EGAT Financial Sector Strategy

Program Development Tool

Municipal Finance

Objective

The Millennium Challenge Goals include safe water for half the World's population by 2015. Any significant progress towards this goal will require an investment in municipal water infrastructure that far exceeds the funding available from donors.

In developed countries, the cost of building municipal infrastructure is spread out over the useful life of the facilities using municipal finance to fund the front end investment, with debt payments spread out over an extended period of time, covered through user fees and local taxes. Since properly managed municipalities do not typically "go out of business", the user fees and local taxes (often property taxes) represent a steady cash flow that attracts long term lenders who are looking for safe, stable investments – such as pension and insurance systems.

Recognition of the need to develop efficient municipal finance in developing countries has been demonstrated by the lengthy series of conferences that have been held on this subject, many of them sponsored by USAID. But while these conferences are useful in enabling practitioners and stakeholders to exchange ideas and pool expertise, they are of little value to USAID's Missions that are faced with the challenge of actually doing something about the issue.

This Program Development Tool draws on substantial internal and external experience and expertise to define the pre-requisites that are necessary for municipal finance to be a viable product in a given country.

Since the ultimate decision on whether or not a debt issue is a viable investment will be made by the investment officer in a pension, insurance or other investment company, the optic for defining the pre-requisites to finance is that of the financial decision maker.

This diagnostic approach tracks the most common issues in municipal finance, but this document is intended to be a guide, not a rigid prescription. While the underlying finance principles will be common to all countries, the cultural and historical overlay in individual countries may require that other factors be included to ensure that municipal finance becomes feasible.

For the sake of brevity, this Program Development Tool uses common financial sector terminology.

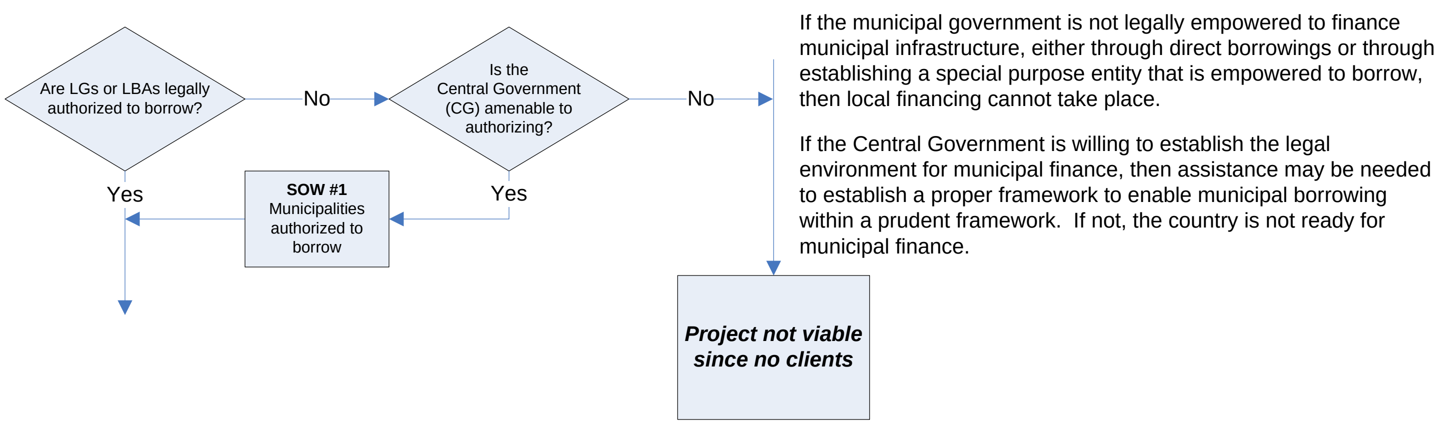
NOTE: Municipal finance requires that a complex set of pre-conditions exist before it becomes viable. This diagnostic tool breaks down complex interrelated issues into discreet, digestible and quantifiable components that allow a step by step focus, and builds a framework that will lead to a comprehensive municipal finance development program that will respond to individual country needs.

Approach

The basic questions an investment officer must answer are:

- Is the potential market large enough to support the economies of scale needed to make this type of financing viable in this country?
- Are there clients who have the legal authority to borrow?
- Does the country's legal, regulatory and market environment support municipal finance – is it reasonably certain that the borrower:
  - Will be *able* to repay,
  - Will be willing to repay, and
  - Can be made to repay if able but not willing?
- This diagnostic tool examines each of the key issues underlying these three questions. The approach is to:
- Asks whether a particular component or pre-requisite is reasonably possible.
- Text to the right provides the implications of a **No** answer.
- A **Yes** answer moves on to the next issue.
- A **No** answer indicates a significant gap in the enabling environment that represents an impediment to municipal finance, and leads to a second question on whether the gap can be filled or worked around.
- A **Yes** answer leads to a statement of work component that will define the objective to be achieved, the skill sets requires, representative LOE, and a clear indicator of successful completion. The second related block of text to the right indicates the benefits of filling the gap.
- A **No** answer will lead to either a determination that municipal finance is not possible, or if it is still possible, what the likely implications are to pricing (risk premium) and availability of credit.

This decision tree approach is demonstrated as follows:



The diagnostic findings that lead to the **Yes** or **No** answers should be recorded and become part of the background briefing for the contractor. The SOW sections would be assembled into a full draft SOW that addresses the specific gaps identified during the diagnostic. This draft would form the basis for the Mission's SOW and would allow for tweaking to conform to local conditions and parceling out of sections to other donors as part of the donor coordination process. In this way, the Mission will be able to determine if each of the pre-requisites is or can be put in place. Ensuring that each issue is addressed is important since a project that misses a critical pre-requisite will not produce the intended result of viable municipal finance.

Usage

This diagnostic process is designed to lead technical specialists in the field of municipal finance through a systematic process. This will ensure that USAID's approach to developing municipal finance can be consistently applied across multiple technical advisors and reduce the risk of personal agendas or preferences coloring the results. It can help ensure that critical gaps are not overlooked, but it cannot substitute for the technical understanding of a development specialist in municipal finance.

This program development tool can be particularly helpful to Mission staff who are reasonably familiar with the underlying issues as a guide on what an independent consultant should be covering.

This systematic approach can also be extremely useful in discussions with host country officials and stakeholders by helping to tie together the various issues and improving understanding and buy-in to the full range of issues that need to be addressed in order to enable municipal finance to become a viable financial service in the country.

This tool focuses on the pre-requisites for viable municipal finance, as seen from the perspective of an investment decision maker. It links to, but does not address, related issues including:

- Municipal government structure and governance – supported by EGAT/PR/Urban
- Pension reform – supported separately by EGAT/EG/Financial Sector
- Utility structure and governance, utility development projects – supported by EGAT/EIT/ Infrastructure and EGAT/PR/Water

For example, this municipal financing tool asks whether the potential borrower has a viable legal form, but does not cover what the appropriate legal form should be – e.g. transaction counterparts can include municipalities, local government enterprises, and private special purpose vehicles implementing local projects under concessions or leas agreements. It asks whether there are adequate user fees, local taxes and/or government transfers to service the debt, but not how those fees, taxes or transfers should be structured or collected. It focuses on the enabling environment, not the competence of the municipal or utility management, since evaluation of governance will be at the individual project level.

Separate program development tools or assistance are available for each of these related issues from the relevant EGAT technical staff that will enable the Mission to take a holistic view of the development of municipal infrastructure.

Support

Support for using this program development tool can be obtained from USAID/EGAT/EG. Assistance with performing the diagnostic process can be provided by EGAT's roster of pre-approved independent technical experts, and implementation of the ensuing projects can be accomplished through the SEGIR Financial Sector BPA using the GSA web site to access the most qualified contractors that have demonstrated capacity to perform this type of financial sector development work.

An Access database that incorporates this tool and will lead you through from diagnostic to the draft SOW and budget can be downloaded from [URL].

