

HANDBOOK FOR MUNICIPALITIES

**CREDITWORTHINESS, CREDIT RATINGS AND BORROWING TO
FUND MUNICIPAL INFRASTRUCTURE**

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Introduction

This handbook is intended to be a brief reference guide for municipalities who are considering borrowing to finance municipal infrastructure.

Any growing urban area requires substantial investments in infrastructure, and there are very few municipalities who receive enough in capital grants from national governments to finance all their requirements. This shortfall requires that municipalities look for alternative funding sources, or face the prospect that infrastructure backlogs become insurmountable, with seriously negative implications for the quality of life and the economic productivity of the urban area.

For a minority of urban areas, where there is a well-run municipality with a reasonable tax base, and an appropriate national legislative framework, the possibility exists that the municipality may take out loans to finance some of its infrastructure requirements. This manual is directed primarily at senior officials in such municipalities.

Depending on circumstances, there may be significant advantages in adopting this approach. There are also costs and risks. Although at one level borrowing is very simple – you borrow and repay over time with interest – municipalities who can borrow should do so with care, as a poorly structured loan can easily burden the municipality with costs it cannot afford.

The handbook is intended to provide a brief overview of the many technical, management and governance issues relating to municipal borrowing. It is structured into two parts. Part 1: Creditworthiness and becoming creditworthy starts by setting out the advantages, costs and risks of borrowing to finance municipal infrastructure. It then outlines what is meant by municipal creditworthiness and why it matters, how it is measured, and advantages and concerns regarding credit ratings. The final section outlines how creditworthiness can be improved.

Part 2: Borrowing and managing debt then outlines the steps that municipalities should go through when borrowing. It also covers the issues involved in managing and repaying municipal debt.

Municipal borrowing has widespread organisational ramifications, and is not simply a technical matter for the municipal treasurer. This manual therefore briefly covers some very broad issues, including organisational restructuring and capital investments plans.

The manual was developed in Swaziland in 2008 and 2009, and is intended firstly for Swaziland's potentially creditworthy municipalities. However it is also intended to be useful to potentially creditworthy municipalities in any country with an appropriate policy and legislative framework. It may also be useful from a policy perspective to national government officials.

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PART 1: CREDITWORTHINESS AND BECOMING CREDITWORTHY

1. Why borrow to finance municipal infrastructure?

Municipalities wishing to finance capital infrastructure in principle have a limited range of possibilities: *external resources*, such as national government capital grants, and *own resources*, such as any accumulated cash savings, annual operating surpluses, and borrowing, whether from state or private lenders.

Borrowing is classified here as own resources because the municipality must repay the loan from its own resources, but the fact that borrowing leverages and multiplies the capacity of own resources is the essential point of borrowing.

For many municipalities, the balance between the expenditure responsibilities legally assigned to them and the locally derived resources legally available to them (i.e. local taxes and service charges) means that national capital grants are critical for local infrastructure services. This applies especially to financially weak municipalities, where some form of national government capital grant is their only practical form of funding for municipal infrastructure.

But the point applies even to larger and more creditworthy municipalities. National government capital grants are generally critical, and arguments in favour of municipal borrowing should not crudely be seen as arguments to reduce national capital grants. On the contrary, municipal borrowing is often most feasible and effective where the municipality can continue to rely upon capital grants as part of its infrastructure funding plan.

Apart from national capital grants, a municipality must rely upon its own resources. This must mean the municipality either already has accumulated cash resources to spend (seldom the case), or that it is consistently managing to achieve annual operating surpluses which can be invested in capital projects.

A municipality without its own cash resources and which consistently runs an annual operating deficit by definition has no resources of its own to invest in capital infrastructure. Such municipalities are totally reliant upon government grants for infrastructure investments.

A minority of municipalities may be in the fortunate position of having accumulated cash savings to draw upon. This almost always means that they have consistently managed to achieve operating surpluses in the past. Such municipalities can use their accumulated resources on infrastructure investment without recourse to borrowing. However, these municipalities are in a strong position as potential borrowers and should also consider the points set out below.

Municipalities which consistently manage to obtain annual operating surpluses are in a position to consider borrowing as a means of accelerating their capital investment programme. They could

simply invest their annual operating surplus in infrastructure projects. But for these municipalities in particular, the following considerations will often be overwhelming.

The arguments below therefore apply to that sub-category of municipalities which have their own resources, whether accumulated or in the form of annual operating surpluses, *or could potentially develop such own resources through appropriate management action*, to invest in municipal infrastructure. In Swaziland there are at least four such municipalities at present.

There are several important reasons for these municipalities to consider borrowing to fund municipal infrastructure.

- **Borrowing allows the delivery of infrastructure to be accelerated**

Firstly and most obviously, borrowing allows the municipality to deliver more infrastructure services within in a shorter timeframe than it could if it invested only its own annual operating surpluses ('savings') each year. The demand for infrastructure is generally urgent, and legal and political mandates are such that governments all over the world incur debt because this demand far exceeds their ability to fund it from surpluses on current budgets.

Like a householder borrowing to fund his or her house, a long-term loan allows the benefits of the infrastructure to be gained before its costs have been fully paid.

Borrowing effectively blends commercial funding with public resources, which are scarce and insufficient to meet the demand for infrastructure, and therefore permits an accelerated investment programme. This has enormous quality of life implications for urban households as well as productivity implications for all economic activity. Such acceleration benefits are often so obvious and tangible that borrowing also becomes a means of relieving community and political pressures on municipal governments.

Many large infrastructure projects only become affordable if financed through borrowing, as their scale is such that they cannot be afforded if they must be paid for only from current surpluses.

- **Borrowing allows infrastructure costs to be shared with future beneficiaries**

Secondly, borrowing allows the costs of the infrastructure to be shared with future beneficiaries of that infrastructure. Infrastructure investment is generally 'lumpy' in the sense that the project costs must be incurred in one or a few financial years. However, if the infrastructure is well maintained, its benefits can continue to be incurred for up to twenty or even thirty years into the future. Relying only on current surpluses to finance infrastructure development therefore imposes undue costs on current beneficiaries of the infrastructure, and gives undue benefits to future beneficiaries.

Borrowing therefore allows a better matching of costs paid and benefits derived across time. Spreading costs over time through borrowing is therefore more equitable, and also conforms more closely to standard cost- recovery principles. It should also strengthen the sense of community ownership over inherited municipal infrastructure.

- **Borrowing can mean saving on infrastructure costs**

Thirdly, in Southern Africa the rate of building inflation (the rate of increase of building costs) has often exceeded the interest rate that a municipality might pay on borrowed funds. In such circumstances, borrowing means that overall infrastructure costs will be lower than if the project is postponed until sufficient own savings have been generated to pay for the project. By that stage, project costs will have increased by more than the total interest cost of the loan. This is an important consideration and an appropriate loan can permit substantial real savings in overall infrastructure costs.

- **Borrowing can increase the municipal management focus on financial sustainability**

Fourthly, a longer-term beneficial impact of borrowing is that the borrower-lender relationship, if properly arranged, tends to improve the municipal management focus upon achieving good operational and financial results. This is because the lender is entitled to be kept informed about the financial results of the borrower, and the borrower has a real interest in ensuring that the lender retains confidence in the ability of the municipality to service the debt. A lender concerned about deteriorating creditworthiness can therefore prompt management action within a municipality to correct any deterioration and to remain operationally and financially effective.

While most municipalities are of course under some form of financial supervision by their national government, the attention paid by a lender to the financial results of a borrowing municipality provides a complementary form of financial accountability. A municipality with infrastructure loans has a financial incentive to promote transparency, good governance and reform.

