

The Municipal Credit Market in South Africa

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Abstract

South African municipalities today face enormous challenges. They are faced with severe infrastructure backlogs, increased service provision and deteriorating municipal finance. These services, which include water, sanitation, electricity and waste disposal are essential to the basic needs of all citizens in South Africa, and contribute greatly to local economic development. Municipalities lack the necessary revenue to supply these essential services, or the necessary infrastructure to support these services. Because of this, and in order not to cause further deterioration of municipal service provision, additional infrastructure investment for municipalities in South Africa is needed, and fast.

Additional investment can come from various sources, but government's ultimate goal is to see private finance or private capital, flow to the municipal sector. This can be achieved either through issuing municipal bonds, or by providing bank loans to municipalities. Previously (before 1994), South Africa still had a municipal bond market, and both of these instruments traded, but currently the composition of debt is changing. Securities debt remains to decrease, while loan debt increases continuously – a principle, which is inconsistent with that which government wishes to achieve at this stage. The residual credit market in South Africa is largely an intermediate one, with banks and other financial intermediaries holding most loans. Government wishes to see this market supplemented by the development and expansion of a securities market, or a “bond model” that lowers the cost of capital to the municipal sector.

This market will imply that municipalities (usually the larger ones) issue debt in the form of bonds, which will then trade in the secondary market. To encourage this, government in South Africa designed the main elements of a municipal debt market necessary to support such a framework. This framework supports the direct access of municipalities to the municipal bond market, rather than the indirect access by intermediaries, which is currently the case. The two intermediaries currently operating in South Africa is INCA – a private sector intermediary, and the DBSA – a public sector intermediary. Together these two market players hold more than half of all municipal debt in South Africa.

In supporting a market where direct capital market access is achievable, or where municipalities issue municipal bonds, a few essential things have to be in place first. This becomes obvious when one considers the underlying strengths of the United States municipal bond market, which makes use of the direct access method or municipal bond issuance. One of the most important market strengths of the United States is the fact that U.S. municipalities, unlike most municipalities in South Africa, are creditworthy. This creditworthiness can mainly be ascribed to three things, (i) adequate revenue that supports borrowing, (ii) reliable financial information, which is necessary for public disclosure, and (iii) proper credit ratings. All three these elements are important to ensure municipal creditworthiness. South Africa faces enormous constraints on all three these elements. Firstly, South African

municipalities do not have adequate revenue to support borrowing, mainly due to debt outstanding, and revenue collection problems. Secondly, the financial information of most municipalities in South Africa – which is imperative for public disclosure - is usually absent, late or unreliable, and thirdly, only five municipalities in South Africa currently reported having credit. The creditworthiness of most municipalities in South Africa seems to be the greatest obstacle in the way of municipal bond market development.

If South Africa wishes to achieve successful and efficient ways to aid the re-emergence of the municipal bond market, it would have to reduce the credit risk of most municipalities. Municipalities can reduce credit risk by making use of certain credit enhancement mechanisms that will also provide additional investment. There are various forms of credit enhancement mechanisms available, which include government lending, government grants, government subsidies, and government guarantees, interception of intergovernmental transfers, municipal bond insurance, bank letters of credit, and making use of special purpose intermediaries. Many special purpose intermediaries do exist in the world today, which include anything from municipal development banks to bond banks. The United States successfully uses bond banks that give access to smaller, poorly rated municipalities via a process known as “bond pooling.” Bond pooling involves a concept where a number of small municipalities pool their issues together to create one large bond pool with numerous advantageous.

Although larger municipalities in South Africa would have no problem accessing the municipal bond market directly via bond issuance, smaller un-creditworthy municipalities would find it much more difficult to access the municipal bond market via bond issuance. One solution to the problem could be if the smaller poorly rated municipalities, makes use of a municipal bond bank similar to the municipal bond banks in the United States. The proposed bond bank, besides providing access assistance to smaller municipalities could also provide certain technical assistance and training concerning the municipal bond market, bond issuance, the role of municipalities in this market, all the requirements necessary for municipalities to access this market effectively, and municipal creditworthiness.

Since the majority of municipalities in South Africa do not have the necessary requirements to access the capital market directly, and secondly, since this direct access method would solve the problem of only a few exceptional municipalities in South Africa, the government proposed framework seems ineffective. One solution could be if the South African government instead of making use of municipal bond issuance uses an intermediary like the bond bank to access additional finance. Although this would be indirect contrast with that, which government wishes to achieve it could be the only solution in re-activating or stimulating the municipal bond market.

Opsomming

Munisipaliteite in Suid-Afrika het verskeie nuwe uitdagings. Hulle word gekonfronteer met infrastruktuur agerstande en die regering verwag van munisipaliteite om 'n groter hoeveelheid munisipale dienste te verskaf. Tesame met dit alles, ervaar die meeste munisipaliteite in ons land vandag groot finansiële druk, en hulle sukkel om kop bo water te hou. Munisipale diensverskaffing sluit in water-, sanitasie-, en elektrisiteitsvoorsiening, asook rommel verwydering. Al hierdie dienste dra by tot die ontwikkeling van die plaaslike ekonomie, en alle Suid Afrikaners is afhanklik van hierdie basiese dienste vir oorlewing.

Een groot probleem rakende die bogenoemde situasie is dat munisipaliteite vandag glad nie in staat daartoe is om hierdie basiese dienste, en die infrastruktuur wat hierdie dienste ondersteun te verskaf nie. Die rede hiervoor is a.g.v. 'n tekort aan finansiering. Dit is uiters noodsaaklik vir Suid-Afrikaanse munisipaliteite om so spoedig moontlik addisionele finansiering vir infrastruktuur doeleindes te verkry.

Alhoewel addisionele finansiering vir infrastruktuur doeleindes vanaf verskeie bronne verkry kan word, is dit die regering se uiteindelike doelwit om te verseker en toe te sien dat private kapitaal na die munisipale sektor sal vloei. Dit kan op twee maniere geskied, (i) munisipaliteite kan of munisipale effekte uitreik, of (ii) munisipaliteite kan banklenings aangaan. Voor 1994 het Suid-Afrikaanse munisipaliteite gebruik gemaak van beide hierdie metodes en daar het 'n suksesvolle munisipale mark vir munisipale effekte bestaan.

Tans verander die munisipale krediet verhouding. Die verhandeling van sekuriteite soos munisipale effekte is konstant besig om af te neem, terwyl lenings bly toeneem – 'n beginsel wat heeltemal teenstrydig is met dit wat die Suid-Afrikaanse regering beoog. Dit het tot gevolg dat die huidige krediet mark in Suid Afrika grootliks 'n indirekte mark is waar banke en ander finansiële instansies meeste lenings besit. Die regering hoop om hierdie mark vervang te sien met die ontwikkeling en uitbreiding van 'n sekuriteite mark, of 'n munisipale effekte mark, wat bestaan uit die uitgifte van munisipale effekte deur munisipaliteite - hoofsaaklik die groteres. Dit sal tot gevolg hê dat hierdie sogenaamde munisipale effekte ook dan later in die sekondêre mark sal verhandel.

Om hierdie mark te ondersteun het die Suid-Afrikaanse regering 'n raamwerk saamgestel wat al hierdie elemente bevat. Hierdie raamwerk ondersteun die direkte toegangsmetode van munisipaliteite tot die munisipale effekte mark eerder as die indirekte toegangsmetode deur finansiële tussengangers soos INCA en die DBSA wat tans die geval is, en verantwoordelik is vir die besit van meer as die helfte van munisipale krediet in Suid Afrika.

Voordat direkte mark toegang verkry kan word, of voordat munisipaliteite wel munisipale effekte uitreik, moet daar eers 'n paar vereistes in plek wees. Dit word duidelik wanneer daar gekyk word na die onderliggende sterktes wat bydra tot die sukses van die Amerikaanse munisipale effekte mark wat gebruik maak van die direkte toegang

metode of die “munisipale effekte uitgifte beginsel. Een van die belangrikste eienskappe van die Amerikaanse mark is die feit dat die meerderheid Amerikaanse munisipaliteite - anders as die meeste Suid Afrikaanse munisipaliteite - krediewaardig is. Hierdie kredietwaardigheid kan toegeskryf word aan drie dinge nl. (i) munisipaliteite moet oor genoegsame inkomste beskik, (ii) munisipaliteite moet die nodige finansiële inligting verskaf, en (iii) munisipaliteite moet gegradeer wees in terme van kredietwaardigheid. Al drie hierdie elemente is nodig om te verseker dat munisipaliteite kredietwaardig is.

Dit is hier waar Suid-Afrikaanse munisipaliteite probleme ondervind. Eerstens beskik Suid-Afrikaanse munisipaliteite nie oor genoegsame inkomste om die lenings te ondersteun nie. Dit kan toegeskryf word aan die probleme wat Suid Afrikaanse munisipaliteite ondervind met die invordering van inkomstes, en die groot hoeveelheid skuld uitstaande. Tweedens die finansiële inligting van Suid-Afrikaanse munisipaliteite, wat nodig is vir publieke openbarmaking is gewoonlik afwesig, laat of nie betroubaar nie, en derdens is daar slegs vyf munisipaliteite in die hele Suid Afrika wat tans oor krediet graderings beskik. Suid-Afrikaanse munisipaliteite skied te kort aan al drie hierdie vereistes en die lae kredietwaardigheid van munisipaliteite wat voortspruit as gevolg hiervan blyk om die grootste beperking te wees tot die ontwikkeling van ‘n munisipale effekte mark. Indien Suid-Afrika ernstig is om hierdie munisipale effekte mark tot stand te bring, is dit uiters noodsaaklik om eers hierdie probleem aan te spreek.

Hierdie problem kan opgelos word met behulp van die verlaging van munisipale krediet risiko’s. Die krediet risiko van munisipaliteite kan verlaag word deur gebruik te maak van sekere krediet verbeterings metodes, wat ook addisionele finansiering sal meebring. Verskeie vorme van krediet verbeterings meganismes kom voor, en sluit in, lenings vanaf die staat, staat subsidies, staats waarborge, versekering van munisipale effekte, die gebruikmaking van tussengangers, en vele ander. Baie sulke tussengangers kom vandag voor in verskeie plekke regoor die wêreld, maar die belangrikste tussenganger vir die doeleindes van hierdie studie is die sogenaamde “bond bank.” Amerika gebruik hierdie tussenganger al vir ‘n geruime tyd met groot sukses. Die “bond bank” verskaf toegang aan kleiner, swak gradeerde munisipaliteite via a proses wat bekend staan as “bond pooling”.

Alhoewel groter munisipaliteite in Suid-Afrika makliker toegang tot die munisipale effekte mark via die direkte voorgestelde metode of via die uitgifte van munisipale effekte kan verkry, skep dit steeds ‘n problem vir kleiner munisipaliteite wat nie kredietwaardig is nie. Hierdie munisipaliteite sal dit uiters moeilik vind om die munisipale effekte mark te betree op die regering se voorgestelde manier van direkte toegang. Een manier om hierdie problem op te los kan wees deur gebruik te maak van ‘n tussenganger soos ‘n “municipal bond bank”. Hierdie voorgestelde “bond bank”, buiten om bystand te verleen aan kleiner munisipaliteite tot die toegang van die mark, kan ook sekere tegniese ondersteuning en onderig rakende die munisipale effekte mark, die uitgifte van hierdie betrokke sekuriteite, die rol van munisipaliteite in hierdie mark, kredietwaardigheid, en alle ander vereistes wat munisipaliteite benodig verskaf.

Aangesien die meerderheid munisipaliteite in Suid-Afrika nie oor die nodige vereistes beskik om direkte toegang tot die munisipale effekte mark te verkry nie, en aangesien hierdie metode slegs die probleem van slegs 'n paar munisipaliteite in Suid Afrika oplos, nie effektief genoeg is nie. Die regering sal dalk noodgedwonge moet kyk na 'n ander oplossing. Dit sal behels, die stimulering van 'n munisipale effekte mark waar munisipaliteite, instelle daarvan om gebruik te maak van uitgifte die mark sal betree via 'n tussenganger soortgelyk aan die "bond bank." Alhoewel die voorstel van hierdie studie op die oog af teenstrydig is met dit wat die regering beoog, blyk dit dat hierdie voorstel Suid-Afrika se enigste hoop mag wees in die stimulering en reaktivering van die munisipale effekte mark.

Index

Chapter 1

Introduction and Problem Statement

<i>1.1. Introduction</i>	<i>1</i>
<i>1.2. Problem Statement</i>	<i>6</i>
<i>1.3. Objectives of Research</i>	<i>6</i>
<i>1.4 Importance of the Research</i>	<i>7</i>
<i>1.5. Methodology</i>	<i>8</i>
<i>1.6. Chapter Exposition</i>	<i>9</i>
<i>1.7. Problems Experienced</i>	<i>9</i>
<i>1.8. Important Definitions</i>	<i>10</i>
<i>1.9. An Additional Note on the Terminology of This Study</i>	<i>12</i>

Chapter 2

Bonds, Municipal Bonds and the Municipal Bond Market of the United States

<i>2.1. Introduction</i>	<i>13</i>
<i>2.2. Bonds</i>	<i>14</i>
<i>2.2.1. Bond Definition</i>	<i>14</i>
<i>2.2.2. Bond Description and Price Information</i>	<i>14</i>
<i>2.2.3. Types of Bonds in the United States</i>	<i>15</i>
<i>2.2.3.1. Government Securities</i>	<i>15</i>

2.2.3.2. <i>Corporate Bonds</i>	15
2.2.3.3. <i>Municipal Bonds</i>	15
2.2.4. <i>Types of Bonds in South Africa</i>	16
2.2.4.1. <i>Government Bonds</i>	16
2.2.4.2. <i>Corporate Bonds</i>	16
2.2.4.3. <i>Parastatal and Water Authorities Bonds</i>	17
2.2.4.4. <i>Municipal Bonds</i>	17
2.2.5. <i>Bond Investments</i>	17
2.2.5.1. <i>Advantages of Bond Investments</i>	18
2.2.5.2. <i>Key Bond Investment Considerations</i>	19
2.2.5.2.1. <i>Interest Rates</i>	19
2.2.5.2.2. <i>Maturity</i>	19
2.2.5.2.3. <i>Redemption Features</i>	20
2.2.5.2.4. <i>Credit Quality and Credit Ratings</i>	20
2.2.5.2.5. <i>Price</i>	22
2.2.5.2.6. <i>Yield</i>	22
2.2.5.2.7. <i>The Relationship between Price and Yield</i>	23
2.2.5.2.8. <i>The Relationship between Interest Rates and Maturity</i>	26
2.2.5.2.9. <i>Tax Status</i>	27
2.2.5.2.10. <i>Risk Involvement</i>	28
2.2.5.3. <i>Bond Categories</i>	28
2.2.5.3.1. <i>How Bonds Are Backed Up</i>	28
2.2.5.3.2. <i>Bonds with Conditions</i>	29
2.2.5.3.3. <i>Popular Innovations</i>	30
2.2.5.3.4. <i>Bonds with Special Investment Features</i>	31
2.2.5.3.5. <i>Other Investment Options</i>	32
2.2.5.3.6. <i>Fundamental Investment Strategies</i>	34
2.3. <i>Municipal Bonds</i>	35
2.3.1. <i>Municipal Bond Definition</i>	35
2.3.2. <i>Municipal Bond Description and Price Information</i>	35
2.3.3. <i>Types of Municipal Bonds</i>	36
2.3.3.1. <i>General Obligation Bonds</i>	36

2.3.3.2. Revenue Bonds	36
2.3.3.3. Hybrid and Special Bond Securities	37
2.3.4. Municipal Bond Investments	38
2.3.4.1. The Advantages of Municipal Bond Investments	38
2.3.4.2. Key Municipal Bond Investment Considerations	38
2.3.4.2.1. Interest Rates	38
2.3.4.2.2. Maturity	39
2.3.4.2.3. Redemption Features	39
2.3.4.2.4. Credit Quality and Credit Rating	39
2.3.4.2.5. Price	41
2.3.4.2.6. Yield	42
2.3.4.2.7. Relationship between Price and Yield	42
2.3.4.2.8. Relationship between Interest Rate and Maturity	43
2.3.4.2.9. Tax Status	44
2.3.4.2.10. Risk Involvement	47
2.3.4.3. Additional Features of Municipal Bonds	49
2.3.4.3.1. Serial and Term Bonds	49
2.3.4.3.2. Collecting the Interest	50
2.3.4.3.3. Trading plus Accrued Interest	50
2.3.4.3.4. Official Statement	50
2.3.4.4.5. Sinking Funds	51
2.4. The Municipal Bond Market In The United States	51
2.4.1. The Size of the Market	51
2.4.2. The Municipal Bond Market Structure	52
2.4.3. The Role-Players in the Municipal Bond Market	54
2.4.3.1. The Issuer	54
2.4.3.2. Municipal Bond Dealers	55
2.4.3.3. Bond Brokers	57
2.4.3.4. The Legal Participants	58
2.4.3.5. Financial Advisors, Specialists, and Other Consultants	58

2.4.3.6. The Trustees and Paying Agents	59
2.4.3.7. The Investors	59
2.4.3.8. The Regulators	60
2.4.3.9. Other Participants	60
2.4.4. Framework for Assessing Municipal Bond Market Development	
<i>Based On the U.S. Model</i>	61
2.5. Summary	64

Chapter 3

Municipal Borrowing in South Africa

3.1. Introduction	65
3.2. The Municipal Bond Model	66
3.3. The Municipal Lending Model	67
3.4. Local Government Financial Intermediaries in South Africa	70
3.4.1. The Infrastructure Finance Corporation of South Africa (INCA)	73
3.4.1.1. Definition and Brief History of INCA	73
3.4.1.2. Objectives of INCA	74
3.4.1.3. Funding Sources	75
3.4.1.4. Credit Assessment	76
3.4.2. The Development Bank of South Africa (DBSA)	77
3.4.2.1. Definition and Brief History of the DBSA	77
3.4.2.2. Objectives of the DBSA	78
3.4.2.3. Funding Sources	79
3.4.2.4. The Role of the DBSA Regarding Municipal Borrowing	80

3.5. Evaluation of the Two Models for Municipal Lending in South Africa	82
3.6. The Municipal Bond Model or the Municipal Lending Model for South Africa?	83
3.7. The Bond Market of South Africa	86
3.7.1. An Introduction	86
3.7.2. The Mechanics of the Bond Market	86
3.7.3. The Bond Exchange of South Africa	88
3.8. Municipal Bonds in South Africa	90
3.8.1. Municipal Bond Definition	90
3.8.2. Type of Municipal Bonds or Debt Proposed for South Africa	91
3.8.3. Municipal Bond Tax Status in South Africa	92
3.9. Possible Characteristics of the Municipal Bond Market in South Africa	94
3.9.1. The Role Players in the South African Municipal Bond Market	94
3.9.2. The Size of the Market	95
3.9.3. The Municipal Bond Market Structure	95
3.9.3.1. The Issuer	96
3.9.3.1.1. Debt Issuance in South Africa	96
3.9.3.1.2. Powers to Issue Debt	97
3.9.3.1.3. The Purpose of Long-Term Debt to be issued in South Africa	97
3.9.3.1.4. The Quantum of Debt to be Issued in South Africa	98
3.9.3.2. Other Market Players	98
3.9.3.3. The Rating Agencies	99
3.9.3.4. The Investors	100
3.9.3.5. The Regulators	100
3.9.3.6. Continuing Education	100

3.10. Summary	100
----------------------	------------

Chapter 4

The Municipal Bond Market in South Africa

4.1. Introduction	103
4.2. Municipal Finance and Municipal Borrowing during the Apartheid Regime	103
4.2.1. Local Government Structure and Municipal Finance (prior to 1994)	104
4.2.2. Characteristics of the Municipal Credit Market during the Apartheid Regime	104
4.3. Municipal Finance and Municipal Borrowing during Local Government Restructuring	105
4.3.1. Local Government Structure and Municipal Finance (1994-2000)	105
4.3.2. Characteristics of the Municipal Credit Market during the Restructuring Period	109
4.4. Municipal Finance and Municipal Borrowing (after 2000)	110
4.4.1. Local Government Structure and Municipal Finance (after 2000)	110
4.4.2. Characteristics of the Municipal Credit Market in South Africa (after 2000)	116
4.5. Favourable Conditions in the Development of a South African Municipal Bond Market	116
4.5.1. Governments Supportive Approach to Municipal Bond Market Development	117
4.5.2. Positive Economic Conditions in South Africa	119

4.6. The Greatest Obstacle in the Re-emergence of a Successful South African Municipal Bond Market	121
4.7. Reducing Municipal Credit Risk	124
4.7.1. Government Lending	124
4.7.2. Government Grants	124
4.7.3. Government Subsidies for Local Borrowing	125
4.7.4. Government Guarantees	126
4.7.5. Interception of Intergovernmental Transfers	126
4.7.6. Municipal Bond Insurance	127
4.7.7. Bank Letter of Credit	129
4.7.8. Structured Municipal Finance	129
4.7.9. Special Purpose Intermediaries	130
4.8. Bond Banks and Bond Pooling	131
4.8.1. Introduction	131
4.8.2. Bond Bank Definition	132
4.8.3. The Operation and Function of Bond Banks	132
4.8.4. Municipal Bond Bank Structure	135
4.8.5. The Advantages of Financing with Bond Banks	137
4.8.6. Municipalities That Benefit Most from Bond Bank Participation	140
4.9. Bond Banks in South Africa	141
4.9.1. Introduction	141

4.9.2. Possible Operation and Function of a Bond Bank in South Africa	142
4.9.3. Advantages South Africa Could Enjoy By Making Use of the Proposed Bond Bank	144
4.9.3.1. The Advantages Bond Banks Could Offer the Entire Market	144
4.10. Summary	146

Chapter 5

Conclusion

5.1. Introduction and Conclusion	147
5.2. Recommendations	150
5.3. Further Areas of Study	152

Bibliography

<i>Bibliography</i>	153
----------------------------	------------

List of Figures

Chapter 1

Introduction

<i>Figure 1.1: Total Budgeted Expenditure on Infrastructure</i>	<i>3</i>
--	-----------------

Chapter 2

Bonds, Municipal Bonds and the Municipal Bond Market in the United States

<i>Figure 2.1: Three Hypothetical Yield Curves</i>	<i>27</i>
<i>Figure 2.2: Yield Curve of Municipal Securities</i>	<i>43</i>
<i>Figure 2.3: Inverted Yield Curve - The Term Structure of Interest Rates for U.S. Treasury Securities</i>	<i>44</i>
<i>Figure 2.4: The Flow of Funds in the Primary Municipal Bond Market</i>	<i>53</i>

Chapter 3

Municipal Borrowing in South Africa

<i>Figure 3.1: Total Municipal Debt Outstanding (From 1997)</i>	<i>71</i>
<i>Figure 3.2: INCA and DBSA Loan Portfolio (From 1997)</i>	<i>71</i>
<i>Figure 3.3: Form of Municipal Debt</i>	<i>72</i>
<i>Figure 3.4: INCA and DBSA Loan Portfolio (From 2000)</i>	<i>73</i>
<i>Figure 3.5: The Main Elements of Government's Proposed Debt Market</i>	<i>84</i>

Chapter 4

The Municipal Bond Market in South Africa

<i>Figure 4.1: Outstanding Debtors as a Percentage of Annual Billing (1997-2000)</i>	<i>111</i>
<i>Figure 4.2: Revenue Collection Levies (1997-2000)</i>	<i>112</i>
<i>Figure 4.3: Revenue Collection in Selected Municipalities (2001-2002)</i>	<i>113</i>
<i>Figure 4.4: Revenue Collections in Selected Municipalities (2000-2005)</i>	<i>114</i>

Figure 4.5: A Bond Bank Focussed on the Credit Rating Effect

136

Figure 4.6: A Bond Bank Focused on the Size of the Debt Issue

137

List of Tables

Chapter 2

Bonds, Municipal Bonds and the Municipal Bond Market in the United States

<i>Table 2.1: Credit Ratings of Moody's, S & P's, and Fitch</i>	<i>21</i>
<i>Table 2.2: Yield to Maturity and Corresponding Prices For a Bond With a Nominal Value of R1 Million and Remaining Life Span of Four Years</i>	<i>25</i>
<i>Table 2.3: Tax-Exempt/Taxable Yield Equivalents Compared For the U.S. Tax Year (2002)</i>	<i>46</i>

Chapter 3

Municipal Borrowing in South Africa

<i>Table 3.1: An Example of BESA's Listed Products (2002-03)</i>	<i>88</i>
<i>Table 3.2: The Municipal Bond Listings of BESA</i>	<i>89</i>
<i>Table 3.3: The Meaning of All Bond Terms Used in Table 3.2</i>	<i>89</i>

Chapter 4

The Municipal Bond Market in South Africa

<i>Table 4.1: Outstanding Consumer Debtors (June 2002)</i>	<i>112</i>
<i>Table 4.2: Status Report from the Auditor General</i>	<i>115</i>
<i>Table 4.3: Borrowings by Category – Pilot Municipalities</i>	<i>116</i>

Chapter 1

Introduction and Problem Statement

1.1. Introduction

Economic development is critically depended on infrastructure. According to the World Bank: *“Infrastructure, represents if not the engine, then the ‘wheels’ of economic activity... Users demand infrastructure services not only for direct consumption, but also for raising their productivity by, for instance, reducing the time and effort needed to secure safe water, to bring crops to market, or to commute to work. Much research in recent years has been devoted to estimating the productivity of infrastructure investments, and studies attempting to link aggregate infrastructure spending to growth of gross domestic product show very high returns. What is evident, is that a strong association exists between the availability of certain infrastructure telecommunications (in particular) power, paved roads and access to safe water and per capita gross domestic product”* (IDC, 1997:14).

