investment and the higher the financing costs, because a risk top-up charge might be imposed. The risk is that the issuer of the bond might not be able to repay the interest and/or the principle.

Regulations for capital markets are diverse since they cover stock and bond markets, and the market for derivatives[25].

25 *Derivatives are financial instruments that 'derive' their value from the future price development of an underlying asset.*

In general, capital market regulations should

- identify who is allowed to underwrite securities;
- clarify what sort of securities can be issued (e.g. whether municipal debt is allowed); and
- stipulate technicalities such as the custody and safekeeping of securities.

Development of capital markets

The development of a capital market usually starts with the **central government issuing government bonds**[26] which are then sold to a group of state-owned enterprises and banks. The proceeds flow back to the government and are used for a variety of purposes to support the national budget. Central government bonds are initially sold only to a limited number of institutions (the primary market[27]) and are not registered on the financial market (the secondary market). Local capital markets are thus excluded.

The next stage occurs when the **central government issues a bond on behalf of a local government** and channels the proceeds to the local body. This is often the case when central government acknowledges local government's needs for long-term finance but is reluctant for it to embark on direct borrowing. Such an arrangement is often subject to a regulated approvals procedure for the LGI in question, which requires the local government to submit a plan of how they intend to repay the funds. Issuing bonds on behalf of local governments also suggests that the central government is willing to allow a secondary market which taps into long-term consumer funds, and that it is prepared to develop the respective legal framework.

A sovereign guaranteed bond, such as the above, makes it easier for local investors to develop confidence in the bond market, since the repayment risk rests with the central government. The next logical step would be to grant local governments the independence to issue their own bonds **(municipal bonds).** In many countries, however, this does not occur, and local governments are denied the chance to develop a reputation as good borrowers, which in turn reduces the flexibility of their investment opportunities.

It should be noted that bonds issued by governments might not initially be designed as long-term financing instruments, and might have maturities of only 3-5 years, or even less. The challenge lies in encouraging governments to offer a variety of bonds with different maturities, which would also open up the long-term capital markets.

Some specialists suggest establishing 'over-the-counter' (OTC) markets for bond issues, which differ from secondary markets in that the bonds are not listed on the stock exchange, but traded directly. OTC markets have certain advantages for small issuers, but may jeopardise the security of investors.

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26 *The sale of bonds usually precedes the establishment of stock markets. We do not propose to explain the way stock markets work, but discuss the financing of LGI with stocks later in this chapter.*

27 *Primary market: the market for new securities issues. In the primary market, the security is purchased directly from the issuer. This differs from secondary markets, where securities are bought from financial intermediaries such as banks and brokers.*

There are various reasons why capital markets might not be ready for local government financing needs:

- **Legal and regulatory factors:**
  - lack of sufficient regulatory and legal frameworks allowing financial institutions and banks to issue bonds;
  - lack of sufficient investor security: if buyers of bonds and stocks are not legally protected, they are not willing to invest; and
  - lack of binding rules for bond issuers to disseminate relevant information on time.
- **On the supply side:**
  - lack of appropriate vehicles (for example pension funds[28]) to tap into long-term savings that can be used for investments.
- **On the demand side:**
  - limited central government activities to stimulate the local bond market by issuing government bonds (see previous page); and
  - lack of acknowledged ratings for the bond issuers and/or the bond itself.

Chile, for example, adopted an integrated approach to developing the bond market in combination with the pension scheme.

Impact of pension funds on bond markets in Chile

As early as 1981, Chile developed a new social security system based on private personal pension plans. Individuals pay a monthly percentage of their income into personal accounts that are fully funded and transferable. The management of the funds was entrusted to specialised pension fund management companies ('Aministradoras de Fondos de Pension' AFP). The pension system was able to accumulate funds that grew from 0.9% of GDP in 1981, to 40% in the mid-90s. In 2007, the total accumulated capital was around USD 100 billion. From the start, AFP was able to invest in bonds, firstly only government bonds, but later also other bonds with a certain rating. It is now probably the biggest single investor in Chile. It is said that about 90% of Chile's domestic financing needs can be financed through the domestic market.

Source: Anjali et al.1997.

28 *Pension funds are retirement funds that hold individual retirement accounts. Although part of the social security system, they are usually important players in financial markets. Individuals usually contribute to a pension fund by making regular monthly payments taken from their income. This means that a pension fund can accurately predict its 'fresh money' and that pension funds can accumulate large amounts of money over long periods of time for investment. Pension funds are therefore among the largest investors in financial markets. However, pension funds only tend to invest in securities with a certain rating.*

The importance of bond markets for economic development can be illustrated by the fact that as of June 2009 a total of USD 25,881 billion in bonds were outstanding worldwide, 91.5% of which were issued in developed countries (see table below). This clearly shows that the size of national economies is related to the size of their financial markets, and that developed countries are supported by well-developed financial markets.

Table 2: Bond markets worldwide

Country	Amount outstanding	Selection of guiding questions
Developed countries	23,665.2	91.5
Africa and Middle East	161.7	0.6
Asia and Pacific	365.3	1.3
Europe	328.3	1.2
Latin America and Caribbean	358.6	1.4

Source: Bank for International Settlements 2009.

3.1.4 Credit rating agencies

As discussed previously, the need for objective information is very important for all market participants. This is where credit rating agencies come into play. Credit rating agencies are private or state-owned companies that determine credit ratings for the *issuer* of a bond or stock, and for *the instrument* itself. The creation of credit rating agencies answers the need for objective information, which is a key precondition if financial markets are to be effective. Ratings assess creditworthiness, expressed as the ability to repay a loan or bond. For a municipality or local government, a rating instils a certain amount of financial discipline because, once a rating is published, it will be reviewed regularly and any drop in the rating will make borrowing more expensive.

The best-known rating agencies are Moody's, Standard & Poor's and Fitch, all of which operate on a global basis. There are also a large number of agencies that operate regionally (see box on the next page about INCA, a local fund that developed its own rating system). Assessments by local rating agencies have hitherto carried little weight internationally, but can be important tools for setting up local credit markets. The various credit rating agencies usually analyse the same data, but may differ in their assessment results. The ratings take account of macroeconomic factors, including a country's economic situation and fiscal reliability, as well as factors relating to the borrower, such as the quality of their management, their financial performance, and their accounting or financial reporting procedures. Rating agencies also differ in the way they present their results: they use letters, for example 'AAA', or numbers, or a mixture of both.[29]

29 *See Appendix for the different rating formats of the big three rating agencies.*

Infrastructure Finance Corporation of South Africa (INCA)

An important role in the South African sub-national government borrowing market has been played by the Infrastructure Finance Corporation of South Africa (INCA). INCA is a privately owned debt fund created in 1997 to help to support the country's stalled municipal bond market. The INCA fund leverages private equity by borrowing from the domestic and international financial markets in order to fund the purchase of both outstanding and new sub-national debt. Its target clientele is broad: local government units, parastatals and private companies involved in infrastructure development in South Africa. The key characteristic of INCA is that it possesses superior information, and focuses on the 'hands on' oversight of credits. This is especially important in the South African context, where major institutional investors do not want to deal with the surveillance of small portions of their portfolio or to keep track of changes associated with governmental reorganisation. INCA's success depends on choosing credits that, despite municipal market turmoil, are unlikely to default. INCA's sophisticated internal rating system, which groups bonds into five risk categories, is also an important factor in this success. Each category has a capital adequacy test that requires a certain percentage of the loan value to be backed by reserves: higher risk categories require progressively higher levels of reserves. The system includes a large number of factors, and is regularly overseen by Fitch Ratings, which, under the corporate name IBCA, was instrumental in the system's design.

The ambiguous role of rating agencies

For local governments and companies alike, the first step is usually to obtain a credit rating before entering the bond market. A local government initiates the rating process by hiring a rating agency. This has repeatedly led to bias on the rating agencies' side, and not only in developing countries. Part of the problem is that while rating agencies claim to have better and more accurate information about the organisations they are rating than others in the financial sector, they are not obliged to disclose all of that information, and the results of their analyses are usually only published as a short summary accompanied by a numerical or alphabetical rating. As became apparent during the recent financial crisis, rating agencies, in competition for employment from credit-seeking organisations, might be inclined to enhance their prospects by awarding rather high ratings. Calls for the mandatory disclosure of all of their results have therefore been increasing, and measures have already been taken to involve third parties and to improve the monitoring of rating agencies' operations.

3.2 Financing Instruments

While the previous section presented a general overview of financial markets, this section discusses the instruments commonly used to acquire credit, the ways in which such instruments are or can be structured, and some of the risks associated with financing LGIs.

3.2.1 Loans

Loans are usually provided by or through banks on the basis of the financial viability of the borrower. The configuration of a loan – its **terms and conditions –** usually stipulates the following:

- The **tenure or maturity**[30] of the loan, which depends on the financial strength of the borrower and the type of LGI to be financed. For example, a loan for investment in a water treatment plant calls for a shorter maturity than that for the construction of a subway line. Loans to finance LGIs usually need to be long-term, i.e. 10 to 20 years within this sector.
- The **repayment schedule:** loans are often amortised, i.e. repayments of the principle with interest are made in equal instalments over the life of the loan.
- The **grace period:** a repayment-free period, usually equal to the time needed for construction because no income can be generated during this time. If the loan is sourced from donors, this period can be longer.
- The **interest rate:** banks usually offer fixed or floating interest rates. The choice depends on market circumstances. If interest rates are expected to rise, a fixed rate is preferable; if they are expected to fall, a floating interest rate is more advisable.
- **Securities:** loans are secured either by taking pledges on physical assets or by pledging revenue sources.
- **Reporting procedure:** the borrower is obliged to report regularly on their financial and business situation. Sometimes the borrower requires the approval of the lender before any new loans can be granted.

Pooled loan structures

Large and/or potentially risky loans can be co-financed by several banks in what is sometimes known as a 'syndicated loan arrangement'. Participating banks usually provide the same assurances regarding the security of the loans, meaning that they all have the same legal position, and the loans are repaid on a pro rata basis. However, to enhance the availability of credit, some lenders can be subordinated to others, meaning that if there are repayment problems, their claims against the loan security will have lower priority[31]. Such arrangements can be very helpful to local governments seeking to finance LGIs, especially when revenue streams are not deemed to be stable. Some authors regard pooled loan structures as 'credit enhancements'[32].

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30 *The terms "tenure" and "maturity" are used interchangeably.*

31 *The order of priorities of the use of cash earned is sometimes also called "cash-flow cascade" or "waterfall".*

32 *For a detailed explanation of credit enhancements see Chapter 4, Section 4.2.*

The box below outlines a positive example of how central governments can regulate municipal loans by considering the different sizes and repayment abilities of local governments.

i The transition to a competitive local credit market: Czech Republic

Municipal borrowing to finance local infrastructure projects is relatively new in the Czech Republic. Under the former regime, almost all local capital investments were financed by state subsidies or projects were carried out directly by the state. When autonomous local governments were set up after the collapse of communism, legislation was introduced to establish the *State Savings Bank* as the sole supplier of municipal credit. But this was later overturned, and the municipal credit market was fully de-regulated. After a new tax and local government financing system was adopted in January 1993, Czech municipalities obtained a variety of stable, shared taxes and solidified their budgets.

A diversified municipal credit system developed. Small municipalities borrow principally from the *State Environmental Fund* at zero per cent interest for targeted environmental projects. Mid-sized cities mainly borrow from commercial banks: over 1,300 commercial bank loans were made between 1992 and 1995, and all the large commercial banks actively lend to the municipal sector. All Czech cities with populations over 100,000 have now issued municipal bonds. The municipal bond market developed quickly on the heels of commercial bank lending, and the same banks that make municipal loans typically serve as municipal bond underwriters. The competitive environment has been supported by the activity of a municipal development fund (the Municipal Infrastructure Finance Company or MUFIS). It was established with the expressed purpose of enhancing competition among commercial banks in the municipal sector. MUFIS provides commercial banks with long-term funds at market rates of interest, for on-lending to local governments. The banks carry out all the municipal credit analyses, and accept all credit risks for their loans.