Under the best circumstances, public entities that borrow will find themselves being scrutinised regularly and rigorously by private lenders. This can have a substantial impact, improving financial discipline, encouraging management reforms, and promoting good management generally. Since a better managed municipality will achieve more than one which is poorly managed, such scrutiny indirectly further improves effectiveness and reduces unit costs, and makes higher capital spending possible.

- **Borrowing builds a credit history**

A municipality which borrows regularly and services its debts establishes relationships with lenders and builds up a credit history. This tends to reduce future borrowing costs and improve access to future loans, which can be invaluable if there is ever a definite and urgent need for an infrastructure loan and all other options are closed. By contrast, a municipality without a credit history is an unknown entity to lenders and will tend to find it both harder and more expensive to raise infrastructure finance.

A good credit history will also tend to attract general investment within the municipal area due to the confidence and benefits that investors and businesses derive from operating in a well-managed municipality which provides the required services and at a reasonable cost.

In the long-term, increased municipal borrowing promotes the development of a more liquid capital market, in which increasing demand for tradable debt instruments puts downward pressure on borrowing costs.

However, municipal borrowing also has costs and risks, the most important of which are the following.

- **Borrowing costs money, and interest costs can be substantial**

Borrowing costs can be very substantial, and a capital project financed over a long period at the interest rates generally applicable in Southern Africa can ultimately involve interest costs of as much as three quarters of the original project capital cost. Municipal borrowing is therefore not something to be entered into lightly, and municipalities should do their homework carefully first.

A borrowing municipality will have to make provision in its budget for interest and redemption payments to the lender every year for the term of the loan. This cost must of course be affordable to the municipal budget, and municipality which cannot realistically make provision for these payments should not attempt to borrow. This is why borrowing is restricted to those municipalities which can achieve sufficient cash operating surplus each year to sustain the annual cost of servicing the debt.

- **Borrowing requires management capacity**

A municipal borrower will have to ensure that it has sufficient management and administrative capacity to properly manage the loan. The loan itself should be affordable and well structured. Loan agreements should be scrutinised to ensure that the interests of the municipality are protected. Debt service payments must be made in full and on time. The annual budget must provide for the necessary costs. Financial reporting should be complete and on time, and municipal management will have to explain any adverse results.

Perhaps the most important issues relate to the use of the borrowed funds. Since loans are so expensive, it is important that borrowed funds should be productively and properly used on priority municipal infrastructure.

Furthermore, since interest is payable on the outstanding balance from the moment the loan is received, it is also important not to receive the funds before they can be spent.

These matters do require some degree of management capacity, organisation and commitment, and a municipality which is unable to achieve this is not likely to be an effective borrower.

Some potentially creditworthy municipalities, after considering the arguments above, may conclude that borrowing is an appropriate way of financing part of their infrastructure programme. In some cases it may be the only way to get essential infrastructure built. But such municipalities should also ensure that they have the financial and management capacity to manage the costs, risks and pitfalls of borrowing.

Since only potentially creditworthy municipalities can consider borrowing to finance infrastructure, the following section turns to the question of what is meant by creditworthiness.

2. What is creditworthiness and why does it matter?

Creditworthiness means what it says: worthy of receiving credit. Essentially it is an opinion by third parties, mainly lenders, on whether debt service payments will be made fully and on time. A lender which has confidence in the long-term financial strength of the borrower, and in the ability and willingness of the municipality to pay its obligations in full and on time, will regard that municipality as creditworthy.

Clearly not all institutions or municipalities are equally creditworthy. Lenders and investors therefore need a way of assessing how risky their loan might be, and a simple scale has been developed to indicate the relative creditworthiness of potential borrowers in the form of a symbol. These symbols are credit ratings, and they are assigned to potential borrowers by independent credit rating agencies. A credit rating is a formal opinion by an independent specialised agency (the credit rating agency) on the long term ability, capacity and willingness to repay commercial debt at the specified times.

Credit ratings are widely used in the financial and banking sectors as an independent view of the creditworthiness or risk associated with the institutions being rated. They have also become important as a continuous monitoring mechanism, and as a tool for institutional investors who seek to balance their portfolios with appropriate amounts of financial assets in different risk classes.

While different credit rating agencies use different symbols, the basic concept is identical across all agencies, in that the symbol reflects the probability of default by the rated entity.

Experience has shown that there is a close relationship between credit ratings assigned and the probability of default; and also between the credit ratings assigned and the cost of borrowing. For example, the actual rate of default on loans taken by borrowers rated BBB+ may be around 6%, compared to less than 1% for borrower rated AAA. Accordingly, BBB+ borrowers can pay up to 200 basis points (i.e. 2%) more for an equivalent loan than a borrower rated AAA. The higher interest rate charged reflects the relatively higher risk of default associated with the BBB+ borrower.

Credit worthiness therefore matters most of all because investment grade municipalities are able to obtain commercial loans at a better rate than their sub-investment grade peers.

An example of a typical rating schedule is given below:

Typical interpretation of credit rating symbols for long-term debt		
Credit rating symbol	Description	
Investment grade	AAA	Highest credit quality. Risk factors are negligible being only slightly more than risk free fund government bonds. <i>Claims paying ability: Highest The risk factors are negligible.</i>
	AA+ AA AA-	Very high credit quality Protection factors are very strong adverse changes in business, economic, or financial conditions, would increase investment risk although not significantly. <i>Claims paying ability: Very high. Protection measures are strong. Risk is modest, but may vary slightly over time due to economic and/or underwriting conditions.</i>
	A+ A A-	High credit quality. Protection factors are good. However, risk factors are more variable and greater in periods of economic stress. <i>Claims paying ability: High. Protection factors are above average although there is an expectation of variability in risk over time due to economic and/or underwriting conditions.</i>
	BBB+ BBB BBB-	Adequate protection factors and considered sufficient for prudent investment. However there is considerable variability in risk during economic cycles. <i>Claims paying ability: Adequate. Protection factors are adequate although there is considerable variability in risk over time due to economic and or underwriting conditions.</i>
Non-investment grade	BB+ BB BB-	Below investment grade but capacity for timely repayment exists. Present or future financial protection factors fluctuate according to industry or company fortunes. <i>Claims paying ability: Uncertain. The ability of these organisations to discharge obligations is considered moderate and thereby not well safeguarded in the future. Protection factors will vary widely with changes in the economic and/or underwriting conditions.</i>
	B+ B B-	Below investment grade and possessing risk that obligations will not be met when due. Financial protection factors will fluctuate widely according to economic cycles, industry conditions and/or company fortunes <i>Claims paying ability: substantial risk that policyholder and contract holder obligations will not be paid when due. Judged to be speculative to a high degree.</i>
Speculative grade	CCC CC C	Well below investment grade securities. Considerable uncertainty exists as to timely repayment of principal and interest. Protection factors are narrow and risk can be substantial with unfavourable economic /industry conditions and/or company developments. <i>Claims paying ability: Has been or is likely to be placed under an order of the court.</i>
	DD	Defaulted debt obligations. Issuer failed to meet scheduled principal and/or interest payments.
	NR	Not publicly rated
Source: Global Credit Ratings		

3. Advantages of having credit ratings

There are real advantages for many stakeholders if potential municipal borrowers obtain formal credit ratings, especially if the rating is renewed annually. Advantages from the perspective of municipalities themselves, national government departments and financial regulators, capital markets (potential lenders), and donors are set out in turn.