Investment in infrastructure also has important implications for economic growth, income distribution, and poverty alleviation, and municipalities can employ this investment as an important local economic development tool. According to a study that was done by the IDC (1997:14) the direct consequence of investing in infrastructure is the generation of jobs, income, and business opportunities, which can be targeted in favour of emerging enterprises and labour-intensive methods. The same study also indicated that the most relevant affect of sustainable growth - which has the longest lasting results seem to be the productivity enhancing impact. The following example will illustrate this productivity enhancing affect. A household that obtains an adequate supply of water will benefit from a sharp reduction in ill health, which in turn may lead to better school attendance, fewer days off work, and eventually a greater productivity at work. Lastly, this study indicated that through infrastructure investment, a municipality could influence where growth occurs, and thereby it could solve the infrastructure backlogs and inequalities in South Africa’s cities and towns. If invested wisely, infrastructure can benefit the local economy, but more importantly the economy of the country as a whole.

According to the Municipal Infrastructure Investment Framework (South Africa, 1996:6), there are three types of economic effects that result because of infrastructure provision. These effects, can be distinguished as direct, indirect and/or productivity improving effects.

The direct effects result because of the immediate employment and income-generating effects obtained through the provision of infrastructure. These effects are the greatest during the construction phase, but continue afterwards to some degree due to the need for operating and ongoing maintenance activities (South Africa, 1996:6).

The indirect effects arise due to the conventional multiplier effect of increased economic activity, whereby more employment, higher levels of income, and more demand within the construction sector lead to greater demand for other goods and services, thus stimulating economic growth. This effect will be strongest during the construction phase and will diminish as construction activity winds down. The magnitude of the effect is reduced to the extent where the additional demand is satisfied by imports, and that public-sector investment crowds out private investment (South Africa, 1996:6).

The productivity-improving effects are potentially the longest lasting, and are the most relevant to sustainable growth. Suitable infrastructure brings with it economic opportunities and lowers production costs, thereby rendering activities economically viable that were previously not so. For instance, the provision of a rural road may lower transport costs sufficiently to make production for sale a viable option, or the provision of electricity in an urban township may open up opportunities for home-based industries that had previously not existed. In addition, reducing the time it takes to fulfil basic household needs such as water, can release people, especially women, to perform other productive tasks, whether paid or unpaid (South Africa, 1996:6).

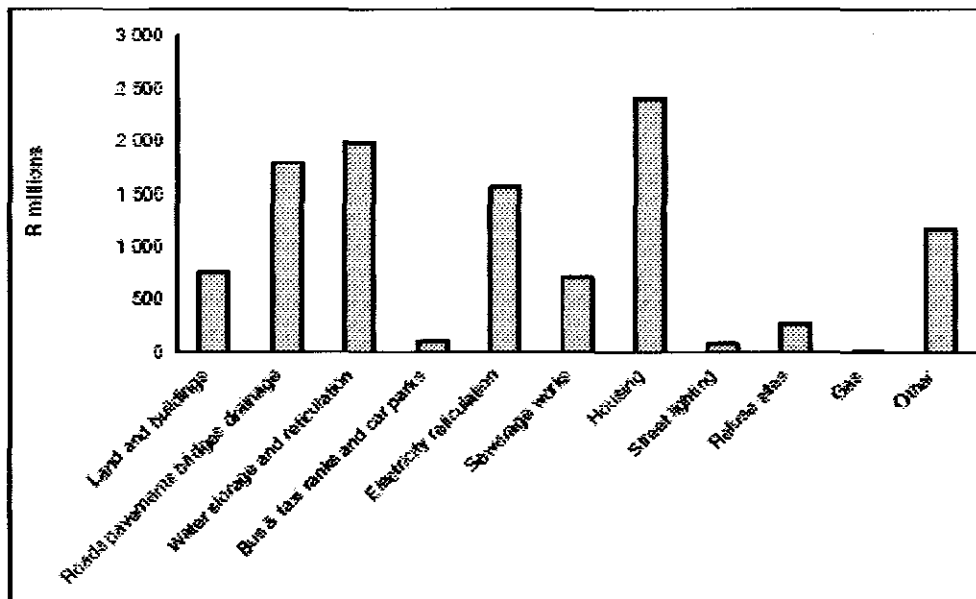
Different infrastructure has different productivity-improving effects. A common distinction made is that between economic and social infrastructure, where the former provides infrastructure directly for income generating activities, and the latter provides services for household use. The White Paper on Local Government (South Africa, 1998:149) refers to the social infrastructure as basic household infrastructure that includes essential municipal services such as water, sanitation, electricity, roads, storm water drainage, and street lighting needed to sustain a healthy and safe standard of living. This social infrastructure have important externalities, such as direct poverty alleviation, and some redistribution effects that can help provide the stable social and political environment required for rapid, much needed economic growth (South Africa, 1996).

The South African constitution has assigned the responsibility and provision of these basic household and suburban services, together with the municipal infrastructure necessary to support these services, to the local government sphere (South Africa, 1996).

This is a very large responsibility. For the 2002/2003 municipal budget, an enormous 82 percent of the total capital budget of R13.1 billion was set aside just for municipal infrastructure. Figure 1.1 below demonstrates the total

budgeted expenditure on municipal infrastructure. What becomes clear is that government assigns the largest proportion of general municipal infrastructure expenditure for housing (R250 million). The other municipal infrastructure expenditure items, includes water reservoirs and reticulation, roads, bridges, pavements, and electricity distribution (National Treasury, 2003:34).

Figure 1.1: Total Budgeted Expenditure on Infrastructure



(Source: National Treasury, 2003:34).

Under apartheid, municipalities traditionally provided these municipal services to formerly advantaged communities, while they neglected formerly black townships and homelands. Where municipalities did provide municipal services, national public entities like Eskom rather than municipalities provided these services. This resulted in South Africa's post-apartheid government inheriting considerable infrastructure backlogs, especially in the previously abandoned areas, and today's municipalities are expected to make up for this by expanding their delivery of services to all residents, and by subsidizing such services to poor households.

These service backlogs and the collapsed or deteriorating infrastructure, together with the amalgamation of the previously divided jurisdictions - that massively increased the population, which municipalities had to serve - all left municipalities without a corresponding increase in the tax base. The demand for the expansion of municipal infrastructure also continues to outstrip supply. This has been especially prevalent in education, health, housing, clean water, roads and electricity, where provincial and local governments have major responsibilities. All of this, combined with the fact that most municipalities experience deteriorating creditworthiness, borrowing capacity and financial distress caused great uncertainty within the municipal sector (South Africa, 1998).

To worsen the situation, the decentralization initiatives, as envisioned in the White Paper and the Constitution, have also transferred greater responsibility for investment choices and investment financing from central government to local and state governments (South Africa, 1998). All of this put even more pressure on local government, and municipalities need to address these infrastructure backlogs first, in order to ensure the provision of their basic services (National Treasury, 2001:174).

Rapid rates of urbanization escalated the scale of infrastructure investment requirements. Within the next 20 years, 75 percent of the South African population will live in urban areas - mainly within large cities. This trend will not only add to the demands on large cities, already overburdened with social infrastructures, but will also contribute to the more than two million existing poverty stricken urban residents (Scott, 2002:1).

All of the above factors place immense pressure on municipal finance. According to the Intergovernmental Fiscal Review of 2001, the capital municipalities could use can come from one of the following sources, namely:

- The national government, in the form of intergovernmental transfers.
- ❖ Municipal taxes, such as property rates or Regional Service Council levies.
- ❖ User charges, such as tariffs and connection fees.
- Borrowing through loans or bond issues.

Government policy during the past five years has repeatedly emphasized the importance of leveraging private sector capital in support of municipal infrastructure investment. If correctly conceptualized, government stated that national government spending on municipal infrastructure could complement private sector investment by focusing on those municipalities unable to access private capital (National Treasury, 2001:175).

Attracting this private capital back to the municipal sector, and increasing historic levels of private sector lending for municipal infrastructure, would be desirable for the following reasons, according to Glasser *et al.* (1998:8):

- ❖ National and local governments have limited resources. By borrowing private money, it allows municipalities (and the nation as a whole) to leverage the revenues they do have, building more infrastructures, and more quickly, than could be done on a pay-as-you-go basis.
- ❖ Municipal borrowing from the private sector is consistent with the decentralization decision-making envisioned in the White Paper on Local Government and the Constitution. Local communities will set their own priorities, and apply to private capital markets for funding.

- ❖ Market economics will cause private investors to allocate funding to those municipalities and projects that are most creditworthy. This promotes healthy management and finance practices at the local level and minimizes the necessity for supervision by national or provincial government.

The importance of gearing in private investment, and of using capital markets to do so, is twofold. Firstly, private sector lenders and investors are important because, unlike public sector lenders, they bring additional funding to the national table, they have better expertise for evaluating project and credit risks, and they manage outstanding loans more effectively. Secondly, active capital markets with a variety of buyers and sellers, and a variety of financial products, can offer more efficiency than direct lending. Competition for municipal debt instruments tend to keep borrowing costs down, and it creates structural options for every need. An active market, also implies liquidity for an investor who may wish to sell. Liquidity reduces risk, increases the pool of potential investors, and thus improves efficiency (South Africa, 1998).

According to Glasser, *et al.* (1998:19) private investment, in the form of municipal bonds or bank loans, to build, operate, and maintain publicly owned and operated facilities is the most common method for private sector involvement around the world, and it involves the issuance of debt by municipalities or other public sector entities. In the past, South African municipalities have borrowed extensively from the private sector by using both these methods. They issued municipal bonds and they made use of loans from certain financial institutions (South Africa, 1996:12).

Although private lending has continued throughout the transitional phase from 1994 to 2000, there has been no new private lending to local government in South Africa recently. Studies conducted by the National Treasury (2000:2) indicated that between March 1998 and March 1999 direct private sector lending to municipalities grew by only R1.84 billion. Of this, almost R500 million was accounted for by one institution alone. Over 80 percent of this growth took the form of short-term lending, and a better primary market exists for municipal short-term debt (such as overdrafts or more formal loans - of short fixed maturity). The long-term debt market, which is especially critical for providing financial resources for municipalities for investment in infrastructure that is critical to both economic and social development (water, electricity, roads and waste), has stagnated.

There have been only a limited number of new municipal bond issues recently, and only a few of the previously issued municipal bonds do trade. Although the private sector continues to be an attractive option for financing infrastructure, it remains untapped. Latest data from the National Treasury (2003:42) shows that the municipal market in South Africa today, only concentrates on a few lenders and larger urban municipalities. The majority of the private investment community still draws back from the municipal sector, and access by municipalities to private capital is becoming harder.

1.2. Problem Statement

The residual credit market in South Africa is largely an intermediate one, with banks and other financial intermediaries holding most loans. Government wishes to see this market supplemented by the development and expansion of a securities market, or a “bond model” that lowers the cost of capital to the municipal sector. This market will imply that municipalities (usually the larger ones) issue debt in the form of bonds, which they then trade in the secondary market. To encourage this, government in South Africa designed the main elements of a municipal debt market necessary to support such a framework. Not only does this framework promote the emergence of a vibrant and innovative primary and secondary market for short and long-term debt, but it could also support the growth of a market for other forms of debt i.e. bank lending (this framework will be discussed in detail later in chapter four).

The question that needs to be asked is whether this framework will be effective in stimulating bond issuance by municipalities, or whether the framework lacks certain aspects that constrain the functioning of a vibrant municipal bond market in South Africa.

1.3. Objectives of Research

The main aim of this study is to investigate the effectiveness of the direct access framework via municipal bond issuance, given the most recent fiscal and financial constraints that most South African municipalities face. In order to achieve this, the following objectives were set, to:

- ❖ Investigate the function and operation of municipal bonds, and the municipal bond market of the U.S. and to examine the underlying requirements and strengths of this market in order to use it as a background, and comparison to the South African municipal bond market situation.
- ❖ Create an understanding regarding the municipal credit market, the two models it consists of, the remaining municipal credit market in South Africa, its function and structure, and the relevance thereof to the primary problem of this study.
- Investigate why the previous municipal market collapsed, and to determine the current ability of municipalities to access the municipal bond market.
- ❖ Identify and propose certain critical requirements that need to be in place first, before the municipal bond market could re-emerge successfully, given all the factors prevalent in today’s market.
- ❖ Identify the greatest limitation currently in the way of municipal bond market development in South Africa, and to introduce certain solutions government could use to decrease the effect of this limitation.

- ❖ Compare all the possible solutions in order to propose the most effective solution government could use to overcome this obstacles, given all the information that was obtain during the course of this study.

1.4. Importance of the Research

In the introduction, this study described the importance of infrastructure for growth and development. But the severity of the need for infrastructure provision in South Africa only starts to become a reality, when one is confronted with the appalling infrastructure situation in South Africa - especially in rural areas - and when one take certain information regarding infrastructure provision in South Africa into account. That is why this study will briefly mention the following facts about the infrastructure situation in South Africa.

Firstly, since 61 percent of 11 million households in South Africa still did not have running water inside their dwelling by 1999, and since a very large group of South Africa's citizens still rely on water from flowing water streams, wells, and springs to fulfil their most important basic need, since people have to travel great distances and spend hours each day fetching water, it is obvious that water provision remains one of the largest infrastructure backlogs in South Africa. The same situation applies to sanitation provision. A great number of South Africa's households do not even have flush toilets or pit latrines. Access to flush or chemical toilets are declining and the number of households using rivers, streams, and bushes for sanitation in South Africa is increasing. The South African Institute of Race Relations reported that South Africa still has 18-million, mainly rural people (or 3 million households) that do not have adequate sanitation, and 7 million people still do not have access to both clean water and sanitation (SAIRR, 2001:38-354).

Electricity provision is also an area of great concern. Although government and Escom have electrified a large number of houses in the past eight to ten years, there is still much government needs to do about this matter. According to the South African Institute of Race Relations (2001) in April 2001, 20 percent of urban households and 54 percent of all rural households were still not electrified. Most people in rural areas in South Africa still rely on costly, unhealthy, and environmentally unsustainable firewood for energy and food preparation (SAIRR, 2001:38-354).

Lastly, some 566 million tons of municipal waste is generated every year, but according to the minister of environmental affairs and tourism, (as quoted by the South African Institute of Race Relations, 2001:353) this waste is poorly managed. He also stated that only a "*fraction*" of the waste is recycled or reclaimed and nearly half of the country's 710 landfills are illegal and do not conform to standards set in environmental legislation. Some 40 percent of South Africans do not have a proper domestic refuse removal system at all (SAIRR, 2001:38-354).

In order for municipalities in South Africa to meet their developmental mandate and in order for them to ensure that they deliver all these services, and provide the necessary infrastructure to support them to solve the problems within the municipal environment, municipalities need a large amount of capital investment for municipal infrastructure.

According to National Treasury (2001a:183) the municipal capital investment that will be used for these infrastructure purposes would most probably include items such as water and wastewater treatment plants and reticulation networks, solid waste disposal facilities, streets and sidewalks, clinics, parks, sports fields and other municipal facilities. The four main reasons why municipalities need to have access to capital for investment purposes are:

- ❖ To extend services to all citizens, so that South Africans everywhere have access to basic services.
- To provide services above the basic level, at users' cost, to those who want and can afford more than the basic services.
- To provide strategic infrastructure that will attract direct investment, as part of economic development efforts.
- ❖ To upgrade and update infrastructure that has reached the end of its useful life.

Without the necessary capital, which comes from the most appropriate means, such as municipal bond issuance, municipalities would fail in achieving all of the above-mentioned objectives. Additional investment for municipalities is of great importance to South Africa, and this must be properly obtained. If South Africa could succeed in this, it could have an enormous affect on the whole of South Africa's economy.

1.5. Methodology

This study consists and relies mainly on a literature, and no empirical analysis was made. The research relies on literature from various sources, such as books, journals, newspaper reports and the internet. Most of the research relies on certain relevant research reports, completed by various international and national institutions, which include:

- ❖ The World Bank.
- ❖ The South African government.
- ❖ The National Treasury of South Africa.
- Private Institutions like the Development Bank of South Africa (DBSA), The Infrastructure Finance Corporation (INCA), and various Bond Banks in the United States, the Research Triangle Institute (RTI), and the United States Agency for International Development (USAID), and lastly the Urban Institute of the United States.

1.6. Chapter Exposition

Chapter one only introduces and discusses the main problem to be addressed in this study. What becomes evident is that South African municipalities need additional investment for infrastructure purposes. Government wishes to see this done via bond issuance, but the framework which government proposed to support this system, seems dubious. This study investigates the effectiveness of the government proposed framework.

The main aim of chapter two is to introduce bonds, the way in which they operate and function, municipal bonds, and the municipal bond market. The whole of this chapter uses municipal bonds and the municipal bond market of the United States as a comparison. The reason for this is that South Africa can use some of the United States market strengths to accelerate the development of its own municipal bond market by comparing it to the United States' model. Since the United States' model uses direct access via bond, issuance (that which the South African government wishes to achieve) the main aim of this chapter is to identify the most important market strengths contributing to the success of the U.S. model.

Chapter three explains the two methods whereby municipalities can attain municipal credit. These two methods include making use of a municipal bond model, via bond issuance, or by using the municipal lending model. The two methods are explained because against this background it is easier to understand the current municipal credit situation in South Africa. Chapter three also discusses the bond market in South Africa. The reason for this is the enormous role it would play in the upcoming municipal bond market environment.

The main aim of chapter four is to discuss the local government finance and borrowing situation, in order to establish the ability of South African municipalities to access the bond market via bond issuance. The greatest limitation in the way of municipal bond market development is also discussed, and chapter four makes certain recommendations to eliminate or to reduce this problem.

Chapter five gives a short summary of this study and describes how the initial problem of this study, was solved. It concludes by making certain recommendations and proposing certain areas of further study.

1.7. Problems Experienced

Most of the information, especially data or information that was obtained from municipalities, dated from before the collapse of the bond market, thus prior to 1994, rendering the information as old, and irrelevant. The collapse of the previous municipal bond market, also contributed to the fact that most market players, such as investors, municipalities, financial institutions etc. feel sceptical about the remaining market, it remains unfamiliar territory, and most people do not know what to expect, which also impedes research. Most resources are based on assumptions on

the new market, or that which government wishes to achieve, not on substantial evidence. Such examples include all the information within the Policy Framework for Municipal Borrowing and Financial Emergencies and the Municipal Finance Management Bill. It is always difficult to refer to such sources, because the relevance thereof and liability may be questioned.

This study obtained much international information; especially information regarding bonds, municipal bonds and the municipal bond market in the United States. Although this contributed greatly to the study, and although it gives a proper idea as to how the municipal bond market function and operates, the South African municipal bond market cannot be fully compared to that of the U.S. and other countries, since the financial and bond markets of each country functions on a unique manner. This can be ascribed to various factors. Critics may oppose this comparison and argue that South Africa's municipal bond market, under no circumstances may be compared to that of the United States' market. Regardless of this, this study still compared the United States' municipal bond market with that of South Africa because of various reasons that will become apparent during the course of this study.

1.8. Important Definitions

Certain important concepts are used in this study and are briefly explained.

Bonds - a bond is a debt security, similar to an I.O.U. When an investor purchases a bond, he lends money to a government, municipality, corporation, federal agency, or other entity known as the issuer. In return for the loan, the issuer promises to pay the lender a specific rate of interest during the life of the bond and to repay the face value of the bond (the principal), (or the original amount borrowed) when it matures, or falls due (The Bond Market Association, 2002a:1).

Bond Bank - agencies created by some states to buy entire issues of bonds of municipalities. The purchases are financed by the issuance of bonds by the bond bank. The purpose is to provide better market access for small, lesser-known issuers (Public Securities Association, 1990:189).

Credit Enhancement – implies the enhancement of credit or the ability of municipalities to attract loans or to issue securities, at good rates. It can be improved by, e.g. municipal bond insurance, bond banking etc. (South Africa, 1998:154).

Creditworthiness - a municipality is creditworthy when it meets the risk standards of the lender. Institutional lenders, like mutual funds, pension funds, or insurance funds, generally will establish a minimum level of credit quality that an issue must have. Unless a municipal lending institution sets clear and prudent rules for lending, it is likely to have a hard time raising capital on the private market (Peterson, 1998:5).

Infrastructure – refers to the foundation or underlying framework of basic services, facilities and institutions upon which the growth and development of an area, community, or a system depend (Verhoef, 2002:1).

Local Government – local government is a state entity with the necessary constitutional and statutory governmental authority within a specific demarcated area in the Republic of South Africa, which consists of a democratically chosen council and local administration, where the most important goal is the provision of services to and the development and structuring of the local community (Scheepers, 2001:11).

Municipalities - a municipality when referred to as an entity, is an organ of state within the local sphere of government exercising legislative and executive authority within a specific demarcated area of jurisdiction which:

- ❖ Consists of a) the political structures and administration of the municipality, and
b) the community.
- ❖ Functions in its area in accordance with the political, statutory, and other relationship between its political structures, political office bearers, and its administration.
- ❖ Has a separate legal personality, which excludes liability on the part of its community for actions of the municipality (Section 2, Local Government Municipal Systems Act, 32 of 2000).

A municipality, when referred to as a geographic area, means a municipal area determined in terms of the Local Government Demarcation Act 27 of 1998.

Municipal Bonds - a municipal bond is a debt instrument that can be traded. An underwriter may purchase an entire bond issue, and then sell it at retail to institutions and individuals. Each bondholder buys only a small piece of the total debt, so smaller investors can participate (National Treasury, 2001:193).

Municipal Debt - a monetary liability or obligation created by a financing agreement, note, debenture, bond, or overdraft, or by the issuance of municipal debt instruments (South Africa, 2002:7).

Municipal Credit Market - is the market through which credit is provided to local government authorities either through municipal loans or through municipal bonds. These instruments then trade on either the primary market (if investors decide to hold the instruments until maturity) or the secondary market (where the instruments are traded, and need not be held to maturity) (Peterson, 2002).

Private Sector Investment – involves the participation of private investors in the capital market, where they provide capital for new investments in infrastructure, thereby reducing the demand for public funds, and providing fiscal space for other public investments, such as in education or health (South Africa, 1998:150).

Special Financial Intermediaries - entities that operate as a channel for municipal credit, or that act as a bridge to private credit markets in borrowing on domestic or foreign markets and on lending to local governments, either directly or through domestic banks. This can consist of entities operating like a bank, like municipal development banks that are found in countries such as the Netherlands, specialized financial institutions, like the local government financial intermediaries that are found in Spain and France, provincial agencies that operates at the provincial level such as municipal finance corporations in Canada, or state instrumentalities operating at the state level, such as bond banks in the United States (El Daher, 2000:1-2).

1.9. An Additional Note on Terminology of This Study

Municipal loans and municipal bonds are two ways of providing credit to local government authorities. Although these instruments and the market, which supports them, have significant differences, the assessment of credit risk in both cases involves essentially the same procedures. This study refers to (i) municipal loans and municipal bonds as to municipal credit, and (ii) to the municipal bond market and the municipal lending market, as to the municipal credit market. To explain this, because the municipal bond market was active in South Africa prior to 1994, this study will refer to the market during this period as to the municipal bond market. However, since the market collapsed after 1994, and since bank lending started to pre-dominate municipal bond trading in the South African market today, this study will refer to the market after 1994 as to the municipal credit market as a whole (which consists of both bank loans and municipal bonds).

This study also sometimes refers to the municipal credit market as to the municipal debt market, which also consists of both municipal bonds and bank loans. Similarly, except where noted otherwise, this study refers interchangeably to different terms for local government authorities, such as “municipality,” “local authority” and “local government.”

Chapter 2

Bonds, Municipal Bonds and the Municipal Bond Market of the United States

2.1. Introduction

Before this study attempts to explain anything else, it is important to provide the reader with insight regarding municipal bonds and the municipal bond market. It is also important to understand the basic principles underlying bonds, the way in which they operate, and their function. The aim of this chapter therefore is to focus on bonds, specifically municipal bonds as a type of bond, bond investments, and finally the municipal bond market in the United States, and this market's most important market strengths.

The reason why this study uses information concerning municipal bonds and the municipal bond market in the United States is because the municipal bond market of the United States has been operating for several years and it is the largest and most effective of its kind in the world. Against this background, it is easy to identify certain market strengths and weaknesses, and South Africa can accelerate the development of its own municipal bond market by comparing it to the United States' model.

Although some critics may oppose this comparison by arguing that South Africa is an emerging economy, and because of this reason might state that South Africa cannot be compared to any of the existing United States markets, this statement can be defended by the following three reasons. Firstly, South Africa, unlike any other emerging economies where municipal bond markets are totally absent, have an advantage above these countries because South Africa's municipal bond market only need to re-emerged or be re-activated. It need not be developed entirely. The operational structure necessary to support the municipal bond market, will easily fall into place once all the obstacles currently in the way of municipal bond market development gets solved. Secondly, it was inevitable for the municipal bond market to collapse, because of the uncertain political situation in South Africa from 1990 onwards. Prior to this, the market was rather successful. With the new local government, the transition period being finalized, and the political structure already in place, the market today might just over-bridge this uncertainty. Thirdly, South African financial markets especially the bond market is highly sophisticated and compare favourably to the rest of the world. Much of the needed requirements necessary for re-establishing such a market today are already in place and a new municipal bond market might fit perfectly into this system.

2.2. Bonds

2.2.1. Bond Definition

A bond, according to the Bond Market Association of New York (2002a:1), is defined as “*an interest-bearing certificate sold by corporations, governments and local governments, to raise money for expansion, or capital in the capital market.*” An investor who purchases a bond is essentially lending money to the bond’s issuer in return for interest and the investor can either hold the bond until maturity and collect interest payments, or sell the bond to a third party.

In South Africa, bonds according to Van Zyl (2003:247) is capital market instruments with an expiry date, which promise that the issuer (borrower) will pay the holder interest and will repay the capital amount back over a certain period.

2.2.2. Bond Description and Price Information

A bond contract in the United States and South Africa, according to Van Zyl (2003:258) usually consists of the following:

Principal: The issuer will repay this amount to the bondholder when the bond expires. It is sometimes called the face value, par value, or nominal value of a bond.

Coupon rate: The issuer will pay this interest to the bondholder during the life span of the bond. It is normally expressed as a percentage per annum and it may be a fixed or a variable interest rate. There is also an indication of the rates at which interest will be paid, usually semi-annually or sometimes, annually. This is referred to as the coupon frequency.

Maturity date: Since the bond expires, the issuer will repay the principal to the bondholder at this date.

Bond issuers can sell bonds directly through an auction process or use investment banking services. The investment banker buys the bonds from the issuer and then sells them to the public (The Bond Market Association, 2002a:1).