Municipal Infrastructure Finance

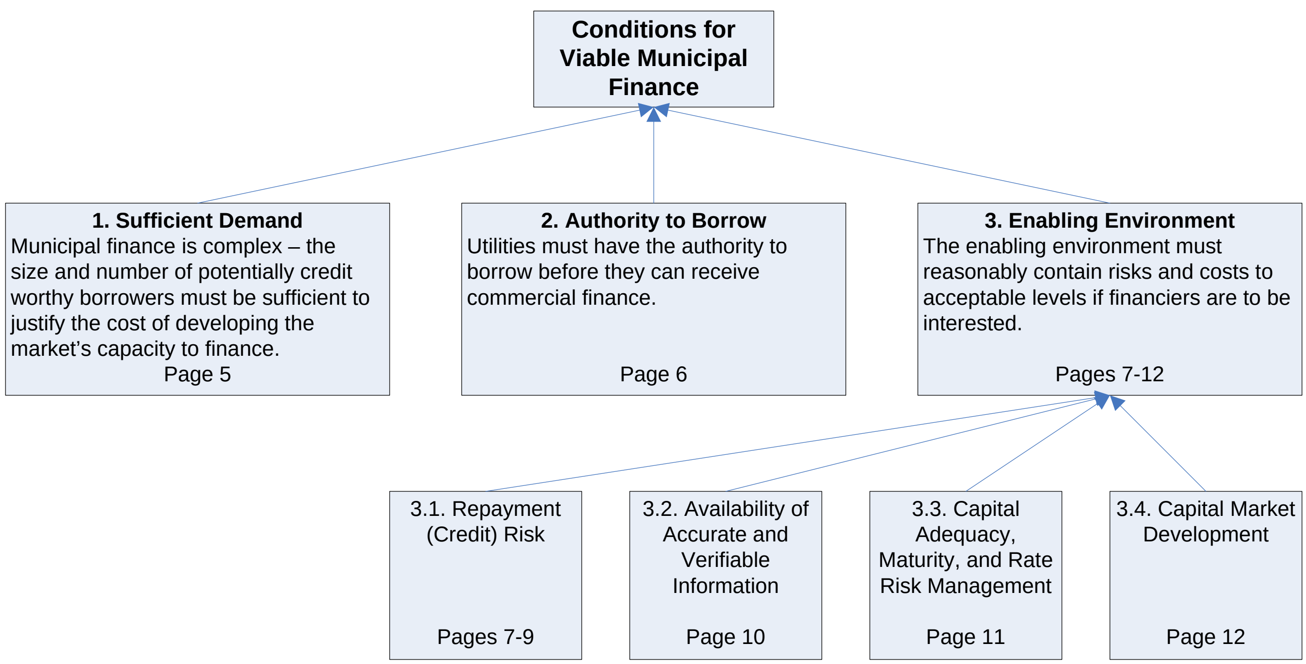
Program Development Tool

January 26, 2005

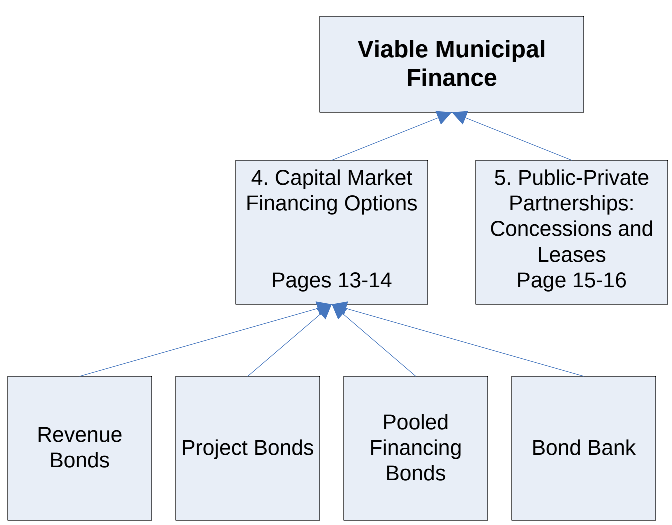
DESIGN OVERVIEW

Introduction

Enabling Environment



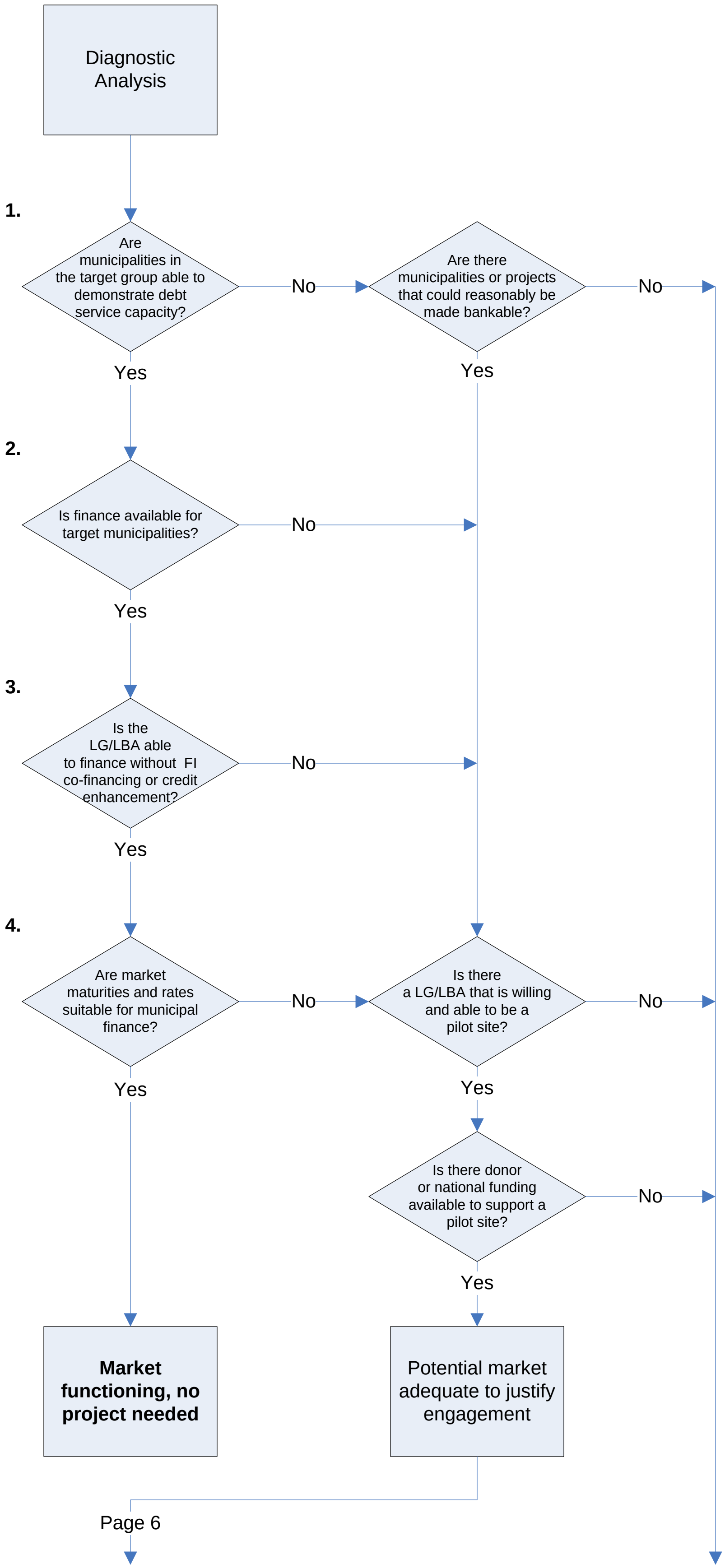
Non-Bank Financing Options



LEGEND

CG = Central Government
DCA = Development Credit Authority of USAID
GOB = General Obligation Bond
IFI = International Financial Institution
LBA = Local Borrowing Authority
LG = Local Government
PSP = Private Sector Participation
RA = Reserve Account
RB = Revenue Bond
TA = Technical Assistance

Section 1 – Potential Market for Municipal Finance



If there are no municipal finance projects that are bankable, and no reasonable expectation that the central government (CG), local government (LG), municipality or a donor will commit the resources to making a municipality or its project bankable, then funding for municipal infrastructure cannot rely on private sector investors.

If municipalities are legally authorized to borrow and are bankable, but are not able to obtain finance, then the economic development of the country is being impaired. This "market failure" may be the result of lack of capacity within the municipality to manage its infrastructure development; a lack of ability to generate the revenue needed to fund debt service through local taxes, usage fees and/or committed central government transfers; or a lack of market absorption capacity for long term municipal debt.

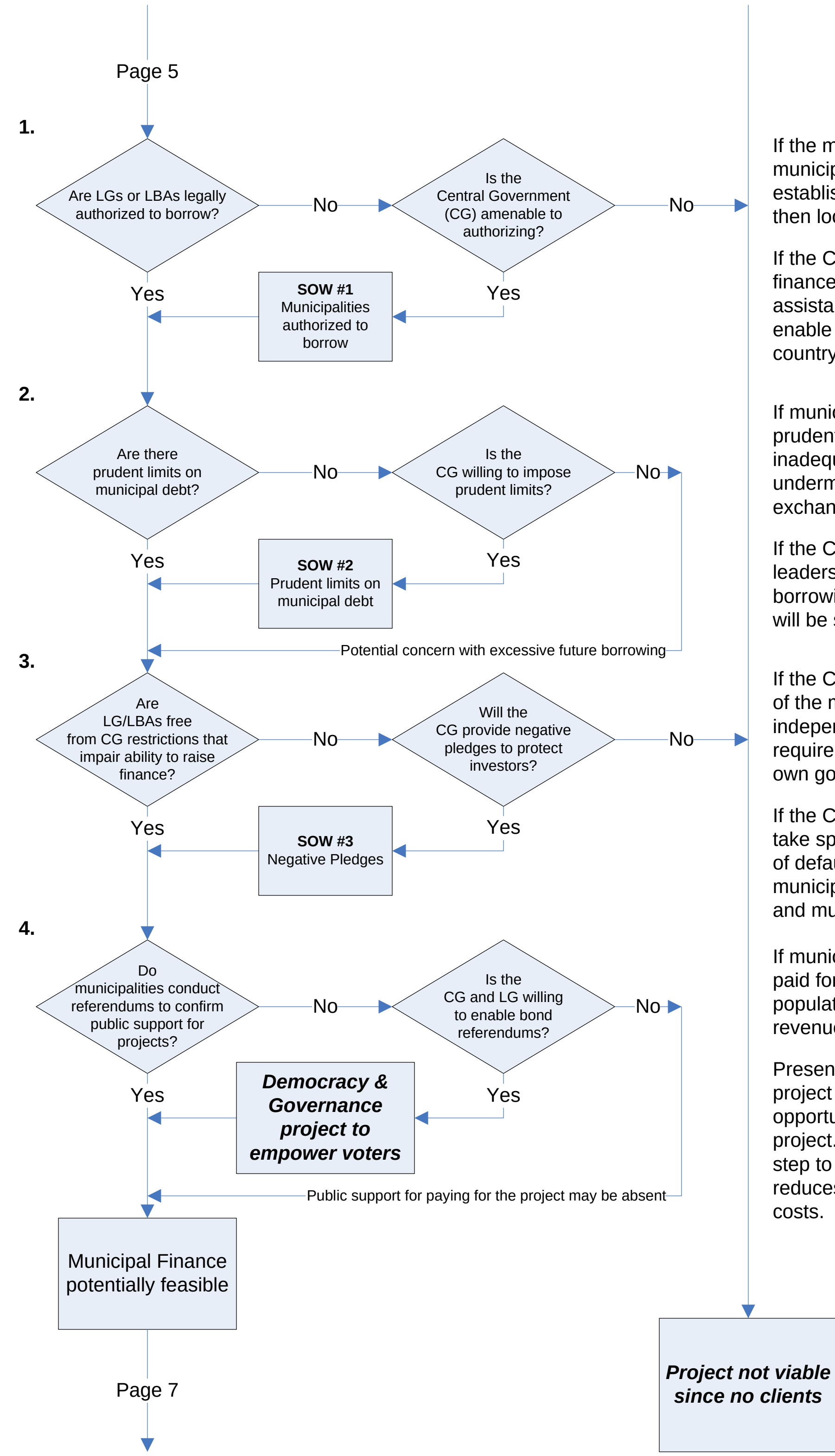
If municipalities not able to borrow without IFI financial support, then domestic resources are not being mobilized and the country, and possibly the municipality, is incurring foreign exchange exposure in filling the gap. While IFI support can be used in combination with private-sector finance to catalyze market development, it is unlikely to be sufficient to satisfy all municipal finance needs, so IFI support should be used to lead to self-sufficiency. Reducing dependence on external financing will require development of domestic financing.