- **Advantages for municipalities**

There are specific advantages in having a formal credit rating conducted annually, especially for municipalities who intend to enter the debt markets, or are already borrowing. A formal detailed scrutiny and opinion by an independent agency every year is welcomed by potential lenders and investors as a means of monitoring financial progress at the municipality, without the lender having to do the analysis itself.

Municipalities with a formal credit rating will find that their pool of potential lenders is larger than otherwise, that they have greater access to better priced infrastructure finance, and that preconceptions and prejudices in the mind as of lenders are more easily countered.

Contractual savings institutions usually operate a number of different portfolios, depending on the risk appetite of their individual investors. Better creditworthiness will mean that more sources can be tapped for finance. Higher creditworthiness also means easier credit decision-making by the financial institutions.

A good credit rating is an exceptionally good marketing tool as prospective investors will be assured that services are well run and that service infrastructure can be financed.

A credit rating and the information available in it can improve the negotiating position of the municipality. Credit ratings can reduce the chances of uninformed decision making simply by providing credible and objective information which might not otherwise be available. In addition the ability to show factually the impact of decisions in respect of tariffs, for example, can be a counterweight to expediency in financial decision-making.

However, in some cases concerns over the possible result may lead municipalities to start by obtaining a 'shadow credit rating' rather than a formal rating from a rating agency. This is often used as a pre-cursor or preparatory step to a formal rating. While it uses generally the same methodology and approach, a shadow rating is usually quicker, cheaper, and more mechanical. Its purpose is to identify areas requiring attention and improvement before any formal credit rating is obtained. It can be conducted in-house (if the necessary skills are present) or by national government agencies or financial regulators, banks, consultants, or even rating agencies.

- **Advantages for national government and for regulators**

Credit rating reports provide national government departments and regulators with additional information, supplementary to their own information sources, which is often very valuable. Regulations can be better tailored to actual municipal realities. Credit rating reports

constitute additional monitoring of the municipality, and in some cases the reports may alert national government departments to emerging problems earlier than conventional monitoring procedures.

The existence of the credit rating report will also make it possible to better target any necessary preventive or corrective interventions. The fact that the credit rating or shadow rating is an independent view of the municipality is also valuable to a regulator or government department.

Policy formulation is also assisted if government is able to draw upon credit rating reports on many of its municipalities for information, and insights. Indicators in credit rating reports can even in appropriate circumstances be used as a basis for performance agreements, such as between government and the municipality regarding turnarounds, or in a performance contract of senior municipal officials.

- **Advantages for potential lenders**

Private investors need to arrange their investment portfolios in such a way that they balance perceived risk and reward. Since higher risk implies higher yield, the portfolio will include a variety of credit qualities. The asset manager will be told, in an investment mandate, how much of the portfolio should be invested in assets of each credit quality (X% in AAA, Y % in AA, Z% in BBB+, and so on).

Credit ratings, which are publicly available and regularly updated, allow investors efficiently to take a view on whether the extra risks are worth the additional yield and to update their yield curves.

Without ratings investors would find it difficult to compare risk and therefore pricing between a municipality and, for instance, a company which is building factories. Credit ratings, as far as risk is concerned, are not sector specific, and allow comparison across sectors. This encourages sector diversification in the portfolio, which further mitigates risk.

Lenders need the independent external views to supplement own credit decisions. Formal ratings are done by independent rating agencies whose only real asset is other people's belief in their integrity and skills. These independent views are very important for asset management companies to ensure integrity in their portfolios.

Ratings helps investor to take a view on the probability of loss, the potential severity of loss and the potential for recovery, but do not replace investment decisions.

Ratings are helpful in monitoring and triggering interventions, because investors will not necessarily have the time or expertise across all sectors to adequately monitor their investments. They may depend to a larger degree on the monitoring services of the rating agencies which could trigger intervention caveats.

- **Advantages for donors**

Credit ratings and especially shadow ratings, in the case of entities attempting to reach an investment grade rating, will give a good indication of status and progress of the municipality, and which areas require further attention. They can therefore permit assistance to be targeted more effectively.

The same process will allow donors to also target and even ring-fence certain support to allow pro-poor policies to be adopted and supported by grants and concessionary loans.

Donor agencies offering credit enhancement techniques to facilitate access by municipalities and other sub-national borrowers to capital markets will clearly require credit ratings.

Finally, credit ratings can be used to provide independent 'comfort' to donors that assistance to municipalities takes place through a sufficiently reliable management and accounting system.

4. Credit ratings: common concerns

- **Cost**

Municipalities may refrain from obtaining ratings because of the cost, especially if turns out to be non-investment grade and no borrowing is affordably possible, in which case the cost incurred might be seen as fruitless. However there are often opportunities to have the credit rating funded by other agencies, such as donors or national government. Furthermore, irrespective of the result, the ratings process itself is very productive for a municipality and the ratings report is valuable in itself. The expenditure is certainly not fruitless.

- **Time**

Managers may be concerned that it may take too much time to prepare the information required by the rating agency. This is only true if the entity has poor information systems, and re-inforces the point that the rating process itself is productive in leading to improved management systems. A rating agency typically will spend 3 to 8 days depending on the size and complexity, collecting the information and conducting interviews. Subsequent ratings are done more quickly.

- **Decreased government support**

Probably the biggest fear that sub national entities have is that an investment rating will lead to government reducing its financial support and redirecting that to others with a lower creditworthiness. The contrary is however closer to the truth. Governments generally feel more comfortable in providing funding and financial support to entities that offer value for money. Although crisis intervention can never be excluded, in the long term government support will target well run creditworthy authorities (the contrary would lead to the total collapse of the intergovernmental fiscal transfer system).

- **Decreased donor support**

The same arguments apply to the donor community. Well-run entities offering value for money in fact attracts more donor money than inefficient entities because most donors follow a definitive pro-poor policy.

In a well-run entity, it is much easier to target pro-poor projects and be assured that the support will reach the poor and not be dissipated on general support. It is therefore very likely that increased efficiencies will actually lead to increased donor support rather than the contrary. This approach is valid until an entity has reached a level of service provision allowing it to cater for its poor without external support.

- **More unfunded mandates**

A further common fear is that being creditworthy will lead to a higher tier of government adding additional functions to the entities mandate without providing the financial support required. Unfortunately in developing economies there are numerous examples of this occurring and the only real defence is to have information available, assessed in good credit ratings, at the disposal of the entity to prove the negative impact of the unfunded mandate.

- **Unfavourable peer comparison**

A final common concern is that the transparency and public nature of a credit rating will result in a negative comparison with its peers. This is possible, but it also provides an incentive to continuously improve performance and equal and better their peers. This principle is fundamental to good governance and can unleash all the positive powers in an entity often changing negative cycles into positive virtuous cycles. It is of course also an important tool to see where the areas for maximum improvements are and assist in prioritising such areas and setting realistic goals and targets.

5. How credit ratings are assigned

Municipalities who wish to obtain a credit rating will need to contract a credit rating agency to assign the rating. It is normal for municipalities themselves to bear the cost of the rating, but in some cases national governments or international agencies may bear the cost.

Municipalities should first decide whether a formal or a shadow rating is appropriate. They should then seek quotes from appropriate service providers or agencies, and then appoint an agency to conduct the credit rating or shadow rating.

The process will begin with an introductory meeting between the agency analysts and senior municipal officials. The municipality will need to ensure that all requested information is provided, and that key managers and political leaders are available to be interviewed by the analysts.