2.2.3. Types of Bonds in the United States

Government bonds, corporate bonds, municipal bonds, mortgage and asset-backed securities, federal agency securities and foreign government bonds are among the types of bonds investors can choose from in the United States. This study will only discuss the most important bonds namely; government bonds, corporate bonds, and municipal bonds, since the others are of little relevance to this study.

2.2.3.1. Government Securities

The U.S. government issues bonds through the Treasury Department. These bonds, known as government securities, are backed by the unlimited taxing power of the federal government. Federal agencies and government-sponsored enterprises also issue bonds of their own. Generally, all of these federal bonds are considered to be among the safest investments in the United States (Fabozzi, 2001:175-196).

2.2.3.2. Corporate Bonds

Private utilities, transportation companies, industrial enterprises, or banks and finance companies issue corporate bonds. These corporate bonds can be divided into two additional categories: mortgage bonds, which are secured by the issuer's assets, and debentures, which are backed only by the issuer's credit. Most companies try to establish a financial structure based on a combination of stocks, representing distributed ownership, and bonds, representing debt obligations. A company that raises funds by issuing bonds is said to be leveraged. Because bondholders are paid at a set rate regardless of profits, this approach increases the potential for profit to stockholders but also increases the level of financial risk (Fabozzi, 2001:253-281).

2.2.3.3. Municipal Bonds

Municipal bonds according to The Bond Market Association of New York (2002b:1) are: "*debt obligations issued by states, cities, countries and other governmental entities to raise money to build schools, highways, hospitals, and sewer systems, as well as many other projects for the public good.*"

2.2.4. Types of Bonds in South Africa

The types of bonds South African investors can choose from include government bonds, corporate bonds, parastatal and water authority bonds, and municipal bonds (BESA, 2003). All of these bonds will be discussed subsequently.

2.2.4.1. Government Bonds

In South Africa the central government issues government bonds through regularly announced auctions, they trade on the Bond Exchange of South Africa and represent the largest group of bond products. There are many different categories of this type of bond, ranging from fixed rate bonds, zero-coupon bonds, inflation linked bonds and variable rate bonds, to foreign currency bonds (BESA, 2003).

2.2.4.2. Corporate Bonds

The corporate bond market, when compared to the government bond market in South Africa appears to be rather small and only represents about twenty percent of the bond trades on BESA today (BESA, 2001).

Corporate bonds in South Africa, according to Van Zyl (2003:271-276) can be classified according to their:

- ❖ Yield (which either involve fixed or variable interest rates).
- ❖ Their security, (which has to do with certainty concerning the interest payments on the bond).
- ❖ The repayment of the principal, (which involve mortgage bonds, debenture, and guaranteed bonds etc.)
- ❖ The terms on which bonds are issued (which mostly have to do with redemption features like call and put options, redeemable bonds, sinking fund provisions, convertible bonds, exchangeable bonds, warrants etc.)
- ❖ The currency and country of issuance (which involve either foreign bonds - bonds that are issued by a foreign borrower in the currency of country where bonds are issued and/or Eurobonds - bonds that are issued in a country (or countries) outside the country of domicile of the issuer).

Corporate bonds trade on a formal or organized exchange such as the Bond Exchange of South Africa (BESA) or on the informal over-the-counter market. Bonds are issued by public offerings (where bonds are issued by making use of an auction, such as with government bonds) or private placements (this involves a procedure whereby bonds are sold to a limited number of pre-determined investors) (Van Zyl, 2003:276).

2.2.4.3. Parastatal and Water Authorities Bonds

Parastatal and water authority bonds, as the name suggests are issued by parastatal entities such as the Atomic Energy Corporation Limited, Escom Limited, SA Housing Trust Limited, SA Roads Agency Limited, Telkom SA Limited, Transnet Limited, and certain water authorities, such as the Komati River Basin Authority, Rand Water, Trans-Caledon Tunnel Authority, and Umgeni Water amongst others (BESA, 2003). These bonds are usually to finance capital projects. For example, Escom the leading electricity distributor in South Africa may use the proceeds from an issue to finance construction of new power plants and transmission lines.

2.2.4.4. Municipal Bonds

Municipal bonds are bonds issued by local government or municipalities and make up most of this study. An in-depth discussion of municipal bonds and the municipal bond market follows later in this chapter. South African municipal bonds are not defined here, simply because the definition is the same as that of the United States.

2.2.5. Bond Investments

Bond investments in South Africa, just like in many other countries around the world, offer a number of benefits. When compared to stocks, bonds are generally safer investments, bonds lead to stability in a volatile stock market, bonds have much more predictable streams of income, and bond investments can help investors achieve some long-term goals or objectives. (All this is discussed below).

For many years, investment in bonds in South Africa was considered inferior, compared to equity and cash, but since 1998, this situation has changed dramatically. Bonds started to perform strongly, while equity returns were much lower than in the years prior to 1998. The reason for this, according to McCurrie (2002:3), is that the good returns generated from the bond market only arose as a result of structural changes within the South African economic environment. If all the assumptions regarding this analysis are reasonably correct, McCurrie (2002:3) affirmed that future returns on bonds are likely to be substantially lower. Although returns since 1997 have averaged about 20 percent, McCurrie is convinced that bond returns over the next few years, may only average +/- 12 percent and equity will most probably outperform bonds within the next three to five years (2002-2007).

If what McCarrie (2002) anticipates does in fact occur, this, together with other factors as inflation predictability may influence investor interest in the bond market. This in turn could affect investor interest in municipal bonds and could hinder the development of the municipal bond market in South Africa.

2.2.5.1. Advantages of Bond Investments

The following advantages of investing in bonds can be identified:

a) Compared To Stocks Bonds Offer a Safer Investment

From an investor's perspective, stocks or shares offer a higher potential return if profits rise, but bonds are generally a safer investment. Stock dividends are paid out of company profits, while bond interest payments are made even if the company is losing money. If a corporation goes insolvent, bondholders must be paid before stockholders (Fabozzi, 2001:3-29).

b) Bonds Lead To Stability in a Volatile Stock Market

A well-diversified portfolio made up of stocks and municipal bonds might not outperform an all-stock portfolio when the stock market is performing, but it does help to add balance during times of market volatility. By comparing two portfolios with one another, with one, being a 100 percent stock portfolio, and the other a 50 percent stock / 50 percent municipal bond portfolio, the comparison indicates that the second portfolio, consisting of the stock and bond mixture (and with has exactly the same initial investment amount as the first portfolio), could withstand the market down-turn better (Franklin Templeton Investments, 2003:1).

c) Bonds Have Predictable Streams of Income

Many investors choose to have bonds in their portfolio because they have a predictable stream of payments and repayment of the principal. Investors therefore invest in bonds to preserve and increase their capital or to receive dependable interest income (The Bond Market Association, 2002a:1).

d) Bond Investments Can Aid Investors

Bond investments can aid investors in achieving some long-term anticipated financial goals, such as saving for children's education, a new home, increasing retirement income etc., which could not otherwise have been achieved. The diversity of fixed income securities such as bonds also presents investors with a wide variety of choices to tailor investments to their individual financial objectives (The Bond Market Association, 2002a:1).

2.2.5.2. Key Bond Investment Considerations

There are a number of key variables to consider when investing in bonds, namely: interest rates, the bond's maturity, redemption features, credit quality, credit ratings, bond insurance, price, yield, the relationship between interest rate and maturity, the relationship between price and yield, tax-status and risk involvement. Together, these factors determine the value of a bond investment and the degree to which it matches investor's financial objectives. All of these factors will now be discussed.

2.2.5.2.1. Interest Rates

The interest on bonds is fixed, floating, or payable at maturity. Most debt securities carry an interest rate that remains fixed until maturity and is a percentage of the face (or principal) amount. Typically, investors receive interest payments semi-annually. For example, a \$1,000 bond with an 8 percent interest rate will pay investors \$80 a year, in payments of \$40 every six months. When the bond matures, investors receive the full-face amount of the bond \$1,000 and the last interest payment (The Bond Market Association, 2002a:1). Other sellers and buyers of debt securities prefer to have an interest rate that is adjustable, and which more closely track prevailing market rates. The interest rate on a floating-rate bond is re-set periodically in line with changes in a base interest-rate index. Other bonds have no periodic interest payments. Instead, the investor receives one payment, at maturity, that is equal to the purchase price (principal) plus the total interest earned, compounded semi-annually at the (original) interest rate, these bonds are known as zero-coupon bonds (The Bond Market Association, 2002a:3).

2.2.5.2.2. Maturity

A bond's maturity refers to the specific future date on which the investor's principal will be repaid. Bond maturities generally range from one day to 30 years. According to the Bond Market Association of New York (2002a:4) maturity ranges are often categorized as follow:

- ❖ Short-term notes: maturities of up to five years.
- ❖ Intermediate notes/bonds: maturities of five to 12 years.
- Long-term bonds: maturities of 12 or more years.

2.2.5.2.3. Redemption Features

While the maturity period is a good guide as to how long the bond will be outstanding, certain bonds have structures that can substantially change the expected life of the investment. These features include:

a) Call Provisions

Some bonds have redemption, or “call” provisions that allow or require the issuer to repay the investor’s principal at a specified date before maturity. Bonds are commonly “called” when prevailing interest rates have dropped significantly since the time the bonds were issued. Before investors buy bonds they must make sure of the call provisions and, if there are any, must be sure to obtain the “yield to call” as well as the “yield to maturity.” (Both these concepts will be discussed later in this chapter). Bonds with a redemption provision usually have a higher annual return to compensate for the risk that the bonds might be called at an earlier date (The Bond Market Association, 2002a:4).

Callable bonds may be less attractive than non-callable bonds because an investor whose bond has been called is often faced with reinvesting the money at a lower, less attractive interest rate. To protect bondholders expecting long-term steady income, call provisions usually specify that a bond cannot be redeemed before the expiry of a certain number of years, usually five or ten years (Wachovia Securities, 1998:2).

b) Put Provisions

Conversely, some bonds have “puts” which allow the investor the option of requiring the issuer to re-purchase the bonds at specified times prior to maturity. Investors typically exercise this option when they need cash for some purpose or when interest rates have risen after the issue of the bonds. They can then reinvest the proceeds at a higher interest rate (Mann, 1996:9).

2.2.5.2.4. Credit Quality and Credit Ratings

Bond choices range from the highest credit quality, which is backed by the full faith and credit of the issuer (such as U.S. government securities), to bonds that are below investment-grade and are considered speculative. Since a bond may not be redeemed, or reach maturity, for years, credit quality is a very important consideration when investors evaluate a fixed-income investment (The Bond Market Association, 2002a:5).

When issuers issue bonds they are responsible for providing details as to its financial soundness and creditworthiness. This information is contained in a document known as an offering document, prospectus, or official statement. Investors will never know completely whether or not the company or government entity whose bonds they are buying

will be able to make its regularly scheduled interest payments from the date of investment, but ratings agencies, banks and securities firms can assist investors in their investment decisions, and this might limit or reduce their potential risk. Rating agencies assign ratings to bonds when they are issued and monitor developments during the bond's lifetime. Securities firms and banks also maintain research staffs which monitor the ability and willingness of the various companies, governments and other issuers to make their interest and principal payments when due. Investment advisors or issuers of bonds can also supply investors with current research on the issuer and on the characteristics of the specific bond, they are considering (The Bond Market Association, 2002a:5).

In the United States, major rating agencies include Moody's Investors Service, Standard & Poor's Corporation, and Fitch Ratings. Each of these agencies assigns its ratings based on in-depth analysis of the issuer's financial condition and management, economic and debt characteristics, and the specific revenue sources securing the bond. The highest ratings that can be obtained are "triple A-rated" or AAA (S&P and Fitch Ratings) and Aaa (Moody's). Bonds rated in the BBB category or higher are considered investment grade, and securities with ratings in the BB category and below are considered "high yield," or below investment grade.

While experience has shown that a diversified portfolio of high-yield bonds will, over the long run, only have a modest risk of default, it is extremely important to understand that for any single bond the high interest rate that generally accompanies a lower rating is a signal or warning of higher risk. Table 2.1 below and on the next page shows the different rating agencies and their assigned credit ratings (The Bond Market Association, 2002a:7).

If investors want to know whether the credit factors affecting their bond investment have changed, they can get information at rating agencies, banks, securities firms or the issuers themselves. Usually, rating agencies will signal whether they are considering a rating change by placing the security on Credit Watch (S&P), Under Review (Moody's) or on Rating Watch (Fitch Ratings). The rating agencies make their ratings available to the public through their ratings information desks. In addition, their published reports and ratings are available in many local libraries and many issuers provide online ratings information accessible through the Internet (The Bond Market Association, 2002a:7).

Table 2.1: The Credit Ratings of Moody's, S & P's, and Fitch

CREDIT RATING	Credit risk	Moody's	Standard & Poor's	Fitch
	INVESTMENT-GRADE			
	Highest quality	Aaa	AAA	AAA
	High quality (Very strong)	Aa	AA	AA
	Upper medium grade (strong)	A	A	A
	Medium grade	Baa	BBB	BBB

	NOT INVESTMENT-GRADE		
Somewhat speculative	Ba	BB	BB
Speculative	B	B	B
Highly speculative	Caa	CCC	CCC
Most speculative	Ca	CC	CC
Imminent default	c	c	c
Default	c	D	D

(Source: The Bond Market Association, 2002a:7)

Bond insurance can enhance the credit quality of bonds. Bonds are said to be insured, when specialized insurance firms serving the fixed-income market guarantee the timely payment of principal and interest on bonds they have insured. Most bond insurers have at least one triple-A rating from a nationally recognized rating agency attesting to them the same rating based on the insurer's capital and claims-paying resources. While the focus of their underwriting activities has historically been in municipal bonds, bond insurers also provide guarantees in the mortgage and asset-backed securities markets and are moving into other types of securities as well. An investor may also buy bond insurance on a bond purchased in the secondary market (The Bond Market Association, 2002a:7). Bond insurance is discussed again in more detail in chapter four.

2.2.5.2.5. Price

The price an investor pays for a bond is based on a whole host of variables, including things such as inflation, interest rates, foreign exchange rates, supply and demand, credit quality, maturity, and tax status. Newly issued bonds normally sell at, or close to, their face values while bonds that trading in the secondary market fluctuate in price, due to a response in changing interest rates. When the price of such a bond increases above its face value, it is said to be selling at a premium and when it sells below its face value, it is said to be selling at a discount (SAIFM, 2001:21).

2.2.5.2.6. Yield

Yield is the return investors actually earn on the bond - based on the price they paid and the interest payment they receive. There are two types of bond yields that investors should be aware of, (i) current yield and (ii) yield to maturity or yield to call. They are as follows:

- ❖ *Current yield* - is the annual return on the dollar amount paid for the bond, and is derived by dividing the bond's interest payment by the purchase price. If investors bought a bond at \$1,000 and the interest rate was 8

percent (\$80), the current yield would be 8 percent ($\$80 \div \$1,000$). If investors bought a bond at \$900 and the interest rate was 8 percent (\$80), the current yield would be 8.89 percent ($\$80 \div \900) (SAIFM, 2001:35-38).

- ❖ *Yield to maturity and yield to call* - are normally considered more meaningful, and tell an investor the total return they will receive by holding the bond until maturity. It also enables investors to compare bonds with different maturities and coupons. Yield to maturity equals all the interest investors receive from the time they purchase the bond, until maturity (including interest on interest at the original purchasing yield), plus any gain (if they purchased the bond below its par, or face value) or loss (if they purchased it above its par or face value). Yield to call is calculated the same way as yield to maturity, but assumes that the bond will be called, and that the investor will receive face value back at the call date. It is imperative that investors make sure of both the yield to maturity and yield to call on any bond they are considering purchasing. Buying a bond based only on current yield may not be sufficient, since it may not represent the bond's real value to the investors' portfolio (SAIFM, 2001:39-48).

2.2.5.2.7. The Relationship between Price and Yield

From the time a bond is originally issued until the day it matures, its price will fluctuate according to changes in market conditions, or credit quality. The constant fluctuation in price is true of individual bonds (and true of the entire bond market) with every change in interest rate levels typically having an immediate, and predictable, effect on the prices of bonds. When interest rates rise, prices of outstanding bonds fall, to bring the yield of older bonds, into line with higher-interest new issues. When interest rates fall, prices of outstanding bonds rise, until the yield of older bonds is low enough to match the lower interest rate on new issues (Bond Market Association of New York, 2002a:10).

Because of these fluctuations, investors should be aware of the value of a bond, which will probably be higher or lower than its original face value, if investors sell prior to maturity. As has been mentioned above, newly issued bonds normally sell at, or close to their face value, while prices of bonds that trade in the secondary market, fluctuate due to changing interest rates (Bond Market Association of New York, 2002a:10).

One very important thing regarding South African bond investments, which distinguishes it from that of the United States, is that bonds are quoted and traded in yield but settled in price, and the market price for a given yield must be calculated (Van Zyl, 2003:249-257). South African prices and yields on bonds therefore, differ from those in the United States, and for this reason need some attention. To illustrate this, the price of the bond, the yield on it, and the specific relationship between these two variables will be discussed in this section.

Consider the example where a bond with a principal of R1 million, a coupon rate of 10 percent annually, a coupon payment date on the 30 September, an issue date on the 1st of October 1998 matures on the 30th of September 2006.

The principal or nominal value of the bond is the amount the issuer is going to pay the holder on the expiry date. The coupon rate or nominal yield determines the regular cash flow investors receive from bonds. The coupon rate on the bond in the above example is 10 percent, and the coupon or interest payment is R 100 000 (the coupon rate of 10 percent times the principal). Thus on the 30 September of each year the bondholder will receive R 100 000. This represents the annual income from the bond. If the bond was bought at par (in other words if the buying price was equal to the principal), then the running yield would be equal to the coupon rate. If the buying price was higher or lower than the principal was, the running yield would be respectively lower or higher than the coupon rate. The running yield is calculated as follows:

Running yield = annual income / buying price x 100 / 1

To illustrate how the buying price of a bond affects the running yield, three different scenarios are used involving the example above. In scenario A, it is assumed that the buying price was R950 000 (i.e. below par), while the buying price in Scenario C is assumed to have been R1 080 000 (i.e. above par). In Scenario B the bond was sold at par. When the running yields in each of these scenarios is determined by the formula used above, the results are as follow: Scenario A gives a running yield of 10.53 percent, Scenario B gives a running yield of 10 percent, and Scenario C gives a running yield of 9.26 percent.

These three scenarios illustrate an important point about the relationship between the price of a bond, and the yield, or return, on a bond, namely, the higher the price paid for a bond, the lower the return. This is because the coupon payment and the maturity value are both constant. In the above example the annual coupon payment is R100 000 and the maturity value is R1 million. As shown in the example above, the running yield is calculated by expressing the coupon payment as a percentage of the price paid. Thus, the lower the price paid for the bond, the higher the running yield, and vice versa.

Yield to Maturity

Probably the most useful indicator of the value of any interest security, including bonds, is the yield to maturity. The yield to maturity is the interest rate that makes the present value of the cash flow over the entire life span of the bond. The cash flow from any bond consists of three elements, namely the coupon interest, interest on interest and the capital gain or loss.

The formula to calculate the yield to maturity (i) is as follows:

$P = C / (1+i)^1 + C / (1+i)^2 + \dots + C / (1+i)^n + M / (1+i)^n$ where P is the market price, C the coupon interest, n the number of periods to maturity and M the maturity value.

If the market price of a bond is known, the yield to maturity can be calculated by using a trial and error process, or by using bond tables where the yield to maturity for given market prices, coupon payments and maturities are provided. Today this can be done very easily by making use of a computer programme, which is based on the trial and error process known as iteration.

As was mentioned above, bonds in South Africa, are quoted and traded in yield, but settled in price and the market price for a given yield therefore has to be calculated. In Table 2.2 below different rates to maturity and corresponding market prices for the bond used in the above example are shown on 1 October 2002. The bond had a remaining life span of four years on that specific date.

Table 2.2: Yield to Maturity and Corresponding Prices For a Bond With a Nominal Value of R1 Million and Remaining Life Span of Four Years

Yield to Maturity	Price of Bond
15	R 857 305.42
14	R 883 494.73
13	R 910 796.90
12	R 939 270.71
11	R 968 978.66
10	R 999 987.19
9	R 1 032 367.01
8	R 1 066 193.41
7	R 1 101 546.59
6	R 1 138 512.03
5	R 1 177 180.93

(Source: Van Zyl, 2003:251)

Table 2.2 illustrates the inverse relationship between the price of a bond and its yield, i.e. as the yield to maturity declines, the price of the bond rises. Because bonds in South Africa trade on a yield or interest rate basis and the yield therefore determines price of the bond, it is equally important to know what determines the interest rate or yield on bonds. The factors that determine interest rate or yield on bonds in South Africa according to Van Zyl (2003:254) are market interest rate levels, maturity, expectations, market forces, and factors regarding the issuer himself.

2.2.5.2.8. The Relationship between Interest Rates and Maturity

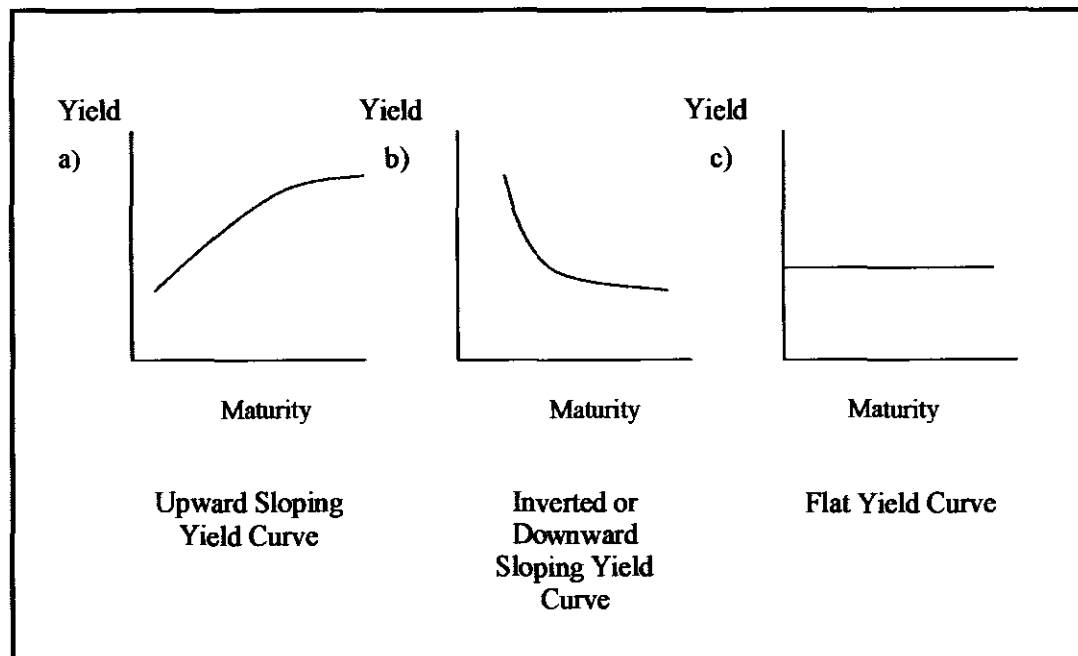
Changes in interest rates, do not affect all bonds equally. The longer it takes for a bond to mature the greater the risk of price fluctuation will be and the greater these fluctuations are, the greater the investor's expectations will be. This is to compensate for the additional risk investor's took in the first place.

There is a direct link between maturity and yield, and this link can best be seen by drawing a so called "yield curve." The most straightforward definition of a yield curve according to Fabozzi (2001:136) *"is a graphical depiction of the relationship between the yields on the bonds of the same credit quality, but different maturities."*

Investor's can draw a yield curve for any bond market. By watching the yield curve, investors can gain a sense of where the market perceives interest rates to be headed - one of the most important factors that could affect the bond prices. A normal yield curve would show a steep rise in yields between short- and intermediate term issues and a less pronounced rise between intermediate and long-term issues. This is as it should be, since the longer the investor's money is at risk, the more the investor should expect to earn (The Bond Market Association, 2002a:10-11).

If the yield curve is "steep" or upward sloping, it means the yields on short-term securities are relatively low when compared to long-term issues. This means that investors can obtain significantly increased bond income (yield) by buying a bond with a longer maturity than they could by obtaining a bond with a shorter maturity. They may wish to modify their choice of bonds accordingly. When yields on the short-term issues are higher than yields on longer-term issues, the yield curve is "inverted" (or downward sloping). This suggests that investors expect interest rates to decline. An inverted yield curve is an indicator of a possible recession. On the other hand, if the yield curve is "flat" it means the difference between short and long-term rates is relatively small, which implies that the reward for extending maturities is relatively small and many investors will choose to stay at the short end of the maturity range (SAIFM, 2001:48-52). In Figure 2.1 on next page, the shapes of all three hypothetical yield curves, namely, a normal upward sloping yield curve, an inverted yield curve, and a flat yield curve, can be seen.

Figure 2.1: Three Hypothetical Yield Curves



(Source: Fabozzi, 2001:136-137)

2.2.5.2.9. Tax Status

Some bonds offer special tax advantages. In the United States there is no state or local income tax on the interest from U.S. treasury bonds and no federal income tax on the interest from most municipal bonds and, in many cases, no state or local income tax either. This tax-exempt status is one of the most important reasons for the attractiveness of municipal bonds to United States investors and is one of the greatest contributions to municipal bond market success in the United States (The Bond Market Association, 2002d:7).

Zero coupon municipal bonds combine the benefits of the zero coupon instrument with those of tax exempt municipal securities and advantages such as tax advantages, low minimum investment, the protection from reinvestment risk, a wide choice of bond options to choose from, high quality, and liquidity are prominent. These bonds are especially attractive if investors seek to accumulate capital for a long-term financial goal such as retirement planning or college funds (The Bond Market Association, 2002a:12).

2.2.5.2.10. Risk Involvement

Just like all other investments, bonds have some degree of risk. When investing in bonds, investors need to remember that an investment's return is linked to its risk. The higher the return, the higher the risk will be. Conversely, relatively safe investments offer relatively low returns (The Bond Market Association 2002a:12).