If municipal finance is functioning adequately, then further municipal finance development is not likely a priority.

But if municipal finance is not available on reasonable terms, and if there is a local government or local borrowing authority that is willing and able to serve as a pilot for municipal finance, ***AND*** either national or donor funding is available to strengthen the local government or local borrowing authority (utility), then a project to develop domestic municipal finance in tandem with a separate (but possibly integrated) project to strengthen the borrower may be justified.

However, if there is no pilot to act as a reference site to demonstrate the project's impact, then the project is unlikely to have a significant impact on development of municipal finance.

Section 2 – Authority of Municipal Utilities to Borrow



If the municipal government is not legally empowered to finance municipal infrastructure, either through direct borrowings or through establishing a special purpose entity that is empowered to borrow, then local financing cannot take place.

If the CG is willing to establish the legal environment for municipal finance, or if the LG has the authority and is willing to do so, then assistance may be needed to establish a proper framework to enable municipal borrowing within a prudent framework. If not, the country is not ready for municipal finance.

If municipalities are legally or practically permitted to borrow without prudent limits, then there is a risk that market discipline will be inadequate to prevent unrestrained future borrowing that could undermine debt service and even impair the country's fiscal and exchange management (as in Argentina).

If the CG is willing to exercise the political will and central leadership to restrain unreasonable sovereign and sub-sovereign borrowing, then the level of certainty for future debt service capacity will be strengthened and financing will be more likely.

If the CG can interfere to impair or unreasonably restrict the ability of the municipality to borrow or service debt, such as by lack of independent fiscal control or unreasonable state approval requirements, then the financier cannot rely on the municipality's own governance to ensure debt service.

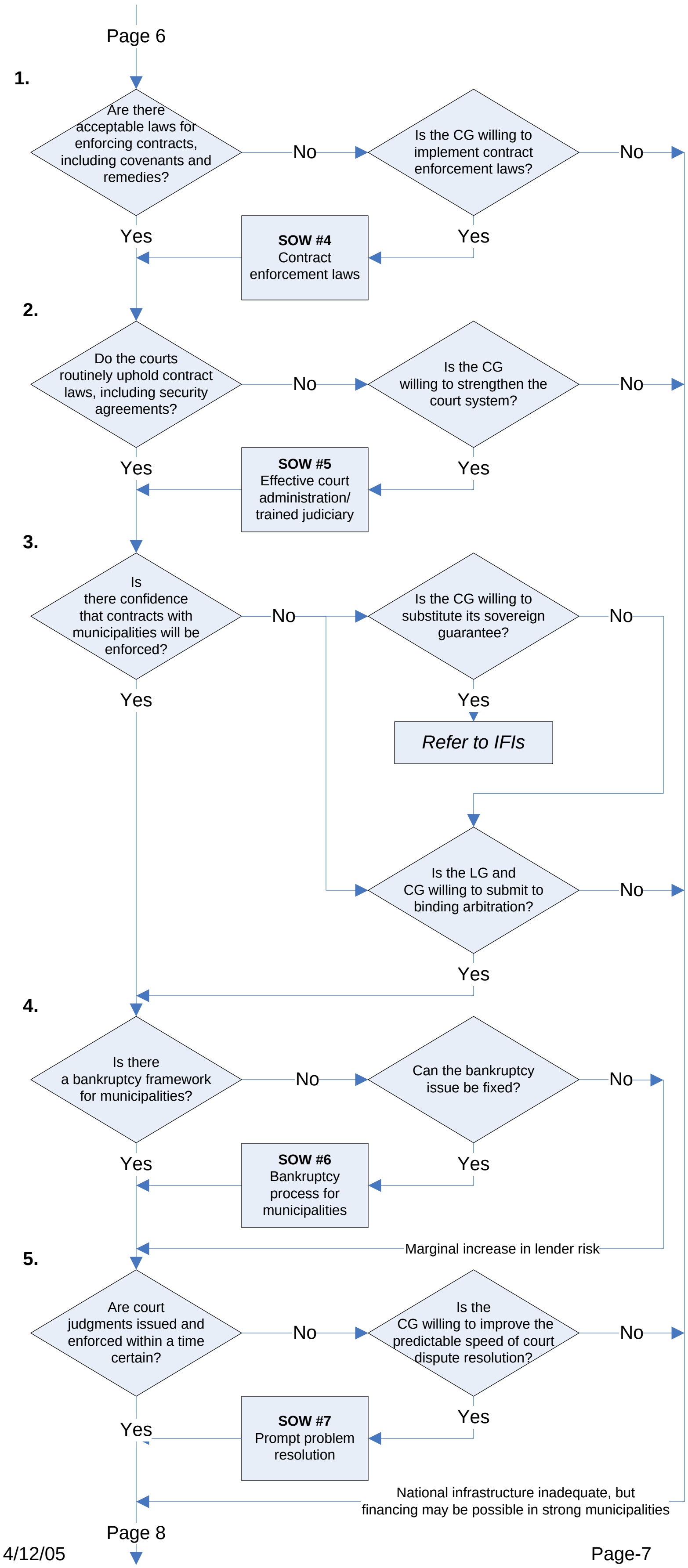
If the CG is willing to provide negative pledges (agreements not to take specific actions, where violation of a pledge would be an event of default) to limit its ability to impair debt service, then the municipality will be better able to demonstrate debt service capacity and municipal finance will be more likely.

If municipalities do not seek voter approval for project that will be paid for out of local taxes and/or usage fees, then the general population may not willingly accept the costs needed to produce the revenue needed to service the debt, undermining investor interest.

Presenting the costs and benefits of a municipal infrastructure project before it is started ensures that the public is given an opportunity to assume ownership in and responsibility for the project. Public support for raising taxes and/or fees as a necessary step to implementing the project and securing the project's benefits reduces political opposition and reduces the incentives to avoid the costs.

Section 3 – Enabling Environment for Market-Based Finance

3.1. Repayment Risk



If a financier cannot impose restrictions on detrimental activities of municipalities that would impair debt service capacity, then it cannot establish “trip wires” that would trigger remedial action to head off default.

If the legal framework does provide for enforceable remedies in case of default by a municipality, then there is greater incentive to honor debt service obligations, the risk of default is reduced and financing becomes more likely.

If contract laws (generally in the commercial code) are weak or the courts are failing to routinely adjudicate and enforce contracts (either through lack of understanding or professionalism) then there is no certainty of enforcement and contracts have no value.

But if the CG is willing to strengthen contract laws and their enforcement, then the entire economy is likely to be strengthened though an improved investment climate.

If investors do not have adequate confidence in the court system to fairly enforce contracts with municipalities (often politically challenging), then financing is not possible. This question is subjective since there may be no precedent on which to base a definitive answer.

But if the CG is willing to issue sovereign guarantees, then such guarantees may be subject to agreements with the IMF, so the project should be referred to the WB or other IFI as a possible source of financing.

If the in-country dispute resolution process is not acceptable to the financier, then financing is unlikely. But if all parties are willing to submit to binding arbitration, then disputes may be fairly and objectively resolved outside of the country’s internal court system, providing that arbitrations decisions reached may not be contravened by the country’s own judicial system.

If there is no bankruptcy framework for municipalities, then there may be no certainty of ranking of creditors or protection of security interests in pledged assets in the event of insolvency of the municipality.