The following table sets out many of the factors that are generally taken into account by rating agencies:

Commonly used credit rating criteria	
COUNTRY PERFORMANCE	Macro-economic environment
LEGAL & INSTITUTIONAL FRAMEWORK	Constitutional and legal framework Expenditure and revenue assignments Adequacy and predictability of central government support Institutional and administrative environment Extent of autonomy in tariff setting, cost recovery, credit control & borrowing
SOCIAL AND ECONOMIC PROFILE	Economic base of the service area Demographic and social profile and trends Economic management fundamentals Operating environment
LEADERSHIP & GENERAL MANAGEMENT	Management track record, capabilities and skills Political leadership track record and capabilities Institutional legitimacy Suitability of organizational structures Governance and management practices Clarity and quality of strategic vision Credibility & track record of attaining goals/objectives Track record in project implementation and service delivery Quality and regularity of financial and operational reporting
SERVICES & OPERATING EFFICIENCY	Service coverage Service quality Operating efficiency Distribution losses Staff levels and costs Energy costs Maintenance expenditure
FISCAL & FINANCIAL	Fiscal & budgetary performance Intergovernmental grants and subsidies Own revenue sources Revenue performance and collection rates Debtors days and age composition Adequacy of provision for debtors Fixed and variable costs - comparison with peers Financial position
CASH AND DEBT MANAGEMENT	Liquidity & debt management Cash flow and cash reserves Quality of investments Extent and maturity profile of existing debt Interest paid Off-balance sheet liabilities Liquidity & indirect risk

Rating agencies assess the municipality on the basis of possibly over a hundred individual ratios and data items. A score or value for each of these is weighted by the rating agency, in order to arrive at an overall score which is converted into the assigned symbol.

After the agency has obtained the required information and performed its analysis, it will compile a draft credit rating report, without an actual rating yet assigned, and show this to the municipality. Municipal management and leadership thereby have a chance to correct any factual inaccuracies, and to debate any negative or positive assessments made on specific issues by the rating analysts.

The rating agency will then finalise its opinion on the creditworthiness of the municipality and assign a credit rating. The formal credit rating report will be sent to the municipality, which will then have to decide whether to release the report to potential investors and the public as a whole, bearing in mind that concealing the rating assigned is not something that increases confidence in the minds of potential lenders.

Credit ratings are part science (in that historical data is analysed to identify trends) and part art (in that it is essentially a prediction of future behaviour). Credit ratings therefore have a strong analytical component, and use many diverse criteria to arrive at their assessment. Inevitably, however, they also incorporate some degree of subjectivity in the form of analyst's opinions. Internal decision-making procedures within ratings agencies should be designed to mitigate the risks involved in such subjectivity.

6. Creditworthiness and how lenders price their debt.

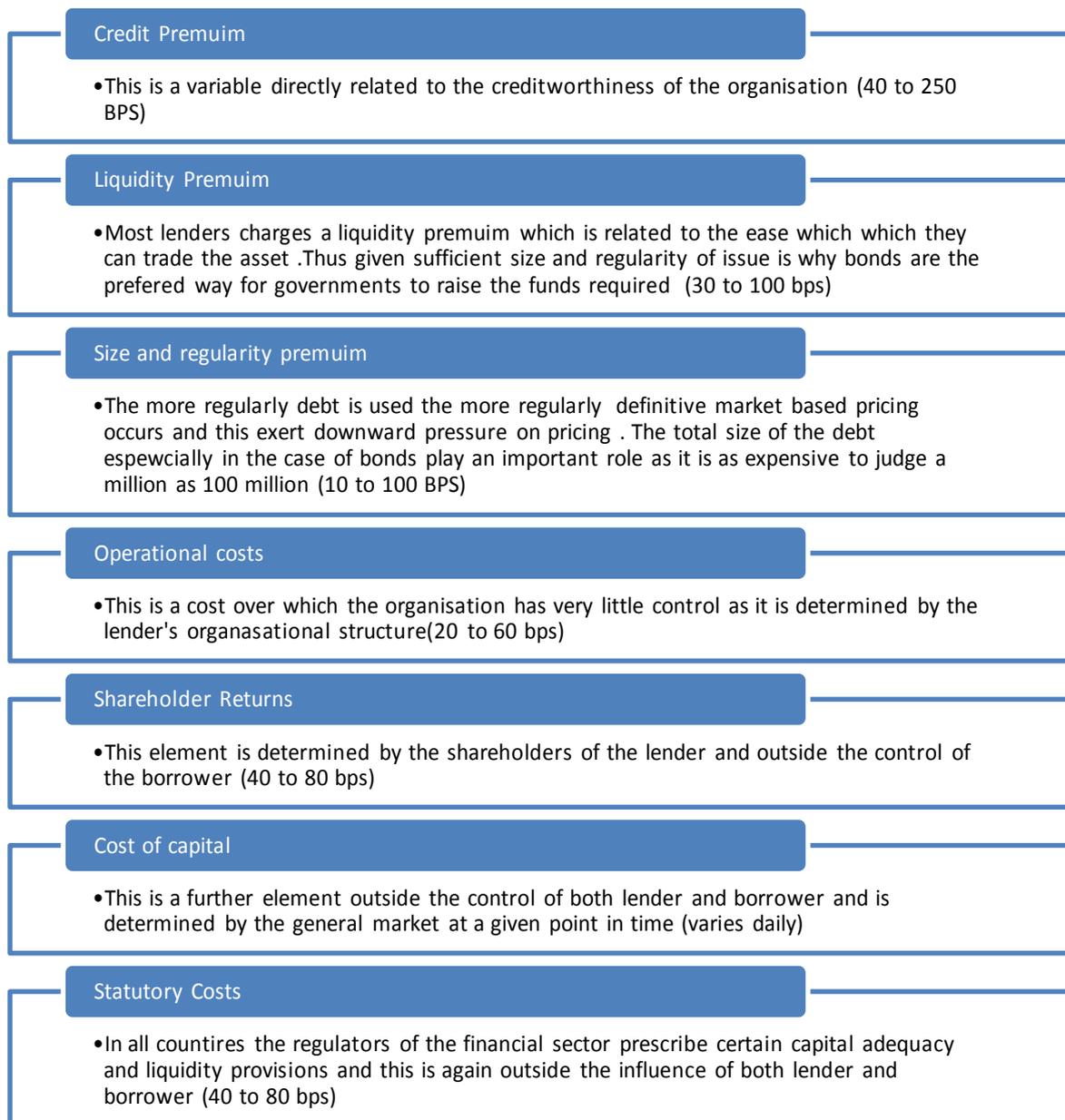
Lenders will generally calculate an interest rate for a proposed loan by applying numerous premiums to their own cost of capital (borrowing rate). In so doing they seek to make explicit to themselves the different costs and risks they are covering in the interest rate they wish to charge.

Some of the factors involved in the pricing of debt represent the essentially fixed costs of the lender, and are not under the control of the borrower. Other factors can be influenced by the borrowing municipality in various ways.

Improving creditworthiness is the main way that municipalities can reduce their cost of borrowing. This is illustrated in the diagram below, which shows a typical lender's pricing structure, with rough indications of the potential price impact.

The potential pricing impact is shown as a number of basis points (bps), where 100 bps is 1.0%.

Figure 1: Factors impacting on loan pricing, with indicative potential impact



7. Improving municipal creditworthiness

The steps a municipality will need to take to improve its creditworthiness clearly depend first of all upon where it is starting from. A municipality with a fundamentally sound revenue base which has not previously lost control of its expenditures might find that relatively simple enhancements to its accounting and reporting systems, better credit control operations and better cash-flow management, will lead in a year or two to credit rating upgrades.