2.2.5.3. Bond Categories

The language of bonds tells potential investors certain features of the loan, such as the time of maturity, repayment schedules of the bond, and whether it is likely to be called or repaid ahead of schedule. Bonds are also characterized by the way in which they are backed, their conditions, and other popular innovations. Some characteristics supply investors with much needed relevant information regarding the bonds and will therefore shortly be discussed.

2.2.5.3.1. How Bonds Are Backed Up

Bonds may be secured or unsecured. A bond is secured by means of collateral to reduce the perceived risks of lenders. This means that in the event of the issuer collapsing, certain of the assets would be specifically reserved for the benefit of these lenders and would not form part of the general funds available to repay all creditors. An unsecured bond is one without collateral. Investors who choose unsecured bonds must trust the issuer's creditworthiness (SAIFM, 2001:60-61). Certain bonds are secured, or backed, and include asset-backed bonds, debentures, refunded bonds, pre-refunded bonds, mortgage-backed bonds and collateralized mortgage obligations.

a) Asset-Backed Bonds

Asset-backed bonds are secured, or backed, by accounts receivable, or money owed to the issuers. An asset-backed bond can be created when a securities firm bundles some form of debt, like mortgages or credit card debt, and sells investors the right to receive the payments that consumers are making on these loans (The Bond Market Association, 1998b:1).

b) Debentures

Debentures are the most common corporate bonds. They are backed by the credit of the issuer, rather than by any specific assets. Although they sound riskier, they are generally not so. The debentures of reliable institutions are typically more highly rated than asset-backed bonds (Wachovia Securities, 1998:1).

c) Refunded Bonds

Some municipal securities originally issued as straight general obligation or revenue bonds may become refunded. When a security is refunded, it is escrowed or collateralized by either U.S. government treasury securities or some other type of securities. The securities in the refunding escrow fund are set up so that they mature when interest, principal, and premium payments are due. Refunded bonds are considered one of the safest municipal securities available in the United States (Fidelity Investments, 2003:2).

d) Pre-refunded Bonds

These are normally corporate or municipal bonds, usually AAA rated, where repayment is guaranteed by the funds from a second bond issue. Proceeds from the secondary issue are usually invested in safe U.S. Treasury issues. Pre-refunded bonds are refunded bonds that are scheduled to be called on the first possible call date, or at a subsequent date, as outlined in the bond's indenture. This structure is typically used to reduce the interest payment expenses for the issuer (Fidelity Investments, 2003:2).

e) Mortgage- Backed Bonds

These bonds are backed by a pool of mortgage loans. They are sold to brokers by government agencies and private corporations, and the brokers re-sell them to investors. Mortgage-backed bonds are self-amortizing which means each payment investors get, includes both principal and interest so that there is no lump-sum repayment at maturity (Bond Market Association of New York, 2002f:1).

f) Collateralized Mortgage Obligations

Collateralized mortgage obligations are more complex versions of mortgage-backed bonds. Although they are sold as a reasonable alternative to more conventional bonds, evaluating their risks and rewards requires skills that are more specialized. They offer regular payment of interest, are relatively safe, and offer notable yield advantages over other fixed income securities of comparable credit quality (Bond Market Association of New York, 2002e:1).

2.2.5.3.2. Bonds with Conditions

Bonds with conditions include sub-ordinated bonds, floating-rate bonds, convertible bonds, and sinking funds.

a) Sub-ordinated Bonds

Sub-ordinated bonds are bonds paid once the other loan obligations of the issuer have been met. Senior bonds are those with stronger claims. Corporations sometimes sell senior and sub-ordinated bonds in the same issue, offering

more interest and a shorter term on the sub-ordinated ones to make them more attractive (Wachovia Securities, 1998:3).

b) Floating-Rate Bonds

A floating rate bond is a bond where the coupon rate on the issue can be re-set periodically (Fabozzi, 2001:200).

c) Convertible Bonds

Convertible bonds are bonds that give investors the option to convert, or change, corporate bonds into company stock instead of getting cash repayments. The terms are set at issue. They include the date on which the conversion can be made, and the amount of stock for which each bond can be exchanged. The conversion option allows the issuer to offer a lower initial interest rate, and makes the bond price less sensitive to changes in the interest rate. These bonds start as zero coupon bonds and then, generally after eight to 15 years, convert to interest-paying bonds. They are ideally suited for individuals planning for retirement (Wachovia Securities, 1998:3).

d) Sinking Funds

Sinking funds are funds established at the time a bond is issued, or cash reserves set aside to finance periodic bond calls (Mann, 1996:10).

2.2.5.3.3. Popular Innovations

Investors can use certain popular innovative techniques to obtain higher returns on bonds. These popular innovations include things such as zero coupon bonds and making use of inflation index bonds.

a) Zero Coupon Bonds

Zero coupon bonds are bonds that pay no interest while the loan is maturing. Instead, the interest accrues, or builds up, and is paid in a lump sum at maturity. Investors buy zero-coupon bonds at great discount, or prices far lower than par value. When the bond matures, the accrued interest and the original investment add up to the par value of the bond. For example, a bond with a face amount of \$20,000 maturing in 20 years might be purchased for about \$5,050. At the end of the 20 years, the investor will receive \$20,000. The difference between \$20,000 and \$5,050 represents the interest, based on an interest rate of 7 percent, which compounds automatically until the bond matures. If the bond is taxable, the interest is taxed as it accrues, even though it is not paid to the investor before maturity or redemption (The Bond Market Association, 2002d:1-21).

Bond issuers prefer zero coupon bonds because they have an extended period in which to use the money they have raised without paying periodic interest. Investors prefer these bonds because the discounted price means that they can buy more bonds with the money they have available to invest, and they can buy bonds of different maturities, timed to coincide with anticipated expenses (The Bond Market Association, 2002d:1-21).

Zero coupon municipal bonds combine the benefits of the zero coupon instrument with those of tax-exempt municipal securities. Investors have a range of advantages that includes tax advantages, low minimum investment, and the protection from re-investment risk, a wide choice of bond options to choose from, high quality, and liquidity. These bonds are especially attractive if one seeks to accumulate capital for a long-term financial goal such as retirement planning or college costs (The Bond Market Association 2002b:7).

Zeros have two potential drawbacks. They are extremely volatile in the secondary market, so investors risk losing money if they need to sell before maturity. In addition, unless investors buy tax-exempt municipal zeros, they have to pay taxes every year on the interest they would have received had it, in fact, been paid (The Bond Market Association 2002d:1-21).

b) Inflation-Indexed Bonds

With inflation-indexed bonds, investors receive a coupon that is adjusted to take into account prevailing inflation in the market, while the value of investors' capital grows in line with the inflation rate. When expectations are that inflation will increase, a normal bond's yield will rise - thus driving down its value. The opposite happens with an inflation-linked bond. If the investing public expects higher inflation in the future, there will be a rush towards inflation-linked bonds. The simplest law of supply and demand will drive inflation-linked bond yields down, and push their prices up (Watchovia Securities, 1999:2).

2.2.5.3.4. Bonds with Special Investment Features

Some bonds have special investment features and include things such as bonds with an original issue discount, escrowed-to-maturity bonds, housing bonds, and stripped bonds.

a) Original Issue Discount

This applies to a bond issued at a dollar price less than par, which qualifies for special treatment under federal tax law. The difference between the issue price and par is treated as tax-exempt income rather than a capital gain if the bonds are held to maturity (Fidelity Investments, 2003:2).

b) Escrowed-to-Maturity (ETM)

Some refunded bonds are not scheduled to be called. These securities, known as escrowed-to-maturity (ETM) bonds, are backed by escrow funds designed to make payments was outlined in the security's original indenture (Fidelity Investments, 2003:2).

c) Housing Bonds

Housing bonds are securities backed by mortgages and mortgage loan repayments. These bonds can be called at any time, although this will not be reflected in the call feature (Fidelity Investments, 2003:2).

d) Stripped bonds

Stripping is the process of separating a standard coupon-bearing bond into its consistent interest and principal payments so that they can be separately held or traded as zero coupon instruments. Municipal bonds which pay interest semi-annually can be separated (i.e., stripped) into the corpus and the coupons. The cash flow of the coupons is repackaged into stripped municipals with a greater variety of maturities, from six months up to 30 years. Like zeros, stripped municipals are issued at a sharp discount from face value and are available in a wide range of credit qualities. The main reason behind stripping bonds is that investors in bonds sometimes find that the mixture of cash flows is not convenient in matching their commitments (SAIFM, 2001:19-20).

2.2.5.3.5. Other Investment Options

There are several ways to invest in bonds. Investors can buy individual bonds, bond funds or unit investment trusts.

a) Individual Bonds

There are varieties of individual bonds to choose from. Most individual bonds are bought and sold in the over-the-counter (OTC) market, although some corporate bonds are also listed on the Stock Exchange. The OTC market comprises hundreds of securities firms and banks that trade bonds by phone or electronically. Some are dealers who keep an inventory of bonds and buy and sell these bonds for their own account, others act as agents and buy

from or sell to other dealers in response to specific requests on behalf of customers (The Bond Market Association, 2002a:13).

b) Bond Funds

Bond funds offer investors another way to invest in the bond markets. Bond funds, like stock funds, offer professional selection and management of a portfolio of securities. They allow an investor to diversify risk across a broad range of issues and offer a number of other conveniences, such as the option of having interest payments either reinvested or distributed periodically (The Bond Market Association, 2002a:15).

Because a fund is actively managed, with bonds being added to and eliminated from the portfolio in response to market conditions and investor demand, bond funds do not have a specified maturity date. With “open-end” funds, investors are able to buy or sell their share in the fund whenever they choose. However, because the market value of bonds fluctuates, a fund’s net asset value will change from day to day, reflecting the cumulative value of the bonds in the portfolio. As a result, when investors sell, the value of their investment may be higher or lower, depending upon how the fund has performed since they purchased their share. “Closed-end” bond funds have a specific number of shares that trade on a stock exchange. Because the fund managers are less concerned about having to meet investor redemptions on any given day, their strategies can be more aggressive (Mann, 1996:2-3).

c) Money Market Funds

Money market funds refer to pooled investments in short-term, liquid securities. These securities include U.S. treasuries, municipal bonds, certificates of deposit issued by major commercial banks, and commercial paper issued by established corporations. Generally, these funds consist of securities and other instruments having maturities of three months or less. Money market funds also offer convenient liquidity, since most allow investors to withdraw their money at any time (The Bond Market Association, 2002a:17).

d) Bond Unit Investment Trusts

Bond unit investment trusts offer a fixed portfolio of investments in government, municipal, mortgage-backed, or corporate bonds, which are professionally selected and remain constant throughout the life of the trust. The benefit of a unit trust is that investors know exactly how much they will earn while investing, because of the composition of the securities in the portfolio. They allow an investor to diversify risks across a broad range of issues and offer a number of other conveniences, such as the option of having interest payments either reinvested or distributed periodically. In addition, since the unit trust is not an actively managed pool of assets there is usually no management fee, but investors do pay a sales charge plus a small annual fee to cover supervision, evaluation

expenses, and trustee fees. Municipal bond unit investment trusts offers a wide range of benefits, including attractive current income free from federal and, in some cases, state and local taxes, a high degree of safety with regard to payment of interest and repayment of principal, professional selection of individual securities, and diversification and professional supervision and convenience (The Bond Market Association, 1997a:1-12).

2.2.5.3.6. Fundamental Investment Strategies

Various techniques help investors match investor goals. Some of these techniques include diversification of the municipal bond portfolio, making use of laddering, barbell and by making use of bond swaps. All of these techniques will be discussed according to certain definitions that were obtained from the Bond Market Association (2002a:20).

a) Laddering

Laddering is a diversification strategy where investors purchase securities of various maturities (long and short term) to reduce their portfolio's sensitivity to interest rate risk.

b) Barbell

Barbell is a strategy, which involves investing in securities of more than one maturity to limit the risk of fluctuating prices. Instead of concentrating on a series of bonds distributed over time, as with a laddered portfolio, investors concentrate their holdings on bonds with maturities at both ends of the spectrum (long- and short-term).

c) Derivative Products Such As Futures, Options and Swaps

Special investments strategies can be used to obtain higher bond returns and thus better aid in accomplishing an investor's investment objectives. Such special strategies may include making use of futures, options, or swaps.

Futures are contracts where financial commitments between two parties are "settled" at a future agreed date. Options are buy or sell agreements where, against an up-front fee, one party acquires the discretionary right (with no obligation) to settle a financial contract at an agreed price and time. Swaps, is a technique whereby an investor chooses to sell a bond and simultaneously purchase another bond with the proceeds from the sale. Investors thus sell one fixed income security and buy another in order to take advantage of current market and/or tax conditions and better meet your current investment objectives or adjust to a change in your investment status. Swapping can increase the quality of an investor's portfolio, increase the total return and provide benefit from interest rate changes and may lower taxes (The Bond Market Association 1999:1).

d) Securitization

Securitization is a process through which un-tradable assets, such as bank loans, or the cash flows from assets, become tradable. This concept is discussed in more detail in chapter four as a municipal credit enhancement technique.

Up to this point bonds, and the way in which they operate, the different types of bonds and their importance to investors given their special investment strategies was discussed. Only after this, can the importance of this unique and significant security and its importance to investment becomes clear, and only then can attention be given to municipal bonds as a type of bond (which is the focus of this study). Municipal bonds will subsequently be discussed.

2.3. Municipal Bonds

2.3.1. Municipal Bond Definition

Municipal bonds according to The Bond Market Association of New York (2002b:1) are: *“debt obligations issued by states, cities, countries and other governmental entities to raise money to build schools, highways, hospitals, and sewer systems, as well as many other projects for the public good.”* When an investor purchases a municipal bond, the investor is lending money to an issuer who promises to pay the investor back a specified amount of interest (usually paid semi-annually) and principal on a specific maturity date.

Although the investment options of municipal bonds closely compare to those of ordinary bonds, municipal bonds in the United States often have special investment features. Most of the time they are secured and backed by some assets, and they make use of diversification by means of either swaps, options, futures and in some cases, even securitization (Bond Market Association, 2002b:1-15).

2.3.2. Municipal Bond Description and Price Information

The name of the issuing municipal government is the first essential piece of information for a municipal bond. After a municipal bond is bought, the investor's name is registered in the issuer's books and appears on the bond, and the ownership is recorded through data entry at a central clearinghouse, so that the holder's identity can be traced to avoid any illegal or dishonest procedure. The confirmation or purchase from the bank or investment firm also provides an investor with a written record of the transaction. With this registered and book-entry method, the physical transfer of

certificates is not necessary, and it offers a number of protections and conveniences to bondholders, including protection from loss or theft, automatic payment of interest, notification of calls and case transfers, amongst others (The Bond Market Association, 2002b:9).

2.3.3. Types of Municipal Bonds

Municipal bonds are generally broken down into three categories, namely general obligation bonds, revenue bonds and hybrids (Public Securities Association, 1990:16). For the purpose of this study only the two basic types of municipal securities namely general obligation bonds and revenue bonds will be discussed. Because of the complicated nature of hybrids, they will only be mentioned and not discussed.

2.3.3.1. General Obligation Bonds

General obligation bonds according to Fabozzi (2001: 203) are securities for which the full faith, credit, and taxing power of the issuer is pledged to, and obliged to be used for the repayment of the bonds. Voter referendum is frequently required for the issuance of these bonds, and the public projects funded by these general obligation bonds provide benefits for the common good and so are repaid by taxes on everyone who is subject to taxes in the specific governmental unit. At times when it is not feasible or possible to provide a general obligation pledge, other forms of tax-backed or tax-supported bonds have been developed to provide financing infrastructure.

2.3.3.2. Revenue Bond

State and local government also sell securities for which specific revenues, not government full faith, credit, and taxing power (as in the case of general obligations), is the source of repayment. These obligations are known as revenue bonds. The issuer of revenue bonds can be either government itself or a separate authority. Revenue bonds have mainly been issued for the construction of facility plants that provide electric power, water, wastewater treatment, and resources recovery and transportation. The revenues and user fees that can be pledged to the bonds include electric rates and charges, water and sewage usage fees, waste disposal and tipping fees and tolls and landing fees (Sundaresan, 2002:338).

Although these bonds are issued for hundreds of unique projects, they can be classified into the following broad categories according to Sundaresan (2001:338), namely:

a) Housing revenue bonds

These bonds are issued to promote the construction of housing for low- and moderate-income families. The proceeds of the bond issues are typically lent to real estate developers.

b) Utility revenue bonds

These bonds are issued to support the local utilities, such as gas, water, and electric power systems.

c) Health-care revenue bonds

These bonds are used to raise money for the construction of hospital and health-care facilities.

d) Double-barrelled bonds

These bonds are backed by two distinct sources of revenues. Part of the cash flow of the debt service comes from specified projects and the rest from taxation.

Although being viewed as substantially riskier than general obligation bonds, revenue bonds are more common than general obligation bonds. Santomero and Babbal (2001: 260) states that the reason for this is that most municipalities attempt to distance themselves from their liabilities. They may do this for several reasons. They may either try to limit their liabilities in the event of an ill-conceived project or permit a greater use of user fees for the proposed projects, or disguise the size of their municipal activity.

2.3.3.3. Hybrid and Special Bond Securities

Most of these types of bonds have characteristics of both general obligation and revenue bonds combined with more unique security structures. These bonds have evolved over time within their specific environment because of certain unique factors. Examples of their classification include refunded bonds, dedicated tax-structured bonds, insured bonds, lease back bonds, letter of credit-backed bonds, life care revenue bonds, moral obligation bonds, municipal utility district revenue bonds, new housing authority bonds, tax-allocation bonds, “territorial” bonds, and “troubled city” bail out bonds (Fabozzi, 2001:208). They will not be discussed simply because, as mentioned, they have evolved over time in the United States due to certain specific factors relating to that environment. Although general obligation bonds and revenue bonds exist in South Africa and have been used previously they can be compared to those of the United States. Hybrids in South Africa will similarly only evolve over time, if, and when the municipal bond market comes to life again.

2.3.4. Municipal Bond Investments

2.3.4.1. The Advantages of Municipal Bond Investments

Municipal bonds or “munis” as they are also referred to in the United States are, according to the Bond Market Association of New York (2002b:1), amongst the most popular type of investment available. Their tax-exempt status is the number one reason they are famous, and this contributes to investor appetite. Tax-exempt municipal bonds offer a wide range of benefits, including:

- ❖ Attractive income, free from federal and, in some cases, state, and local taxes.
- ❖ A high degree of safety with regard to payment of interest and repayment of principal.
- ❖ The advantage of a rather predictable stream of income.
- ❖ A wide range of choices to fit in with each investor’s individual investment objectives with regard to investment quality, maturity, choice of issuer, type of bond and geographical location.
- ❖ Marketability in the event of investors having to sell before maturity.

2.3.4.2. Key Municipal Bond Investment Considerations

As with any other bond there are a number of key variables to look at when investing in municipal bonds, such as interest rates, the bond’s maturity, redemption features, credit quality, credit ratings, bond insurance, price, yield, the relationship between interest rate and maturity, the relationship between price and yield, the tax-status and risk involvement. Together, these factors determine the value of an investor’s bond investment and the degree to which it matches the investor’s financial objectives.

2.3.4.2.1. Interest Rates

As with any other bond, the interest rate stated on the municipal bond that is payable to the bondholder, and the dollar amount paid is normally fixed, floating or payable at maturity. Most municipal bonds carry an interest rate that stays fixed until maturity and is a percentage of the face amount, paid semi-annually. For example, a \$1000 municipal bond with a coupon rate of 7 percent will pay \$70 a year to the bondholder, \$35 every six months. While the interest payment or coupon rate, cannot be changed during the life of a bond (unless, of course, it is a variable rate security), the market price of a security changes as market conditions change. If investors sell the municipal bonds prior to maturity, they will receive the current market price, which may be more or less than the original price (Wachovia Securities, 2003b:2).

2.3.4.2.2. Maturity

As has already been mentioned, the maturity date is the date on which the investor will receive payment of principal and the final interest payment. In other words, it is the day, month, and year on which the bondholder will receive the par value of the bond, plus the final interest payment (Wachovia Securities, 1998:2).

Municipal bonds are often long-term bonds, with maturities ranging from 20 to 40 years and the investor's choice of maturity will often depend on two things: (i) when investors would want or need the principal to be repaid, and (ii) the kind of investment investors seek within their risk tolerance. For example, investors seeking greater overall returns might be more interested in long-term securities such as municipal bonds, despite the fact that their value is more vulnerable to interest rate fluctuations, market risks and credit risks (Bond Market Association of New York, 2002a:4).

2.3.4.2.3. Redemption Features

Just like ordinary bonds, municipal bonds also have certain call and put features. Municipal bonds with a call feature allow the issuer to call or retire either all, or a portion, of the bond at a premium or at par before maturity. Municipal bonds with a put feature allow investors to redeem the bonds at par value on a specific date long before the maturity date (Bond Market Association of New York, 2002a:4).

2.3.4.2.4. Credit Quality and Credit Rating

When investors invest in municipal bonds, their primary concern should be the issuer's ability to meet his financial obligations. In the United States, issuers of municipal bonds succeeded in this, and have an outstanding record of meeting interest and principal payments in a timely manner. Issuers disclose the details of their financial state through either official statements or offering circulars, which are available from any bank, brokerage firm, the Internet, or from a library of official statements. Issuers also provide continuing disclosure about their financial state through nationally recognized municipal security repositories. Lastly, investors may contact the issuer or visit the issuer's web site for information (The Bond Market Association of New York, 2002b:4).

According to Reedman and Stahl (1994:441-450) there are five primary factors that assist investors in evaluating the credit quality of municipal bonds. They are:

- Economic conditions of the service area such as employment base stability; the employment base diversity; area's unemployment rate; area's income growth; historical consolidated growth rate; historical population growth rate; historical systems connection growth; projected population growth; and the projected systems connection growth.
- ❖ Financial performance, such as residential rates per kilo watt hour; revenue per kilowatt hour; sales growth; power growth; historical services coverage; consolidated balance sheet; historical fixed charge coverage; projected fixed charge coverage.
- ❖ Legal protection and risk, like security; bond covenants; tax opinion; contract/litigation rights; contract/litigation liabilities; general risk management.
- ❖ Operations quality.
- ❖ Management quality.

Another way of reducing investor risk is through bond insurance. According to the Bond Market Association of New York (2002a:7), credit quality can be enhanced by bond insurance, and through this investor risk can be reduced. Bond insurance makes up an important part of this study and will be discussed further and in greater depth in chapter four.

Another way to evaluate an issuer is to regard his credit rating. Municipal bonds in the United States are also graded by rating agencies, such as Moody's Investor Service, Standard & Poor's, and Fitch, or banks and brokerage firms that have their own research departments that analyse municipal securities grade municipal bonds in the United States. Bond ratings are important benchmarks because they reflect a professional assessment of the issuer's ability to repay the bond's face value at maturity (The Bond Market Association of New York, 2002b:4).

Each of the agencies assigns its ratings based on in-depth analysis of the issuer's financial condition and management, economic and debt characteristics, and the specific revenue sources securing the bond. Although each agency has unique features in its own rating scale triple-A is the highest rating for each one and each scale descends down the alphabet as the opinion of creditworthiness declines (again see Table 2.1).

While experience has shown that a diversified portfolio of high-yield bonds will have only a modest risk of default on the long run, it is extremely important to understand that, for any single bond, the high interest rate that generally accompanies a lower rating is a signal or warning of higher risk. To conclude, tax-exempt municipal bonds offer investors the chance to maximize their after-tax return in proportion to the level of risk they are willing to accept. In general, as with any fixed income investment, the higher the yield, the higher the risk. (The Bond Market Association of New York, 2002b:5).

2.3.4.2.5. Price

Municipal bonds, unlike other bonds, are generally quoted in terms of yield, because there are so many issues of different maturities. In the case of a variable rate bond, the interest stated on the coupon changes on a regular basis, either daily, monthly, or semi-annually. This change is usually based on market conditions or on an index or formula (prime rate, six-months Treasury bill, commercial paper etc.), in order to keep the yield in line with the market. If the coupon interest payment is fixed however, the price of the bond itself must change in order to keep the yield in line with other newly issued bonds (Public Securities Association, 1990:13).

Bond prices are the amount at which the bond was sold at the end of the previous trading day, given as a percentage of par. Par value equals 100; a discounted bond trades at a price below par 100 while a premium bond trades at a price above 100 (Wachovia Securities, 1998:2). When the prices change, it leads to an automatic change in yield. For example, an investor who pays less than par for a bond with a 6 percent coupon receives, in effect, more than 6 percent in yield; that is, he or she receives \$60 of interest each year on an investment of less than \$1000. An investor who pays more than par for the same bond would receive a yield of less than 6 percent. Yields on municipal bonds are usually quoted in increments of .05 percent, or five basis points; with a basis point equal to 1/100 of 1 percent (Public Securities Association, 1990:13).

Municipal bonds fluctuate in yield for the same economic reasons that other bonds do. According to the Public Securities Association (1990:13), the price investors pay for bonds include variables, such as:

- ❖ General shifts in the interest rates due to Federal Reserve monetary policy.
- ❖ Changing inflation expectations.
- ❖ Short term swings in the demand for municipal bonds on the part of the investors.
- ❖ Supply of new issues.
- ❖ The perceived creditworthiness of a particular bond issuer and the total volume of municipal bonds issued.
- ❖ The creditability and frequency of the issuer.
- Credit quality, maturity, and tax status of the bond.
- Trading activity of the bonds.
- ❖ Trading of this specific bond or similar bonds in the marketplace.
- ❖ The call provisions of the bond.
- The difficulty in finding a buyer or seller for the bond.

- ❖ The size of the order.
- ❖ The amount of service provided to the customer.
- ❖ Whether or not the dealer is holding the bonds in safekeeping, collecting the interest, monitoring for bond calls or other "material events" and providing monthly evaluations.

2.3.4.2.6. Yield

As with ordinary bonds, there are also two types of municipal bond yields, (The Bond Market Association, 2002:3): namely current yield and yield to maturity or yield to call.