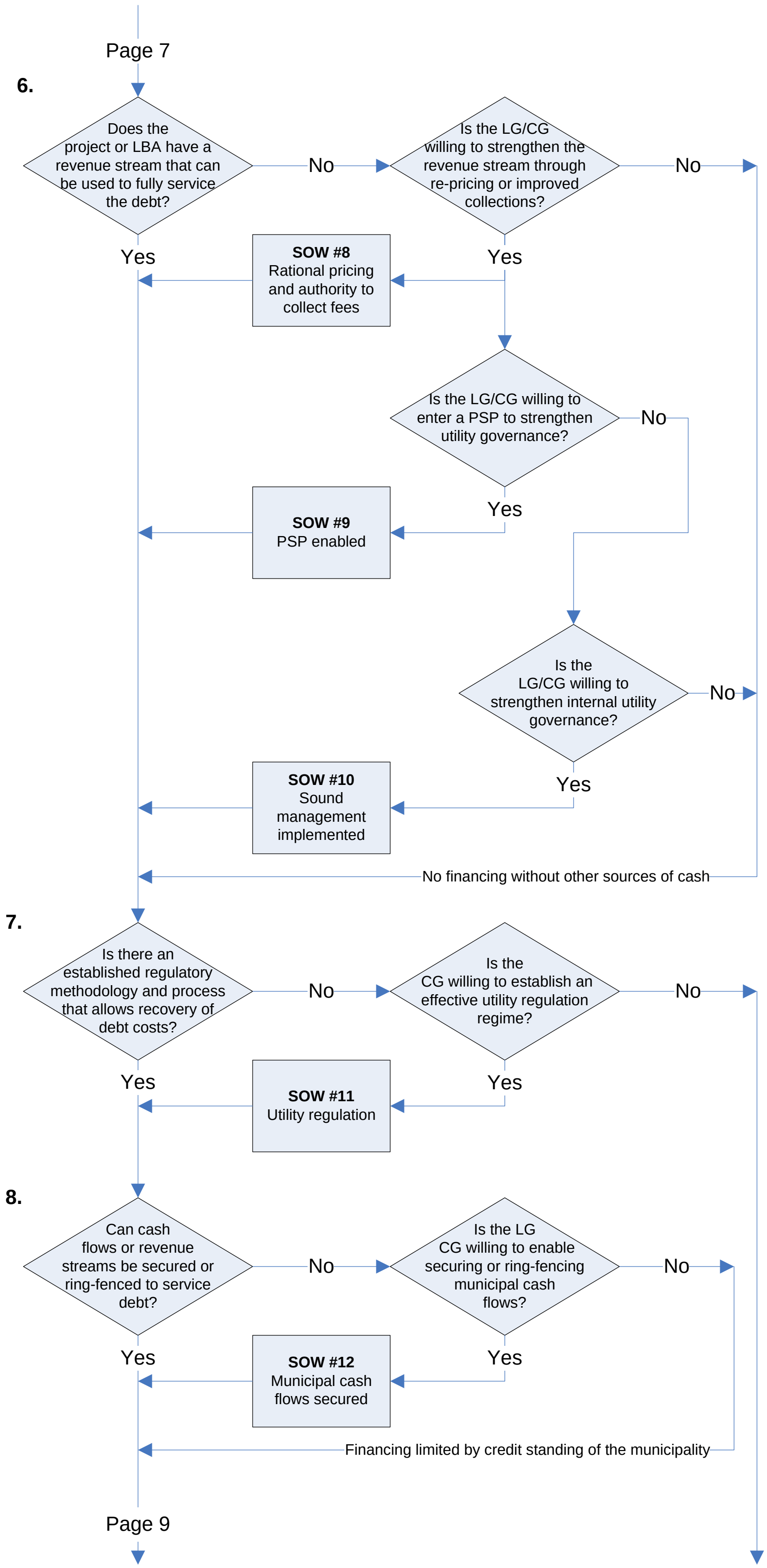
If the government is willing to resolve this constraint, then financing may be more l kely, although pragmatically municipal bankruptcy may have limited impact on debt recovery.

If the time taken to reach a judgment, go through the appeals process, and enforce the ruling is lengthy and uncertain, then court adjudication may have limited practical value to a creditor.

If the CG is willing to speed up the process from filing to enforcement, or implement an effective alternative dispute resolution process, then the investment climate will be materially improved, benefiting municipal and all other forms of finance.

Even if the national legal and regulatory infrastructure fails to provide adequate support to municipal finance, regional or local authorities may still be independent and strong enough to demonstrate adequate debt service capacity and governance to justify financing. Such one off transactions can potentially act as catalysts to lead development of the national infrastructure.

Section 3 – Enabling Environment for Market-Based Finance (continued)



If the project does not have a steady, predictable revenue stream adequate to cover operating expenses and debt service, either from fees or contractually obligated government transfers, then the municipal utility will not be able to demonstrate debt service capacity to lenders or potential bond investors. This will effectively eliminate access to private sector finance.

If the municipality is willing, and market factors allow, repricing of services and strengthening of fee collections and/or government budgetary transfers sufficient to fund operating expenses and debt service, then the utility will have increased access to private sector finance.

If the municipality is willing to enter into a public-private partnership with a utility operator to strengthen the management of the utility, then increases in revenue collection and improvements in operating efficiency are more likely, and will increase access to finance for the infrastructure.

If the municipality is not willing to enter a PSP, but is willing and able to improve its internal management to improve revenue collection and operating efficiency, then financing will be more likely, particularly once it has demonstrated implementation of governance improvements.

Even without the introduction of a PSP, establishing sound municipal and utility governance may require substantial restructuring.

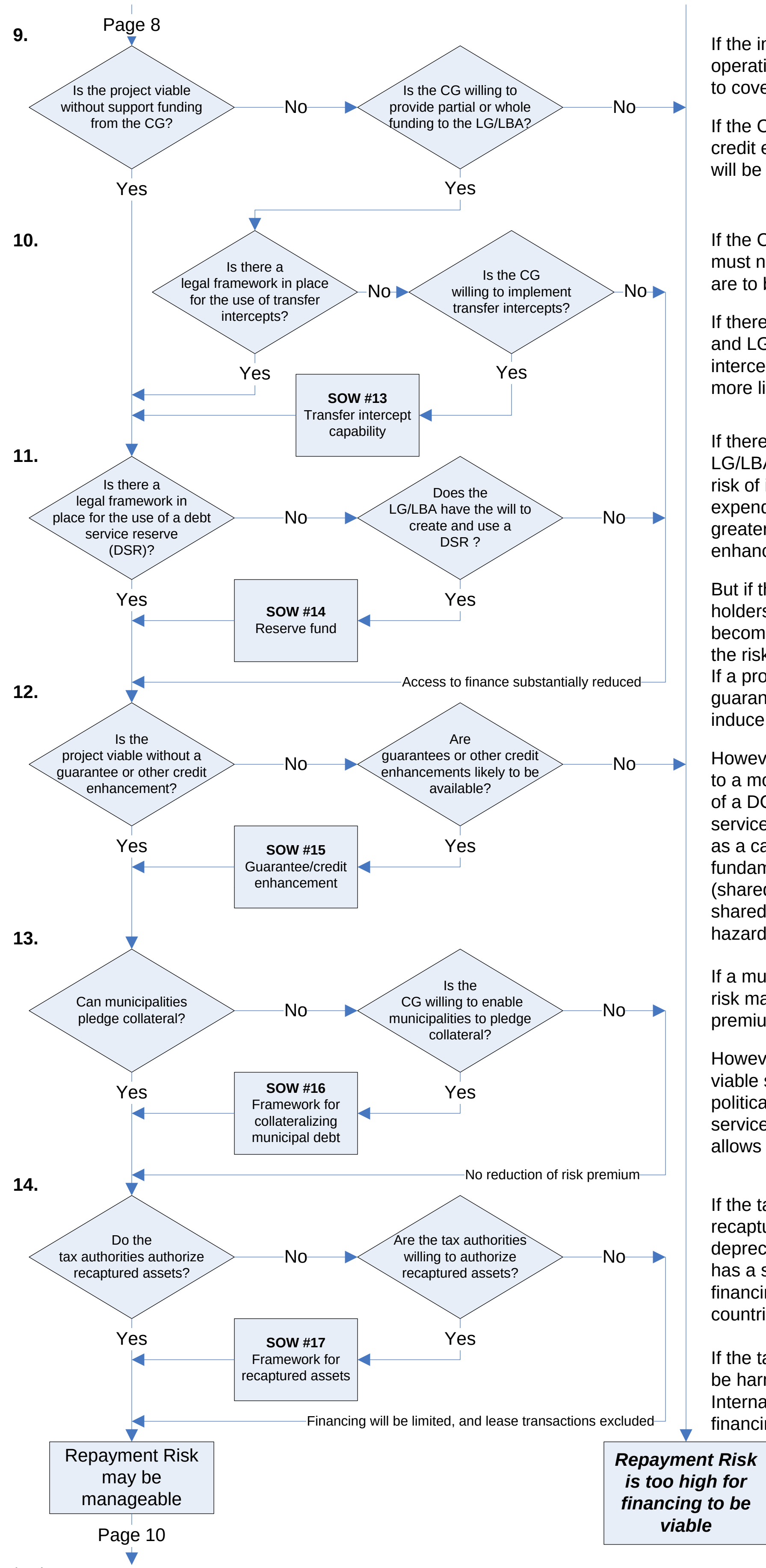
If there is no regulatory environment for utilities, or if it does not fully recognize debt service on efficiently incurred capital expenditures and operating expenses as legitimate costs in calculating and setting tariffs, then the municipality is more likely to be subject to political pressure to keep rates below reasonable levels. In addition, future regulation may impair debt service capacity.

If the CG is willing to establish an effective regulatory regime for utilities, then the attractiveness of investing in municipal utilities will be substantially improved and municipal services are likely to expand.

If financiers have no effective means of securing or ring-fencing cash flows for debt service, for example by requiring that utility fees be paid into a restricted account, then debt service payments become part of the normal municipal budget and expenditure process and are thus subject to variation, re-appropriation, or shortfall. An inability to secure cash flows may make most financing transactions non-viable.

But if the CG is wiling to establish reliable ring fencing of revenue streams and enable a revenue intercept in case of an event of default, then access to municipal finance will be much improved.

Section 3 – Enabling Environment for Market-Based Finance (continued)



If the individual projects cannot generate the income to fully cover operating expenses and debt service, then the CG may be willing to cover the shortfall to enable private sector financing.