On the other hand, some municipalities may have a reasonable revenue base, but their organisational structure and financial performance is such that only a major restructuring initiative will restore the municipality to what should be an essentially creditworthy position.

Finally, for other municipalities, the revenue base is so deficient relative to their expenditure responsibilities, and their financial capacity so small, that there seems little prospect of their ever achieving an investment grade rating.

The fundamental pre-requisite for creditworthiness is that operational income should consistently exceed operational expenditure, because this surplus is what will be used to make the payments on any new loan. Government grants are included in operational income, provided they are reliable and predictable. Operational expenditure includes interest on existing debt.

Although there are many factors that influence a credit rating, being creditworthy is essentially about consistently ensuring that operational expenditure plus interest payments remains less than operational income.

If this is not the case then the first step to becoming creditworthy is to increase income and reduce expenditure. All initiatives by a municipality to enhance creditworthiness will require measures which will enhance revenues and reduce expenditures, in order open up a sustainable gap between the two.

This means that improving creditworthiness should be understood as a process rather than an event, and continuous effort should make it possible to achieve continuous improvement. Municipalities seeking to improve their creditworthiness should therefore draw up a plan which systematically addresses any weaknesses. The following points are an outline of the steps which will generally be necessary:

- **Understand your starting point:** a municipality should start with an assessment of its starting point. It could appoint an internal team to assess strengths, weaknesses and challenges, or if necessary use a shadow credit rating process.
- **Be clear on objectives,** which should be realistic but not unduly pessimistic.
- **Develop initiatives to address problem areas,** prioritising by focusing on enhancing income and reducing expenditures. Think broadly about the alternative service delivery methods, alternative organizational structures, different revenue sources, more efficient procurement

processes, better staff appointment procedures, downsizing and outsourcing, and anything that may improve services, increase revenues and reduce costs. Simply applying budget cuts across the board is unlikely (on its own) to be of much long term value.

- **Compile an action plan** from the chosen initiatives: for each issue, specify what must be done or the outcomes required, timeframes and targets, and responsibilities and monitoring arrangements.
- **Allocate the capacity and resources required:** any management initiative requires resources. Care should be taken to ensure that efforts to improve creditworthiness are not handicapped by inadequate resources and capacity.
- **Implement the plan effectively** by measures such as ensuring that the municipal manager is the champion, that the executive management team is fully committed to the plan and collectively monitors progress every month; that all constraints and blockages are immediately resolved at the highest level; and by periodically assessing and adjusting the plan if necessary.

Plans to improve creditworthiness can be relatively focused, if the issues to be addressed are relatively limited. Even in this case, a systematic approach along the lines suggested above will be beneficial.

For cases where a substantial administrative and financial turnaround is required, the following is an outline of a Turnaround Charter which can be used by municipalities to develop an appropriate restructuring plan for their municipality:

Objectives

- Balance competing demands for investments from the economy, maintenance and expansion of services to formal areas, and expansion of services to poor and informal settlements
- Reduce current deficit (raise capacity to match costs with available revenues and needs)
- Raise capacity to raise private funding

Interdependencies and Integration points

- Dedication and commitment by the Management Team to the turnaround
- Availability of funds to manage the turnaround
- Full and continued engagement of key stakeholders
- Ministry playing a facilitative and supportive role
- Regular information sessions with residents to manage perceptions
- On time communication

Key Performance Areas

- Revenue increases
- Expenditure reduction
- Tight overall management
- Organisational changes

- Improved service delivery
- Political support and public management

Outcomes (3 years)

- Aligned organisational structure
- New service delivery methods and agreements including water and electricity
- Reductions in expenditure
- Stable and productive workforce that is affordable
- Deficit replaced by surplus
- Improved credit rating
- Satisfaction with implementation of the turnaround plan

Critical Success Factors

- Improvement in revenue flows in the short term
- Efficiency gains as a result of demonstrable quick wins –high impact areas
- Stable environment and political buy in – all stakeholders speaking the same language
- Careful management of employee implications
- Improved staff morale
- Flexibility in reviewing legislation where necessary

Periodic credit ratings can be used to supplement internal assessments of the progress of the municipality on the turnaround plan.

In due course it should be possible for the municipality to enhance its credit rating sufficiently to expect that reasonably affordable debt financing can be obtained for infrastructure investment.

PART 2: BORROWING AND MANAGING DEBT

8. The purpose of borrowing: developing a capital investment plan

The potential advantages, costs and risks associated with borrowing to fund municipal infrastructure were discussed in Part 1.

The service delivery challenges facing municipalities require them to carefully consider issues such as the following:

- What is the long term requirement for service delivery, per service?
- What projects and costs will be required to meet that demand?
- What capacity will be required to implement these projects?
- How can the projects be financed (government grants, own saved resources, borrowed funds)?
- Can the municipality afford to debt-finance the infrastructure?
- Can the municipality afford to delay priority projects?

The interest costs of borrowing are high enough to make it essential that municipalities that borrow should use their borrowed funds on priority infrastructure. Unwise investment decisions can burden the municipality and with interest costs for no good reason, and negate the main advantages of borrowing for municipal infrastructure

It is therefore important to carefully and systematically assess which capital programmes and projects are in fact important and urgent enough to justify to funding with debt.

Because not everything can be done at once, municipalities need to clarify for themselves what their service delivery priorities are (importantly, discuss service standards), which projects will address these priorities and standards, and how the projects should therefore be sequenced. Further, their decisions should be informed by expected project costs, and how the projects are to be funded. In short, municipalities should develop a capital investment plan.

A capital investment plan is a systematic attempt to estimate

- the service delivery challenges facing the municipality, and how they are growing; and
- the priority investments (projects) now which will meet service delivery challenges in future
- realistic project costs
- appropriate sequencing of projects/investments over time

A capital investment plan is a necessary management tool for any public entity or municipality that is managing capital projects, among other reasons because it allows the municipality to fund the plan programmatically, rather than on a project by project basis. Capital investment plans are therefore very useful to show to potential lenders.

Capital investments plans start by developing a long range forecast of capital infrastructure requirements, based on research and data analysis (population growth, income distribution and

economic growth, preferred levels of service, existing and projected infrastructure backlogs, and unit cost of service infrastructure). This makes it possible to provide a broad & long range estimate of the fiscal implications of service delivery needs (i.e. an estimate of capital spending requirements per function, rather than an identification of specific projects).