As a result of this competition, real interest rates in the municipal sector have declined and average lending terms have been extended. Commercial banks now make infrastructure loans of up to 8 years with their own funds, and up to 15 years when using intermediary funds. Municipal bonds are issued for five to ten year terms. Growth in the credit market has been supported by an exemplary local government repayment record. There have been no defaults on commercial-sector lending; problem loans in the commercial sector represent less than 0.8 per cent of all municipal loans. The Czech National Bank classifies municipal loans as the second safest loan category after national government debt. For reserve purposes, municipal loans carry a risk weighting of only 0.2 over national government debt.

3.2.2 Bonds

Various types of bonds, such as bank bonds, municipal bonds or revenue bonds, are available to finance LGIs. The general **terms and conditions** for these bonds are similar to those described above under 'Loans', but they are repaid in a different way. Bonds are usually repaid at maturity in one amount ('bullet repayment'), i.e. they are not amortised. Types of bonds differ according to the issuer and the way in which the obligation is secured.

Municipal bonds (MB) are issued by local governments through banks or brokers in order to raise funds for public infrastructure. They can be traded on the local stock exchange or in OTC markets.

MBs are usually secured through:

- **General obligations,** in which the entire income of the borrower is used to secure repayment: This includes transfer payments from central governments. These bonds are therefore considered more secure because they are backed by central government payments and not by local government revenues or assets alone.
- **Limited obligations,** which relate to specified revenues. These may include future revenues from the project to be financed, and/or from other activities under the purview or control of the issuer. Limited obligations may derive from local taxes, fees or income from real estate. These revenues can be ring-fenced and put in accounts (called 'trustee accounts') beyond the reach of the local government.
- A mixture of **general and limited obligations,** which occurs quite often. Local governments will try to recover a portion of the project related costs through revenues, and use general obligations to provide stability.

Revenue bonds are a special type of MB, as they rely solely on the revenue of a project (or a number of projects, in which case they are called 'pooled bonds'). They can therefore only be used when the target project(s) produce reliable long-term revenues, for example in the case, of a water treatment plant or a toll road.

Bank bonds are issued by local banks to refinance their loans. They therefore indirectly support the financing of LGIs. This method is used when a local government is not allowed to issue bonds on its own; when the credit rating of the bank is better than that of the local government; or when the bank supports a number of smaller local governments that are too small to issue bonds individually. Bank bonds are secured by the assets of the entire bank, which are mainly cash investments and receivables.

3.2.3 Loans or bonds?

There is no 'right answer' as to whether bonds or loans should be used to finance LGIs. It very much depends on the financial market situation of the individual country, the type of infrastructure to be financed and what is best suited to the local government seeking external finance. Many countries combine bond and bank lending successfully (e.g. Germany), whereas other countries, such as the United States, focus on bond lending. Nevertheless, the existence of a bond market has two advantages: first, a successfully functioning bond market means that an integrated public disclosure policy is in place in the financial market, and this has a positive effect on the overall transparency of public management; second, even if the choice is for a loan, banks increasingly want to refinance themselves through the bond markets. The advantage of loans, on the other hand, is that they foster bank/client relationships, which in the medium- and long-term trust, decrease insecurity, and reduce information asymmetries between the banks and their clients – in these cases, the respective local governments.

3.2.4 Stocks and equity

Stocks are often used when a formerly state-owned company is privatised: otherwise they are rarely used to finance LGIs. Stocks require a functioning stock market and an active investor community. An LGI can be financed through stocks when the company that intends to invest 'goes (or has already gone) public', i.e. offers its shares to the public on the stock exchange. Private and institutional investors can buy the shares, become equity owners and thereby provide the funding. The amount of capital available for LGIs depends, amongst other things, on the market price of the stock, which of course fluctuates over time. The challenge for managers of publicly listed companies is to keep the shareholder value stable and at the highest possible level.

Equity investments (also discussed in connection with project finance arrangements in Section 3.3.1) are made when a company invests in LGI. The equity investor, often called a sponsor, incurs a high risk because, in the case of a default, the claims of banks will be met before those of equity owners, meaning that equity owners can lose their entire investment. In compensation for the higher risk, equity and stock owners usually enjoy voting rights and higher possibilities of profits because, if the investment is successful, dividend payments can be high and long-term.

The provision of sufficient equity is very difficult in developing countries owing to the inherent riskiness of projects, the unavailability of long-term funding and the lack of entrepreneurial risk takers. Governments therefore provide equity as 'in kind' contributions, usually in the form of land use rights, real estate or access to public infrastructure, such as roads or electricity supplies, in order to extend possible loan volumes.

3.3 Modes of financing

Modes of financing can be distinguished by **type of borrower** and **type of transaction.**

3.3.1 Types of borrowers

A decision has to be made as to how borrowing can occur:

- on a **corporate finance** basis, meaning either that the local government or an established entity under its purview is the borrower; or
- on a **project finance** basis, meaning that a so-called Special Purpose Vehicle (SPV), the only asset of which will be the LGI, must be incorporated.

Among other things the use of an arrangement depends on the individual countries' circumstances, the local government objectives, its size and financial endowment, as well as the type of LGI to be financed. As a consequence, it is impossible to make clear suggestions as to which mode might be applicable because the factors are interlinked and vary in importance in each case. However, it is clear that project finance in general requires a stable and enforceable legal environment and sophisticated market participants.

Corporate finance

If a local government acts directly as the borrower, the financing will be on a corporate basis. *Corporate* in this sense means that the revenues of the entire local government can be used for loan or bond repayment. The credit decision will be based on its balance sheet (or budget) and the new loan will add to its existing obligations: hence corporate finance is often called 'on-balance sheet finance'. The local government bears all the main risks, not only those involved in the construction, implementation and operation of the project, but also the financial risk. For potential investors, the difficulty of financing an LGI on a corporate basis is the lack of adequate transparency concerning the financial, economic and managerial structure of local governments. This often makes corporate finance arrangements problematic for financial markets. To overcome these obstacles, it is therefore important for local governments to have credit ratings and a functioning control mechanism, besides using internationally recognised accounting standards.

Where national regulations do not allow local governments to act as borrowers themselves, they might allow LGIs to be financed through municipally owned companies. This is usually to avoid the complicated legal and political implications of a local government going bankrupt. Such political considerations do not apply to companies established under law, which can act as fully independent entities. As long as they are creditworthy, they can use local financial markets to take up bank loans and issue bonds. These companies often develop into utility providers, for example supplying electricity, or water and sewerage services.

China's municipal investment companies

In China, municipalities are not legally allowed to act as borrowers or issue guarantees that could in any way make them liable or vulnerable to future payments. Municipalities therefore use existing state-owned companies or have established new companies to act as borrowers on their behalf. In many cases, these companies hold the entire infrastructure assets of a city, such as the transport systems, roads, water supplies, sewerage treatment plants, etc. These assets serve as a capital base or security against which they can borrow. The Shanghai Chengtou Holding Company Limited, formerly known as the Shanghai Municipal Raw Water Co. Ltd., is a case in point. The company is primarily involved in developing water resources, water distribution and water supply-services. It is now listed on the stock exchange, thus proving that setting up municipal investment companies is not only a legally acceptable, but also an economically viable way to finance LGI.

Project finance

Project finance, often called 'off-balance sheet finance', means that the project is financed through debt or equity which has been specially accumulated for this purpose. Equity providers – government, funds, banks or other investors – set up a company as an SPV, which acts as the borrower. Lenders to the project rely on the ability of the project to generate revenues to repay the loan.

One of the advantages of using a project finance arrangement is that risks can be allocated to the party that can best bear them. However, although this seems very simple and straightforward, past experience has shown that many long-term infrastructure financing arrangements fail because the risks are not recognised or adequately considered, or are unequally distributed or borne by an unsuitable party who may not have a good understanding of the risks of a project's use of a particular technology. One way in which financial markets can assess the viability or bankability of a project is by looking at a **cash-flow model** which presents an overview of all the financially relevant project data, and provides a forward looking cash-flow projection. Cash shortfalls can thus be anticipated and measures can be taken to mitigate them: for example, a debt service reserve account can be set up to hold enough cash for at least one loan repayment instalment. The cash-flow model will undergo a number of stress tests in which the robustness of the project is tested against a number of individual or combined events. Depending on the possible project risks, the cash-flow model will be tested for the effects of, for example, interruptions in the project's operations, or increases in interest rates or energy prices. The results of these tests can then be used to deploy mitigating measures and strengthen the project structure.

In addition to the financial considerations, the contractual aspects of project finance, which are crucial for success or failure, can be complex because they must cover three project phases:

1. pre-completion, when a degree of certainty must be established before or while the project is under construction;
2. completion, when the project is ready to start operations; and
3. after completion, when the repayment process begins.

The main contracts can be divided into **project contracts and financing agreements.** The first is usually based on a concession arrangement – a licence to undertake the project issued by the local government. The second details the funding, security and recourse.

Project contracts consist of:

- a concession arrangement;[33]
- a joint venture agreement to set up a SPV (if it is to be a joint venture);
- a management agreement detailing the responsibilities for the operation and maintenance of the project;
- an Engineering, Procurement and Construction (EPC)[34] contract for the timely and technically correct construction of the project; and
- a supply and off-take agreement detailing what input is to be supplied, who is to supply it and at what price, who the buyer of the output is, and the nature of the contractual obligations between buyer and project.

Financing agreements specify the financial terms and conditions, and include all covenants, security documents and any guarantees, as well as support and comfort letters.

Generic project risks

Any externally financed LGI must be subjected to a thorough due diligence process to assess its bankability. Understanding the potential risks makes it possible to mitigate the impacts of a default. Each project has specific risks that need to be individually identified[35], but they are most likely one or more of the following:

- legal and regulatory risks
- political risks
- supply risks
- market risks
- foreign exchange risks
- interest rate risks
- construction risks
- contractual risks
- environmental risks, and
- management risks.

33 *Concession arrangements are usually made between a local government and a private party, however they can also be made with a public entity.*

34 *An Engineering, Procurement and Construction contract is a very common form of contracting.*

35 *Project risks usually need to be assessed by external specialists, which can make project finance arrangements very expensive.*

3.3.2 Parties to the transaction: Public Private Partnerships

Financing varies according not only to the type of transaction, but also to the parties involved in that transaction. They may be purely public (i.e. public bodies or the government), or wholly private (all participants are privately owned enterprises and do not depend on any form of public support or subsidy), or a mixture of the two. The latter are called Public Private Partnerships (PPPs), and because they combine the strengths of both sectors, they have played an increasingly important role in recent years. PPPs, which do not necessarily need financial markets, can be a model way of financing local government infrastructure.

No clear definition of PPP exists and the concept is used in a number of different ways. In its simplest form, it refers to a contractual agreement between the private and the public sectors in order to achieve a common objective in the delivery of a public sector project and/or service. Such cooperation can take many different forms, but the final responsibility in the case of an LGI, lies with the public partner. PPPs should therefore not be confused with privatisation, which entails not only a change in ownership, but also in full responsibility.[36]

3.4 Summary

Financial markets consist of a number of individual market platforms of which the banking and the capital markets are the most important. In developing countries, however, opportunities for successfully financing LGIs with loans and bonds obtained through local financial markets are often lacking. The main impediments are an insufficient supply of funds, weaknesses in legal and regulatory frameworks, and a lack of understanding of the situation of local governments and the nature of LGIs.