If the CG is not willing to cover the shortfall, then other forms of credit enhancement will be needed to satisfy bondholders that they will be adequately protected from the risk of default.

If the CG is willing to provide financial support, then the payments must not come under the control of the municipality or utility if they are to be relied on by potential bond investors.

If there is no legal framework for the use of an intercept and the CG and LG/LBA are willing to support the creation and use of an intercept, then the risk to the bondholder is reduced and finance is more likely to be available and at a lower risk premium.

If there is no framework in place for the creation of a DSR and the LG/LBA does not have the will to create and use a DSR, then the risk of interruptions in debt service due to variability in income or expenditures is higher and bond investors will require either: a) a greater debt service coverage ratio; and/or b) other forms of credit enhancement.

But if the LG/LBA is willing to establish a DSR to enable bond holders to track the source of debt service payments before they become due, then the availability of finance will be increased and the risk premium reduced.
If a project is not viable on a stand alone basis, then external guarantees or other forms of credit enhancement could potentially induce investors to participate.

However, while such external support may transfer some of the risk to a more credit worthy party (such as the US tax payer in the case of a DCA guarantee), it will not strengthen the underlying debt service capacity of the municipal utility. A guarantee can be used as a catalyst to encourage investment in a transaction type that is fundamentally viable, but new to the local market. Pari-pasu (shared risk) guarantees ensure that the local financing entity has a shared interest in ensuring repayment in full, so avoids the moral hazard engendered by full or top-up (first loss) guarantees.

If a municipality or utility can pledge collateral, then the financing risk may be reduced somewhat, possibly justifying a lower risk premium.

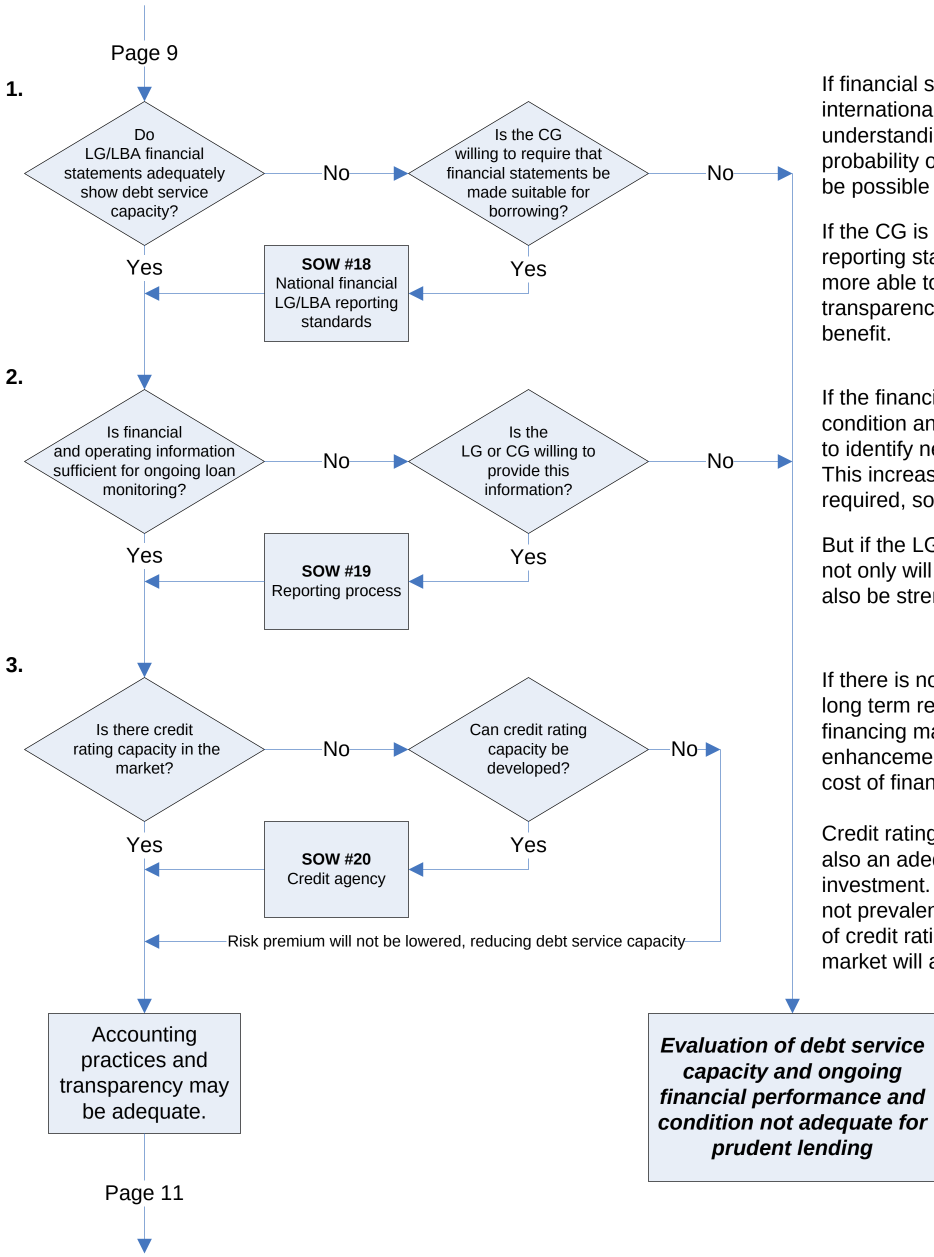
However, foreclosing on municipal infrastructure may a) not be viable since the net market value may be limited, and b) meet political impediments if it would mean terminating municipal services. Collateral may have more value as a nuisance factor if it allows the creditor to pressure the borrower.

If the tax authorities and accounting rules do not permit the recaptured asset provision, which is a specific acceleration depreciation provision used in concessions and leases (and it now has a specific generally accepted procedure under IAS), then financing assets under a lease arrangement will be unlikely in most countries.

If the tax treatment of depreciation and for leasing transactions can be harmonized on international best practices, as codified by International Accounting Standards, then options for asset based financing will be substantially expanded.

Section 3 – Enabling Environment for Market-Based Finance (continued)

3.2. Availability of Accurate and Verifiable Information



If financial statements produced by municipalities do not conform to international standards and do not give a potential investor a fair understanding of the municipalities debt service capacity, then the probability of repayment cannot be evaluated and no financing will be possible on a rational basis.

If the CG is willing to require reasonable financial accounting and reporting standards for municipalities, then not only will they be more able to justify credit, but financial management and transparency will be improved, resulting in a broader governance benefit.

If the financier will not have ongoing access to the financial condition and performance of the borrower, then it will not be able to identify negative trends and force remedial action before default. This increases the lending risk and the risk premium that would be required, so lowers debt service capacity.

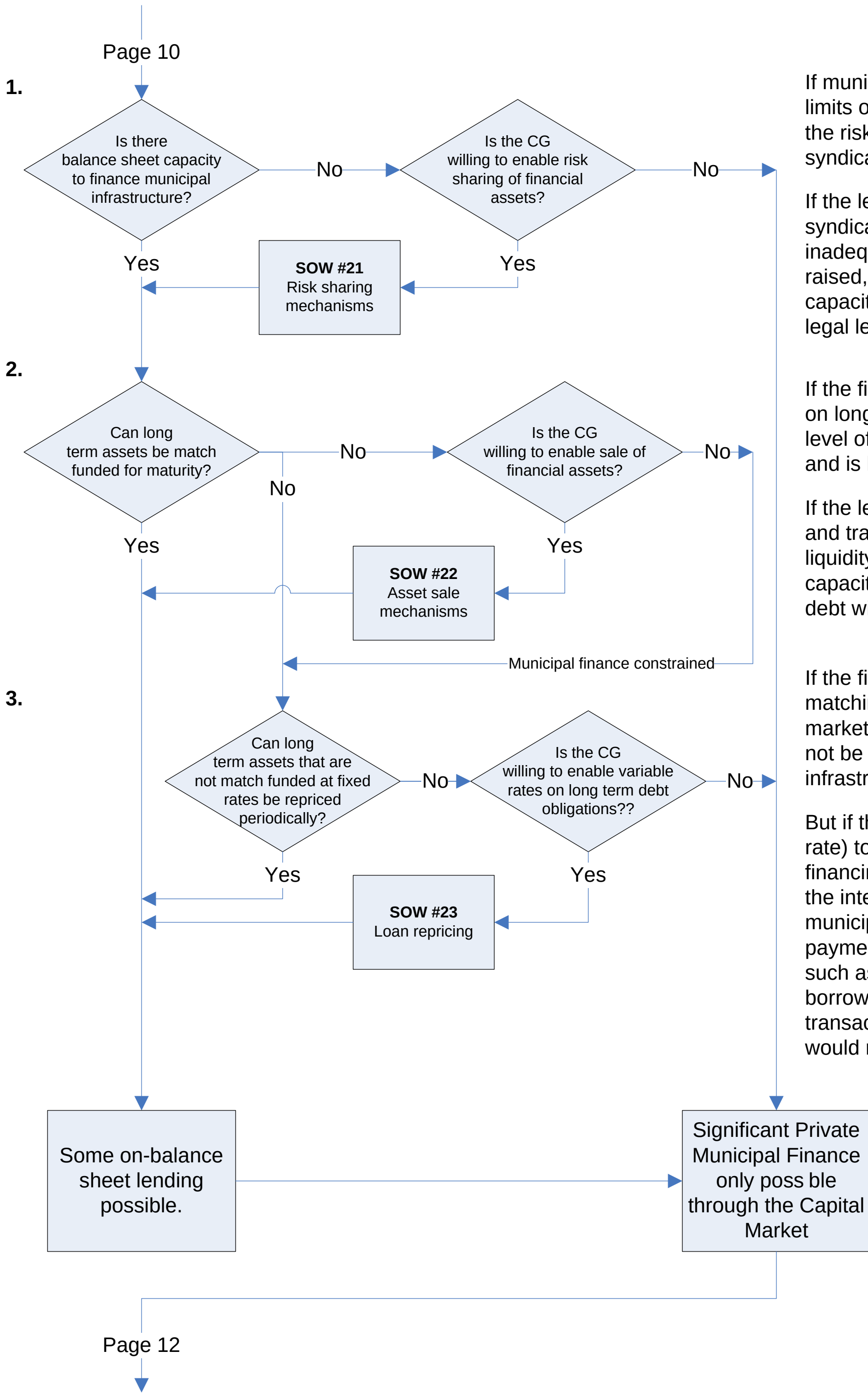
But if the LG or CG is willing to ensure consistent reporting, then not only will financing be more accessible, but governance should also be strengthened.