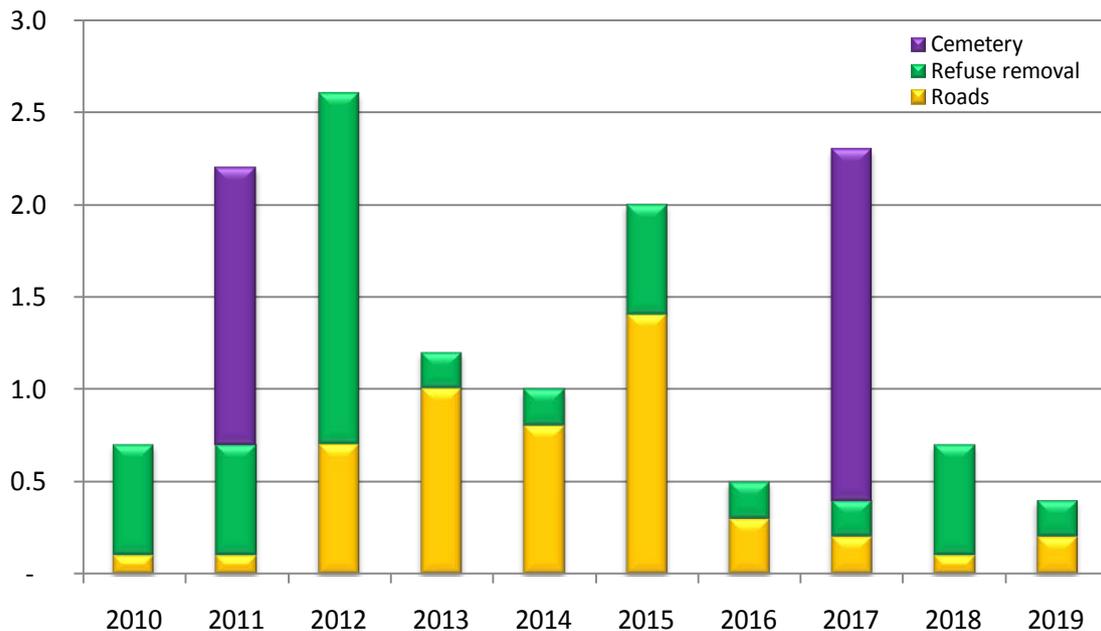
Some preliminary investment strategy targets will then need to be set. These could take the form of the following examples:

- Upgrading of 75% of roads by 2020
- reduce number of poor quality roads to 25% of total local network by 2020
- 60% of waste properly disposed of in landfill by 2020
- ensure adequate cemetery space for 60% of expected local deaths by 2020

Thereafter it will be necessary to develop outlines of projects which could meet the service delivery requirements, estimate the cost of the projects, and sequence them in a way which could achieve the targets. By taking a ten year perspective, the plan should attempt to avoid overspending (or spending too early) on some services and not spending enough (or spending too late) on others.

Consider a hypothetical example, illustrated below, in which the municipality seeks to address backlogs and service delivery deficiencies in roads, refuse removal and cemetery services. Having assessed the situation, two large projects are regarded as urgent, namely expanding the cemetery to provide additional space for local requirements; and building a proper landfill site for refuse collected. But a major road programme is also required; as are refuse trucks, and legal and other preparations mean that the cemetery expansion and the landfill cannot happen in the first year. Also, the cemetery expansion can only be a holding action, since the projections suggest that by 2017 an entirely new cemetery site will be needed.

Such a municipality might come up with an initial version of its capital investment plan along the following lines (illustrated below): it will buy one refuse truck (E0.5m) and build one sidewalk along its roads (E0.1m) in each of the first two years. In the second year it also attends to the overdue cemetery expansion costing E2.0 m. By the third year (2010) substantial spending is envisaged on the new landfill, and E1.0 m is spent on what is envisaged as a four year (i.e. to 2015) programme of major road works. After completing the landfill, capital spending on refuse removal diminishes to merely buying some more skips each year, though in 2015 another refuse truck is predicted to be required. During this period the road works dominate the capital programme, but by 2017 the projections suggest the new cemetery site will be needed. After this the necessary spending diminishes, though a final refuse truck will be required in around 2018.



The first time such a plan is drawn up it will tend to be (and should be) based needs or requirements: backlogs, current and projected. But clearly this must be an iterative process. Potential sources of funding and affordability considerations must be taken into account, project management capacity confirmed, project cost estimates improved and made more detailed; and financing arrangements considered. In the light of new information, priorities may be re-assessed, and targets amended.

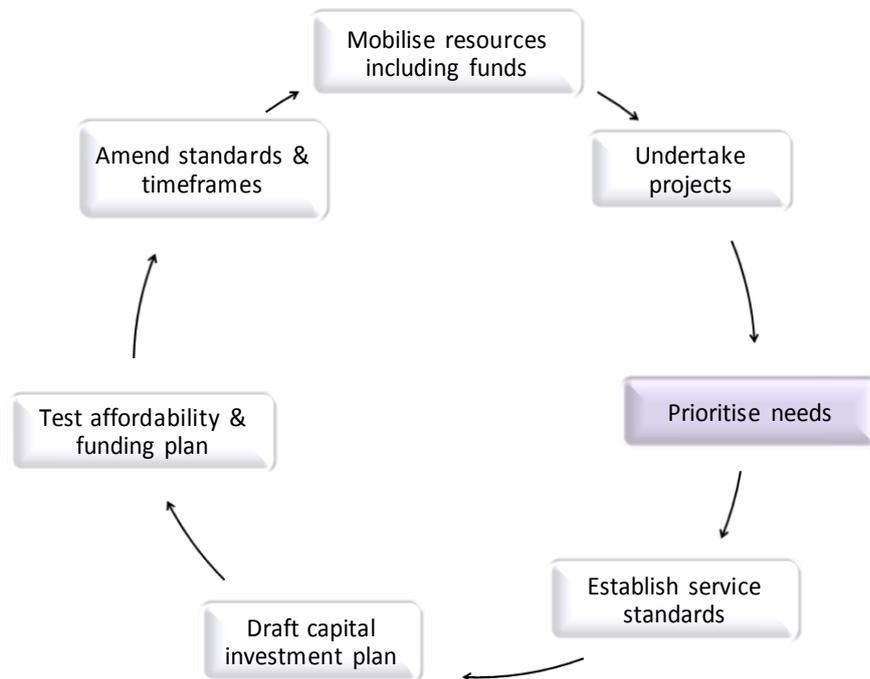
This is not an abstract modeling exercise but a systematic decision-making process which if well managed should combine hard information on service delivery requirements, project costs and affordability with social and political judgments on priorities and urgency. Although municipalities may obtain assistance for the more technical aspects, the work involved in doing should be empowering for all involved and will stand the municipality in good stead in all its other work. In due course community consultation will be required, and discussions with other government agencies and departments, with business people and with lenders.

9. Funding the capital investment plan

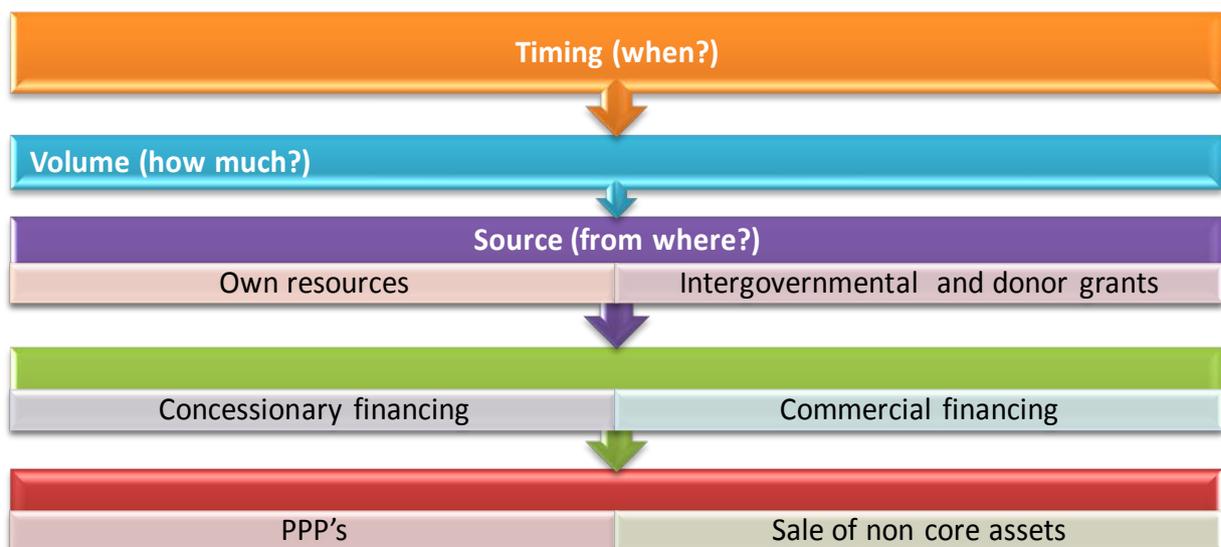
Once a municipality has developed a reasonably clear and affordable capital investment plan, this should be tested against the potential funding sources and funding structures, to determine the most appropriate funding strategy. The capital investment plan should not be finalised until its funding implications have been tested and found acceptable.