This chapter has demonstrated that ready-made approaches cannot be applied to the financing of LGIs. Although there is much to be said for financing LGIs from local budgets, tax revenues and transfer payments, past experience has shown that these methods are often insufficient, and alternative instruments are called for. It is widely acknowledged that local financial markets are the backbone of economic development and it is therefore a priority to encourage them, not least to provide local governments with those much-needed alternative financial instruments. This not only supports the financing of LGIs; it is also highly beneficial to the local financial markets themselves, as is now widely recognised.

36 *For an example of PPPs see Appendix.*

4. Instruments, approaches and lessons learned

4.1 Lack of financial sector involvement

Even if all the framework conditions listed in the previous chapters are fulfilled and the instruments they describe in place, many investors might still be hesitant to get involved in LGI finance in developing countries. As we have seen, investments in such projects invariably require large long-term loans. Banks in developing countries frequently do not have a sufficient capital base to provide the required loans, while actors in local capital markets do not regard municipalities as potential clients since they have only limited experience of large, long-term projects and the associated risks. These risks (perceived or real) result in very high interest rates and make credits unaffordable.

Furthermore, in the past the donor community has not fully appreciated the potential of existing financial markets for municipal financing in developing countries. Donor funds have often been injected without using the local financial infrastructure and without facilitating its development. Direct lending has been used to finance specific projects or programmes. The loans have been repaid by governments, who have often also had to carry foreign currency risks. Local banks have not been involved, and have functioned merely as mechanical vehicles for the payments, which had little impact on local financial markets. To make their loans affordable, donors often lend at below-market interest rates, further inhibiting capital market involvement. In some cases, market distortions have been created or parallel financial structures have emerged.

This is not to imply that donors do not support local financial markets. It simply means that the importance of the interconnection between these markets and the financing of LGI has not been fully realised until recently.

In order to involve local capital and financial markets in LGI financing, it is important to at least partly mitigate the risks associated with lending to municipalities. On the one hand, lowering risks increases the viability of municipalities as clients for the markets; on the other hand, it enables the markets to charge lower interest rates, thereby making loans more affordable.

The core mechanisms used to mitigate risks are credit enhancements. In financial market terms, credit enhancements include instruments such as collaterals, guarantees (see 4.2.1) or other agreements that attempt to reduce the risks associated with borrower default. Credit enhancements are used as incentives to encourage private players in the financial and capital markets to enter the field.

The following section outlines various types of credit enhancement schemes and techniques that can be deployed to mitigate risk. The type of mechanism depends on the risks to be mitigated and the inefficiencies that need to be counteracted.

4.2 Credit enhancement mechanisms

4.2.1 Guarantees

Guarantees are the most common form of credit enhancement. As their name suggests, they guarantee lenders against the risk of borrowers not repaying their debts. In the case of LGI finance, guarantees are provided by professional insurance companies and/or multilateral banks that underwrite a certain commitment and pay the lender in the case of a default.

Three guarantee types are commonly used when financing LGIs:

1. **Comprehensive guarantees,** which guarantee the payment of interest and the repayment of the principle of a loan or bond without exclusions for risk. In the case of default, payments are made to banks or bond holders on demand regardless of the reasons for the default. Below is an example of an institution providing a comprehensive guarantee given to bond holders in the Philippines.

> **i The LGU Guarantee Corporation[37]**
>
> Thailand has announced its intention to boost the size of its capital market to 1.5 times its GDP in the next four years. According to the Finance Minister's announcement in June 2009 the plan includes liberalising the brokerage business, relaxing tax barriers in dividend payments and other tax relevant regimes. The capital market size is currently smaller than the annual GDP of around USD 263 billion. The measure should support the flexibility and increase long-term funding for LGI.
>
> *Source: Dow Jones Newswire July 2009.*

2. **Political risk guarantees (PRGs)** are especially designed to cover political risks to lenders that might occur in the country of the borrower, which are (usually) beyond the control of either side. PRGs typically cover four political events that often threaten the repayment of loans and bonds:

- expropriation
- currency inconvertibility or non-transferability
- political violence
- breach of contract

PRGs are a useful instrument when the rating of the country is at or below investment grade. The Multilateral Investment Guarantee Agency (MIGA) of the World Bank Group offers such PRGs, as do most regional development banks, some of which also include the coverage of equity.

3. **Partial credit guarantees** (PCG) share certain predetermined commercial risks of default between the lender and the borrower. Sharing risks keep both sides actively engaged but allows lenders to reduce their risks to acceptable levels. Repayments are covered regardless of the reason for the default.

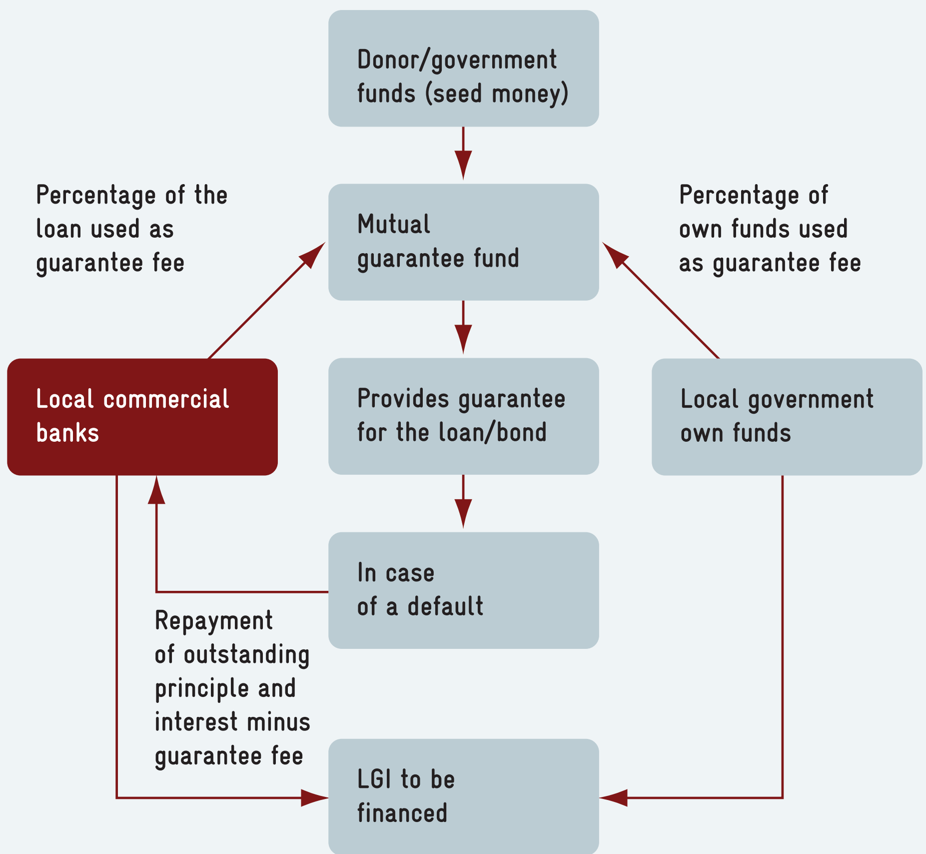
37 See also http://www.lgugc.com/index.htm.

In addition to the guarantees described above, **Mutual guarantee funds (MGFs)** provide another approach of supporting weak financial markets and weak local governments. Local governments that want to finance LGIs contribute to a fund that guarantees the repayment of loans or bonds. In the case of a default, the banks are repaid by the MGF to the guaranteed amount.

The design of an MGF may vary according to:

- **Ownership.** A local government becomes a member of the fund and makes regular contributions. The local government then obtains the potential right to be eligible for a LGI guarantee. To achieve a critical mass of guarantee funds, others, such as local government associations, donors who can provide feeder funds, and professional insurance companies, might also participate.
- **Management.** Before a guarantee decision is taken, the MGF must be in a position to assess the risk and determine a guarantee premium. If the MGF is mainly donor funded, the possibility of outsourcing part of the decision making process to the local community should be considered.
- **Payment of guarantee premium.** The guarantee premium should reflect the actual risk of the loan or bond. However, if the project is politically important, the guarantee fee might be subsidised, waived, or provided by other partners in order to reduce the financial burden.
- **Projects and local governments.** If the project or the local government is too small to make a feasible application for funds, resources can be pooled with other local governments who then act as one applicant.

Figure 5: **Basic model of a mutual guarantee fund**



Source: Author's design.

4.2.2 Pooled arrangements

Another form of credit enhancement is to bundle existing capacities. Pooling arrangements can take advantage of economies of scale, and can also diversify and reduce potential risk. They can be used in different ways to enhance financing options for LGIs, and can be very helpful in encouraging banks to become involved in LGI finance.

Some of the most common forms of pooled arrangements are when:

- A number of **smaller local governments** agree to pool their LGIs and act as one borrower. In this way, they can improve their chances of getting a loan, bond or share, and thus decrease financing costs, and reduce the risk to the lender, since it is unlikely that *all* borrowers will fail (an advantage of so-called 'portfolio diversification').
- Local government **revenue streams** are pooled in order to provide a certain amount of security for the loan to be repaid. These revenues might include donor or central government-funded subsidies for interest and/or principle repayments.
- A number of **different instruments,** such as bonds and loans, are pooled to leverage the financing.
- **Lenders pool** their resources to finance a larger project. They then act as one lender that can offer a sum of combined financial and technical support (this can also be called a co-financing arrangement).
- **A bank** combines a number of local government loans into one bond in order to sell it on the secondary market and thereby refinance its exposure. This can be done also in reverse by first issuing a bond to provide liquidity and then supplying loans to local governments.

A disadvantage of pooled arrangements is that the larger the consortia of participants, the more time they need to come to an agreement. While the interest rates might be cheaper for the borrower, the transaction costs will usually be much higher.

i

The potentially negative effects of MDFs on the development of financial markets can be illustrated by a case from Brazil. A local MDF, which has been operating for the past 30 years, has not unbundled the complex process of fund management and has crowded out the local financial market. This has led to a situation in which the MDF is 'too successful' in providing infrastructure financing, which discourages the introduction of municipal bonds, which are currently not allowed. As a consequence, the market for long-term finance (also for private companies) in Brazil is underdeveloped, creating liquidity shortfalls and impeding the development of the economy.

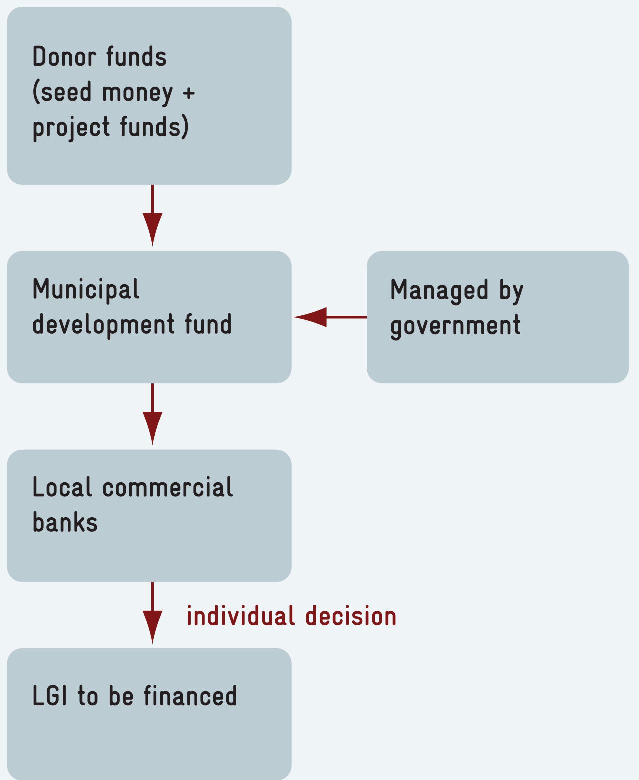
4.3 Municipal development funds[38]

Municipal development funds (MDFs) have the potential to be appropriate instruments for credit enhancement and for introducing financial markets to municipal financing. In very general terms, they may be defined as financial intermediaries that provide credit to local governments and to other institutions investing in local infrastructure.