If there is no formal credit rating capacity in the market, then some long term regulated lenders may be barred from investing, or financing may not be feasible without substantial credit enhancements and/or increased risk premium, which will raise the cost of finance and lower debt service capacity.

Credit rating agencies require good, open access to information but also an adequate market demand for their services to justify the investment. In smaller countries, particularly where transparency is not prevalent, the cost may outweigh the benefit, limiting the ability of credit rating agencies to provide services at a price that the market will accept.

Section 3 – Enabling Environment for Market-Based Finance (continued)

3.3. Capital Adequacy, Maturity, and Rate Risk Management



If municipal financing requirements exceed the prudent lending limits of any single financier, then financing will only be poss ble if the risk can be spread over multiple institutions, either through loan syndication, securitization or other risk sharing mechanism.

If the legal infrastructure that will govern the allocation of loss to syndicate or consortia members in case of default is absent or inadequate, the level of uncertainty, and thus the lending risk, is raised, increasing the risk premium and lowering debt service capacity. Lack of risk sharing would limit transaction size to the legal lending limit of the lender, severely limiting municipal finance.

If the financier only has access to short term funding, then taking on long term assets funded by short term liabilities would result in a level of maturity transformation (maturity gap) that may be unsafe and is likely to be subject to regulatory restrictions.

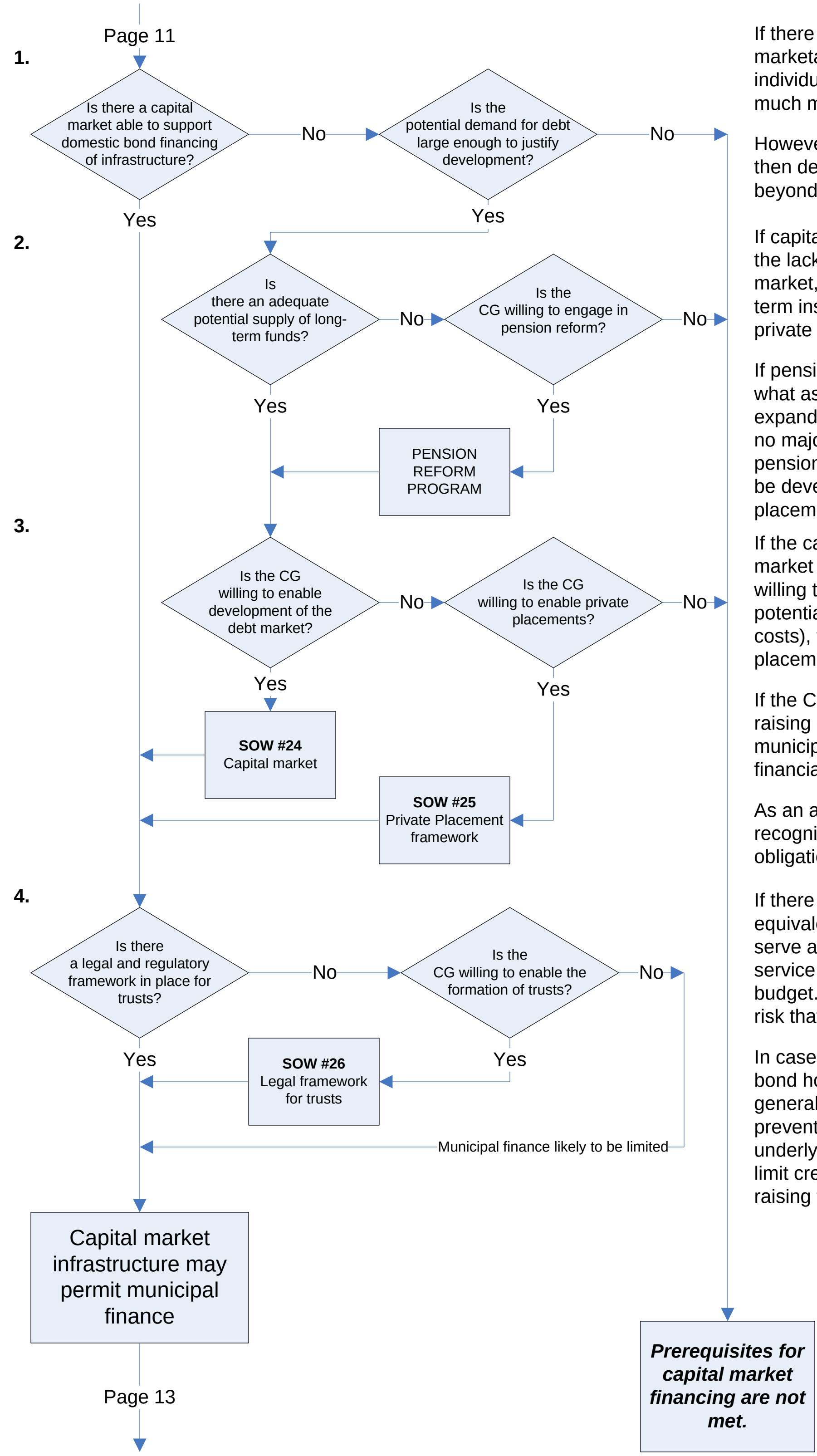
If the legal environment or market do not permit the sale of assets and transfer of the legal claim to the buyer, and there is no other liquidity support mechanism (lender of last resort), then the capacity of the banking system to take on municipal infrastructure debt will be severely constrained.

If the financier cannot fund itself at fixed rates at maturities matching those of the municipal finance, then it is exposed to market rate risks that could impair its financial performance, so will not be able to provide fixed rate financing for municipal infrastructure.

But if the municipal financing can be repriced periodically (variable rate) to reflect changes in market interest rates, such as tying the financing to a T-bill rate, then the lender is protected with respect to the interest margin. But the debt service requirement on the municipality could rise to the point where it could no longer meet payment obligations, resulting in default. Interest risk protection, such as a rate swap or other derivative that stabilizes the borrower's interest cost, may be possible, but would add to the transaction cost and the risk premium. Higher borrowing costs would restrict access to financing.

Section 3 – Enabling Environment for Market-Based Finance (continued)

3.4. Capital Market Development



If there is no domestic or regional capital market then the marketability of municipal debt will be limited to the capacity of individual lenders, which is unl kely to be sufficiently high to provide much municipal finance.

However, if the potential demand for debt instruments is significant, then developing the debt market can have significant benefits beyond just facilitating funding of municipal utilities.

If capital market capacity cannot reasonably be built, either due to the lack of market size to justify developing a national capital market, or because there would not be adequate demand for long term instruments, then greater reliance will have to be placed on private placements to expand access to municipal financing.

If pension funds are under-developed or unreasonably restricted in what assets they may invest in, reform of the pension system could expand development of long term sources of funding. If there are no major sources of demand for long-term finance, such as pension and life insurance companies, and those sources cannot be developed, then sale in the capital markets or by private placement will not be viable.

If the capital market infrastructure does not support a secondary market in debt instruments, and the central government is not willing to enable development of such a market (possibly due to the potential market being too small to justify the setup and supervisory costs), then long term funding may be available through private placements outside of a formal market.

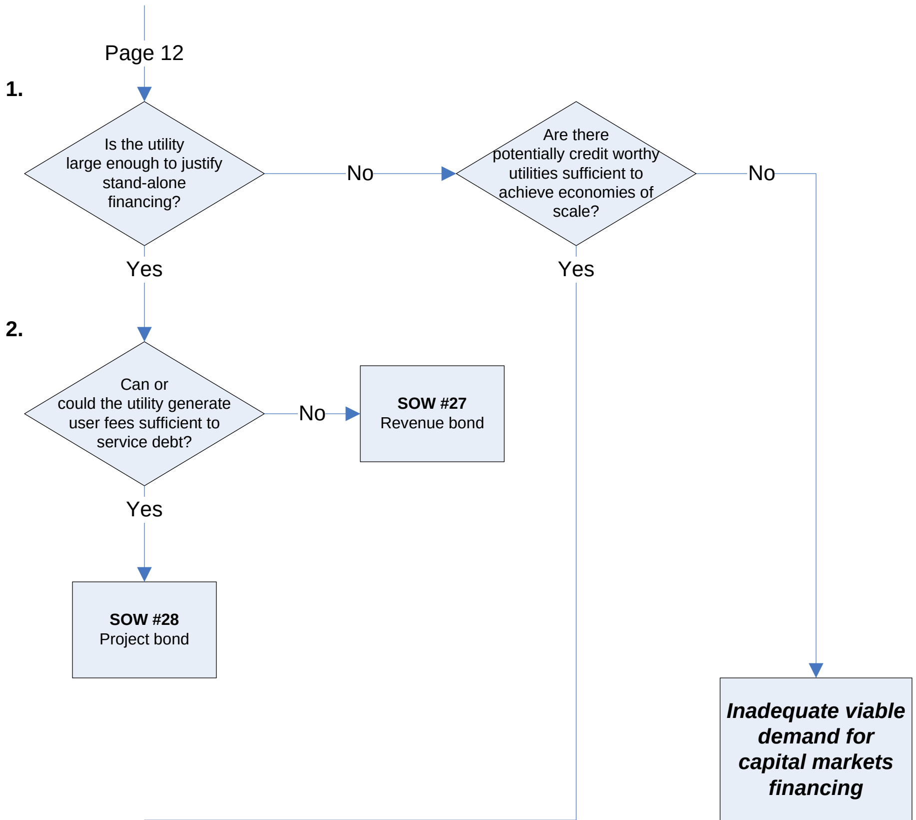
If the CG is willing to enable development of a debt market, then raising debt funding through the capital markets will benefit not only municipal finance, but corporate finance as well, and make the financial markets more competitive.