For example, the relationship between the structure of the debt and the timing of capital projects is an important matter. The municipality must have funds available when required but should receive a loan, on which interest is paid, which then sits idle in the municipal bank account. The funding plan should be that the capital programme is never without funds, but without incurring any such 'negative arbitrage'.

The funding plan therefore fits into the planning and budgeting cycle as illustrated below and should not be seen as an afterthought.



The funding plan should therefore specify the amount of funding required, its timing, and its potential sources. The following diagram illustrates some possible funding sources, of which commercial borrowing is only one. A typical funding plan will rely on several sources of funding, including government capital grants.



In some cases municipalities can obtain loans from development banks, state banks, or even directly from government departments. The potential private or commercial lenders to municipalities

include commercial banks; contractual savings institutions such as pension fund and insurance companies; building societies, and private equity funds, and in some cases national wealth funds.

At this stage the municipality will have a clear capital investment plan and a realistic sense of the potential funding sources for the infrastructure required. Commercial borrowing may be envisaged as one of the funding sources. In this case, it is important to understand something of the kinds of debt instruments that are likely to be available to municipalities.

10. Understanding debt instruments: bonds and loans

There are two main forms of debt instruments that a borrowing municipality will need to consider, namely loans and bonds.

The characteristics of a typical loan agreement are the following

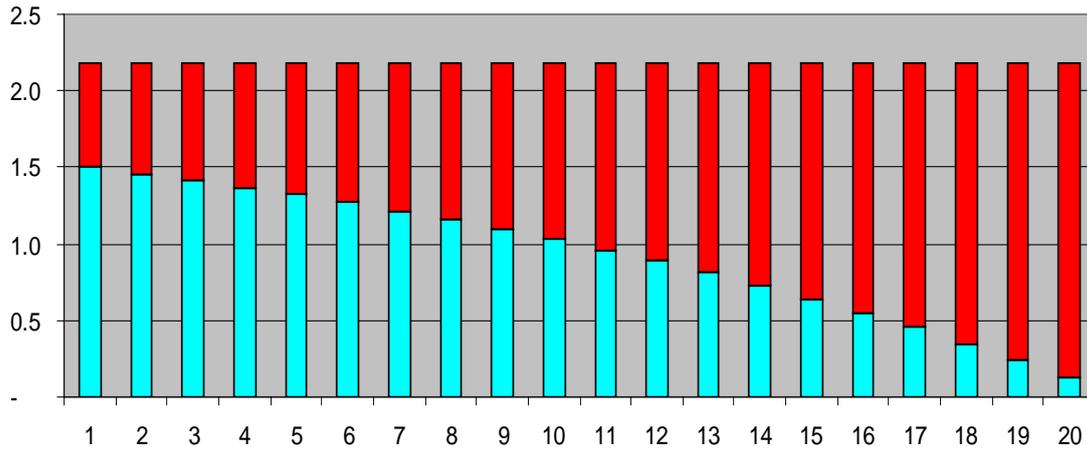
- Tailor-made loan agreement which is not readily tradable, so liquidity premium is high
- No penalty for size and/or irregularity
- Can be fixed or variable interest rate
- Interest rate risk carried by borrower
- Normally amortizing
- Normally done on basis of issuing a RFP
- Mostly financed by banks

Bonds are somewhat different:

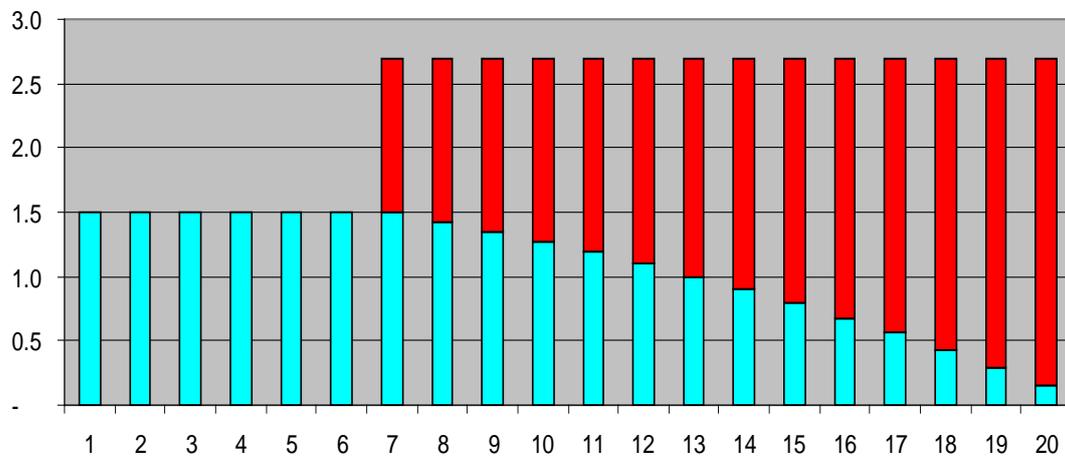
- Highly tradable and therefore a small liquidity premium
- Requires critical mass with time and size
- Normally fixed coupon
- Interest rate risk carried by lender
- Normally bullet repayment
- Initial prospectus costs high
- Administratively cheap
- Normally underwritten by contractual savings institutions

To illustrate the differences in structure referred to above, consider a municipality which borrows E25 m over 10 years at a 12% interest rate where two payments are made per year (i.e. 20 payments in all).

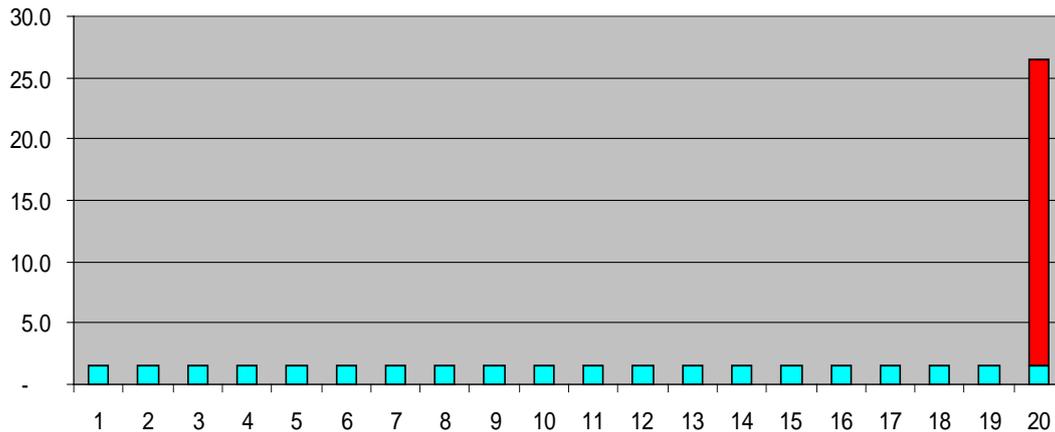
If an amortizing debt structure is chosen, as it usual for loans, the municipality will make 20 equal payments of 2.18 million, i.e. E4.36 million per year for ten years. At the end of this the original E25m will have been repaid, together with R18.6m of interest with the following profile (the red represents the capital portion, and blue the interest).