The **first generation of MDF**s were established with donor funds which the MDFs then channelled to the final recipients. This took place without any local financial market involvement. First generation MDFs are still operating, and many of them hold monopoly positions in lending to local governments. This has benefits in terms of economies of scale and allows the MDFs to introduce stricter conditions on lending. However, as with direct donor funding, these types of MDF may crowd out local financial markets or lead to the development of parallel financing structures.

To overcome the shortcomings of first generation MDFs, and enable local financial markets to participate in the design of the funds, a **second generation of MDFs** has been developed. These combine donor funds and locally generated funds. The basic form of a second generation MDF is shown in the diagram below.

Figure 6: **Second generation MDF**



Source: Author's design.

38 *For more information on the topic of MDFs please refer to El Daher, S.: Specialised Financial Intermediaries for Local Governments: A Market-based Tool for Local Infrastructure Finance. November 2000, World Bank; Peterson, J.: Municipal Funding Arrangements: Global Experience and Lessons Learned. August 2006,Asian Development Bank.*

There are a large number of variations of this basic model depending on the local impediments that need to be overcome. Since there is no 'one-size-fits-all' solution, some of the model's parameters must be changed so that the fund meets the requirements of each case. The design of the fund should, however, allow for the use of local funds in the financing of LGI. Where these parameters are changed, it is important to review their effects on other stakeholders and on risk positions carefully. Capacity building measures to guide local governments to work with financial markets must be fine-tuned accordingly. The most important parameters of the model are:

- **Donor funds,** which may be grants or long-term loans or a mixture of both. The less grant money is involved, the more commercial will be the terms of the financing.
- **Loan tenure:** If the local financial market can only provide short-term loans, a MDF can improve a loan's tenure by providing the local financial market with long-term donor funds.
- **Ownership structures:** A MDF may have different ownership structures. When managed on a long-term basis by a mixed consortium (e.g. of donors, the government, local financial institutions, etc.) there are advantages in terms of economies of scale. It is however advisable that donors establish a strong monitoring system and develop a clear exit strategy right at the beginning of their involvement.
- **Local ownership:** The proportion of donor funds, bank loans and own contributions of governments to a MDF can vary, but in order to retain local government ownership and to ensure loan repayment, the own contribution of local governments should not be too small. Around 20% of the total project cost might be considered a minimum share.

Regarding the development of new generations of MDFs, it is important to highlight the principle of unbundling their various activities . In addition to its intermediary function, many MDFs also undertake other tasks, such as economic and financial appraisal, technical assistance and construction oversight. By outsourcing selected activities, institutional capacity for sub-sovereign lending within the market will be increased, but it is necessary to analyse which MDF functions can realistically be unbundled on a case-by-case basis.

The benefits of unbundling a MDF can be summarised as follows:

1. Separately managed components lead to better results

A centrally organised MDF, for example at the level of the ministry of finance, cannot oversee each of the required functions of the MDF with the same degree of quality and depth. By outsourcing certain functions, the MDF can concentrate on its core functions and manage the results. Ideally, donor support for the MDF is made redundant, because all financing functions are taken over by the local financial market.

2. Unbundling fosters quality through competition

Outsourcing of certain functions loosens the monopolistic position of MDFs, and competition for those functions, via competitive tendering procedures, can lead to higher levels of quality in their performance.

3. Development of new business fields

The unbundling and outsourcing process introduces new business fields and areas of operation in places where they are not otherwise available in the local economy. By introducing new business fields to interested local parties, a MDF can open up new markets, for example, in the provision of financial information.

The MDF in Tamil Nadu described below offers a good example of how a MDF, which was initially government-owned and was transformed into a public-private-partnership, had a significant impact on the development of the local financial market. It also reveals how a MDF can take over a wide variety of functions of the central government. Development banks are, for example, often appointed to receive donor funds, or implement state-sponsored programmes.

i The Tamil Nadu Urban Development Fund, India

The Tamil Nadu Urban Development Fund evolved from a municipal trust fund into a fund financed and managed by the public and private sectors. The initial fund was financed entirely by the public sector, and although financially viable, it was too small to meet the demand for urban infrastructure investment. The fund was converted into an autonomous financial intermediary to increase its impact. The private sector has a 30% stake in the new fund, which is managed by Tamil Nadu Urban Infrastructure Financial Service Ltd., a private management company. Operations have been widened to include urban infrastructure projects sponsored by private investors. To further pursue the project's objective of poverty alleviation, a new grant fund was established to finance poverty alleviation projects for specific low-income populations. In addition, the participating financial institutions have undertaken to contribute an amount equal to 44% of the Tamil Nadu government's initial contribution. The ultimate objective of the fund is to provide self-sustainable financing while mobilising private savings for urban infrastructure investment.

The fund is administered by a board of trustees nominated by the government of Tamil Nadu and the participating financial institutions. These include the Industrial Credit and Investment Corporation of India, Ltd., the leading managing partner of the Tamil Nadu Urban Infrastructure Financial Service Ltd.; Infrastructure Leasing and Financial Services, a leader in the development and financing of private infrastructure projects in India on a limited recourse basis; the Housing Development Finance Corporation, and a leading finance corporation in housing and regional development. The strong reputation of these institutions in India's business and financial community should help the fund to raise additional resources from further private investors.

Source: Peterson et al 2004.

4.4 Lessons learned

A number of important lessons can be learnt from global experience of the way credit enhancement schemes have functioned hitherto. When designing these schemes, significant attention should be accorded to enhancing the role of the private sector in its provision of financial services to local governments. Credit enhancement schemes designed to facilitate this involvement should take the following key aspects into account:

- **Planning for long-term involvement:** although credit enhancement schemes should in theory be transitional, experience points to the importance of long-term instruments for local market development. Planning for long-term involvement is particularly relevant where such instruments are to become institutionalised.
- **Ensuring the private sector plays an important role:** a high level of private sector engagement strengthens local ownership on the one hand, while promoting the commercial orientation of a given scheme on the other.
- **Market development should be part of the vision and mission of schemes:** the involvement of the private sector is an important success factor. However, the overall objective should not focus on increasing profits. A specific goal of any intervention should be the overall development of the broader market.
- **Endurance is required:** experience shows that it usually takes a long time for entities to become profitable. They must therefore benefit from adequate initial funding.
- **Consideration should be given to revenue intercept mechanisms:** while the underlying criterion for loan disbursements should be the creditworthiness of the borrower, the majority of successful schemes have included revenue intercept mechanisms with direct access to intergovernmental payments.
- **Risk sharing mechanisms need to be adapted to local circumstances:** there is no 'one-size-fits-all' approach when it comes to sharing risk between private sector lenders and the credit enhancer. Framework conditions differ from country to country and risk sharing mechanisms therefore need to vary accordingly.
- **Consideration should be given to the ways subsidies are applied:** subsidies might be needed, but they should be used in ways that strengthen institutional capacities while minimising any potential market distortions.

5. Country assessment – capacity development and policy advice to promote sub-sovereign lending

The tables in this chapter can be used for assessing the key considerations when examining a country's capacity for sub-sovereign lending.

These assessments have two purposes:

- to evaluate whether the given regulatory framework, institutional landscape, preconditions and available capacities are favourable for sub-sovereign lending; and
- to identify possible areas for capacity development and policy advice which may directly or indirectly promote sub-sovereign lending and improve local government access to external finance and domestic financial markets. At the same time, the 'readiness' and/or ability of a particular local government to debt-finance capital investments can be gauged.

The assessments cover the key issues to be considered when dealing with sub-sovereign lending and deal with the demand side of external finance. The criteria of the assessment tables are derived from the previous chapters and each criterion is assessed according to its impact on sub-sovereign lending, be it negative, neutral or positive.

While the assessments offer a guide as to whether the overall situation is favourable for sub-sovereign lending, and where capacity development and policy advice might be appropriate, they cannot claim to be complete or to provide the solution for how to proceed in a given case. They constitute a quick, simple and 'hands-on' way to evaluate the specific country-situation, and cannot replace an in-depth analysis of the conditions upon which the instruments and approaches most suited to that country should always be based.

To reflect the systemic character of the various challenges on the demand side, capacity development and policy advice should be based on a comprehensive multi-level and multi-stakeholder approach in order to promote experience and evidence-based decision-making and the scaling up of good practices.

5.1 Assessment of legal framework for sub-sovereign lending

The legal and regulatory framework for sub-sovereign lending (see Chapter 2, Section 2.1) is concerned with the fundamental questions of whether sub-sovereign lending is allowed, and if so, under what circumstances and conditions, and according to what rules and procedures. Adherence to these rules and procedures and the extent to which they are enforceable are particularly important. Where clear, precise and enforceable rules and procedures exist, uncertainty on the demand as well as the supply side is reduced.

In many countries, the legal and regulatory frameworks are not favourable for sub-sovereign lending. Policy advice to improve the legal and regulatory framework is primarily addressed towards issues at the national level. Nevertheless, the capacities and interests of the relevant stakeholders at all levels should be taken into account.

Table 3: Assessment table for legal frameworks for sub-sovereign lending

Key question	Answer options		
	Negative	Neutral	Positive
Are local governments allowed to incur debt for capital investment purposes?	No		Yes
Are there clear and precise rules concerning:			
Restrictions and limitations on local debt?	No		Yes
Pledges and guarantees for local debt obligations?	No		Yes
Reporting and disclosure requirements for local debt?	No		Yes
Approval and control of local debt?	No		Yes
Bail out and procedures in case of local default?	No		Yes
Is there a single piece of local debt legislation?	No		Yes
Are the legal procedures in the case of local government default enforceable?	Not given	Uncertain	Given

Source: Author's design.

5.2 Assessment of intergovernmental fiscal relations and fiscal frameworks

Intergovernmental fiscal relations and frameworks (see Chapter 2, Section 2.2) determine the assignment of revenues and expenditures and the financial autonomy and fiscal authority of local governments to set, for example, taxes, tariffs and fees, thereby also determining the potential solvency and creditworthiness of local governments. They also outline the rules and procedures for local government financial management (accounting, reporting, etc., assessment of which is described in Section 5.4), and for local government financial control and auditing (assessment of which is described in Section 5.5), both of which have an impact on transparency and the level of certainty or uncertainty for local decision-makers and potential investors.

In many countries, intergovernmental fiscal relations and fiscal frameworks are unfavourable to local government autonomy and their ability to access domestic financial markets. National standards and procedures may be undefined or inappropriate to the existing capacities and constraints of local governments. The design and application of national transfer mechanisms in particular are often unfavourable for local governments.

Activities concerning intergovernmental fiscal relations and fiscal frameworks concentrate primarily on national level issues involving the central government. Potential activities may, for example, include the strengthening of local government associations or an improvement in cooperation and coordination between the ministry of finance, sector ministries and the ministry in charge of decentralisation and local governments. Once again, the respective capacity development measures and policy advice should be experience- and evidence-based, so that decision-making and policy implementation takes account of the capacities and interests of the relevant stakeholders.

Table 4: Assessment table for intergovernmental fiscal relations and fiscal frameworks

Key question	Answer options		
	Negative	Neutral	Positive
Do local governments have unfunded mandates?	Massive	Partly	Little/no unfunded mandates
National transfer-system:			
Is the system transparent, rule based and predictable?	No	Partly	Yes
Do local governments have discretionary powers over transfers?	Little discretion	Medium	High discretion
Is the system sensitive to moral hazard (e.g. incentives to improve local government performance)?	No	Partly	Yes
Is the local government dependent on national transfers?	High fiscal imbalance	Moderate fiscal imbalance	Low fiscal imbalance
Do local governments have the authority to set and levy own source revenues?	No authority	Restricted authority	Full authority
Are national standards for local financial management, accounting and reporting in place?	No standards in place	Standards partly in place	International minimum standards
Which accounting system is used in local governments?	Cash accounting	Modified cash accounting	Accrual accounting

Source: Author's design.