- ❖ *Current yield* - Current yield is the annual return on the dollar amount paid for the bond and is derived by dividing the bond's interest payment by its purchase price.
- ❖ *Yield to maturity* - Yield to maturity is much more meaningful and tells investors the total return they will receive by holding a bond until maturity. It equals the interest an investor receives from the time of purchase until maturity plus any gain (the bond was purchased below par, or face value) or loss (if purchased above par value).

2.3.4.2.7. Relationship between Price and Yield

While the interest payment or coupon rate cannot be changed during the life of a bond (unless it is a variable rate bond) the market price of a municipal bond changes as market conditions change. If investors sell their municipal bonds prior to maturity, they will receive the current market price, which may be more or less than their original price. Consequently, it is important to understand how the direction of interest rates might affect an investor's municipal bond holdings. As with other fixed-income securities, municipal bonds fluctuate in response to changing interest rates. The prices increase when interest rates decline and, prices decline when interest rates rise. The reason for this, according to the Bond Market Association of New York (2002b:6) is:

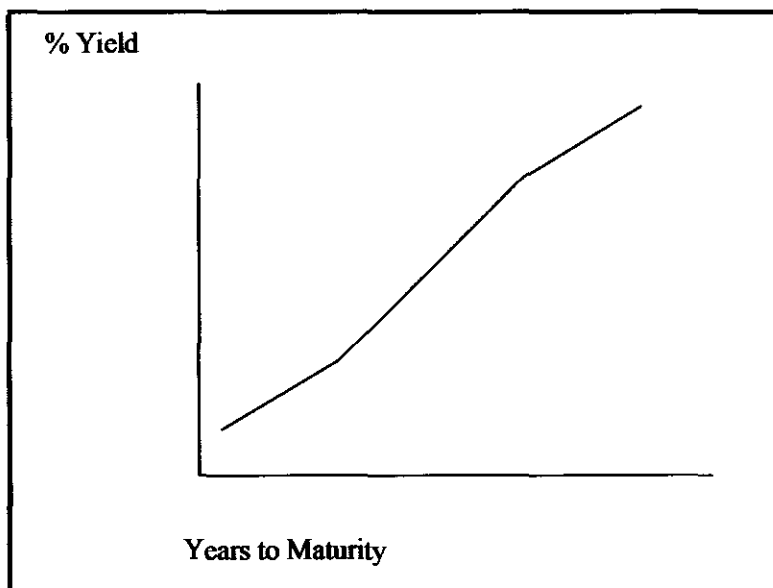
- ❖ When interest rates fall, new issues come to the market with lower yields than older securities, making the older securities worth more, hence the increase in price.
- ❖ When interest rates rise, new issues come to market with higher yields than older securities, making the older ones worth less, hence the decline in prices.

2.3.4.2.8. Relationship between Interest Rate and Maturity

Because of the special characteristics of the municipal bond market in the United States, there are two distinct differences between municipal rates and other rates. These two differences, which are (i) the volatility and (ii) the composition of demand, influence the yield curve of the municipal bond markets greatly, and for this reason will be discussed.

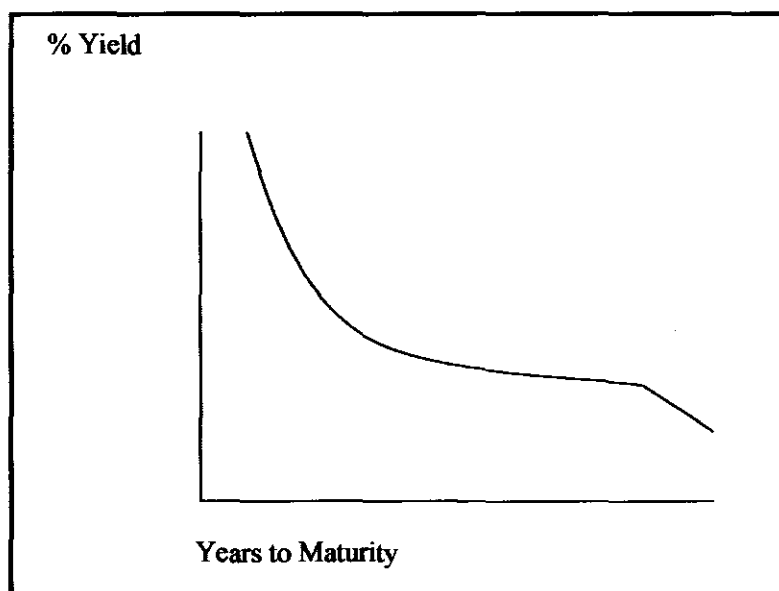
Municipal rates in the United States are more volatile than other rates. The reason for this is the cyclical pattern of demand for municipal securities by investors who are mainly interested in the tax-exempt status of municipal bonds. The other difference is the fact that municipal bond yields are usually upward sloping, even if interest rates are near cyclical peaks and other rates are expected to fall. This interesting phenomenon only becomes clear when a sample municipal yield curve (of exactly the same period) is compared to, for instance the yield curve for U.S. treasury securities. The yield curve of municipal securities remains upward sloping amidst near cyclical peak interest rates, while the treasury securities' yield curve slopes downwards, reflecting the market's expectation that future rates will fall. Figure 2.2 and Figure 2.3 on the next page shows this. The composition for demand is the main reason for this upward sloping curve but other reasons include (i) the greater volatility of longer-term municipal bonds, (ii) the heavy supply of intermediate- and long-term bonds as a percentage of the total market, and (iii) the relatively limited demand for longer-term securities by purchasers of tax-exempt bonds. An example of such an upward-sloping yield curve for municipal securities can be seen in Figure 2.2. on the next page (Public Securities Association, 1990:154-155).

Figure 2.2: Yield Curve for Municipal Securities



(Source: Public Securities Association, 1990:154)

Figure 2.3: Inverted Yield Curve - The Term Structure of Interest Rates for U.S. Treasury Securities



(Source: Public Securities Association, 1990:154)

2.3.4.2.9. Tax Status

Some municipal bonds offer special tax advantages while others do not. Municipal bonds that offer these tax advantages falls into a tax-exempt category and municipal bonds that do not offer tax advantages are known as taxable municipal bonds. Both types of municipal bonds, namely tax-exempt municipal bonds, and taxable bonds, will be discussed now.

a) Tax-Exempt Municipal Bonds

The principle characteristic that sets municipal bonds apart from all other capital market securities in the United States is their federal tax-exempt status (Public Securities Association, 1990:7). This means that the interest income on municipal bonds is mostly exempt from federal income tax, and it is because of this characteristic that municipal securities are often referred to as “tax-exempt” bonds.

In most states, interest income received from securities issued by government units within the state is also exempt from state and local taxes (The Bond Market Association of New York, 2002:2). Since the tax status of interest and related tax consequences on municipal securities greatly influence the nature, type, and level of investor interest,

and because municipal bonds offer a double, and sometimes even a triple layer of tax exemption, it is clear why investors find municipal bonds in the United States so attractive.

One of the best ways to appreciate the tax-exempt advantage of a municipal security according to the Bond Market Association of New York (2002b:2), is to compare it to a comparable investment. Tax exemption can mean important savings for investors by increasing the amount of income remaining after taxes.

To illustrate what a taxable security would have to yield to match the spendable income from a tax-free investment, the Bond Market Association of New York (2002b:2) explains this concept by making use of a so-called bond calculator (that can be seen in Table 2.3.). From this, it is clear that the municipal bond would have provided the best yield after taxes are taken into account, and therefore would have been the more advantageous investment. The table is for illustrative purposes only. To use the table most effectively, investors must follow the directions below.

- ❖ *Step 1:* Find the appropriate return (single or joint).
- ❖ *Step 2:* Investors must determine their tax bracket by locating the taxable income category that they fall into. Taxable income is income after appropriate exemptions and deductions.
- ❖ *Step 3:* The number in the column under the tax bracket gives investors the approximate taxable yield equivalent for each of the tax-exempt yields in the first column from the left. Example: If investor are single and have a taxable income of \$70 000 (\$115 000) if married), the investor fall in the 30% tax bracket. According to the table, the investor would need to earn 8.75% on a taxable security to match a 6.0% yield from a tax-exempt security such as a municipal bond.

In the instances in which the interest income is also exempt form state and local income taxes, the advantages over the return on taxable securities is even more conspicuous.

**Table 2.3: Tax-Exempt/Taxable Yield Equivalents Compared For the U.S. Tax Year
2002**

TAXABLE INCOME							
Single Return	\$0- \$6000	\$6001- \$27,950	\$27,950- \$67,700	\$67,701- \$141,250	\$141,251- \$307,050	\$307,051 & Over	Marginal Rate for Certain High- Income Taxpayers
Joint Return	\$0- \$12,200	\$12,001- \$46,700	\$46,701- \$112,850	\$112,850- \$171,950	\$171,950- \$307,050	\$307,050- & Over	
Tax Bracket	10%	15%	27%	30%	35%	38.6%	39.69%
Tax- Exempt Yields (%)	TAXABLE YIELD EQUIVALENTS (%)						
2.0%	2.22%	2.35%	2.74%	2.86%	3.08%	3.26%	3.31%
2.5%	2.78%	2.94%	3.42%	3.57%	3.85%	4.07%	4.14%
3.0%	3.33%	3.53%	4.11%	4.29%	4.62%	4.89%	4.97%
3.5%	3.89%	4.12%	4.79%	5.00%	5.38%	5.70%	5.79%
4.0%	4.44%	4.71%	5.48%	5.71%	6.15%	6.51%	6.62%
4.5%	5.0%	5.29%	6.16%	6.43%	6.92%	7.33%	7.45%
5.0%	5.56%	5.88%	6.85%	7.14%	7.69%	8.14%	8.28%
5.5%	6.11%	6.47%	7.53%	7.86%	8.46%	8.96%	9.11%
6.0%	6.69%	7.06%	8.22%	8.57%	9.23%	9.77%	9.93%
6.5%	7.22%	7.65%	8.90%	9.29%	10.00%	10.59%	10.76%
7.0%	7.78%	8.24%	9.59%	10.00%	10.77%	11.40%	11.59%
7.5%	8.33%	8.82%	10.27%	10.71%	11.54%	12.21%	12.42%
8.0%	8.89%	9.41%	10.96%	11.43%	12.31%	13.03%	13.25%

(Source: The Bond Market Association 2000)

a) Taxable Municipal Bonds

Not all municipal bonds offer income exempt from both federal and state taxes. There is an entirely separate market of municipal issues that are taxable at the federal state level, but still offer a state, and often local, tax exemption on interest paid to residents of the state of issuance. These bonds are referred to as taxable municipal bonds. In the USA, taxable bonds exist because the federal government does not subsidize the financing of certain activities that do not provide a significant benefit to the public at large. Four types of bond issues that are federally taxable in the United States are investor-led housing, local sports facilities, refunding of a refunded issue, and borrowing to replenish a municipality's under-funded pension plan. Taxable municipals offer yields more comparable to those of other taxable sectors, such as corporates or agencies, than those of other municipals do (The Bond Market Association of New York, 2002b:11).

This study mostly refers to tax-exempt municipal bonds since they make up most of the United States market. When this study refers to taxable municipal bonds, it makes the distinction clear.

b) Additional Taxation of Municipal bonds

The tax treatment of municipal bonds varies by state, and there are three types of taxes that can be imposed on municipal bonds in the United States (i) income tax on coupon income; (ii) tax in realized gains; and (iii) a personal property tax (Fabozzi, 2001:222-223).

2.3.4.2.10. Risk Involvement

A certain amount of risk is involved in municipal bond investments. According to Fidelity Investments (2003:2), the following types of risk are associated with municipal bonds in the United States:

a) Market or Interest Rate Risk

As with all fixed income securities, municipal bonds are susceptible to fluctuations in interest rates. If interest rates rise, bond prices will decline, despite the lack of change in both the coupon and maturity (Fabozzi, 2001:22).

b) Timing or Call Risk

Many municipal bond issues carry call provisions that allow retirement of the bond prior to stated maturity. These calls are clearly defined in the description and usually pay the holder a premium for exercising this right. An issuer will typically call bonds when interest rates drop, making re-investment less desirable for the buyers (Fabozzi, 2001:23).

c) Re-investment Risk

This is the risk involving the variability in returns from re-investment from a given strategy, due to changes in market rates. This risk is greater for longer holding periods (Fabozzi, 2001:22).

d) Inflation Risk

This is risk arising because of variations in the value of cash flow from a security due to inflation, as measured in terms of purchasing power (Fabozzi, 2001:25).

e) Liquidity Risk

This is the risk that an investor will have to sell a bond below its true value where the true value is indicated by a recent transaction. The primary measure of liquidity is the size of the spread between the bid price and the ask price quoted by a dealer. The wider the bid-ask spread, the greater the liquidity risk (Fabozzi, 2001:23).

f) Credit Risk or Default Risk

Despite the fact that most municipal bonds have high credit ratings, there is a risk of default in any bond investment. By investing in higher-rated securities, the credit risks associated with a municipal bond investment can be reduced. Furthermore, insured bonds are guaranteed to make timely principal and interest payments (Fabozzi, 2001:24).

g) Alternative Minimum Tax (AMT)

The Alternative Minimum Tax system was developed to prevent individuals and corporations from avoiding significant tax liability through exemptions from gross income, tax credits, and deductions. A tax advisor should be consulted for more information on the Alternative Minimum Tax (Fidelity Investments, 2003).

h) Intangible Tax Risk

In some states in the U.S., individuals conducting business are subject to the intangible personal property tax. This is an annual tax based on the current market value, as of January 1, 2003 of the intangible personal property owned, managed, or controlled by the resident or person doing business in Florida (Fidelity Investments, 2003:2).

i) Special Event Risk

Some municipal bonds, including housing bonds and certificates of participation (COPS), carry special event risk because they are callable at any time regardless of the stated call features. These types of municipal bonds are rarely priced much above par regardless of the coupon. As a result, when they are available, they often trade at lower than the market price during periods of declining interest rates because their prices have limited potential (Fidelity Investments, 2003:2).

j) Other Types of Risk

Other types of risk affecting municipal bonds include risks that would normally influence ordinary fixed income securities such as exchange rate or currency risk, volatility risk, political or legal risk, event risk etc. Many risks could affect municipal bond and this study does not represent the entire range of risk, since it is too large, therefore, this study only discusses the most relevant risks (Fabozzi, 2001:27-29).

2.3.4.3. Additional Features of Municipal Bonds

According to the Public Securities Association (1995:26), several other important features and practices distinguish municipal securities from other kinds of securities. Knowledge of these characteristics is necessary for any understanding of the fundamentals of municipal securities.

2.3.4.3.1. Serial and Term Bonds

Long-term municipal debt is sold as serial bonds rather than as term bonds. With serial bonds, a predetermined series of bonds mature each year until the maturity of the longest series. There are a few benefits involved in making use of serialization. First, serialization may help in marketing the bond because different investors prefer to purchase bonds with different maturities. Secondly, serialization allows the issuer to market selectively longer-term series to some investors, and shorter-term series to others. Finally, it may also increase the degree of comfort that investors have in the ability of the municipality to redeem the maturity (Santomero & Babbel, 2001:260). A typical offering consists of as much as 20 or more different maturities or serial bonds. This helps the issuer spread out debt service and stay within the financial requirements.

Contrary to this, term bonds are repaid in full on a single maturity date (Santomero & Babbel, 2001:260). In recent years with the growth of revenue bonds, term bonds have become increasingly popular in the United States. These kinds of bonds are due only on maturity and usually carry a sinking fund requirement. Term bonds are tax-exempt and

similar to traditional corporate debt because, as with corporate bonds, they are usually quoted by price rather than yield. They are therefore also called dollar bonds (Public Securities Association 1990:26).

2.3.4.3.2. Collecting the Interest

Interest on fixed-rate municipal bonds is generally paid semi-annually and usually on the first or fifteenth of the chosen month. The last interest payment is made on the day the principal is due (Public Securities Association, 1990:26).

Holders of registered bonds, as noted above, receive interest payments without any requirement of presentation. The bondholder however is entitled to accrued interest. Accrued interest begins on a specific date on the bond known as the “dated date,” although the bonds are often actually sold or delivered at a different date. A so-called short coupon results when the time between the dated date and the first coupon date is less than six months and a long coupon results when the first coupon date is more than six months away from the dated date (Public Securities Association, 1990:27).

2.3.4.3.3. Trading plus Accrued Interest

According to the Public Securities Association (1990:28), it is necessary to allocate interest between buyers and sellers of municipal bonds because most trading takes place between interest payments. The investor who sells bonds is entitled to the interest due from the last interest payment date to the date of sale. In the U.S. municipal bond market, it works as follows: the buyer of the bonds must pay the seller any interest due when he or she buys the bonds. If the settlement date for an investor’s bond sale is March, for example, and the last coupon date was January, the seller is entitled to two months’ interest from the buyer. Municipal bonds then trade “plus accrued interest.” This means the interest due is added to the price of the bonds. The buyer, in turn, will collect and keep the full six months interest on the next interest payment date (Public Securities Association, 1990:28).

2.3.4.3.4. Official Statement

According to the Public Securities Association, (1995:28) underwriters of municipal bonds are required to send official statements to all investors in new-issue securities, and to the Municipal Securities Rulemaking Boards (MSRB). Other rules of the SEC (the Securities and Exchange Commission in the United States) require underwriters of municipal securities offerings in excess of \$1 million or more in aggregate principal amount to obtain and review an official

statement before bidding on, or purchasing the offering, unless the offer qualifies for specific exemption from the requirements.

2.3.4.4.5. Sinking Funds

As indicated earlier sinking funds are reserves, set aside yearly by the issuer to redeem term bonds over a specified period prior to the stated maturity date. Just as serial maturities help issuers spread their financial charges evenly, so sinking funds help to even out payments on term bonds. Instead of paying off the entire issue at maturity, the issuer pays a set amount annually into a sinking fund from which bonds are redeemed according to a set schedule. Sinking funds, therefore, add a measure of security to the bonds. This fund is sometimes referred to as the “Debt Service Fund” (Stone and Youngberg, 2003:2).

2.4. The Municipal Bond Market In The United States

2.4.1. The Size of the Market

The municipal bond market of the United States is one of the world’s largest and most remarkable securities markets and as already mentioned, it can be divided into two categories, namely, the tax-exempt municipal bond market where tax exempt municipals trade, and the taxable municipal bond market where taxable municipal bonds trade.

a) The Tax Exempt Municipal Bond Market

The tax-exempt municipal bond market is by far the bigger of the two municipal bond markets in the United States. In 1997, it had approximately \$1.7 trillion worth of tax-exempt municipal bonds in the hands of investors, with more than 50 000 state and local entities participating in the issuing of these securities, and with the daily trading volume amounting to an estimated \$9 billion. While some of the bonds are “actively traded”, other bonds may not trade for months at a time, due to most individual investors buying and holding the bonds until they mature (The Bond Market Association, 1997b:1).

b) The Taxable Municipal Bond Market

The other market that developed in the U.S. is a market for which the interest income is taxable. Although this market is relatively smaller than the tax-exempt market, the growth of the taxable municipal market in recent years has been astounding. The Bond Market Association of New York (2002b:9) stated in one report that over \$75 billion in taxable municipals has been issued between 1997 and 2002.

2.4.2. The Municipal Bond Market Structure

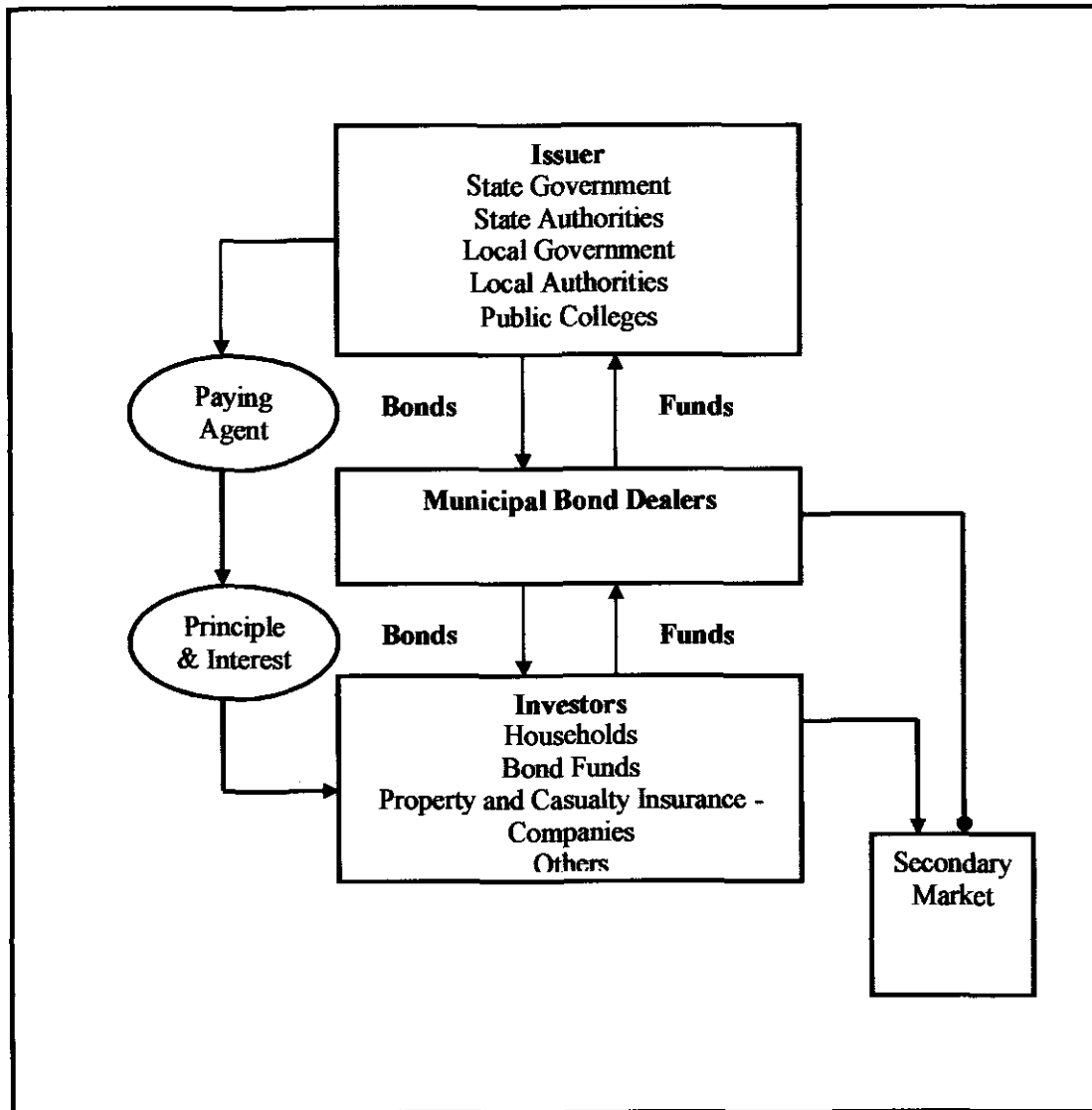
The municipal bond market consists of the primary market, which deals in the new securities of issuers, and the secondary market, where securities are bought, sold, and traded after they have been issued.

a) The Primary Market

Figure 2.4 on the next page presents the flow of funds in the primary municipal bond market. The process begins where an issuer sees a need for money to pay for capital improvements, or to fill gaps in its cash flow. The issuer then takes a series of steps that lead to the primary market. In this market the municipal bond dealer, who may be independent or part of a securities firm or a bank, purchases the issuer's bonds through a process called underwriting (Public Securities Association, 1995:33).

The bonds are then resold to institutional and individual investors, who pay the dealer directly for the debt they have purchased. The dealer uses these funds to reimburse himself for the capital that was used to purchase the bonds from the issuer. If an issue is underwritten and there are no buyers, the underwriter assumes the risk of holding the bonds in inventory until they are eventually sold. Both principal and interest are paid to the investors by the issuer, usually through a bank acting as paying agent, according to a fixed schedule (Fabozzi, 2001:225).

Figure 2.4: The Flow of Funds in the Primary Municipal Bond Market



(Source: Public Securities Association, 1990:35)

b) The Secondary Market

The secondary market consists of the activity and trade in securities after they have been sold as new issues. This market also supports the primary market by providing liquidity to investors who are more likely to buy a security if they know that they can sell that security at a fair market price prior to its stated maturity. Most municipal dealers in the United States have trading departments that make secondary market trades in outstanding bond issues (Fabozzi, 2001:226).

c) Bond Offerings

When states, cities, or towns want to offer new bonds, there are two ways to get the bonds to market; (i) they can negotiate an arrangement with a securities firm to underwrite the bond, or (ii) they can ask for competitive bids. A competitive bid means that the issuer works with the lowest bidder to sell the bonds. A negotiated agreement considers other factors. Most offerings in the United States - up to 80 percent - are negotiated. The main advantage is a guaranteed pre-sale. The potential problems are the opportunity for manipulating the deal to the advantage of the underwriter at the expense of the taxpayer, who finalizes the interest bills, and the possibility of political kickbacks. Competitive bids are free of these problems, but may rule out developing a strong working relationship that could benefit the issuer (Wachovia Securities, 1998:2).

2.4.3. The Role-Players in the Municipal Bond Market

Any municipal bond market has dedicated professionals, who have the diverse skills needed to raise money in the capital market for state or local governments. Distinct roles are played by state officials, public finance investment bankers, underwriters, salespeople, traders, analysts, lawyers, financial advisors, rating agencies, insurers, commercial bankers, investors, brokers, technology developers and vendors, the media, and regulators within this market. All of these professionals work together to ensure the common goal of providing funds to local government to build much needed public projects and infrastructure. By accomplishing this, they also contribute to the development of a secondary market for municipal securities. In order to understand this market properly, the municipal bond market of the United States, its structure, the specific role players in this market and the market strengths, which have so successfully attracted issuers, will be discussed in the remainder of this chapter.

2.4.3.1. The Issuer

State and local government units, either directly in their own names, or through a special authority, issue municipal bonds in the United States. An authority is a separate state or local governmental issuer expressly created to issue bonds or to run an enterprise, or both. Authorities such as those for transportation or power can issue bonds on their own behalf. Other authorities can issue bonds for the benefit of other, qualified, non-governmental parties, such as non-profit hospitals, private colleges, and private companies engaged in pollution-control activities. Municipal bonds are authorized and issued to express state and local laws, which impose restrictions on the size and financial structure of the debt. Moreover, each new issue requires the approval of the legislative body of the issuer, often through an ordinance or resolution (Public Securities Association, 1995:57).