Sometimes an amortizing loan includes a capital repayment 'holiday', in terms of which no repayments are made on the capital amount for an initial period. This may assist the borrower because the first six payments are more affordable, but since interest is charged on the capital amount outstanding, the delay in repaying the capital implies higher interest costs. In the example below, no capital payments are made for the first three years, so debt service charges are only E3.0m per year in that period. Thereafter the capital amount begins to be paid off, in a normal amortising way, and annual debt service payments rise to over R5.2 m per year. By the end of the term of the loan, total interest paid has amounted to R21.7 million.



Finally, if the municipality prefers a structure where the capital amount is repaid in a single 'bullet' payment at the end of the term of the loan, as is usual for bonds, it will make 19 payments of only E1.5 m each, i.e. E3.0 m per year, but the last payment will be R26.5 m. The total interest paid in this case is E30 m, so although the loan is more affordable on an annual basis for almost all of the term, it does costs more in interest because the outstanding capital amount, on which interest is paid, remains the original capital amount right to the end.



Having worked on the capital investment plan and the funding plan, and having made some decisions regarding the type of commercial funding required, municipalities are now in a position to prepare to approach the capital markets to raise the loan.

11. The prospectus, presentations and road shows

This section deals with how to approach the capital market for the first time. Municipalities can and should seek assistance with especially this phase if their internal skills are insufficient. Nevertheless fundamentally it is the municipality who must present itself to the potential lenders, as only the municipality can in fact bind itself into any kind of borrowing agreement.

Having decided upon the capital investment plan it wishes to implement, and a funding strategy which supports it, the municipality will need to introduce itself to potential investors and lenders. It does this drawing up appropriate documentation, and then making presentations to potential investors in what is sometimes referred to as a road show. Many municipalities will seek some specialised assistance with this phase in the process of raising the loan.

The documentation required will generally include a formal prospectus or information memorandum about the municipality and its intentions. The purpose of this is to provide information about the municipality which may not be known or readily available to a potential lender. It should include at least the following:

- General information and history of the town and municipality
- Demographic profile and rates of growth
- Economic base, profile and prospects
- Service delivery mandate of the municipality
- Legal and regulatory framework, including authority to borrow
- Information on the executive and political management team
- Service delivery challenges and service delivery approach
- Municipal strategy and action plan
- Financial and credit rating history

- Medium term operational budget forecasts
- Capital investment plan
- Projected financial implications

Such material assembled in one document goes a long way to overcoming generalisations and prejudices regarding municipalities. Since many potential investors will in fact know relatively little about how municipalities work, an information memorandum of this nature allows investment grade municipalities to effectively set themselves apart from the generalisations.

The work involved in assembling the documentation is, again, itself an empowering process. Provided it was conscientiously done, municipalities which have prepared a capital investment plan will find that much of the content of the material required for the information memorandum is already available. Moreover, the work involved in ensuring that the document is self-consistent will quickly highlight management issues requiring attention, and will prepare municipal leadership better for its encounters with potential lenders. No plan is perfect, but what the investors seek is an acknowledgement of challenges, a plan to deal with them, and confidence in the capacity of the municipal leadership to implement it.

A credit rating report is an independent view of the creditworthiness of the municipality, and serves a different purpose to the information memorandum as outlined above. The information memorandum is municipality's representation of itself to potential investors and lenders, and credit rating reports and audited financial statements are appended as supporting documents.

Having prepared an information memorandum, the municipality should undertake a series of visits to potential lenders and investors. This 'road show' is intended to:

- introducing the new entrant to the market
- initiate relationship building
- inform potential investors about the particularities of the sector
- establish potential market appetite for the municipal debt
- establish what term, instrument and other features (collateral, credit enhancements, etc) would be appropriate to achieve desired certain indicative prices)

In some cases a new issuer may conduct several road shows over a substantial period before feeling ready to launch the debt issue itself.

12. The request for proposals, choosing the best offer, and closing the deal

The road show will probably have suggested some changes to initial thinking regarding the form of debt to be raised (loan, bond, structuring, term, which of the conditions and enhancements sought by potential lenders should be accommodated, etc). After making amendments in the light of this feedback, the municipality is ready to seek the debt finance itself.

In the case of a loan, a formal request for proposals (RFP) is prepared: a short document setting out the funding required and requesting loan proposals. For a bond, a revised and updated prospectus may be issued, now incorporating additional contractual information such as terms, conditions and covenants of the bond issue.

After completion of the necessary documentation, a further road show is advisable. It is common practice to hold this road show about 14 days before the closing dates for proposals solicited in terms of the RFP's or when bonds will be issued.

A public bond issue will be decided on price alone and the adjudication process is fast and efficient (normally dealt with within 10 minutes of closing).

The adjudication of the responses to a request for proposals is often more complex. Experience has shown that commercial banks and other financial institutions seldom make offers which are exactly in line with the original request and instead offer different variables in terms of interest rates, fee structures, additional services, and so on.

This requires a thorough analysis of the different options. A good practice to follow is to only take the base cases into account when adjudicating. Variations are then negotiated only with the preferred and successful bidder.

It hardly needs mentioning the bond auction and RFP processes as outlined above must take place within the framework of law and regulations applicable to municipalities.

After obtaining any necessary approvals from higher authorities, financial closure can take place.

13. Managing and repaying debt

Achieving financial closure on a new debt financing agreement is a milestone, but it is in fact only the beginning of the relationship between the lender and the borrower. That relationship will last at least as long as the term of the loan, and even longer if further loans are obtained in the future. It is governed by law and by agreement, and is an institution-to-institution relationship, in that the individuals involved may move on but the relationship and commitment remains.

Debt management is administratively relatively simple. It involves knowing the payments required per year over life of the loan, budgeting for the repayments every year, making the payments in full on the due dates, and keeping full records and documentation on all transactions. The administrative capacity required for this clearly depends on the number of loan agreements being maintained, but for small or medium municipalities it will seldom be more than a part-time job for an appropriately skilled individual.

Far more important are the commitments and promises involved managing debt, and on this no mistakes should be made. Having promised to pay make payments on time and in full, the creditworthiness of a municipality will slip immediately it fails to honor that commitment. When

making this promise, the credibility of the municipality, as represented by the mayor, the municipal manager and the treasurer, is on the line.

The municipal borrower should therefore ensure that nothing will prevent it from meeting its commitments in terms of the loan agreement. This will mean ensuring that audited financial statements are available on time each year; that key financial ratios are maintained; that debt service payments are protected when budget are under pressure, and any other features of the loan agreement or bond covenants. Most of all, the loan agreement is a commitment to ensure that the municipality is financially well-managed, so that sustainable annual operating surpluses are achieved in order to provide for debt service payments.

Moreover, the municipality should invest effort and resources in maintaining the relationship with its lenders. Regular road shows are a good practise not only for new entrants to the market but also for established borrowers. Road shows enhance ongoing communication, strengthen relationships, and provide opportunities to explain any recent developments.

14. Conclusion

This handbook covers a substantial field in just a few pages. Although one should not overcomplicate things – at the end of the day we are only talking about borrowing prudently – there is clearly much more to say about each of the different areas touched upon.

Nevertheless, it is hoped that, for those municipalities which are considering borrowing to fund part of their capital infrastructure programme, this material will be useful as a general guide to the issues which should be considered.