5.3 Assessment of local government budget discipline and fiscal performance

The ability of a particular local government to attract external finance and incur debt is mostly determined by its creditworthiness. Creditworthiness is based on assumed credit risk, and higher credit risk is reflected in higher interest rates. Solvency and fiscal performance, which are directly linked to local budget discipline, lie at the core of local government creditworthiness (see Chapter 2, Section 2.3.1).

To assess a local government's creditworthiness, potential investors rely on analysis of its expenditure and revenue composition, as well as on other available information that might indicate its financial situation. Good performance in financial administration and governance (on the expenditure and revenue sides) is therefore a necessary precondition for access to local credit markets. Although approaches may vary considerably, the Table 5 covers the typical indicators used to assess the financial situation of a local government, and the existence of structural problems in the local budget. In order to improve the reliability and significance of the assessment, time series analysis and/or comparisons with the situation of other local governments are advisable.

Potential activities seeking to improve budget discipline and fiscal performance take place mostly at the local level, and/or involve local government support structures, which may be public or private. Capacity development measures might address, for example, revenue collection and administration so that untapped revenue potentials can be better used; other measures might be concerned with local government monitoring, evaluation and steering capacities to improve the cost-effectiveness of local service provision and the financial sustainability of budgetary decisions. Other activities might include the support of networking structures and peer-to-peer learning in order to identify and share good practices. A negative assessment of the key financial indicators might also be explained by intergovernmental fiscal relation and framework conditions (structural reasons outside direct local government control). In such cases, activities should also focus on national policy-making issues.

Table 5: Assessment table for local government fiscal performance and budget discipline			
Key indicator	Answer options		
	Negative	Neutral	Positive
Operating budget surplus	No surplus or surplus due to poor budget execution		Net operating surplus
Share of recurrent to total expenditures	Smaller than average	Average	Above average
Share of capital investments to total expenditures	Smaller than average	Average	Above average
Growth rates and volatility of own-source revenues	Worse than average	Average	Above average
Tax coverage	Potential sources of revenue are not covered/taxed	Partly covered/taxed	Potential sources of revenue are covered/taxed
Tax collection	Poor collection/ smaller than average	Moderate collection rate/ Average	High/100% collection rate
Cost-effectiveness of revenue collection	Low/smaller than average	Medium/Average	High/above average
Debt burden	High Debt-ratios beyond national/accebtable limit	Medium Debt-ratios within national/accebtable limits	Low Debt-ratios well within national/accebtable limits

Source: Author's design.

5.4 Assessment of local financial management, budgeting and accounting

The availability of accurate, coherent, timely and reliable financial data is not only a necessary condition for transparency, but also the basis of all credit analysis, and thus crucial to potential investors and their need to reduce information asymmetries and uncertainty. It is also required for sound local government decision-making and for local government control, whether administrative, political or public. Adequate capacities in financial management and accounting are therefore essential for sub-sovereign lending as well as for good financial governance, since the extent of these capacities determines the quality of the financial data aggregated and presented in local budgets, financial statements or other financial documents and reports (see Chapter 2, Section 2.3.2).

With regard to activities associated with local government budget discipline and fiscal performance (see Section 5.3), the quest to improve local financial management and accounting takes place predominantly at the local level, and/or involves local government support structures (public and/or private). Capacity development activities might, for example, address accounting issues, or attempt to improve the linkage and coordination between local government financial and sector planning (annual and/or medium term). Other areas of activity might address asset management and valuation in order to obtain comprehensive overviews of existing economic resources. All these local level activities can be combined with experience and evidence-based policy advice at macro level, e.g. defining and setting up national standards for the respective areas (scaling up). Another area of activity is to support networking structures and peer-to-peer learning to help identify and disseminate good practices.

Table 6: **Assessment table for local financial management, budgeting and accounting**

Key question	Answer options		
	Negative	Neutral	Positive
Quality criteria for local budgets/budgeting:			
Is the budget complete (even if not legally required) and does it encompass ■ assets ■ revenues ■ expenditures ■ liabilities ■ receivables	Not given	Partly given	Given
Is the budget realistic and credible?	Not given	Partly given	Given
Is the budget transparent and comprehensible?	Not given	Partly given	Given
Does the budget adhere to national budgetary standards and procedures?	Not given	Partly given	Given
Is there a medium term expenditure framework (a quality criterion for normal budgets)?	Non-existent		Existent
Is there an asset register?	Non-existent	Existent (documentation only)	Existent, valued and linked to budget
Are there property rights (for the pledging of land and real estate)?	Not known		Known
Does the budget adhere to national accounting standards?	Not given	Partly given	Given

Source: Author's design.

5.5 Assessment of local government audits and control

The existence of effective control, audit and oversight mechanisms (see Chapter 2, Sections 2.2.7 and 2.3.2), as well as suitable sanctions for poor performance or non-compliance, is of major importance in several ways. In order to reduce moral hazard, prevent fraud and excessive debts, and to promote effective, efficient and sustainable financial management and debt policies, local governments must be held accountable for how they deal with public resources. Disclosure of financial information is vital in this respect. In addition, potential investors require this information in order to better assess the risks of lending to local governments. The findings of audit and/or control reports are important indicators for assessing these risks and the capacities and financial management performance of local governments (reports from effective independent audit courts are particularly valuable in this regard). Audits and controls promote transparency and reduce uncertainty because they require that local governments practise sound financial reporting and adhere to national standards.

Activities take place at national and local levels, and also involve mid-level structures at the regional level. At the national level, capacity development and policy advice can be concerned with national regulatory and institutional frameworks of oversight, control and auditing. Strengthening the capacities of the respective institutions at the regional level, and their cooperation and coordination with local governments may be another area of activity. At the local level, activities might address capacities to comply with national control and reporting requirements, or provide support for internal or civil control mechanisms. Activities at the local level might also include strengthening local accounting and budgeting and the procedures for monitoring and evaluation, as transparent and reliable financial information is a precondition for effective control.

Table 7: Assessment table for local government audits and control

Key question	Answer options		
	Negative	Neutral	Positive
Are national standards of financial reporting respected by local governments?	Not respected	Partly respected	Respected
Quality of local governments internal control?	Non existent/ not effective	Partly effective	Working effectively
Quality of local government oversight mechanisms?	Political, lengthy and/or ineffective	Medium	Rule based, timely, and effective
Quality of external control/audit mechanisms (political, administrative and/or public)?	Political, lengthy and/or ineffective	Medium	Rule based, timely, independent and effective
Quality of the approval and control of local debt?	Political lengthy and/or ineffective		Rule-based timely and effective
Effective independent auditing/audit court (or equivalent)?	Non existent	Irregular or incomplete	Given
Local government Disclosure and availability of audit reports?	Not given	Partly	Given
Result of last local government control/ audit reports?	Negative	Medium	Positive

Source: Author's design.

5.6 Assessment of capacities in technical and financial planning and implementation

Adequate capacities in technical and financial planning, and in managing the implementation of capital investment projects are crucial (see Chapter 2, Section 2.3.3). If available capacities are inadequate, costs may rise and debt-financing of infrastructure projects might become inefficient. This holds especially true when debt is used to finance revenue-generating projects, and debt repayment relies on the expected revenues.

Technical and financial planning provides the basis for local decision-making on:

- whether and where an infrastructure project should be built and its potential size; and
- whether debt-financing a project is necessary, financially feasible and appropriate.

The technical aspects of a project must therefore be clearly planned, and its implementation, operational and maintenance costs must be calculated as realistically and precisely as possible.

Capacities in procurement, contracting, project management (monitoring, steering and oversight, cost control, etc.) are necessary to ensure that construction and cash outflows remain within the scheduled time frame and calculated limits.

The lack of adequate technical and financial planning and implementation capacities results in erroneous decision-making, miscalculations and misallocation of resources, reduced sustainability, and unnecessarily increased costs and debt burdens.

Capacity development to strengthen planning and implementation capacities is principally addressed by local governments or supporting structures. Potential activities can be in the areas of technical and financial planning, cooperation between relevant local government departments, or in supporting implementation and project management, and the sharing of experiences and lessons learned.

Table 8: Assessment table for local government capacities in technical and financial planning and implementation

Key question	Answer options		
	Negative	**Neutral**	**Positive**
Execution rate of local budgets for capital investments?	Low/smaller than average	Medium/average	High/above average
Capacities in strategic planning and decision-making?	Low	Medium	High
Capacities in technical planning: ■ feasibility studies ■ size ■ technical standards and characteristics ■ time needed	Not given	Partly given	Given
Capacities in financial planning: ■ feasibility studies and cost benefit analysis ■ project costs ■ funds required per year ■ amount & structure of debt-financing ■ debt-service ■ funds for operation and maintenance	Not given	Partly given	Given
Local government experience in large-scale infrastructure projects?	No experience		Record of successfully planned and implemented projects
Quality of local government procurement?	Not transparent, not rule-based, slow	Minor deficits	Transparent, rule-based, timely
Quality of local government contracting?	Not transparent, not rule-based, slow	Minor deficits	Transparent, rule-based, timely
Capacities for management and steering of project-implementation?	No capacities	Limited capacities	Sufficient/adequate capacities
Provision for operation and maintenance (O&M)	No fund allocation, poor technical capacities for O&M	Deficits in fund allocation and technical capacities for O&M	Sufficient financial and technical resources for O&M available

Source: Author's design.

6. Country assessment - financial markets

This chapter describes how to assess financial markets in a particular country in terms of their capacity to provide financial services for local infrastructure. In addition, potential areas for capacity development are identified. Much of the following refers to the larger picture of financial markets and the instruments used to finance LGIs given earlier in Chapters 3 and 4.

It is generally assumed that financial market liquidity is not a constraining factor in lending: the fault lies more usually with the limited capacity of major actors in the sector to offer funds for the financing of local governments.

In order to answer key questions while making these assessments, ministries of finance, international banks, banking associations, donor organisations, and law firms might be helpful sources of information.

6.1 Assessment of the banking sector

6.1.1 Legal framework

The ability of financial markets to provide long-term finance to local governments depends on the legal frameworks within which the banking sector operates. This requires legal certainty and the enforceability of laws. In the majority of developing countries, the existence of a universal banking system (see Chapter 3.1.2) is often assumed. However, the following questions must first be answered.

- Do banking laws and regulations cover long-term finance?
- Is the extension of loans to local governments permitted under general banking licenses?
- Do banking laws and regulations conform to international standards?

Reviews of legal frameworks for banks should include:

(i) regulatory restrictions on bank activities;
(ii) regulations on domestic and foreign bank entry;
(iii) regulations on capital adequacy;
(iv) deposit insurance system design and features;
(v) supervisory powers, independence, and resources;
(vi) loan classification stringency, provisioning standards, and diversification guidelines;
(vii) regulations fostering information disclosure and private-sector monitoring of banks; and
(viii) government ownership.[39]

- Are the banks allowed to offer a wide range of products?

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39 *See Barth, James et al., April 2004.*

Assessment of results

If the answers to these questions are all negative, the banking sector is not ready to support long-term local government finance, and substantial policy advice is necessary before proceeding to the next step.

Areas of intervention

The capacity development interventions mentioned here should be aligned with the overall development of the economies of the countries under assessment.

To identify possible impediments to local government funding through financial markets, a review of the country's existing legal frameworks is necessary, possibly resulting in the drafting of new laws, or amendments to those already in place, especially in cases where regulations and laws restrict long-term finance.

In order to strengthen the banking sector, the introduction of international regulations and standards might also be necessary. These would include standards of accounting, auditing and disclosure of information, and the monitoring of bank debts.