As an alternative, support for private placements – particularly legal recognition of the transaction type and enforcement of contract obligations – will benefit the general investment climate

If there is no legal framework for the use of a trust (or statute law equivalent) that specifies the qualifications an entity must meet to serve as a trustee and that defines the authority of a trustee, debt service payments cannot be easily ring-fenced from the central budget. If debt service payments cannot be ring-fenced, there is a risk that revenues for debt service could become misappropriated.

In case of bankruptcy of the financial intermediary (bond manager), bond holder claims on the municipal utility could be pulled in to the general pool of assets to satisfy creditors of the intermediary. This prevents bond holders from looking through the intermediary to the underlying debt service capacity of the municipal utility, and will limit credit evaluation to the standing of the intermediary, possibly raising the risk premium and limiting financing.

Section 4 – Capital Market Financing Options

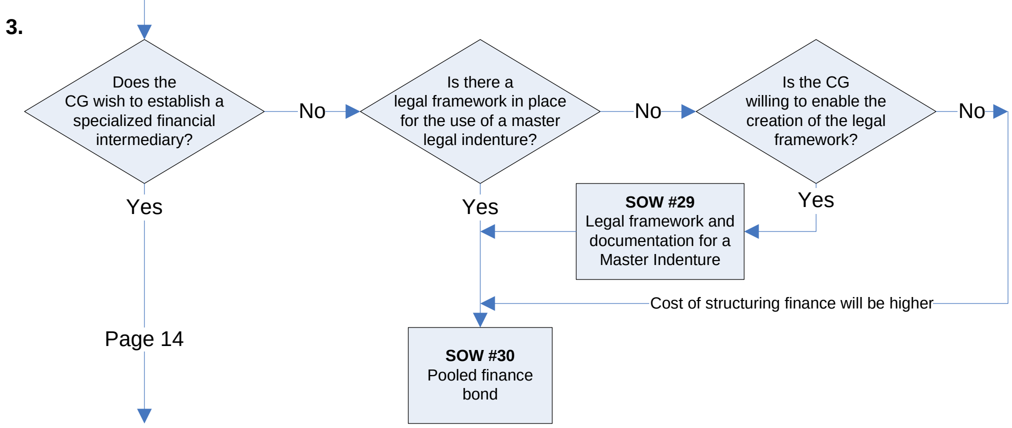


Municipal finance is complex and expensive to set up. For a municipality to borrow in the capital markets, it must be large enough to achieve sufficient economies of scale for independent financing to be financially viable.

If there are multiple municipalities that can team up to borrow collectively, then the financing amount may be large enough to justify pooled financing. But if there are not sufficient LG/LBAs seeking financing and demand cannot be catalyzed, then the investors who buy the bonds cannot achieve sufficient diversification and cost economies on the arrangement and issuance of the bond cannot be achieved.

If the utility can generate sufficient revenue (user fees) to service the debt and fully cover operating expenses, then it may be able to borrow through a project bond based predominantly on the cash flow of the project.

If not, then revenue from other sources, such as taxes or contractual transfers from the central government will be necessary to justify a positive credit decision by investors.

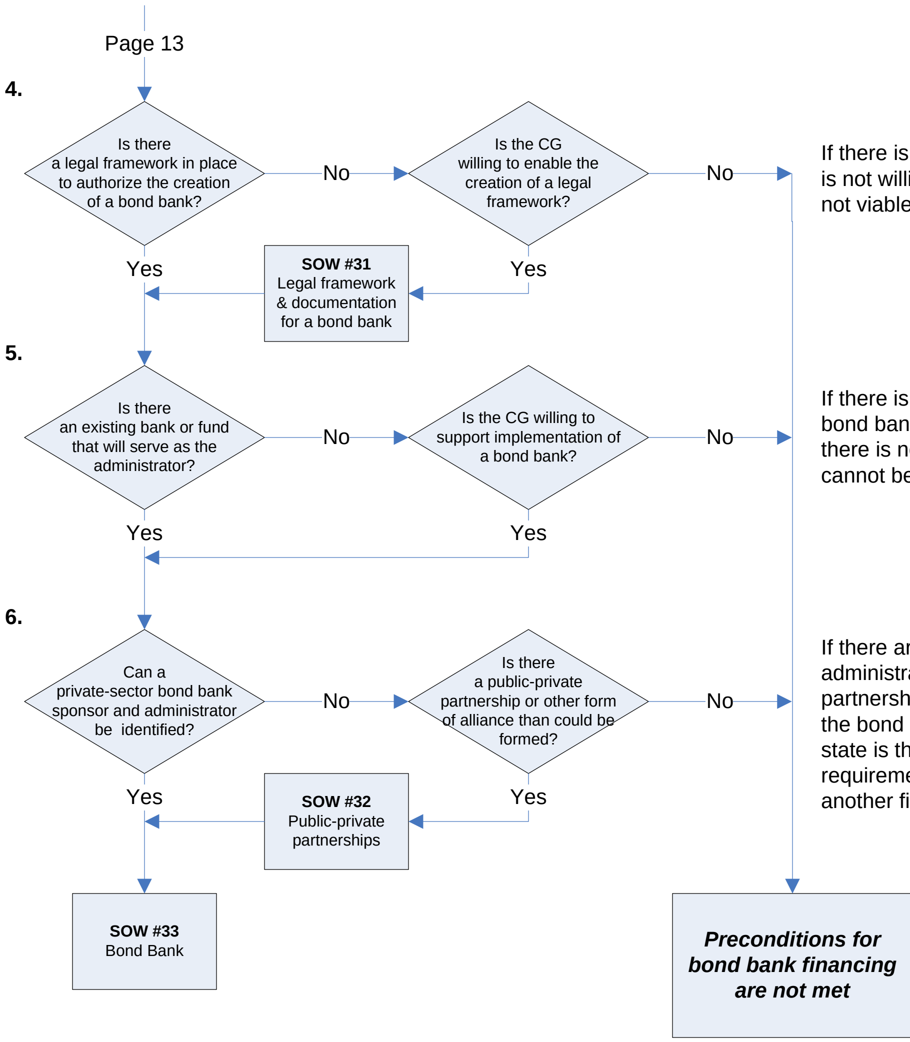


If the CG or large enough LG wants to establish a specialized financial institution to centralize municipal finance, then a bond bank may be the appropriate vehicle.

If no specialized institution exists or will be created, and if there is no a legal or documentary framework in place for a master debt agreement, then the cost of negotiating and preparing separate indenture agreements will raise the cost of financing, reducing borrower debt service capacity and lender interest.

If the legal framework for pooled finance exists, and municipalities are willing to cross guarantee each other, then a pooled finance bond may be viable.

Section 4 – Capital Market Financing Options (continued)



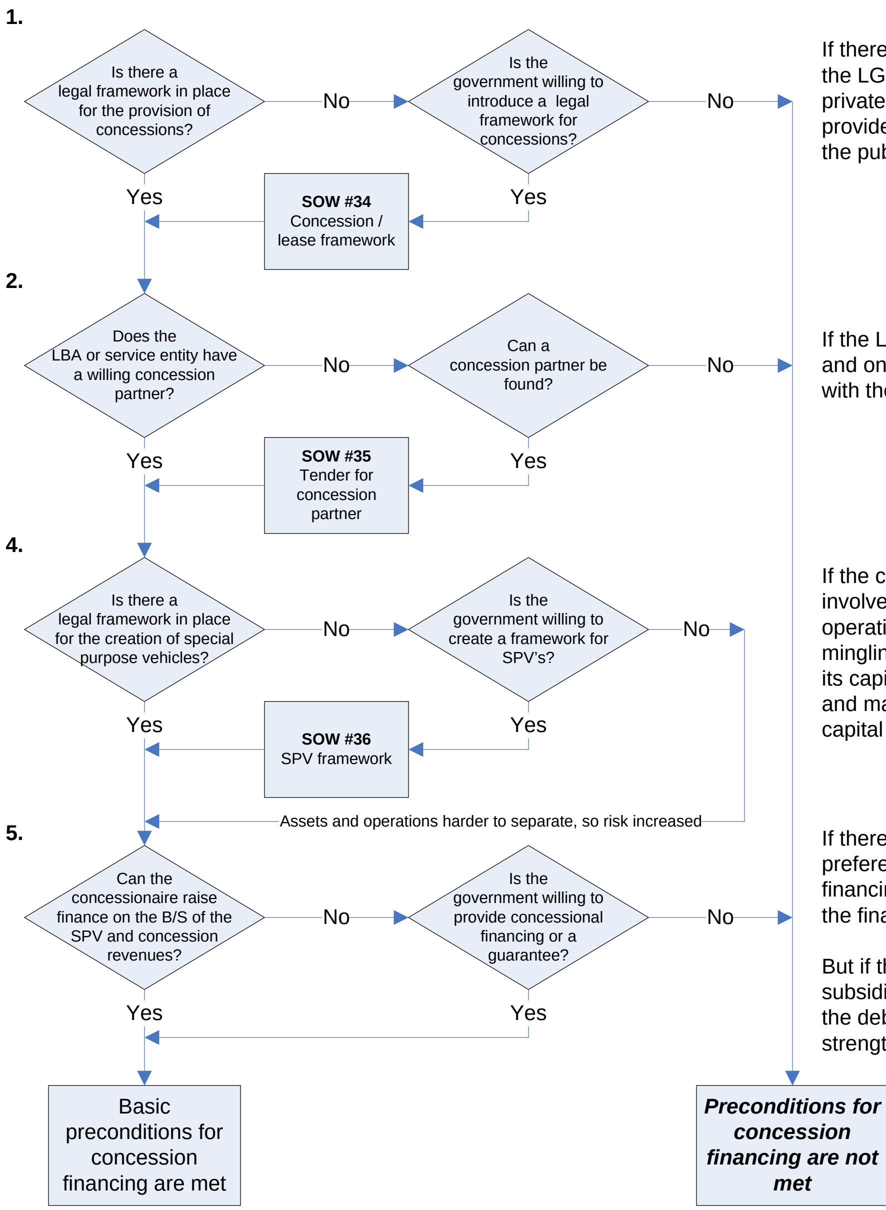
If there is no legal framework to authorize a bond bank and the CG is not willing to create that framework, then the bond bank option is not viable.