2.4.3.2. Municipal Bond Dealers

In order to raise money in the market, the issuer works with a municipal bond dealer. The municipal bond dealer is usually in a department of a securities firm or bank that provides other financial services. Public finances, investment banking, underwriting, marketing, and trading of municipal securities are just some of the jobs that the municipal bond department of securities firms and banks undertake.

Some municipal bond departments are fully integrated into one department, with all the functional areas organized as one business unit. In other firms these areas are divided between the firms fixed income division and the investment banking division. There can also be any number of other organizational combinations. Because of the broad and regional nature of the business, there are dealers that operate solely in the municipal bond market, sometimes concentrating on one market sector. Others do mostly retail business, which involve working with individual or household investors. Still other firms trade only for dealers; they are the so-called municipal bond brokers or brokers' brokers (Public Securities Association, 1995:39).

a) Public Finance

Public Finance is the investment-banking arm of the municipal bond business, where investment bankers work with existing clients and where they develop new business with other issuers. Public finance specialists, with information from the underwriting and trading side, respond to the issuer's needs and the needs of investors with traditional and innovative financing structures. The investment bankers are responsible for coordinating and responding to the many written and oral "requests for proposals" (RFPs) that are sent to them by issuers. These RFPs, which include detailed plans and financial analyses of the issuer, form the basis of the issuer's selection of a municipal bond dealer in a negotiated underwriting. The selection of underwriters for a negotiated sale is highly competitive, as many firms compete for an issuer's business. These public finance departments also sometimes perform financial advisory work (Anon., 2003:6).

b) Underwriting

The underwriters set prices and yields on new issues. The two main paths underwriters use to purchase or obtain bonds from an issuer, are through a competitive sale, or a negotiated sale.

Normally more than one underwriter will submit a bid to the issuer. The bonds are awarded to the underwriter who offers the lowest interest cost. Underwriters will often bid on bonds as part of a syndicate, which involves a group of two or more underwriters from competing firms who agree to make a bid together to an issuer.

Competitive sales are also called advertised sales or sealed bid sales. In a negotiated sale, the issuer, prior to the public sale date, selects the lead underwriter or senior manager whose job will be to coordinate and manage the financing through all of its stages. The issuer often selects other managers from competing firms to act as co-managers. The managers, acting together or with other firms through a syndicate, make an offer to purchase the bonds from the issuer at a price that will both produce the lowest interest cost to the issuer and sell the bonds to investors. There is greater flexibility in structuring the bonds and in reacting to most current market conditions in a negotiated sale. As in a competitive sale, the underwriters work closely with traders and salespeople to determine the right price for a new issue (Anon., 2003:7).

c) Trading

Traders maintain the secondary market for securities by actively buying bonds from, and selling bonds to other dealers and investors. A good trader must be familiar with the bonds available in the municipal market, their creditworthiness, as well as with the overall conditions in the other fixed income markets. In the United States, the market is very complicated and traders specialize either in one sector of the market, such as hospital bonds; or in certain bond maturities, such as one to 10 year bonds; or in dollar bonds (bonds that are quoted and traded in dollar prices rather than in terms of yield) (Anon., 2003:7).

d) Sales

The sales people involved in buying and selling bonds develop and maintain direct contact with institutional investors. They are situated in the trading room close to the underwriters and traders. In addition to selling new issues that the firm has underwritten, the salesperson is familiar with the investor's portfolio and looks for opportunities to serve the investor in the secondary market. The sales force can be organized in various ways: geographically, by client relationships, by the maturity of the bond, or by a combination of any of these (Anon., 2003:7).

e) Sales Liaison

Securities firms that have a client base with many individual investors often have a retail sales liaison force. The sales liaison staff is normally located in the trading room and works with the account executives (known as stockbrokers, registered representatives, account executives, or private client service representatives) in the firm's main offices and branches. The account executive calls the sales liaison staff with enquiries and orders, and the liaison staff work with the underwriter or trader to fill the investor's needs (Anon., 2003:7).

f) Research and Credit

The complexity of the municipal market and the financial difficulties of some state and local governments in the United States have led municipal bond dealers to place greater emphasis on the creditworthiness of municipal issuers. Dealers have research and credit specialists who are responsible for reviewing and following issuers in the primary and secondary market. Research analysts may prepare a short opinion that can be distributed internally (within the firm) or externally to investors on competitive or negotiated issues coming to market, or they may write comprehensive reports on specific market sectors or on market strategy (Anon., 2003:8). In some firms, research and credit personnel work extensively with the public finance investment bankers on RFP's. Once the firm is awarded the negotiated business, they might handle credit issues and rating issues as well. By implication, the dealers (through the research and credit team) then are responsible for reviewing offering statements under the disclosure rules of many firms (Public Securities Association, 1995:42).

g) Operations

Operations involve the complex processing involved in the buying and selling of municipal securities. These include the processing of orders and payments, verifying and delivering securities, issuing confirmations, and maintaining customer accounts and other required documentation. The adoption of industry-wide requirements for orders, record keeping, and confirmations has significantly standardized the functions of the operations group (Anon., 2003:8).

2.4.3.3. Bond Brokers

Municipal bond brokers, or brokers' brokers, trade only for municipal bond dealers and dealer banks; they do not work directly with either institutional or individual investors. Brokers are able to facilitate trades in a more efficient way than the dealers would be able to. For example, dealers often try to sell bonds in their inventories through brokers by asking a broker to seek bids from other dealers. This is known as the bid-wanted business. In other cases, a dealer may be looking for particular bonds for a customer and tell the bond broker the specified yield or price at which he or she would be willing to buy the securities. In this instance, the broker will seek these bonds from other dealers (Public Securities Association, 1995:43).

2.4.3.4. The Legal Participants

The legal participants in the United States Municipal Bond Market consist of the bond counsel and the underwriter's counsel, but because of the diverse and complex nature of the municipal market, some issues may require opinions in addition to those provided for by the bond counsel and underwriter's counsel. These opinions may include those of special tax counsel, bank counsel, and disclosure counsel, outside bond counsel and/or borrowers counsel (Anon., 2003:11). For the purpose of this study, only the bond counsel and the underwriter's counsel will be discussed.

a) Bond Counsel

Every municipal security in the United States is accompanied by an opinion of the bond counsel who represents the legal interests of the bondholders. That opinion addresses the main legal issues, such as the fact that the bonds constitute legal, valid, and binding obligations of the issuer, and that interest on the bonds is exempt from federal income taxation under applicable tax laws (Public Securities Association, 1995:36).

b) Underwriter's Counsel

An underwriter's counsel represents the underwriters in a negotiated issue. Underwriter's counsel conducts a thorough test of due diligence of the issuer. Due diligence involves questioning the issuer and any important related parties about their financial state, plans, reports, and other factors that are important for a purchaser to know in order to make an investment decision. At the closing, underwriter's counsel provides a certificate to the underwriter stating that nothing material to the transaction has been omitted from the disclosure process. Underwriter's counsel also prepares the bond purchase agreement or contract, before the debt is sold to the underwriter (Anon., 2003:10).

2.4.3.5. Financial Advisors, Specialists, and Other Consultants

State and local governments in the United States often seek the advice of a financial advisor and other professional experts. Financial advisors perform a variety of tasks such as analyzing the financing needs of the issuer, helping to choose an underwriter or organize a competitive sale, structuring the issue, working with the rating agencies and credit enhancers, and advising on other matters related to the issuer's debt and capital plans. The scope of the advisor's work overlaps with that of the underwriter, particularly in a negotiated sale. A financial advisor can act as the underwriter for

an issue, although this practice is becoming increasingly rare for large issues because conflict of interest can arise. The opinions of consultants are important not only for establishing the merits of a particular project but also for attracting voter approval and for promoting investor acceptance and confidence in the bonds (Public Securities Association, 1995:36).

2.4.3.6. The Trustees and Paying Agents

A bank is designated as the custodian of funds and official representative of bondholders. Trustees are appointed to ensure compliance with the trust indenture, and represent the bondholders while imposing and negotiating the necessary contracts with the issuer. In the United States, the trustee is responsible for carrying out the administrative functions that are required under the bond documents. These functions include establishing the accounts and holding the funds relating to the debt issue, authenticating the bonds, maintaining a list of holders of the bonds, paying principal and interest on the debt, and representing the interests of the bondholders in the event of default (Mann, 1996:9-11).

2.4.3.7. The Investors

Three classes of investors dominate the municipal marketplace in the United States. These are (i) households, consisting of individuals acting directly or through investment counsels (ii) household proxies, that is, bond funds such as managed closed-ended funds, open-ended mutual funds, money market funds, bank personal trusts and unit investment trusts; and (iii) institutions, particularly commercial banks and property and casualty insurance companies. According to figures available from the Internal Revenue Service, the Bond Market Association of New York (1997b:2) reported in 1997 that an estimated 5.1 million households owned municipal bonds in some form, either through direct ownership of individual bonds or through investment in institutional portfolios, including mutual funds, unit investment trusts, and bank trust accounts.

The principal characteristic of all the buyers of municipal bonds is that they are in a sufficiently high tax bracket, which makes it beneficial to invest in tax-exempt bonds. Commercial banks and insurance companies are also major institutional holders of municipal bonds. Individual participation in the U.S. municipalities has also expanded significantly through investments in unit investment trusts and mutual and money market funds (The Bond Market Association, 2002:11).

2.4.3.8. The Regulators

There are three municipal security regulators in the United States, namely: (i) the Securities and Exchange Commission (SEC); (ii) the Municipal Securities Rulemaking Board (MSRB); and (iii), the National Association of Securities Dealers.

a) The Securities and Exchange Commission (SEC)

The SEC is an independent, non-partisan, quasi-judicial regulatory agency with responsibility for administering the federal securities laws in the United States. The SEC enforces federal securities laws to provide protection for investors, to ensure that they have access to disclosure of material information, and to see that the securities markets operate fairly and honestly (Fabozzi, 2001:228).

b) The Municipal Securities Rulemaking Board (MSRB)

The (MSRB) was established to develop rules and set standards regulating securities firms and banks involved in underwriting, trading, and selling municipal securities. The MSRB is a self-regulatory organization overseen by the SEC. The MSRB has authority to make rules regulating the municipal securities activities of banks and securities firms only. It does not have authority over issuers of municipal securities or investors (Fabozzi, 2001:228-230).

c) The National Association of Securities Dealers (NASD)

The NASD was established to conduct regulatory reviews of members' business activities, and designs and operates marketplace services and facilities. NASD regulation performs many functions, including education, registration, and testing of securities professionals; field examinations of securities firms to determine their compliance with federal securities laws, the rules of the MSRB, and NASD rules and regulations; surveillance of the National Association of Securities Dealers Automated Quotation System (NASDAQ) markets; and other services (Public Securities Association, 1995:51).

2.4.3.9. Other Participants

Other participants in the U.S. municipal securities market include information repositories and the Committee on Uniform Security Identification Procedures.

a) Information Repositories

In the United States bond market, the Nationally Recognized Municipal Securities Information Repository (or NRMSIR) is found, and its role includes not only the collection and dissemination of final official statements but also the dissemination of secondary market continuing disclosure information. An information repository can be a private information vendor as long as it meets certain recognized SEC conditions (Public Securities Association, 1995:51).

b) Committee on Uniform Security Identification Procedures (CUSIP)

The CUSIP (or Committee on Uniform Security Identification Procedures) service bureaus were established in 1964 and is operated by Standard & Poor's for the American Bankers Association. It was formed to develop a uniform method of identifying all corporate securities, U.S. government securities, and municipal securities. The CUSIP service bureau assigns unique numbers and standardized descriptions to practically every sector of the financial market, including the municipal market, and this is kept on file. A CUSIP number will have a combination of nine numbers and letters and these numbers are then assigned to most municipal issuers. Standard & Poor's Corporation provides a master directory of all its CUSIP listings to subscribers.

2.4.4. Framework for Assessing Municipal Bond Market Development Based On the U.S.

Model

Because of the prolonged success of the United States municipal bond market, policy makers in emerging economies have begun to identify a number of basic market strengths necessary to attract issuers and investors in a sustainable fashion. Although policy makers know that many of the actual ways in which the U.S. market meets these requirements cannot be recreated in emerging economies (such as South Africa), they still try to find short cuts to achieve accelerated bond market development in their own countries by comparing them to the United States bond market. Leighland (1997:2) have characterized some market strengths on both the demand and supply side of the municipal bond model.

Market strengths that have caused some influence on the demand side for municipal bonds in the United States are:

a) Investor Familiarity and Confidence

The United States municipal market is capable of withstanding occasional shocks to investor confidence caused by major issuer defaults and bankruptcies. This is largely because its system of legal and procedural protections has

developed over a 200-year period of market successes and failures. Investors are familiar and confident in this market.

b) Ability to Trade Securities, Because of the Active Secondary Market

Because an active secondary trading market has developed in the United States investors are able to sell off their investments prior to maturity, thus vastly increasing investor interest in securities of any given maturity.

c) Freedom to Invest Mainly Due to the Absence of Government Control

For the most part, the United States government neither prescribes investments by institutional or individual investors. This not only increased competition for investments but also made the market receptive to new kinds of instruments.

d) Acceptable Return on Investment, Because of the Tax-exempt Status of "Munis"

Although often criticized as an inefficient subsidy, the exemption of municipal bond interest payments from federal income tax has proved to be a powerful attraction, particularly for individual investors.

e) Strong Credit Quality of the Tax-supported Debt

The U.S. municipal market expanded through the 1950s by relying on the credit strength of "general obligation" bonds, backed primarily by tax revenues. The ability of local taxes to generate strong and consistent revenues meant that investor has started to see general obligation bonds as almost completely free from default risk.

f) Strong Credit Quality because of the Revenue-backed Debt

As voters demanded restrictions on the sale of debt backed by tax revenues, state and local governments began to shift to bonds backed by specific project revenues rather than taxes. The higher interest payments compensated the relatively narrow revenue support backing.

g) Strong Credit Quality and the Separate Corporate Issuers

The relatively higher risks associated with revenue bonds were also addressed by the proliferation of special purpose government corporate entities (known most often as special districts and public authorities). These entities issue the debt, builds, and manage the cost-recovery facilities designed to pay off the obligations. Separate corporate status has kept this debt off state and local budgets and allowed many of these entities to function more like business enterprises.

h) Information Regarding Investment Risks - Standardized Legal & Financial Data

Because revenue bonds are typically backed only by project revenues, prudent investors required detailed information about the revenue-producing activities of the issuers and safeguards regarding the use of bond

proceeds. The United States market has developed a tradition of extensive disclosure by issuers, as well as widely applied reasonably effective standards of accounting, auditing, and financial reporting.

i) Assistance in Interpreting Information by Financial Intermediaries

Unlike stocks, basic judgments about the credit quality of municipal bonds are difficult to make because they are typically sold by entities associated with products that are not easily identifiable. Rating agencies, bond funds, bond insurers and other intermediaries help investors process and cope with the increasingly complex information about the risks associated with their investments.

Some market strengths that caused an influence in the supply side of Municipal Bonds in the United States are as follows:

a) Tolerable Borrowing Costs: Interest Rates/Issuance Costs

The overall low cost of capital raised on the municipal market is perhaps the single most important factor in attracting issuers to the United States municipal market. Together with this, the:

- ❖ Tax exemption for investors also allows issuers to keep interest costs low.
- ❖ A large number and variety of investors are willing and able to compete for good investments, which keeps costs low.
- ❖ Competition amongst financial service providers such as underwriters and bond trustees keeps issuance costs reasonably low.

b) Long-term Debt Amortization: Extended Maturities

The impacts of costs on issuers are also mitigated by the long maturities available in the United States market, which allow borrowers to amortize costs of construction over periods of time that approach the long-term life-spans of the infrastructure assets being built, thus reducing the size of annual debt service costs.

c) Assistance for Small Borrowers, through Bond Banks Pooled Borrowing, etc.

State governments in the U.S. have developed a variety of programmes to assist small local borrowers in accessing the capital markets. One such programme is where state-level corporate entities are created to consolidate local issues into single issues sold on the national bond market.

d) Facilitative Formal Oversight: Responsible Self-regulation

Regulation of the U.S. municipal market has largely been self-imposed, with a focus on the disclosure of information rather than judgements about the merits of particular issuers or securities. This has left buyers and sellers free to test and establish procedures, instruments and regulations that have benefited a large cross-section of role players and contributed to steady growth in borrowing activities.

2.5. *Summary*

The aim of this chapter was to introduce and explain bonds, the way in which they operate and function, municipal bonds, the municipal bond market of the United States and the underlying strengths of this market. It is clear that numerous explanations exist for these underlying market strengths. South Africa can use some of the United States market strengths to accelerate the development of its own municipal bond market by comparing it to the United States' model, but before this is done attention must first be given to the municipal borrowing situation in South Africa. This will be explained in chapter three.

Chapter 3

Municipal Borrowing in South Africa

3.1. Introduction

Chapter one indicates that South Africa currently cannot finance the infrastructure investments she needs without accessing private finance. The disappearance of the municipal bond market in South Africa contributes to this problem and government is not able to finance this crucial need. It will be necessary for local authorities to attract larger volumes of municipal credit if South Africa is to meet its local infrastructure investment objectives. Urban infrastructure can attract private finance in different ways. The most critical avenue for any country to achieve this, according to Peterson (2002:3) would be to make use of the local credit market. This must be done in a way not merely to give municipalities access to credit, but the way in which the credit is accessed must also increase the efficiency of local investment, and it must reinforce financial sector reforms.

According to the National Treasury (2001:184), there are two options, which creditworthy local governments can use to approach the proposed credit market. Lending can occur either through municipal bond issuance, or through bank loans. It is for this reason that Peterson (2002:3-23) divides the municipal credit market into two models, namely, the “municipal bond model”, which involves bond issuance, the primary foundation of municipal borrowing in North America, and the “bank lending model” which involves bank loans, the most used option for municipal borrowing in Europe and other developing countries.

All bank lending to municipalities according to the National Treasury (2001:201), represents intermediate capital market access, and involves banks that lend funds that it has acquired, either from another intermediary, or directly from capital markets to municipalities. To make credit more available to small municipalities, many countries around the world have developed special purpose intermediaries. The Infrastructure Finance Corporation of South Africa (INCA) - a private sector institution - and the Development Bank of South Africa (DBSA) - a public sector institution - are the two most important intermediaries or role-players currently operating in the municipal market in South Africa. Between them, they hold about half of the outstanding municipal debt stock (National Treasury, 2001:201).

This chapter divides the credit market into the two models, proposed by Peterson. The aim of chapter three is to introduce the “bond model” and to describe the “bank lending model.” It also focuses on the special intermediaries, used in the so-called “bank lending model,” and discusses the most important intermediaries within the South African

context, namely INCA and the DBSA. This chapter also compares the “municipal bond model” with the “municipal lending model” and discusses the importance of using both models simultaneously for municipal borrowing purposes.

Chapter three further discusses the government proposed framework, and the direct access method underlying this framework, which involves bond issuance or the so-called “bond model.” Lastly, chapter three introduces the bond market of South Africa, and the operation thereof. This is important because before this study attempts to explain the municipal bond market of South Africa, it is important to know how this market (if it re-emerges) will fit into the current bond market structure. It is also important to show the important role the bond market will play in supporting the upcoming municipal bond market.

3.2. The Municipal Bond Model

The municipal bond model originated in the United States, and has been the primary source for local infrastructure finance, through general obligation bonds (see chapter two) supported by local taxing powers, and revenue bonds (see chapter two) secured by the earnings of such projects as water supply and mass transit (El Daher, 2000:1). One of the most important aspects of the municipal bond model, which needs to be mentioned early on because of its relevance to this study, is that local capital financing through bond issuance offers a different approach to the principles underlying municipal lending.

The main differences between municipal bonds and municipal lending, according to Peterson (2000:11) are the following:

a) Competition, not Relationship Banking

Municipal bond underwriters try to achieve a long-term working relationship with their municipal clients. The essence of a bond issue is freshly competed on each occasion, and neither an institutional nor an individual purchaser of bonds, need to have a long-term relationship with the issuer. Market competition of this kind could result in a more intense focus on the cost of capital, and it is likely to produce more savings for sizable and seasoned issuers.

b) Public Monitoring, Not Proprietary

Whereas intermediaries typically seek to build loan departments that possess proprietary information and proprietary methods of analyzing creditworthiness, in a municipal bond market the issuers provide information on

local financial conditions, and bond markets rely on disclosure of municipal financial information to function effectively.

c) Unbundling

Municipal bond market unbundles the various support functions that a municipality can receive from a specialized intermediary. Local governments therefore can make separate decisions about where to maintain their liquid deposits, where to obtain financial advisory services or the technical assistance in the project design. Bidding for each of these support activities can be competed separately in a sub-market of its own and by unbundling these services and subjecting them to competition is likely to lower total costs.

3.3. The Municipal Lending Model

According to El Daher (2000:1), *“in many developing countries it would not be feasible for a majority of small and medium-sized local government entities (and even some large ones) to have access to long-term credit markets. Considerable efforts are required to develop the financial infrastructure necessary to bring entities to the market. One way to foster the market access and help increase the flow of private funding to local governments could be through specialized, commercially viable, well capitalized financial intermediaries that could independently mobilize long-term debt on private markets for on-lending for priority local infrastructure investments”*.

Weist (2000:1-10), defines special financial intermediaries as *“entities that operate as a channel for municipal credit, or that act as a bridge to private credit markets in borrowing on domestic or foreign markets and on-lends to local governments, either directly or through domestic banks.”*

Glasser *et al.* (1998:63) defines financial intermediaries as *“facilities or special step down transformers, that reduce the high voltage (or capital flow) from the high-tension power transmission lines (or the capital market) efficiently over large distances (between the different market players involved), to small users that need only small and occasional capital flow. Thereby not generating the power (or capital) themselves, but rather intermediating and distributing it, downwards.”*

As such, the capital market remains, indirectly through the financial intermediary, the ultimate funding source for local infrastructure investments. By leveraging their equity funds through debt issuance, the intermediaries can deepen and expand the market-based funding pool for local governments, and thereby, could contribute to the upstream development of domestic long-term credit markets.

According to El Daher (2000:2), specialized financial intermediaries can consist of entities that operate (i) like municipal development banks (such as the municipal bank of the Netherlands), (ii) like specialized local government financial intermediaries (like the ones in Belgium, Finland, France, Spain and Sweden), (iii) like provincial agencies that operate at the provincial level (such as municipal finance corporations in Canada), or (iv) at the state level (such as bond banks in the United States). The last mentioned financial intermediary namely, bond banks will be given greater attention later in this study.

There is no clearly defined pattern of ownership among intermediaries specialized in municipal finance. Some entities, like the intermediaries in France and Spain are privately owned and others are publicly owned, like the intermediaries in Belgium, and the Netherlands. The public sector can be present at the central and/or local government levels, as in the case of Finland's Municipal Finance Plc., where the association of local governments owns it. It is involved in debt pooling for specific and identifiable projects, similar to the bond banks used in the United States. The Swedish local government-funding agency "Kommuninvest" is owned by the association of local governments but is privately managed. Holland's "Bank Nederlandse Gemeenten" is jointly owned by the central and local governments; its loans are subjected to the joint and several liability of the cooperative of local government borrowers or shareholders. Spain's "Banco de Credito Local" is privately owned by Argentaria and Dexia.

Dexia is a world leader in financial intermediation to local governments, with equity participation in numerous institutions around the world, including, South Africa's own Infrastructure Finance Corporation or INCA. Dexia is also the holding structure for Credit Communal de Belgique (CCB) and Credit Local de France (CLF). CCB is a local government owned cooperative while CLF, is originally government owned but has since been privatized. CLF's resources are raised through bond issues, whereas deposits represent the main source of CCB, which is a major depository institution – unlike most specialized financial intermediaries for local governments (Weist, 2000:1-10).

The most important goals of financial intermediaries are that they must (i) raise long-term resources on private credit markets and (ii) simultaneously operate in a financially sustainable manner. Together with these goals, they support local government operations through a range of financial instruments and products adapted to the different local needs of each country, and can operate in the primary or the secondary credit market. They also involve pool financing for local government infrastructure investments, and provide smaller local government borrowers with the possibility to access long-term debt markets. Lending would be mostly accomplished in leveraging the intermediary's equity funds through bond issuance. Lastly, they also provide certain non-lending products such as fee-based financial advisory services, which they might offer to local governments, mainly the larger ones. The intermediary's portfolio, diversified among a large number of local government borrowers, normally provides a good security for, and strengthens the credit quality of the debt issues (El Daher, 2000:3).

To achieve financial viability, intermediaries need a regulated environment conducive to enhancing local government creditworthiness. They must engage in efficient financial transactions within a business framework well-defined in terms of (i) strategic and institutional objectives, (ii) eligibility criteria and operational features including specific guidelines for portfolio diversification amongst sectors and borrowers, (iii) range of lending and non-lending products such as loans, equity participations, guarantees, underwriting, and advisory services, (iv) financial policies related to funding, lending and capital adequacy, (v) product pricing for balance as well as off-balance sheet transactions, and (vi) market, credit and currency risk management policies (El Daher, 2000:3).

The two most obvious reasons municipal lending differs from the bond market, according to Peterson (2000:4-7):

a) Relationship Building

One important aspect of having intermediaries is that they strive to establish permanent, partnership relations with its local clients. The most relevant services an intermediary provide are (i) the long term loans it provides to finance municipal investment projects that range from anything between fifteen to thirty years, and (ii) the financial advisory services that help municipalities prepare and structure their budgets, (iii) assistance in investment project design and associated financial analysis of cost recovery strategies. All of this builds relationships amongst market players, something that does not exist in the bond market model.

b) Delegated Monitoring

Another major difference between bonds and bank loans is rooted in financial sector intermediation. In modern intermediation theory, intermediaries like banks perform what is called a “delegated monitoring” function. Municipalities and other borrowers could deal directly with individual lenders, by borrowing investment funds from large financial institutions like pension funds, insurance companies, or individual savers or investors. Unless the loan at stake is large, it is inefficient for each saver to try to monitor financial conditions and all the other factors affecting loan payment. Therefore, a special intermediary performs this intermediation and monitoring function. It gathers savings from numerous sources, assembles specialized professionals capable of loan appraisal and loan oversight, allocates capital, and then monitors both its loans and the financial condition of borrowers.