Capacity development measures might therefore include legal advice, and support with regard to the introduction of international standards. This support might be directed towards regulatory bodies as well as towards the banking sector itself.

Table 9: **Assessment table for the banking sector legal framework**

Key question	Answer options		
	Negative	Neutral	Positive
Do banking laws cover long-term government finance?	No	Laws are drafted but not implemented.	Yes
Is extending loans to local governments permitted under the banking licence?	No	Only specialised institutions can lend to local governments.	Yes
Do banking laws conform to international standards?	No	International standards are only partly adopted.	International standards are enforced.
Banks offer a wide range of financial products and freely set prices?	Banks are restricted by laws in offering services and setting prices.	A range of different services are offered, however competition is restricted.	Competition among banks includes the offer of various services.

Source: Author's design.

6.1.2 Operational status of the banking sector

A competitive environment is a necessary prerequisite for banking markets to develop and provide demand-driven services for local infrastructure projects. The donor community and the public sector have a key role to play in this. In order to prevent the crowding out of local banking markets, it is essential to involve local commercial banks in donor-driven or government backed financing schemes, and to promote their inclusion.

A further prerequisite is that for any bank to get involved in LGI financing, they should have a sufficiently large capital base.

To assess the operational status of the banking sector, the following questions must be answered:

- Do public banks adhere to commercial principles?
- Do banks have a sufficient balance sheet to support local government finance?
- Do donors provide funding at market rates?
- Can bank loans be enhanced by any of the commonly used credit enhancements?

Areas of intervention

Where the competitive environment is limited, possible measures might include sensitising policy decision-makers to the advantages of creating a level playing field for the various stakeholders in the financial market. In addition, measures should be taken to ensure that the donor community is not building parallel structures, but is instead promoting the development of a competitive local financial market.

Table 10: **Assessment table for the operational status of the banking sector**

Key question	Answer options		
	Negative	Neutral	Positive
Balance sheet of local banks?	Small: limited possibilities of tapping into local capital.	Moderate with impediments to accessing capital.	Large, including local capital and international sources.
Does the existence of state owned banks undermine the development of a sound private banking market?	Yes: state owned banks crowd out private banks.	Private banks exist but operations are impeded by existence of state banks.	No: competition between private and state banks exists.
Can bank loans be enhanced by credit enhancement instruments?	Enhancement instruments cannot be used.	Certain instruments are available but banks do not have the know-how to apply them.	A variety of instruments are available to enhance loans.
Are local banks competitive vis-à-vis donor funds?	No: banks are crowded out by donor funds.	Banks are competitive, but donor funds do not include banks in their financing schemes.	Yes

Source: Author's design.

6.2 Assessment of capital/bond markets

6.2.1 Legal framework

Any analysis of capital markets must take account of the identifiable laws that govern their operations. In some countries, banks are allowed by law to undertake capital market functions, whereas in other countries, specialised financial institutions, such as brokerages, are required. (But whatever the legal conditions, there will always be grey areas where financial markets carry out practices that are not explicitly covered by any law.)

However, the legal frameworks under which capital markets operate must be such that these markets are able to support local governments with long-term finance.

The following questions need to be answered in this context:

- Are banks and/or brokers allowed to underwrite bonds for local governments?
- Does the legal framework cover issuance and the trading of local government bonds?
- Is a regulator in place to monitor the issuance of bonds?
- Is a legal framework in place that allows institutional investors, such as pension funds or insurance companies, to invest in the local bond market?

Areas of intervention

It is important to review the existing legal framework, and, if necessary, offer advice on the drafting of new or amended laws. Central governments need to have or develop an awareness of capital markets as a means of financing local government infrastructure.

Assessment of results

Table 11: Assessment table for the legal framework for capital/bond markets

Key question	Answer options		
	Negative	Neutral	Positive
Are banks and/or brokers allowed to underwrite bonds for local governments?	No		Yes
Does the legal framework cover issuance and the trading of local government bonds?	Bonds are not included in the legal framework.	Bonds can be issued, but with little investor security.	Bonds can be issued and traded, security intermediaries exist; disclosure of information is required.
Is a regulator in place to monitor the issuance of bonds?	Issuance of bonds is not monitored.	Regulator is in place, but there are no sanctions for misconduct	Regulator has the power to sanction in the case of misconduct
Is a legal framework in place that allows institutional investors to invest in the local bond market?	Institutional investors are excluded from local bonds.	Institutional investors are allowed, but the legal framework discourages them.	Institutional investors play an active role in trading local bonds.

Source: Author's design.

6.2.2 Operational status of capital/bond markets

It should be one of the objectives of local capital markets to provide long-term financing opportunities to local governments.

In order to assess the current capacity of a capital market to do so, the following questions need to be answered:

- Does a capital market exist and how big is it?
- Have bonds been issued to finance LGIs?
- Who issues bonds to finance LGIs: the central government, local governments, banks or other financial intermediaries?
- Are there investors with sufficient absorption capacities (e.g. pension funds or insurance companies) who could be interested in buying bonds to finance LGIs?

Areas of intervention

If markets are very small, capacity development measures can be targeted towards:

- supporting the central government's understanding of its potential role as a bond issuer. Bonds need to be issued with a transparent reference interest rate and at different maturities to establish benchmarks for local government bonds;
- supporting the economic and financial capacity of bond issuing banks and/or brokers by setting up advisory services. This might include supporting the development of a pricing model for bonds. Support might also be given to pension funds by helping them develop saving schemes for long-term savers in order to tap into local capital;
- building trust and confidence among investors by putting remedies and securities in place.

Assessment of results

Table 12: Assessment table for the operational status of capital/bond markets

Key question	Answer options		
	Negative	Neutral	Positive
Does a capital market exist?	No	The volume of the market is small, only a few players participate.	Active market with a variety of players: market volume is a significant share of GDP.
Have bonds been Issued to finance LGIs?	No	Bonds have been issued by the government, but with little inclusion of banks.	Bonds have been issued by different players, including banks and brokerages.
Are there investors with sufficient absorption capacities?	No	Yes, but investors are not allowed to invest in local government bonds.	Investors can invest in bonds and are interested in doing so.

Source: Author's design.

6.3 Assessment of financing institutions

The assessments described above offer an indication of the status and general circumstances of financial markets. The assessments described below help identify the institutional set-ups that might be applicable.

6.3.1 Local banks: Loans

In order to involve local financial markets in the financing of LGIs, the provision of loans to local governments by local banks should be an attractive instrument. The following questions need to be answered in this context:

- Are bank loans available to finance local government infrastructure?
- Are banks willing to extend loans to local governments?
- Are banks willing to apply strategies that might differ from their standard business practices?
- Do banks have credit and loan departments which are able to assess the risks of long-term loans to local governments?

Areas of intervention

If the answers to the above questions show that favourable framework conditions are in place, but bank involvement is limited, then a suitable bank should be identified as a partner. The minimum criteria are that the bank must be willing to enter the sector and have an adequate capital base to be able to provide long-term funds. Capacity development in this context needs to focus on the institutional development of banks (i.e. on their management, planning, business structures and strategies), as well as on the transfer of knowledge and best practice. Selected bank personnel must receive specialised training in order for them to better understand the situation of local governments and the risks involved in financing local governments, as well as how to manage them. It is essential that lessons learnt from experience in other countries are passed on so that the new ways of thinking that may be necessary can be introduced.

While due diligence is a standard process that must be undertaken prior to any credit decision, the solutions offered to clients, whose situations may vary, might require modifications over and above those a bank would normally offer.

Assessment of results

Table 13: Assessment table for local bank loans			
Key question	**Answer options**		
	Negative	**Neutral**	**Positive**
Are bank loans available to finance local government infrastructure?	There are no banks involved in LGI financing.	Loans are available but uptake is limited.	Bank loans are an inherent part of LGI.
Do banks have the capacity to assess the risks of long-term loans to government?	No	Internal structures exist, but know-how in government finance is insufficient.	Yes
Do banks have an interest in extending loans to local governments?	No, banks do not consider LGI finance an attractive business.	Banks are interested in extending loans but do not have a sufficient funding base to do so.	Yes
Are banks willing to apply strategies that are different to their standard business models?	Banks only apply their standard models.	Banks are willing to change their models but do not have the capacities to do so.	Banks have changed their standard business models in order to lend to local governments.

Source: Author's design.

6.3.2 Local banks: Bonds

The term 'bond banks' is used to describe brokerages and other financial institutions that are allowed to issue bonds. Bonds are frequently used to finance LGIs in the English-speaking parts of the world. In order to assess whether they can be used in local government financing, the following questions must be answered:

- Are bonds currently being used to finance LGIs?
- If so, who by?
- Are lengthy bond repayment free periods a problem for bond banks?
- Can the bond market be improved by involving more investors?

Areas of intervention

As discussed in Chapter 3.1.3, certain conditions at macro and meso level are required – to create a demand for bonds and to establish rating benchmarks and investor security. It might also be useful to encourage or activate the use of bonds by the private sector.

Capacity development support will vary because a great deal depends on the bank issuing the bonds. If a bank issues bonds to refinance its loans to local governments, the bank might require advice on improving its internal procedures. If the bond is issued directly by a local government through a bond bank, advice might target areas such as the pooling of smaller local government capacities, the pooling of revenue intercepts, or the necessity to establish trustee accounts and other credit enhancing measures.

Assessment of results

Table 14: Assessment table for bond banks

Key question	Answer options		
	Negative	Neutral	Positive
Are bonds currently being used to finance LGIs?	No	Bonds are used without involving local capital markets.	Bonds issued by local capital markets are used to finance LGI.
Who issues bonds?	Central Governments on behalf of local governments	A number of local governments in consortium supported by the central government	Local governments and banks in order to increase their capital base for lending.
Are lengthy repayment free periods a problem for bond banks?	Yes	Trustee accounts are part of the arrangement, which can mitigate potential problems.	Bond banks have no problems with extended repayment free periods.
Can the bond market be improved by activating more investors?	The bond market does not provide sufficient security to attract investors.		Investors see bonds as safe long-term investments.

Source: Author's design.

6.3.3 Municipal development funds

Although MDFs can provide financing for LGIs, and in certain instances foster the inclusion of local capital markets in local government financing, they are not always the best solution, and the need to use a MDF should be assessed carefully. Much depends on the situation of the current local banking and capital markets. If the results of the above assessments show that those markets are not willing or capable of providing the appropriate services by themselves, the development of a MDF should be considered. And if this is so, the MDF's activities should be integrated with those of the local financial markets in order to avoid a crowding out effect.

Questions in this context are:

- Does a MDF already exist in the country?
- Is there demand for a MDF?
- Does the MDF possess an adequate governance structure?
- Is the private sector involved in providing refinancing?
- Has the MDF fostered the inclusion of the private sector since its inception?

Areas of intervention

Setting up a MDF should only be considered when the local financial sector is currently unable or unwilling to satisfy existing short- and medium-term demands or is likely to become so in the foreseeable future, and when there are enough other stakeholders (e.g. donors, central governments, etc.) in the country to support it. In general terms, new MDFs offer governments the opportunity to establish 'clean' organisations. They must, however, be designed to have clear exit strategies for when they cease operating, or are fully integrated into the local financial market as a commercial organisation.

If a fund already exists the following approaches should be followed:

1. Central government must be made aware of the linkage between local government finance and the development of local financial markets. A most effective way to do this can be by providing best-practice examples which can be adapted to the country-specific situation.
2. In the case of an existing MDF that does not take local financial markets into account or integrate its activities with them, attention must be given to unbundling the functions of the MDF functions. This requires careful analysis of the services available on the local market, or those that can be made available in the medium-term, and of any fundamental weaknesses in the market that need time to be rectified.