If there is an existing bank or fund available that is willing to form a bond bank, then the bond bank can be organized more quickly. If there is no bank or fund expressing interest in the initiative and one cannot be found, the bank will have to be formed.

If there are no private sector bond bank sponsors and administrators interested, and if there is not public private partnership structure that could formed to attract the private sector, the bond bank would have to be formed as a state authority. If the state is the only alternative for the formation of a bond bank, the requirement for private sector participation will not be met and another financing alternative should be considered first.

Section 5 – Public-Private Partnership Financing

Concession – Municipality contracts with an operator to manage the municipality's utility



If there is no legal framework in place for concessions or leases, the LG or LBA may not have the authority to contract with the private sector for public services. If there is no CG support to provide that authority, then it will not be possible to proceed with the public-private partnership financing.

If the LG or LBA do not have a willing concession partner available and one cannot be found, then it will not be poss ble to proceed with the public-private partnership financing.

If the concession partner does not have the ability to separate its involvement in the utility from the municipality and its own operations and balance sheet, then there is an increased risk of co-mingling of activities. If it cannot raise finance through an SPV for its capital investment, it may be able to undertake its operational and management obligations, but it will not be able to finance the capital expenditures.

If there is no means in which to ring-fence the financial risk and preferential tax treatment associated with the concessional financing, the concession partner will not be willing to undertake the financing risk.

But if the CG is willing to provide financial support, through subsidies, concessional financing or an acceptable guarantee, then the debt service capacity of the project may be sufficiently strengthened to merit financing.

A concession is a contractual arrangement in which a service provider obtains the right to provide a particular service or set of services under predefined conditions and in exchange for agreed upon outputs. Concessions are usually awarded to private providers but could in theory be awarded to public enterprises.

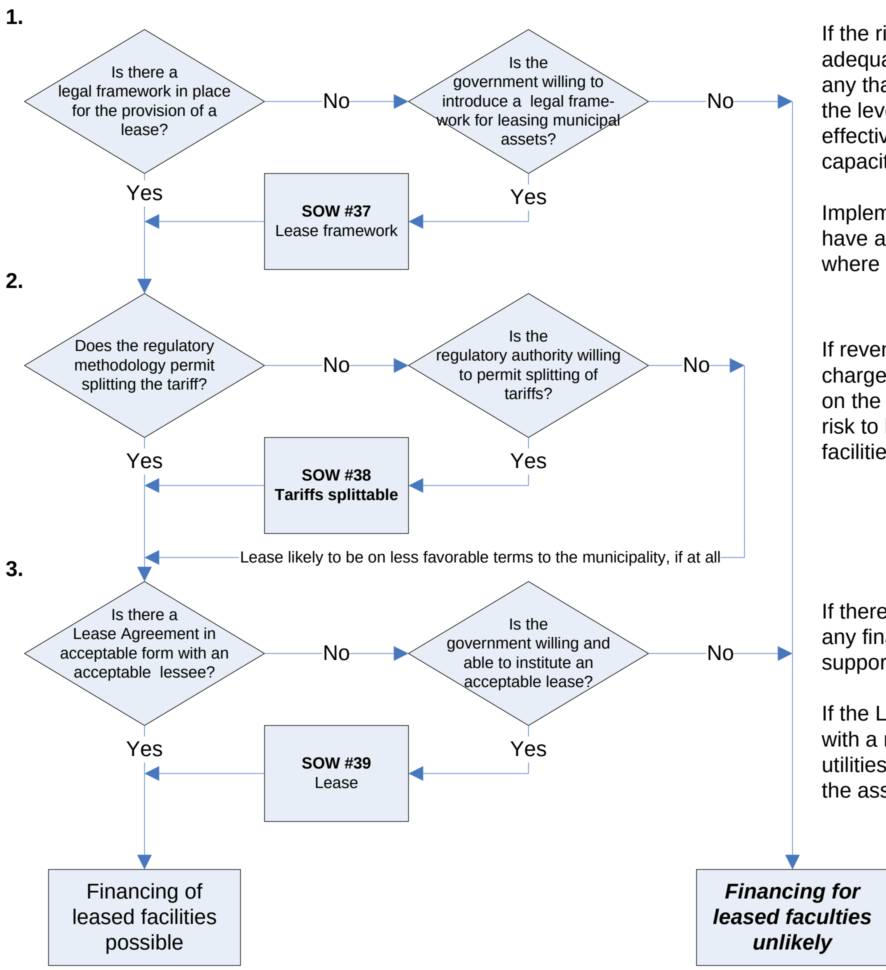
The primary rationale for use of concession arrangements is typically to manage the natural monopolies that often develop for services such as water supply and sewerage reticulation and ensure that a degree of competition is brought to bear on the supply of the service through a competitive bid process.

Appropriate allocation of risk is key to concession design. Concessionaires assume both operational and investment risk. For example, a rehabilitate-operate-transfer (ROT) concession will require the concessionaire to meet predefined capital expenditure goals (e.g., rebuilding sewer canals) during the term of the concession as well as to take responsibility of operational hazards such as water or electricity lost during transmission and distribution. Then at maturity the concessionaire will transfer the concession (i.e., operational and investment responsibilities) back to the government.

If investors are not prepared to make long term capital investments because of country and sector risks, the next option may be to seek a PSP to improve operation performance through a lease or affermage. In this case, large scale capital investment may need to be made by the CG or LG. The lease or affermage will improve the operational performance and credit quality of the utility that could lead to private capital investment in the future.

Section 5 – Public-Private Partnership Financing (continued)

Leases – A utility management company leases the physical facilities and operates them.



If the rights and obligations of parties to lease agreements are not adequately defined in the law, disputes are more likely to arise and any that do occur will be more difficult to resolve. This increases the level of uncertainty, and thus the ability of the lessor to effectively manage the leased assets and ensure the debt service capacity of the asset owner is preserved.

Implementation of an international standard lease framework would have a broad benefit to the economy, particularly in countries where property rights are uncertain.

If revenue streams from tariffs cannot be split to cover operator charges and asset company charges, then the level of uncertainty on the calculation and application of tariffs is increased, raising the risk to both lessor and the financier of the asset company's facilities.

If there is no lease agreement with a reputable utility manager, then any financing for improvements to the assets will not benefit from support from external management.

If the LG or CG is willing and able to establish a lease agreement with a reputable utility operator, then the management of the utilities' assets is likely to be improved and the borrowing ability of the asset company or municipality will be strengthened.

Leases are fundamentally different in their financial structure than concessions. They are by far the predominant transaction structure used for PSP in the water sector, and for a reason.

A lease separates the capital expenditures and related risk from the operating effort and investment. The government sets up an asset company that owns the physical assets and liabilities of the system. The asset company or other government agency, often the ministry of public works, lets a lease contract that allows the operator to operate the system using the assets to run the business. The asset company is required to raise capital for capital development projects. Capital raised goes on the balance sheet of the government owned asset company, but the proceeds are provided for the EXCLUSIVE use of the operator. They invest the funds in new kit according to an agreed upon or approved plan with the asset company.

There are actually several different types of capital expenditure risk. The risk that the debt is not repaid or serviced rests in the asset company – that's repayment and principal risk. The risk that adequate funds to service the debt are not available when needed – which has huge potential impact on the operator's ability to make a profit – is generally considered a risk that falls mainly on the asset company and government. This is subject to negotiation. The risk that the operator obtains the agreed upon capital expenditure amounts when promised, but invests it in a manner that does not lead to the performance improvements and revenue increases expected, falls squarely on the operator. This is done by fixing the expected operator lease payments and revenue/price caps in advance of the investment.

This structure is popular because (1) it separates the capital expenditure risk from the operating risk, and in risky situations, it is difficult and expensive to raise capital when lenders believe that the project operator alone will be able to service debt. (2) it allows the government to use its balance sheet to borrow even if the financing structure is fundamentally a ***PF*** *structure.*