In the case of specialized intermediaries such as municipal banks, monitoring is facilitated by the partner relationship that gives the bank special knowledge of the municipality’s budget and finances. Where the bank handles all of a municipality’s accounts, its security interest can be protected by loan agreements that give the bank, as lender, automatic access to the municipality’s accounts for repayment purposes. The municipal bank may

initiate loan-restructuring discussions with a borrower in financial difficulty or may facilitate a pro-active programme of loan re-structuring, where necessary, to accumulate non-performing loans.

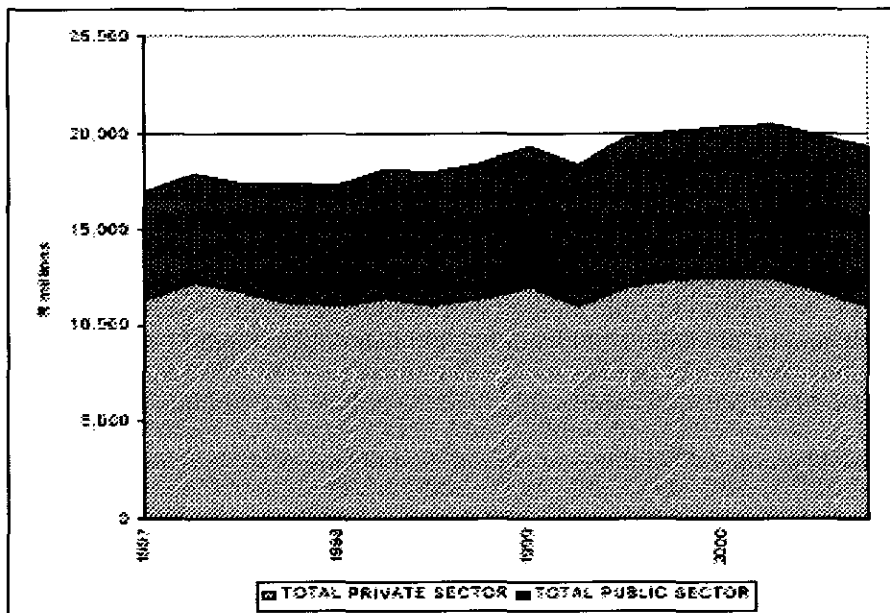
Although a lot of different kinds of financial intermediaries exist in the world today (as can be seen from the above mentioned facts) only the ones relevant to the South African credit market will be discussed, namely the Infrastructure Finance Corporation (INCA) which operates as a specialized financial intermediary, and the Development Bank of South Africa which operates similarly to a development bank or municipal development bank. They will be discussed subsequently.

3.4. Local Government Financial Intermediaries in South Africa

The Infrastructure Finance Corporation Limited, or, INCA, and the Development Bank of Southern Africa (DBSA) are the two most important intermediaries operating within the municipal credit market of South Africa. The Infrastructure Finance Corporation Limited (INCA) is a private sector lender, while the Development Bank of Southern Africa (DBSA) is a public sector lender. As have already been stated, these institutions together hold more than half of the total municipal debt in South Africa, and as such need some attention.

National Treasury figures since 1997 show that municipal debt owed to the private sector has not changed greatly - generally remaining between R11 billion and R12 billion. At the same time, debt owed to public sector institutions, including the Development Bank of Southern Africa (DBSA) has grown significantly, from R 5.6 billion to R 8.1 billion. This increasing reliance on public sector debt is inconsistent with government's policy goal of increasing private sector investment. This can be seen from Figure 3.1 and Figure 3.2 below.

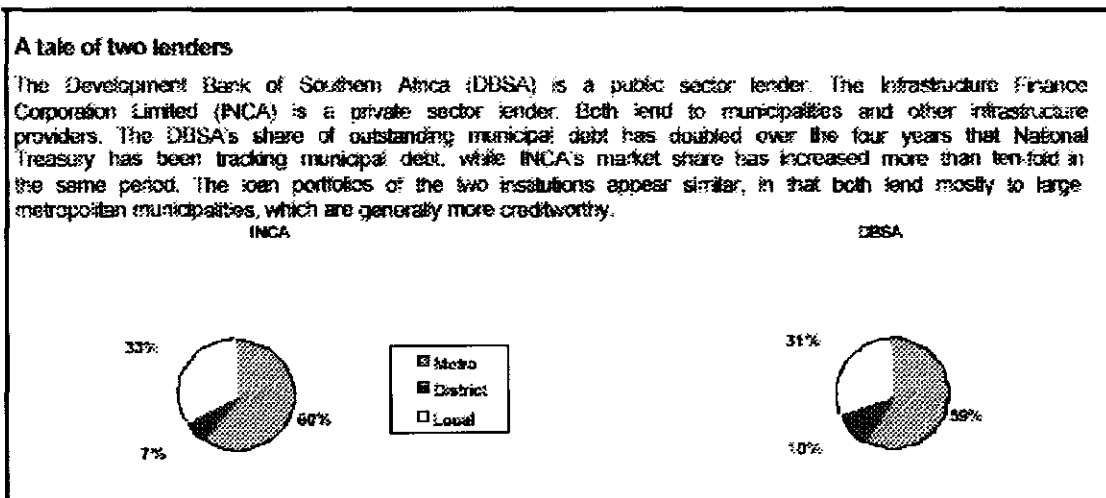
Figure 3.1: Total Municipal Debt Outstanding (From 1997)



(Source: National Treasury, 2001:190)

The expansion in municipal debt from 1997 until 2000 that can be seen from Figure 3.1 and 3.2 can be ascribed to the growth in public sector lending to municipalities, especially lending by the DBSA. The DBSA's municipal debt stock has grown both because of acquisitions (primarily the Local Authorities Loan Fund, which was acquired from national government) and because of new loan origination. It increased from under R2 billion in March 1997 to nearly R6 billion at the end of 2000. Although the private sector has been the major supplier of credit to municipalities, the net amount of private sector lending remained essentially unchanged (National Treasury, 2001:192).

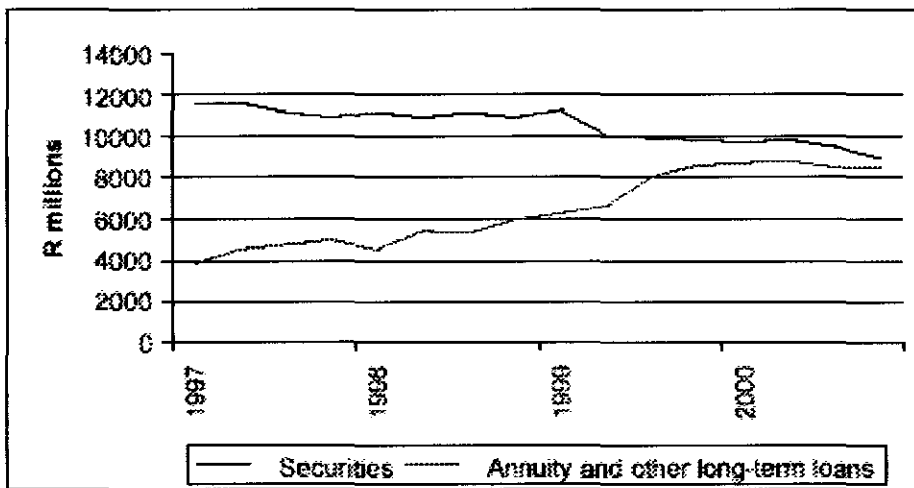
Figure 3.2: INCA and DBSA Loan Portfolio (From 1997)



(Source: National Treasury, 2001:190)

Not only is private sector lending relatively stagnant, as shown in Figure 3.1, but the outstanding debt stock is also becoming less suitable for capital markets, as shown in Figure 3.3. There has been a marked change in the form of debt over the period that National Treasury has been monitoring outstanding municipal debt. The earliest figures in the study show municipal securities at R11.6 billion, and long-term loans, at R3.8 billion. By December 2000, the pool of outstanding (and theoretically tradable) securities had fallen to just under R9 billion, while long-term loans had more than doubled to R8.5 billion (National Treasury, 2001:193).

Figure 3.3: Form of Municipal Debt

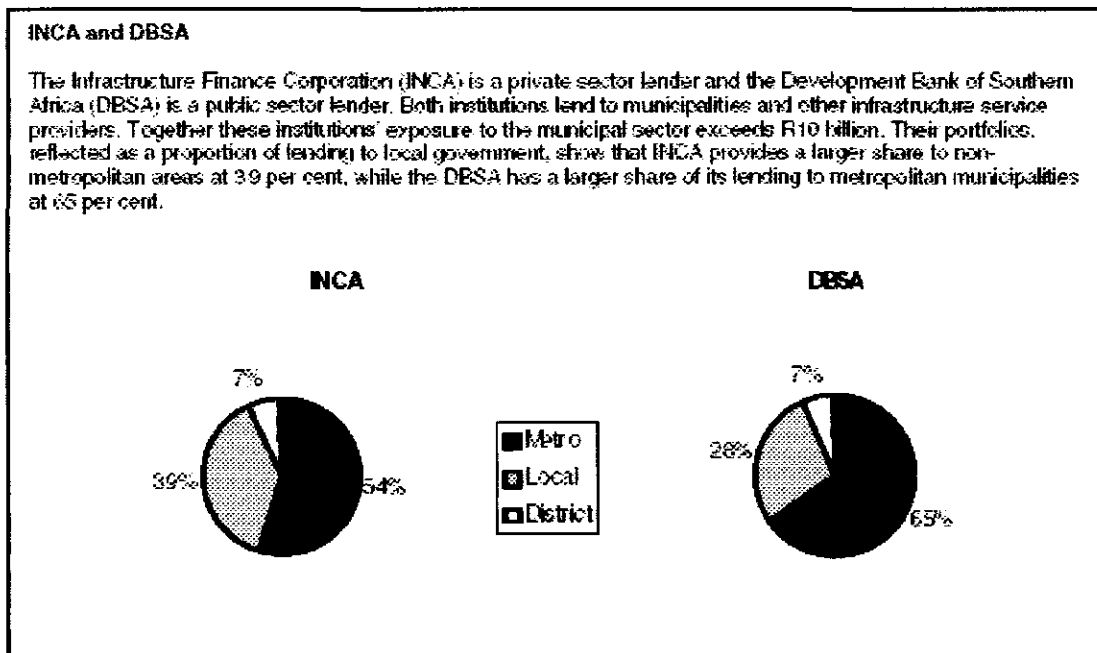


(Source: National Treasury, 2001:190)

By the end of December 2002, the total outstanding borrowing by municipalities amounted to R20.2 billion, marginally up by R300 million from a year earlier. The municipal borrowing market is also concentrated among only a few lenders and larger urban municipalities. The main source of public sector credit to municipalities is sourced from the Development Bank of Southern Africa (DBSA) and amounts to R7 billion. Private sector credit currently stands at R12 billion and accounts for 60 percent of municipal borrowings, primarily provided by commercial banks, and the Infrastructure Finance Corporation (INCA) of South Africa. Together, these institutions account for 79 percent of the private sector market. Insurance and pension funds, which used to account for 35.3 percent of private sector lending to municipalities in 1997, now account for a mere 2.5 percent of private sector lending (National Treasury, 2003:42).

As was mentioned above, securities used to be the main instrument of municipal borrowing but because of DBSA increasing its market share through mainly granting long-term loans to municipalities, securities declined from 68.3 percent in March 1997 to 35.9 percent in December 2002. The absence of these tradable municipal securities poses a great challenge to the development of a municipal bond market. Although it was mentioned earlier and although it can be seen in Figure 3.3, it does not provide information for the last two years, namely 2000 to 2002.

Figure 3.4: INCA and DBSA Loan Portfolio (From 2000)



(Source: National Treasury, 2003:43)

To sum it up, the information discussed above only shows four important things:

- ❖ Private sector debt remained stagnant while public sector debt increased.
- ❖ Securities debt declined, while loan debt increases.
- ❖ Municipal borrowing is only concentrated among a few lenders.
- ❖ Municipal borrowing usually goes to the larger, urban ("more creditworthy") municipalities.

Because of the importance of INCA and the DBSA within the South African local credit market, they will be reviewed subsequently.

3.4.1. The Infrastructure Finance Corporation of South Africa (INCA)

3.4.1.1. Definition and Brief History of INCA

Despite being established in 1997 - a time of significant turmoil within the municipal debt market in South Africa – INCA, none-the-less, became one of the major providers of finance to municipalities. INCA not only proves to be one of the most beneficial innovations within the South African municipal credit market, but it is also the first 100 percent privately financed municipal credit intermediary in the developing world. Its value as an international pilot project for private sector debt financing of municipal investment is immeasurable, and it can be seen as the most important

alternative to the non-existent municipal bond market in South Africa, and as such deserves some attention (INCA, 2003).

INCA can either be defined as *“a Corporate Entity with the characteristics of both a Cash Flow Collateralized Debt Organization and a Specialist Finance Company”*, or *“a debt fund for infrastructure loans, whose target clientele include local authorities, parastatal bodies, and public utilities, district council’s provinces, private firms involved in local infrastructure development and financial institutions of various kinds, with it’s most important function being, providing long term loans to municipalities, by investing in the assets they generate”*.

Its main shareholders are mostly public-oriented privately owned and managed institutions, such as a major South African financial institution, namely First National Bank (FNB), insurance companies (Old Mutual and Southern Life), a semi-public financial institution (Msele Financial Holdings), a women’s development institution (Women’s Investment Portfolio), and four international partners: Dexia International (from France), Prop Arco (a subsidiary of Caisse Française de Développement - also from France, Deutsche Investitions und Entwicklungs- gesellschafts (DEG, of Germany), and the Commonwealth Development Corporation (of the United Kingdom). Representatives of these international parties sit on the board of INCA, which brings credibility, as well as expertise, to the undertaking (INCA, 2003).

3.4.1.2. Objectives of INCA

INCA’s function is described in the 1997 prospectus (INCA, 2003) and states that INCA aims to create value for the investor by:

- ❖ Applying consistent and expert credit evaluation techniques for the evaluation of potential borrowers so that credit risk can be accurately priced.
- ❖ Utilizing, where possible, primary and/or secondary credit enhancement to provide security for the borrower.
- ❖ Issuing INCA Bonds which are independently rated by Fitch as an investment opportunity for medium and long-term investors.
- ❖ Providing a liquid market for INCA Bonds by listing them on the Bonds Exchange and through the use of market-making abilities of FNB.
- ❖ Operating with a capital structure designed to reduce further the risk for investors, of which a key feature will be subordinated junior debt.

3.4.1.3. Funding Sources

INCA's main funding sources include local and international market funds, raised through a series of INCA bond issues and long-term loans extended to the corporation by international financial institutions. Other sources of funding available to INCA include shareholders' capital, and future funding primarily comes from the issuance of junior bonds (INCA, 2003).

INCA borrows mostly from the capital market, and lends the proceeds to local governments. The money lent by INCA is raised by means of bond issues. The issuance of bonds comprises a combination of senior fixed rate asset-backed corporate bonds; subordinated fixed rate asset-backed corporate bonds; as well as general and specific commercial loans (INCA, 2003).

An example of such a bond issue was arranged in 1997. The amount issued was R1.2 billion or (US\$ 240 million). It was an unsecured asset-backed bond with a maturity of 6 years (for R200 million 2003 bonds); 9 years (for R800 million 2006 bonds); and 14 years (for R200 million 2011 bonds) respectively. The interest rates varied from 13.5 percent (for 2003 and 2006 bonds) to 14 percent (for 2011 bonds) and interest payable was semi-annually with a redemption value of 100 percent of par. The credit rating was done by Fitch South Africa (Pty) Limited and an AA-credit rating was assigned to the bond. The bond market is meant to be the main source of funds mobilization, but not the only one, and INCA's bonds are tradable, and do trade, but they are not very liquid (INCA, 2003).

INCA has obtained international loans, from Agence Française de Développement, the European Investment Bank, and additional arrangements have been made with USAID and Dexia to guarantee or underwrite bond issues on the US and Eurobond markets - to be activated when conditions are appropriate (INCA, 2003).

INCA bonds are issued in accordance with the rules of the Bond Exchange. Settlement takes place through the electronic settlement procedure. The transfer secretaries make interest and capital payments to the individual and INCA bondholders by electronic transfer. Furthermore INCA uses the central depository for the immobilization of INCA bonds in terms of the rules of the Exchange (INCA, 2003).

In the future INCA hopes to have funding available from the issuance of junior bonds, and commitment to these bonds has already been made. Junior debt is a debt instrument but serves a purpose similar to equity in INCA's capital structure, providing additional security to the senior bondholders, thereby lowering the cost of senior debt to INCA, and as a result to the municipal borrowers. The equity and junior bonds are not lent to borrowers, but are held in

reserve to provide security to the senior bondholders in the event of a problem with a loan made to a municipality. The existence of this reserve allows considerable gearing or financial leverage in the raising of senior debt.

3.4.1.4. Credit Assessment

INCA is very rigorous, and only lends to local authorities that (i) have sound economic and tax bases, and (ii) are sufficiently well managed. In so doing, it uses an interesting and sophisticated computerized risk assessment model, which produces a sort of unofficial “shadow rating.” The details of the model are not made public, but its basic structure is described in the 1997 bond prospectus of INCA (World Bank, 2003).

For investors, INCA is structured to lessen risks in the existing municipal debt market. This includes providing the following:

- Credit risk – through the development of its own credit model used to evaluate projects to allocate risks within its portfolio. This model is discussed below.
- ❖ Market-based credit enhancements by its capital structure and its risk management techniques.
- Liquidity risk of municipal debt using a market-making agreement with First National Bank. INCA hopes to create a programme to purchase, enhance, and pool outstanding municipal debt that is not being traded, in order to also address liquidity problems with the outstanding debt.

INCA helps borrowers overcome the high transaction costs associated with raising funds, especially bonds, by raising a single pool from which loans will be made to several borrowers. In addition, it should lower the interest cost of capital to borrowers due to the credit enhancements built into the structure (Peterson and Phelps, 1997:115).

INCA’s Credit Evaluation Model uses techniques to evaluate the risk profile of a borrower and it measures this against a database of important national standards. This statistical analysis is then supplemented with additional information and perspectives flowing from a rapid appraisal process (World Bank, 2003).

The methodology used assesses municipalities against five key criteria:

- ❖ Financial position, including solvency, liquidity, profitability, and cash flow.
- ❖ Economic environment, including the sensitivity to growth, natural resource levels, and the condition of existing infrastructure.

- Institutional capacity, in effect a review of management capability, and other indicators of competence and efficiency.
- ❖ Environmental management.
- ❖ Socio-political issues, such as unemployment, housing, payment backlogs.

Each risk category is evaluated, weighted, and scored. The evaluation process results in the allocation of an “internal rating” of the borrower based on its creditworthiness. According to its internal rating the borrower is then placed in a particular category, which determines the amount of capital INCA would require in order to undertake the lending, and the maximum amount that INCA can lend to the borrower. With the help of its credit evaluation model, INCA has in only two and a half years of operation (from 1997 until mid 1999) made loans to 48 local authorities, for a total amount of 1.4 billion Rand (about US \$ 280 billion).

INCA believes it can, on a sustained basis, lend about R700-800 million (140-160 million US \$) per year. This represents about 2 percent of total income of municipalities and 8-9 percent of their capital budgets. As one measure of the seriousness of this risk, INCA will not lend jointly with the South African government, even when knowing, that much of government’s subsidized lending rates, might lower the costs of capital to municipal borrowers. It justifies this stance because once government is involved; loan repayment becomes a matter of political negotiation that inevitably will carry over repayments to the private sector lending partner (Peterson, 2000:20).

INCA’s experience has been the most interesting recent development in local government access to capital markets in South Africa. The experience is not yet long, but it tends to show that it is possible to make municipal development bankable. The structure addresses a number of the market barriers that keep the financial sector from providing debt for municipal infrastructure. While many of these barriers are well recognized, and a number of private sector mechanisms have been proposed to overcome them, INCA is the only intermediary that is providing the debt financing most sought by municipal borrowers and remains the single most important aspect in the current municipal credit market (Peterson, 2000:20).

3.4.2. The Development Bank of South Africa (DBSA)

3.4.2.1. Definition and Brief History of the DBSA

The Development Bank of Southern Africa (DBSA) was established in 1983, but was transformed in 1996 to ensure it met the needs of the new South Africa and the Southern African Development Community (SADC), as a whole. Its main purpose is that of addressing the socio-economic imbalances and helping to improve the quality of life of all people in South and Southern Africa by supporting, both financially and in a facilitative role, the creation of

infrastructure to serve South Africa's needs. In addition to its primary focus, namely infrastructure, the DBSA also attends to the short and medium term rural finance requirements (DBSA, 2003).

Although an apparent tension exists between the two main objectives of the DBSA namely: (i) to fund infrastructure provision mainly through loans on a sustainable basis (a bank orientated role), and, (ii) to play a proactive role in the broader development of South and Southern Africa (a development orientated role), government ultimately would like to see the development emphasis maintained within a banking environment. Project funding could be achieved on a financially sustainable basis, but the challenge will be to ensure proper management of the risk profile while doing justice to the developmental issues. Although the philosophies underlying a "banking institution" and a "development institution" are not mutually exclusive or incompatible, achieving both institutional objectives requires a balanced approach and poses a great challenge to the institution. The pattern of future lending, and future funding or capitalization of the DBSA will be materially affected by the relative weight given to the banking and development roles within the DBSA's mandate (DBSA, 2003).

The DBSA can support infrastructure development, taking into account institutional banking and other risks, to support socio-economic development by:

- ❖ Making direct loans available at appropriate interest rates for all such infrastructure.
- ❖ Taking up an equity stake where appropriate.
- ❖ Providing guarantees where appropriate.
- ❖ Acting as merchant bank to package risk appropriately and the consequential investment and returns in close collaboration with the private sector, government and other agencies (DBSA, 2003).

To conclude, the main aim of the DBSA is to ensure uninterrupted delivery for development and to co-ordinate activities in this regard, in such a way that real experience and proven and potential capacity in institutions provide a basis for decisions on the future unfolding of the development finance system (DFS).

3.4.2.2. Objectives of the DBSA

The DBSA as a "banking institution" has the following functions:

- ❖ It ensures financial sustainability, affordability and the efficient application of scarce resources.
- ❖ It interprets risk by taking into account project context, the broader financial base of the beneficiaries and the difference in socio-economic development stages of the areas, provinces, or countries.
- ❖ It applies the principle of cost recovery for technical and professional services rendered.
- ❖ It applies best practice in terms of corporate governance.
- ❖ It mobilizes and leverages funds.
- ❖ It strengthens the ability of clients to manage risks (DBSA, 2003).

The DBSA as a “development institution” strives to be a leading change agent for accelerated and equitable socio-economic development in Southern Africa. It is committed to:

- ❖ Providing sensitivity to the needs of the poor and responsiveness to the demands of clients.
- ❖ Ensures alignment of operations to national policies and regional programmes and local priorities.
- ❖ Provide a network of collaboration and partnerships with public and private sector institutions.
- ❖ Ensures competitiveness and professionalism.
- ❖ Establishing the implementation of a best practice policy in all areas of activities; including social and environmental practices.
- ❖ Assure adherence to principles and practices for good governance (DBSA, 2003).

3.4.2.3. Funding Sources

The DBSA raises funds from development partners such as national government, the Southern African Development Countries (SADC), local authorities, private sector entities, donors, infrastructure investment funds utilities (both national and provincial), non-governmental organizations, provincial governments, parks boards and tourism, provincial development corporations, district councils, statutory institutions and others. It also works with donors and international, national and provincial partners to build relationships with all key role players in development, and to this end, it tries to promote the best possible use of resources in order to reach the goals of development initiatives (DBSA, 2003).

According to the Development Bank of Southern Africa (2003) to fulfil this catalytic role, they also have to do the following:

- ❖ Help to mobilize additional investment by co-financing public and private sector investments.
- ❖ Promote public and private partnerships for infrastructure.
- ❖ Provide technical assistance focused on strengthening policy, institutional capacity, and environmental management in support of bank projects and programmes.
- Share skills and knowledge with institutions and clients to maximize the development impact and quality of specific project interventions.
- ❖ Provide professional and administrative resources for managing special infrastructure development initiatives on behalf of government and/or development institutions.

For the DBSA to attract private sector lending to the municipal sector the lending risks have to be mitigated by targeted development finance. The DBSA are very important in this regard because they add value by optimizing the development impact of infrastructure projects and by exploring and promoting best practice. Their loan conditions and project interventions also facilitate broader access to services, stimulate productive economic activity, and enhance job

creation. Briefly, the DBSA attempts to enhance the financial sustainability or bank ability of the municipal sector (DBSA, 2003).

The bank could play a role in packaging various forms of finance aimed not only at service provision, but also at placing local authorities on a sustainable financial footing. With local government being the primary vehicle for public delivery of basic services, the bank's support to these institutions has a significant development impact.

Local government institutions form the bank's main client base. In 1999, local government borrowers accounted for approximately three quarters of its clients and 43.5 percent of its total book debt. The DBSA's portfolio includes loans for infrastructure in 55 percent of all local government institutions in South Africa, many of these from the Local Authority Loan Fund (DBSA, 2003).

Although the DBSA mainly targets municipalities with limited funding, they will provide loans to financially sound municipalities where the investment focus falls on marginalized communities or economic development. The bank also supports financially weaker municipalities through technical assistance by developing the necessary capacity to secure commercial funding. The DBSA has a particular role to play in the evolution of a viable municipal system in South Africa, as it invests in the specific capacity municipalities need to be sustainable and for them to maintain infrastructure services (DBSA, 2003).