Assessment of results

Table 15: **Assessment table for municipal development funds**

Key question	Answer options		
	Negative	Neutral	Positive
Does a MDF exist in the country?	No	Different donors and existing institutions can be combined to establish a MDF.	A MDF exists and includes local financial markets in its financing schemes.
If not, is a MDF required?	No, a fairly well developed banking/ capital market exists and is active or willing to participate in LGI financing.	Capital and banking markets are underdeveloped.	There is significant demand from municipalities, but the financial sector cannot meet this demand in the short and medium term.
Does the fund possess an adequate governance structure?	Management and decision-making is undertaken at the central government or donor levels.	Management is by different stakeholders: decisions are strongly influenced by the central government and/or donors.	Management and decision-making involves local markets and the local government.
Is the private sector involved in providing refinance?	Donor funds: local institutions are not involved.	Central government, donor funds, with the involvement of local institutions.	Funded by local institutions, supported by central government (through direct funds, tax incentives, etc.)
Has the MDF fostered the inclusion of the private sector since its inception?	MDF does not include local financial market structures.		Has changed noticeably in order to integrate with local financial market structures.

Source: Author's design.

6.4 Guarantees

As discussed in Chapter 4.2.1, guarantees can be used as credit enhancement instruments. They are attached to a loan, bond or fund, and help to reduce risk for the lender. Designing effective guarantee schemes is a complex task. It is crucial to avoid moral hazard, while at the same time ensuring additionality (i.e. that a credit would not have been disbursed without the guarantee).

An important precondition for establishing a successful guarantee system is the involved financial institution‘s willingness to enter the sector. A guarantee scheme on its own might not be enough to encourage a bank to finance LGIs. Without a guarantee scheme many financial institutions would be reluctant to enter the sector in the first place.

Questions to be answered in this context are:

- Is the risk to be covered generic?
- Does it make sense to establish a local guarantee scheme?
- If a guarantee scheme already exists, has it been taken up in a satisfactory number of cases?

Areas of intervention

Before establishing a local guarantee scheme, a thorough review must be made of whether the risks involved in LGIs can be mitigated by such a scheme. Setting up these kinds of arrangements will probably require changes in laws and the introduction of regulatory authorities to oversee their operations.

When a scheme already exists, measures might include the optimisation of its overall design. Is a thorough due diligence procedure in place? Is the risk sharing mechanism such that moral hazard is avoided, while at the same time ensuring additionality? Is its pricing adequate?

Assessment of results

Table 16: Assessment table for guarantees			
Key question	**Answer options**		
	Negative	**Neutral**	**Positive**
Is the risk to be covered generic?	No, identifying the cause of the impediment will help to cure the problem.		Yes
Does it make sense to establish a local guarantee scheme?	Local guarantee schemes do not change the availability of funds from capital markets.	No current need for guarantees, but not clear if guarantees will be needed in the future.	Guarantees remove persistent impediments to market financing of LGIs.
Is the guarantee scheme taken up in a satisfactory number of cases?	No, take-up rates remain at a very low level.	Numbers are satisfactory, but the rate of arrears is quite high.	Yes, persistent high demand with good portfolio quality.

Source: Author's design.

6.5 Assessment of project finance opportunities

Project finance is a sophisticated instrument. It is useful in specific cases, but a stable legal environment is required for it to work effectively. This assessment should help to identify whether the mechanism can be applied in a particular country and whether the project in question is suitable. Project finance is used in a variety of contexts but very frequently in connection with PPPs.

The questions that need to be answered in this context are:

- Does the country's legal system support project finance?
- Is the local government familiar with project finance?
- Will the project become more bankable through a project finance approach?
- Are the project sponsors experienced?[40]

40 The role of sponsors, in terms of project finance, is to develop, design, build, finance, operate or maintain a project.

Areas of intervention

The following areas of intervention are possible:

1. Raising the awareness of major players (the central government, commercial banks, etc.).
2. Developing expertise in relevant institutions and organisations, such as ministries of finance and other government bodies, local banks, construction companies, utility providers, etc.
3. Implementing pilot projects in suitable sectors.

The application of a project finance approach is usually accompanied by a broadening of the legal framework, and of the potential options for combining the instrument with loans and bonds.

Assessment of results

Table 17: **Assessment table for the legal framework for project finance**

Key question	Answer options		
	Negative	Neutral	Positive
Does the country's legal system support project finance?	No international standards are applied to national companies, no effective bidding procedures are in place.		Courts negotiate comprehensive economic cases, international standards are applied, and bidding procedures are in place.
Is the local government familiar with project finance?	No		Project finance is the instrument of choice for the local government. Local government has the capacity to assess project risks.
Does the project become more bankable through project finance?	Project finance has no influence on the availability of funds from financial markets.		Financing can be obtained more easily when project finance is applied.
Are the project sponsors experienced?	Sponsors have no track record and are not financially able to undertake projects.	Sponsors have track records but are only interested in parts of the project.	Sponsors have dealt with similar projects before and are financially sound.

Source: Author's design.

7. Conclusion

The objective of this handbook has been to guide practitioners in overcoming the challenges of sub-sovereign lending in particular contexts. Owing to the complexity of the subject, special attention has been paid to the demand and supply sides. The assessment tables presented in this handbook are based on a number of theoretical considerations and are designed to provide those working in the field with a practical way to understand current situations and identify the most pressing issues.

Although framework conditions in countries vary, the core questions remain the same. On the demand side, the level of decentralisation and autonomy in a given country needs to be identified. The capacity of local governments to manage their budgets is another determining factor. On the supply side, much depends on the development of the financial sector, and on what financial instruments are available. Although financing through bonds might still be beyond reach in many developing countries, this approach is being used in many emerging markets. The major issues, however, remain the creditworthiness of local governments, their ability to repay loans from their cash flows; and the willingness and ability of financial institutions to provide funds. In addition, and no less importantly, legal framework conditions must be favourable to the financing processes involved.

Capacity development approaches depend on the particular situation and the types of impediment they are meant to overcome. Measures might be as diverse as improving legal frameworks for local governments, or supporting banks to develop suitable products.

In line with GIZ's Capacity Works guidelines, Table 18 outlines the key areas of concern and the major questions that need to be addressed in order to structure an appropriate intervention:

Table 18: Framework for planning of cooperation

Areas of concern	Major question	Core issues
Strategy	Which type of strategy should be adopted to enhance the external financing of local governments?	▪ Does the strategy adequately address major shortcomings in sub-sovereign lending? ▪ Does the initiative build on local initiatives (e.g. legal reforms, banks' interests, etc.)? ▪ Have alternative approaches (e.g. promoting the financial versus the capital market) been evaluated in order to choose the most effective and efficient one? ▪ Have political risks been taken into consideration?
Cooperation	Who are the major cooperation partners?	▪ Have all relevant actors (e.g. local and national governments, banks, donors etc.) been taken into consideration? ▪ Have the different roles played by actors from the financial sector and the local government been clarified? ▪ Is there a need to identify a cooperation partner for refinancing?
Steering	Which steering mechanism is suitable for developing external financing options for local governments?	▪ Are the core actors (from the financial sector and the local government) adequately represented within the steering structure? ▪ Has a clear decision-making structure been defined?
Processes	Which core management and support processes must be established?	▪ What are the most important processes required to reach the envisaged results? ▪ What processes are needed to ensure smooth management of the intervention?
Learning & Innovation	How are the learning and innovation capacities of partners enhanced?	▪ Which procedures and structures have been implemented in order to ensure ongoing innovation? ▪ How is the knowledge exchange between partners structured?

Source: Author's design.

Appendix

Appendix 1: Development of European municipal banks

The Municipal Bank of the Netherlands: a case study

Overview

The Municipal Bank of the Netherlands (BNG) was established by the Dutch Association of Municipalities in 1914 in order to improve the access of municipalities to credit markets. However, only a few municipalities subscribed to the new institution at the time. In 1922, the BNG was reorganised and the Dutch government became its principal shareholder. The bank has grown over the years, and now it has over $60 billion of assets, approximately 90% of which are loans to municipalities and other kinds of local government units, such as housing authorities. 50% of the bank is currently owned by the national government, and the remainder is owned by municipalities.

Loan performance

Problems with municipal loan repayments to the bank have been negligible for some decades. In addition to the bank's appraisal of individual loans, municipal credits are backed by a municipal fund which disburses state transfers to municipalities and is administered by the BNG on behalf of the government. Special provisions allow fund monies to be used to support municipalities facing financial difficulty and to guarantee their loan repayments. Municipalities drawing on the fund in this way are subject to limitations on further borrowing and must take specific measures to restore their fiscal health and prudent financial management.

Because of their excellent loan repayment record, municipal loans in the Netherlands do not carry any additional risk weighting for reserve purposes (i.e. they are classified as carrying the same risk as central government debt). The BNG itself enjoys an AAA rating from all international rating agencies, enabling it to raise capital worldwide at low cost.

The bank's developmental functions

Project planning is decentralised in the Netherlands and the BNG does not participate in local project development: it mainly appraises loan applications from a financial point of view. However, part of the bank's mission is to help to implement national policies regarding local authorities. The majority of municipalities maintain accounts with the BNG. The bank provides them with a wide variety of financial services, and is responsible for 90% of the financial transactions between central government and local government units, including monthly payments of grants and shared taxes.

Refinance

For a long period, the BNG, like other municipal credit intermediaries in Western Europe, was able to collect savings from the public and received substantial capital contributions from the government. In recent years, financial sector liberalisation and the subsequent increase of competition have forced the bank to enter capital markets to raise additional funds. During the 1980s and early 1990s, capital was mainly raised in the form of direct loans from large domestic financial institutions, mainly pension funds and insurance companies. These instruments allowed the BNG to match long-term liabilities with the long-term assets it held in municipal loans.

More recently, pension funds and insurance companies have increasingly invested in the equity and real estate market, thus reducing the volume of funds available for lending. The BNG has therefore turned to international markets for most of its incremental funds. About two thirds of its new funds are now raised through international bond issues. The BNG is exempt from income taxation and earns stable fees on the financial transactions, it manages on behalf of the government, and is able to on-lend funds to municipalities at relatively modest rates.

Overall Western European experience

The experience of other Western European countries is often similar to that of the Netherlands. The major characteristics are described below.

■ Development role of municipal banks

Compared to the Netherlands, other Western European municipal credit institutions play a more active development role and can offer local technical assistance. In France, for example, institutions aim to establish permanent financial advisory relationships with their municipal clients. This includes advising municipalities on budget preparation and capital planning. In Germany, a municipality owning shares in the local municipal bank is provided by law with long-term credit as part of a permanent partnership.

■ The role of governments

Historically, governments have owned a controlling share in municipal banks and provided them with *de facto* guarantees against municipal defaults. These ‘special relationships’ are now disappearing. The *Banco de Credito Local of Spain* (BLF), which was owned by the state, is finalising a privatisation process, and its management has been transferred to a financial group (Banco Bilbao Vizcaya Argentaria). Until the 1980s, the BLF was funded by direct contributions from the state budget and by state loans. Its funds were replenished by the state when municipalities failed to fully repay their debt. As a first step toward liberalisation, the BLF was required to begin raising part of its funds on the competitive bond market. Yet its bonds were supported by a government guarantee. Later, in preparation for privatisation, the guarantee was withdrawn, and the bank was transformed into a large financial organisation. Local and regional borrowing surged as a result of the decentralisation of service provision and as a consequence of the doubling of unrestricted revenue sharing to 20% of national tax collections implemented in 1997. This greater transfer commitment has provided sub-national governments with the wherewithal to take on and service much larger debts.

The French experience is in some ways similar to that of Spain. Previously, French municipal budgets were reviewed and approved by the state. This included approval of local borrowing and of the local budget's provision for debt servicing. Moreover, most local revenues were provided by the state. These arrangements carried an implicit obligation on the state to provide additional funds, if a municipality's state-approved budget proved inadequate to service its debt; and for decades, the state did indeed function as a guarantor. Based on the decentralisation of the French local government system in the 1980s, the state abandoned its guarantor position, forcing the renegotiation of many outstanding high interest municipal loans when local finances came under pressure.

Competition and deregulation

Competition has reduced the dominance of some of the traditional municipal banks in Western European countries. Opponents of deregulation feared that subjecting municipal banks to competition would drive away credit from the municipal sector. However, long-term credit flows to local governments in these countries have increased substantially since the introduction of competition.

Appendix 2: Development of US bond markets

State and local governments in the United States have approximately $1.3 trillion of outstanding municipal bonds, representing around 8% of the domestic credit market.

The US municipal bond market is now mature and relatively stable, but this was not always the case. During the 19th and early 20th centuries it experienced many problems with creating and testing various kinds of market institutions – problems today faced by developing countries. At a time of rapid urban growth, cities in the United States were responsible for financing nearly all their additional capital requirements, which was consistent with the use of a decentralised financing tool, namely locally issued bonds.

Between 1840 and 1880, when urban populations exploded (Chicago, for example, grew from about 30,000 to 2,000,000), local government debt escalated, rising from $25 million to $821 million. At the turn of the century, local government debt, excluding state debt, exceeded federal government debt by 50%. Between 1902 and 1932, total state and local debt grew again, this time by a factor of almost 10. Municipal bonds issued by rapidly growing Western and Midwestern cities were sold mainly to investors in the Eastern United States and to Europeans, especially in the earlier period. The growth of the municipal bond market revealed serious cracks in the credit system. Periodic recessions precipitated bond defaults. Foreign investors in particular sought protection from both federal and state governments, arguing that they were implicit guarantors of the debt of the local jurisdictions within their boundaries.

Most states therefore established debt ceilings for local governments. They also prohibited municipal guarantees of private loans and of municipal borrowings to finance joint ventures with private entrepreneurs. Voter approval of general obligation bond issues was usually required. To further limit their risks, many states amended their constitutions to prevent the state from assuming municipal indebtedness.

Over time, three important mechanisms have emerged to reduce credit risk in the US bond market:

1. ***Credit rating*** agencies nowadays rate almost all publicly issued bonds. Credit rating has become a large business that grades risk. In the early years, however, credit rating was more haphazard. Out of all the municipal bonds to default during the Great Depression of the 1930s, 48% were rated Aaa, the highest safety classification, by Moody's, the principal bond-rating agency of the time. Nearly 80% of the defaulting bonds were rated Aaa or Aa, the two highest safety categories. As one author described it, "during this period municipal rating was characterised by superficiality and inexperience. The staff at Moody's did not exceed four people." Merely because sophisticated credit rating systems exist, as in the US, it should not be assumed that newly established rating institutions in developing or transitional countries will be able successfully to grade municipal credit risks from the outset.
2. ***Public disclosure*** has greatly improved the information upon which risk assessments are based. In the wake of New York City's financial crisis of the mid-1970s, voluntary disclosure guidelines were adopted by the Municipal Finance Officers Association and the Public Securities Association. These guidelines identified the kind of financial information that should be made available to the public before a municipal bond could be sold. They also recommended standardised presentation formats. The guidelines became the basis for a system of mandatory disclosure regulated by the government and introduced at a later point in time. Today, municipalities with outstanding bonds are also required to report any significant changes in their financial or legal circumstances.
3. ***Private bond insurance*** has further reduced purchaser risks. Almost half of all municipal bonds issued today are insured by private insurance companies against failure in the timely repayment of interest and principal. Unlike cost-free government guarantees, private bond insurance does not carry the risk of moral hazard. Municipalities must pay a premium for insurance coverage. The insurance companies deploy specialist staff to assess the risks in a municipality's finances or in projects financed by revenue bonds. The greater the risk, the greater the premium a municipality must pay to obtain insurance.

Appendix 3: Rating systems

Bond ratings[41]

A bond rating evaluates credit risk. While many factors feed into the investment decision-making process, the bond rating is often the single most important factor affecting the interest cost of bonds.

- Moody's **'investment grade'** ratings are described below (ratings lower than Baa are considered speculative, and not shown).
- **'Aaa' - Bonds** are judged to be of the highest quality. They carry the smallest degree of investment risk. Interest payments are protected by a large or by an exceptionally stable margin and the principal is secure.
- **'Aa' - Bonds** are judged to be of high quality by all standards. Together with the Aaa group they comprise what are generally known as high grade bonds. They are rated lower than the best bonds because margins of protection may not be as large as in Aaa securities, or fluctuations of protective elements may be of greater amplitude. Other elements may also make the long-term risks appear somewhat larger than those of Aaa securities.
- **'A' - Bonds** possess many favourable investment attributes and are to be considered upper medium grade obligations. Factors giving security to principal and interest are considered adequate, but there may be elements which suggest a susceptibility to impairment at some point in the future.
- **"Baa' - Bonds** are considered medium grade obligations, i.e. they are neither highly protected nor poorly secured. Interest payments and principal security appear adequate at present, but certain protective elements may be lacking or may be judged unreliable over time. Such bonds lack outstanding investment characteristics and are speculative to some extent.
- 'Bonds in the Aa, A, and Baa categories are also assigned numbers based on the strength of the issue within each category. Thus 'A1' would be assigned to the strongest group of A securities and 'A3' to the weakest.

41 *See http://www.munibondadvisor.com/rating.htm.*

The following table shows the investment grade ratings of the three major rating agencies:

	Moody's	Standard & Poor's	Fitch
Best Quality	Aaa	AAA	AAA
High Quality	Aa1 Aa2 Aa3	AA+ AA AA–	AA+ AA AA–
Upper Medium Grade	A1 A2 A3	A+ A A–	A+ A A–
Medium Grade	Baa1 Baa2 Baa3	BBB+ BBB BBB–	BBB+ BBB BBB–

Appendix 4: Project risks

Legal and regulatory risks

In developing countries, legal and regulatory risks play an important role. In many countries, deficiencies such as unreliable legal regimes, limited abilities to enforce laws, and untrustworthy court systems and legal personnel prevail. These kinds of legal and regulatory risks are difficult to manage because they can be so far reaching, and many lenders rely on specialised lawyers when assessing exposure to legal risk. A mitigating measure used in the past was to include a dispute resolving mechanism as part of the project structure. If a problem arose, a pre-appointed third party sought a solution agreeable to everybody, thus pre-empting the need to go to court.

Political risks

Political risk can be insured against. However, this normally occurs only if international financing is used. If a LGI is financed locally and the lending banks are not repaid, there is almost no loophole. For long-term local lending, banks must have a certain degree of faith in the prevailing stability of the governmental regime.

Dependent on the nature of the project, a large number of project-inherent risks must be assessed. The most important of these are described below.

Supply risk

The functioning of many projects is dependent on an adequate supply of input material: for example, raw water in the case of a water treatment plant or biomass in the case of a renewable energy project. Risks to projects arising from a shortage or lack of such inputs are called supply risks.

Market risk

Market risks can arise from decreases in anticipated prices, changes in expected demand, or a combination of both. For example, if a local government extends a water pipeline network to a newly developed part of town and expects to recoup the financing costs with a connection fee, but nobody goes to live there, the demand and hence the anticipated income will not be forthcoming.

Foreign exchange risk

Projects financed in foreign currency often face currency exchange risks as loan repayments are usually covered by the project income, of which 99.9% is likely to be in local currency. In the past, the risk was mostly taken by the central government, but if local governments borrow directly, they will have to be prepared to take on this risk. Another foreign currency risk can arise from the import of foreign equipment and technology.

Interest rate risks

In most cases, the borrower can decide if a loan should have a floating or a fixed interest rate, at least for a certain period of time. If a local government needs to borrow long-term but only short-term loans are available, there is a risk that by the time the short-term loan is to be renewed, the interest rate will have increased, adding more costs to the project.

Technical risks

Most LGIs can be implemented with proven technology. However, the technology might not be suitable for the particular country or might depend on special inputs that are not available in the country. In addition, personnel must be able to operate and maintain the technology adequately. On a global scale there are very different ideas of what 'maintenance' means, or how frequently it should be conducted, or when or whether a handbook should be consulted, assuming one is even available.

Construction and completion risks

Construction and completion risks refer to the ability of the appointed construction company to carry out the project in time and within the budget limits. Many examples exist of time and costs being deliberately underestimated in order to win in a competitive tendering process. The winning companies then try to renegotiate their contracts with local government while the projects are under way. This results not only in a large number of unfinished projects, but also in a situation where undertakings are not conducted according to the required standards, resulting in quality and/or functional deficiencies.

Management risk

If a local government outsources the management of a LGI, it does so in order to increase efficiency and to decrease costs. There is, however, the risk of a winning bidder not having adequate or sufficiently qualified personnel. If management remains at local government level, it should be assigned to a specialised unit in order to minimise management risk.

Environmental risks

Environmental risks arise from emissions of solids, liquids, gases, or from uncontrollable major events (e.g. earthquakes). In addition, contextual risks arise from a project's impact on local environments or ecology.[42]

42 *See Tinsley 200, p. 17.*

Appendix 5: Public Private Partnerships (PPP)

The range of cooperation opportunities between public and private sectors (PPP) includes the provision of financing, the supply of operational and maintenance services and the support and/or upgrading of technical designs. PPPs can therefore be used for a variety of reasons, for example…

- … to overcome a shortage of funds
- … to take advantage of the efficiency of a private sector operator
- … to use private sector technology
- … to diversify risks and
- … as a transition towards full privatisation

PPPs for services, operations, maintenance and other provisions can be structured in various ways. Arrangements that usually require capital investments include:

- **Build-operate-transfer** (BOT)[43], in which, through a public bidding process, a local government assigns a concession to build and operate a LGI. At the end of the concession period, the LGI reverts to the local government. The private party recoups its costs from the project's cash flow.
- **Build-own-operate** (BOO) is similar to a BOT, but the concession spans an unlimited period of time. Ownership remains in the private sector so that this kind of PPP must be seen as a form of privatisation.
- **Transfer-operate-transfer** (TOT) is used when the basic infrastructure is in place, but results can be enhanced by professionalising operations and management. Although some minor technical upgrades might be needed, the private party does not incur a large financial risk because little or no initial financial commitments are required. The private party receives fee income from the operation and management of the project.

43 *Sometimes also called build own operate transfer (BOOT).*

In addition to the above, a broad range of PPP structures do not require significant initial capital investments.

- **Service contracts:** whereby a local government signs an agreement with the private sector for a certain service. Garbage collection is a good example: the local government signs an agreement with a company or consortium for the regular collection of household garbage and its transportation to a defined collection point. The local government pays the private sector for the service, thus saving on personnel and garbage collection vehicles. Since the private party is usually operating under a long-term contract, it can invest in its people and equipment, incrementally if necessary. Such contracts are normally performance-related, and if the private company does not deliver to contractually fixed standards, it receives reduced or no payment.
- **Operation and maintenance contracts** are often used when a LGI requires a large capital investment. An example might be the day-to-day operations and maintenance of an underground railway line with which the local government does not want to get involved. These types of contract stipulate requirements for operational results (e.g. quality and frequency of delivery) and maintenance (e.g. regularity and extent), as well as remuneration and penalties imposed in case of non-delivery. The local government, however, retains responsibility for setting and collecting fees and tariffs, thus saving on employment and administration costs, while the private operator, operating under a long-term contract, benefits from a regular income.
- **Private finance initiative (PFI)** is a special form of agreement between a local government and the private sector, which became popular in Great Britain in the 1990s. The idea for the private sector is to make investments and undertake operations and maintenance on behalf of the local government. The private operator is paid with project-generated fees. Of course, the private sector's risk is much higher in this case as any reductions in revenue from fees may make it impossible to recover its investment costs.

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