Lastly, the Bank also pursues co-financing with the private sector. This is done, firstly to extend its own limited resources, and secondly, to expand the role of the private sector capital market in the municipal sector. It also pays careful attention to credit risk management by identifying and managing borrower risk based on borrower appraisal and an internal credit-rating model. Project risk is addressed in the project appraisal process, based on financial, economic, technical, environmental, institutional, and social modules. The appraisal process, followed by negotiations and loan conditions, promotes sound development projects that are affordable to both the borrower and the users, contribute to economic growth, and are institutionally and environmentally sustainable. The depth of the project appraisal process enables the Bank to price and mitigate risk. It reassures private sector financiers who are invited to co-finance deals, and facilitates further deals that do not require the involvement of the DBSA. Other financial instruments being considered by the DBSA include guarantees (full, partial or limited period) bond-pooling for municipalities requiring small long-term loans, bond insurance and securitization in the capital market of parts of its current loan book. This approach demonstrates possible mechanisms for municipal lending and helps the bank evaluate options for credit enhancement (DBSA, 2003). Most of these credit enhancement options will be looked at in chapter four.

3.4.2.4. The Role of the DBSA Regarding Municipal Borrowing

Glasser *et al.* (1998:120) stated that some potential roles of the DBSA regarding borrowing should be:

- a) The DBSA has skills in project analysis. By making these skills available through technical assistance and training (to market participants on the borrower or lender side) would be compatible with a market based capital model. Though there is some risk of crowding out other technical assistance and training providers if the services are not priced at cost, the needs are still so big that it would not result in an immediate problem.
- b) In order not to prevent market discipline, guarantees and insurance should be provided at rates that genuinely reflect the risk involved. This is also compatible with market systems and with the entry of private insurers into the market, which can be expected in the near to medium term. The best way to insure risk-reflective pricing is to treat a guarantee and insurance operation as a separate, self-funded activity.
- c) The DBSA or another entity could pool small, good quality loans to achieve marketable size and thereby could function as an intermediary for small borrowers. Because the private sector could in theory do this as well, there is a possibility of crowding out private sector initiatives. A size limit, in terms of population, annual budget, or issue size would limit the potential for competition with the private sector.
- d) If it is true that private markets will currently lend only for short- to medium term, due to macro uncertainties, DBSA or another entity could provide:
 - (i) Financing for the longer maturities in a given issue.
 - (ii) Subordinated positions over the life of a loan.
 - (iii) Guarantee take-out of some percentage of loans at some point in time (e.g. 80 percent take-out at 7 years).
- e) One way to keep the DBSA from competing with the private sector is to allow first crack to the private sector. Before undertaking any municipal transaction, the DBSA would be required to advertise its intent, or a borrower would have to show that it had approached, e.g. three lenders before coming to DBSA. These approaches at their best add time and transaction costs. At their worst, they remove market discipline completely.
- f) There is nothing wrong in principle with DBSA competing for investment positions with private lenders. Nevertheless, if it does so at below-market rates with “free” or cheap government money, it can spoil the operation of the market. The potential for cheap funds will keep both potential borrowers and potential lenders from engaging fully in the market.
- g) The DBSA could make use of special purpose lending, e.g. for environmental, transition or some other public-policy purpose which the government was willing to make priority. They have the virtue of restricting non-market activities to certain sectors or categories. Such an approach may limit private market activity in the given sector or category, but avoids crowding out in other sectors. Of course, below-market funding for any particular sector would tend to distort municipal priorities in favour of that sector.

Glasser *et al.* (1998:120) also stated that there is no obvious way for the DBSA to be active in the markets, without the potential for damage to the much-disciplined market mechanisms it intends to achieve, unless the DBSA is bound by market rules. One such rule for example, at least in the end, could be to get its capital from the capital markets and price its loans accordingly.

3.5. Evaluation of the Two Models for Municipal Lending in South Africa

From all the above-mentioned facts it is evident that two models exist within the municipal credit market system. The first model, is the “municipal bond model” that has been the foundation of municipal borrowing in North America, and the second model, the “municipal lending model”, which was used to finance municipal investment in most of Europe throughout the 20th century and still is the primary source of local credit financing in that region. This model consists of various types of special intermediaries, such as municipal development banks, specialized intermediaries, bond banks etc. The most important difference between these two models is that the “municipal bond model,” provides direct access to private capital, whereas the “municipal lending model” provides indirect access to capital for local governments.

In designing local credit initiatives for developing countries, Peterson (2000:3) stated that it is unnecessary for policymakers to choose between these two models. The reason for this, Peterson believes, is that these two systems are converging in their regions of origin, and countries embarking on measures to build or strengthen local credit markets (such as South Africa,) would do well by *“selecting characteristics from both models, and, even more, by encouraging competition on a level playing field between bank lending and bond issuance.”*

Although many countries simultaneously use bank lending and local bond issuance, the policy rationale justifies emphasizing development of local bond markets. The reason for this is that in a competitive world bonds have more ways to tap institutions and households’ long-term savings. Even when the ultimate credit extended to a local government continues to be from a bank loan or other financial institution, Peterson (2000:22) stated that it would increasingly be the case that the financial intermediary raises its own capital for on lending from bond issues. That is the direction of change for the most successful intermediation such as INCA discussed above.

According to El Daher (2000:3-5) the two models play complementary roles and serve different, albeit overlapping, market segments in meeting local government demand for long-term credit. They offer alternative options in financing local governments, the needs and capabilities of which vary in line with their economic size and resource base. It is true that municipal bond markets may be more suited to the larger better-endowed borrowers, but where local governments lack the scale for direct market access, market based local government financial intermediaries can fill the void in pooling credit demand and mobilizing long-term resources on local government behalf. Lending would also be accomplished mostly in leveraging the intermediaries’ equity funds through bond issuance.

El Daher (2000:3) also mentioned that one very important aspect to remember when deciding whether to borrow from a specialized financial institution or to issue debt obligations on the bond market, is that local governments need to assess and compare the cash-flow implications of both alternatives, since credit lines from financial institutions allow a draw-down of funds in accordance with borrower expenditure requirements, while bond issues would result in relatively large lump sum, cash inflows. For local governments, usually unacquainted with good liquidity management practices, loans from financial institutions allow for more manageable cash profiles and a better control of the “cost-of-carry.” This is of great importance in the South African situation, and should be kept in mind, since most South African municipalities lack the skills, expertise, and good liquidity management necessary to issue bonds.

Some of the major strengths, of this “securities-based”, or “municipal bond” model, that was introduced above, according to the South African National Treasury (2000:18), is (i) it is more broad-based than the other model, and (ii) it can generate an aggregate investment capital from multiple sources such as individuals, investment funds (like unit trusts), bank, non-bank financial institutions, pension funds, and others. Securities markets can generate more capital both by aggregating smaller investments and by assuring liquidity and flexibility to investors whose needs change. Bank lenders in one-on-one transactions should be able to look out for their own interest effectively; investors in securities often lack the knowledge (and the leverage) to protect their interests. Accordingly, governments worldwide usually regulate the sale and trading of municipal securities for the protection of investors (National Treasury, 2000:18).

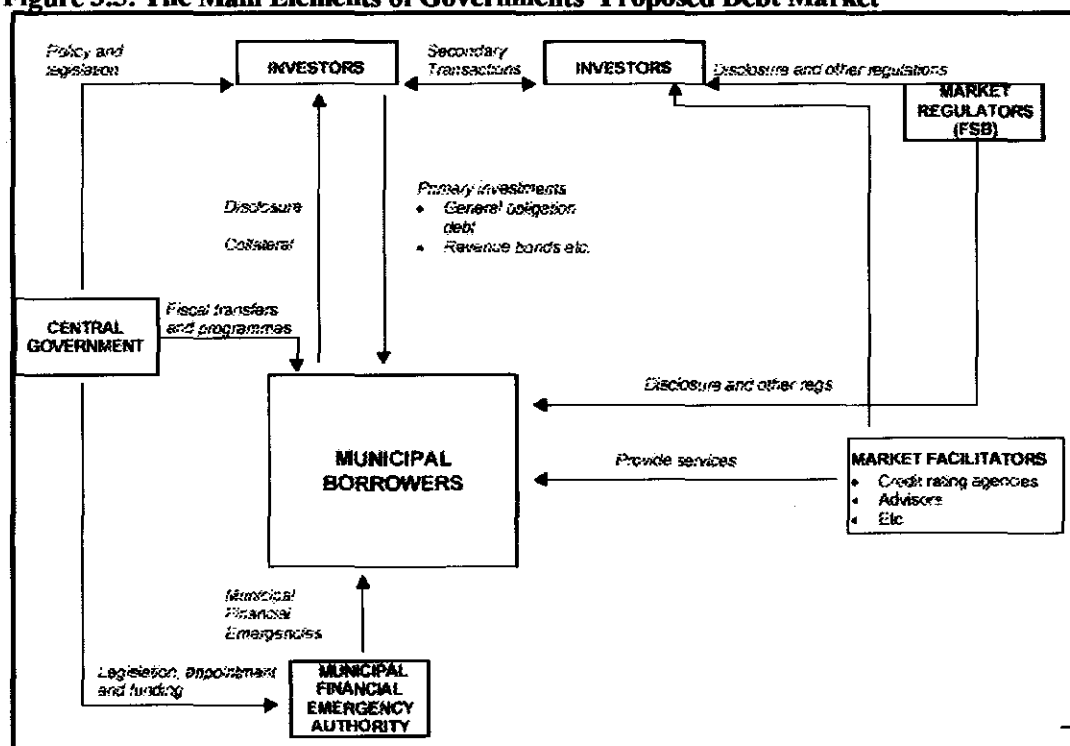
3.6. The “Municipal Bond Model” or the “Municipal Lending Model” for South Africa?

According to the South African government, the residual bond market in South Africa is largely an intermediate one, because banks and other financial intermediaries hold most loans. Government would prefer to see this market supplemented by the development and expansion of a securities market, or a “bond model.” The reason for this is mainly the potential power this market has to lower the cost of capital to the municipal sector. This market will imply that municipalities (usually the larger ones) issue debt in the form of bonds, which then trade in the secondary market (National Treasury, 2000:6). To encourage this, government designed the main elements of the municipal debt or credit market necessary to support such a framework. Figure 3.5 on the next page describes this framework.

According to the National Treasury (2000:11) this framework will also have the following advantages: (i) the vibrant and broad municipal bond market will enable more municipalities to draw on private finance for capital investment allowing fiscal funds channelled through Consolidated Municipal Infrastructure Programme and other grant mechanisms to be better targeted at the poorer cases, and (ii) a dynamic municipal financial market will enable market investor’s greater ability to diversify their risks and hence, fund a wider range of municipalities than is currently possible

By designing this framework, government also means to promote the growth of a market for other forms of debt (i.e. bank lending), which, from a practical perspective is where much of the growth in the municipal debt market is likely to lie in the short and medium term (National Treasury, 2000:6).

Figure 3.5: The Main Elements of Governments' Proposed Debt Market



(Source: National Treasury, 2000:7)

According to government (National Treasury, 2000:8) there are five main reasons why access to financial markets is considered important for local authorities in South Africa:

a) Access to capital

Given the extensive infrastructure needs in South Africa, financing investment on a “pay-as-you-go” or “taxation-in-advance” basis is neither possible nor efficient. Particularly where the need for capital greatly exceeds what is available on a grant basis from the central fiscus, access to capital markets can provide municipalities with the capital resources necessary to finance infrastructure investments efficiently. The “pay-as-you-go” approach means that new facilities should be paid for, over time by the people who are benefiting from them, whereas the “taxation-in-advance” approach mainly implies that new municipal projects should be paid for immediately, by taxpayers (Public Securities Association, 1990:54).

b) Inter-temporal equity

The benefits of the infrastructure investments municipalities make often endure for extensive periods and accrue to future generations of taxpayers and consumers. It is equitable for such generations to bear some of the cost of these benefits. Financing investment over time with funds accessed from capital markets allows for this.

c) Efficiency

Because capital markets allocate capital resources on a commercial basis, capital is allocated efficiently. Moreover, the opportunity costs of capital provide incentives to ensure efficient standards of delivery and discourage “overbuilding” and wasteful investment.

d) Accountability

Markets tend to punish poor fiscal and management performance through pricing (pushing up interest rates or making capital increasingly scarce.) This can promote accountability and fiscal discipline at the local level. It may also provide other stakeholders (national government; the provinces; aid agencies and so on) with a convenient means to assess the relative performance of municipal governments.

e) Short-term matching of revenues and expenditures

In the short term, for example within a given financial year, municipal revenues, and expenditures are seldom completely congruent in time. Short-term borrowing allows municipalities to deal with this lack of synchronicity.

International experience suggests that achieving these benefits depends on the method of access to the market and the conditions under which this access occurs. In principle, government feels there are two routes of access. Local government can access capital markets directly (which implies the “bond model” above) or through “on-lending” from central government, most often through a public intermediary (which is currently the case) (National Treasury, 2000:9).

Aside from the DBSA and INCA, which already represent the “indirect” access mechanism, there are three broad reasons why government wishes to facilitate direct access by municipalities in particular. Firstly, when sub-sovereigns borrow through central government, the debts of these bodies easily become the implicit or contingent liabilities of central government and government wishes to protect themselves from this. By protecting themselves from this liability, government not only guarantees sound fiscal management at the national level, but it also makes it easier for them to maintain their macro-economic targets. It can also assign more responsibility over to the local sphere by

ensuring that municipalities face strong incentives to improve their own management and creditworthiness. Secondly, international experience suggest that the indirect borrowing route can result in situations where credit allocation decisions become increasingly less commercial in character, and under such conditions capital does not necessarily flow to the most productive uses, but to those players that are politically the most astute. Thirdly, sub-sovereign borrowing via the state can result in the squeezing out of private capital from the municipal sector, thereby narrowing the aggregate resources available for investment, or it may create incentives for local governments to elude certain restrictions through innovative off-budget schemes (National Treasury, 2000:9).

To avoid all of this, government proposes that the direct route be taken, which offers the potential for a more transparent, market-based system to develop where there is a greater chance of achieving the benefits of accessing capital markets.

Within this framework of direct access, one very important question arises. Will all municipalities gain access to capital markets? Glasser *et al.* (1998:16) answers this by classifying municipalities into three groups:

- ❖ Municipalities, which do not require external assistance to obtain commercial loans or access to the bond market.
- ❖ Municipalities which require external assistance to access private capital markets.
- ❖ Municipalities, which are poor candidates for private capital investment, due to fundamental weaknesses that are likely to persist for the mid- to long term.

Despite many changes within the local government sphere these past few years, not all local governments in South Africa will have the capacity to access capital markets. Some municipalities “*will remain incapable of accessing capital markets in the medium to long term*” even after the new so-called “policy framework” has been introduced and consolidated (National Treasury, 2000:11).

3.7. The Bond Market of South Africa

3.7.1. An Introduction

When compared with each other, the South African Bond Exchanges’ market capitalization of R400 billion, is about one third of the size of the Johannesburg Stock Exchange (JSE), with the one important exception in this comparison being the liquidity on the Bond Exchange. The liquidity of the Bond Exchange is much

higher, with average daily trading volumes according to ABSA (2003:7), reaching as much as R30 billion, compared to an average of approximately R1 billion per day on the Johannesburg Stock Exchange.

Foreigners account for approximately 25 percent of all trades and own an estimated 10 percent of South African bonds. The dominant issuer in the bond market (with an 80 percent market share), is the South African government, which borrows money via bonds to fund the budget deficit. Other issuer's include Eskom, Transnet, Telkom, South African Breweries, municipalities, the Lesotho Highlands Water project etc., and others. The bond market is an extremely efficient market and trading costs is as low as 0.05 percent of the amount traded. The main market participants in this market are large banks, insurance companies and pension funds (BESA, 2003b).

3.7.2. The Mechanics of the Bond Market

The reason bond markets exist is prominent, namely, to provide a channel for raising capital required by borrowers, and in doing this, it allows lenders or investors the opportunity to provide capital, and then to trade the shares on the market when they wish to realise their investment returns (ABSA, 2003:7).

Since 1995, an electronic settlement system has been in place in South Africa and the main players in this system are the Exchange as regulator, the Exchange members, the service providers, and the settlement agents. The service providers allow for the transference of data, while the settlement agents handle cash transfers and electronic transfers. In the South African context, the banks serve this dual role and the SA Reserve Bank, which provides a clearing function and the Central Depositary (a computerised custodial service for securities) assist the banks as settlement agents in their task. The Central Depositary receives all interest and redemption payments for scrip and distributes these funds to the members of the Depositary (the banks) on due dates for, in turn, dispersal (ABSA, 2003:7).

The most important market player in the bond market in South Africa currently, is BESA, or the Bond Exchange of South Africa. For the purpose of this study, BESA needs to be discussed because of the enormous role it will play in the upcoming municipal bond market, which will become clear as this chapter progresses.

3.7.3. The Bond Exchange of South Africa

The Bond Exchange of South Africa (or BESA) is a self-regulatory body operating (i) within the framework of the Financial Market Control Act and (ii) within the set Rules and Directives approved by the Financial Services Board or (FSB). The objectives of the Bond Exchange are to:

- ❖ Set an excellent standard in its self-regulatory oversight of the South African bond market.
- ❖ Provide at optimum cost a stable, secure and efficient environment for the listing, trading and settlement of debt securities and derivatives
- ❖ Reduce the financial risk of trading through the Exchange.

Although primarily a government bond market, BESA also lists rand denominated debt securities issued by local government, public enterprises, and major corporates. Table 3.1 on the next page gives an example of all these listed products, together with their market capitalization in March 2002 (BESA, 2003c).

Table 3.1: An Example of BESA's Listed Products (2002-03)

Product	Market Capitalization
Central Government	R 340 431 742 270
Municipals	R 131 228 000
Parastatal / Utilities	R 35 406 453 235
Water Authorities	R 18 549 745 000
Corporates	R 57 561 958 071
Banking	R 30 565 392 700
Financial Services	
Mining	
Steel	
Chemicals	
Transport	
Telecommunication	
TL06	
Dual / Inward Listing	R 41 000 000
Total	R 452 122 126 576

(Source: BESA, 2003c).

It is evident from this table, that South African municipal bonds currently contribute the least to the market capitalization of BESA. It is because of this reason that both the Bond Exchange of South Africa, and the South

African governments, most strategic initiatives for the near future, includes the establishment of a viable, infrastructural and municipal debt, or bond market, the main focus of this study. There are currently only three municipalities listed on BESA - one of the bonds was issued by the Beacon Bay Municipality, and two was issued by the city of Durban - all prior to 1993, before the market collapsed. These municipal bonds, and all the relevant information, underlying these bonds, can be seen in Table 3.2 and Table 3.3 on the next page (BESA, 2003c).

Table 3.2: The Municipal Bonds Listings of BESA

LOAN STOCK LISTINGS – Municipal Bonds (31 May 2003)									
STOCK CODE	CATEGORY	ISSUER	COUPON RATE	REDEMPTI ON DATE	LOAN NUMBER	INTEREST PAYABLE	BOOK CLOSED	LISTING DATE	ISSUED AMOUNT
BC03	F	BEACON BAY MUNICIPALITY	11.350	13 AUG 2005	28/2	13 FEB 13 AUG	14 JAN 14 JUL	01 JAN 1980	1 228 000
TOTAL									1 228 000
D160	F	CITY OF DURBAN	14.800	30 JUN 2003	160	31 DEC 30 JUN	01 DEC 01 JUN	30 JUN 1993	40 000 000
D144	F	CITY OF DURBAN	14.000	30 JUN 2005	144	31 DEC 30 JUN	01 DEC 01 JUN	30 JUN 1993	90 000 000
TOTAL									130 000 000
TOTAL MUNICIPAL BONDS									131 228 000

(Source: BESA, 2003c).

Table 3.3: The Meaning of All Bond Terms Used in Table 3.2

V =	Variable Redemption
C =	Variable Coupon Rate / Floating Rate
B =	Variable Redemption / Variable Coupon
F =	Fixed Redemption / Fixed Coupon
FM =	Multiple Redemption / Fixed Coupon
CA =	Callable Bond
CPI =	Inflation Linked Bond
Z =	Zero Coupon

(Source: BESA, 2003c)

The members of the bond exchange are the bond trading institutions, and trading of listed bonds by member firms take place on a 24-hour basis on (i) BESA's Bond Automated Trading System (BATS) or (ii) via telephone or (iii) inter-dealer screen. Institutions that wish to list their bonds on BESA have to comply with certain listing disclosure requirements and rules. These requirements *"provide for the minimum disclosure that investors and their professional advisors would require for the purpose of making informed assessment of the nature and state of an issuer's business – specially the most recent financial statements and forecasted earnings"* (BESA, 2003b).

According to BESA (2003a), the disclosure requirements for listings have the following requirements:

- Identity for directors, senior management, advisers, and auditors in their relationship with the issuer.
- Purpose of the issue.
- Method of issuance and treatment of subscription.
- Details of the offering and expected timetable.
- Full disclosure of the issuer's financial information in its audited financial statements, capital requirements, and risk factors.
- ❖ Information on the issuer's production, products, services and other factors that affect its business.
- ❖ Operating financial review and prospects, including research and development.
- ❖ Information regarding the major shareholders and other stakeholders that may affect decisions taken by the issuer
- ❖ Any additional information that may affect the issuer's business and the investor's decision.

To conclude, the South African bond market is one of the most liquid emerging bond markets in the world and in 2000 the total value of transactions was 24 times the value of the market capitalization (Van Zyl, 2003:259).

3.8. Municipal Bonds in South Africa

3.8.1. Municipal Bond Definition

Municipal bonds, according to the National Treasury of South Africa (2001:193), are debt instruments that trade on the capital market. Local governments of South Africa issue them to finance infrastructure. An underwriter may purchase an entire bond issue, and then sell it at retail to institutions and individuals. Each bondholder buys only a small piece of the total debt, so smaller investors can participate. Bondholders need not keep the bond to maturity (as was previously the case). Instead investors risk can be lessened by the existence of a secondary market, where this type of bond can

trade and where investors can sell the bond if need be. This liquidity would bring more potential investors to the market - an outcome government in South Africa wishes to achieve.

3.8.2. Type of Municipal Bonds or Debt Proposed for South Africa

When the question arises of the type of debt, or debt instrument, municipalities must issue - and any regulation thereof, it is best approached by examining the kinds of security that municipal borrowers give, since security determines the type of debt instrument to be issued. According to Glasser *et al.* (1998:20) security (in the sense of collateral) and remedies, are aspects of the same question, and debt markets require clarity about both.

Before they invest, creditors want to know what their remedies or security will be in the event of default, and this will mostly determine the type of debt instrument. In the past, most South African municipalities have given only unsecured general promises to pay, and most lenders have accepted whatever remedies they have at law in dealing with this. Increasingly, however, and following trends elsewhere in the world with established municipal debt markets, the parties are exploring ways of enhancing a creditor's security by contract, and pledges of particular physical or monetary assets, of receivables, and of particular revenue streams have all been used (Glasser *et al.*, 1998:20).

The provision which allowed this under the previous law regarding local government finance namely the Local Government Transition Amendment Act - permitted the local council to "*furnish any security*" for a loan. This is a very broad, open-ended authorization whose limits have not yet been explored. As part of the new legislation which will govern municipal borrowing, greater detail will be given as to what powers municipalities have to pledge security in order to collateralize debt. The South African government's overall policy position on this matter characterizes two broad principles:

- Government should grant the contracting parties broad leeway to design security provisions that meet their needs. In addition to the conventional "full faith and credit" (general obligation) provisions, this should include special security arrangements including the pledging of assets, of local tax and tariff revenue streams, of intergovernmental grants or transfers, and tax and tariff level covenants (National Treasury, 2001:14).
- ❖ Certain limits should apply and government should not permit municipalities to pledge assets essential to the maintenance of public health and safety, nor should government allow municipalities to pledge revenue streams to the extent that it may compromise their ability to deliver certain essential services, which law will need to define (National Treasury, 2001:14).

3.8.3. Municipal Bond Tax Status in South Africa

As indicated in chapter two one of the biggest market strengths underlying the United States municipal bond market is the fact that the largest part of their market involves trading in tax-exempt municipal bonds. Because of their tax-exempt status and the advantages of this to investors, these securities compared to other securities in the United States prove to be much more attractive. According to Glasser *et al.* (1998:95) two questions arise when it comes to municipal bonds and taxes in South Africa, namely: (i) at what cost to the fiscus does municipal lending with tax incentives occur? and (ii) to what extent is this cost offset by the ability of the tax exemption to attract private investment in municipal infrastructure? These two questions, are discussed subsequently.

a) At what cost to the fiscus does municipal lending with tax incentives occur?

Municipal lending with tax incentives will influence both the central sphere of government (due to an increase in compliance costs), and taxpayers (who will face tax increases in one form or the other as the tax exempt status translates into revenue foregone which must be collected elsewhere).

b) To what extent is this cost offset by the ability of the tax exemption to attract private investment in municipal infrastructure?

A risk is that tax relief for holders of municipal debt (who may be the more affluent taxpayers) will translate into higher tax burdens that will finally settle on less affluent taxpayers. These taxpayers do not have surplus funds at their disposal to make these investments in the first place. Thus, the rich will benefit whilst the poorer sections of lower to middle-income groups will face a higher tax burden, as government's revenue needs still have to be met at the end of the day. This in return may lead to new investment capital, being attracted to public infrastructure investments that would not otherwise have been made. In other words, government's revenue needs may be significantly reduced if the foregone tax is effectively leveraged into private investment capital for local infrastructure. If each rand of new private investment, costs government only the marginal income tax foregone on the interest, then that could be effective leveraging. Glasser *et al.* (1998:96) concluded that the key question regarding this issue should be whether, and to what extent, the investment would have occurred, but for the tax advantage.

Arguments for tax incentives, according to Glasser *et al.* (1998:97) include the following:

- ❖ Tax exemptions can stimulate the flow of investments by the private sector. This has proven effective in stimulating private investment in municipal infrastructure in the United States and could also prove to be a great benefit to South Africa, since private investment in infrastructure these past few years has been very limited (as can be seen from chapter one).

- ❖ Tax exemptions are consistent with allowing decentralized and market-compatible decisions about capital allocation. In other words, they subsidise all capital investment by municipalities, or all municipal investment infrastructure by any party (depending on the option chosen). Local councils decide for themselves which capital project is a priority, and investors impose market discipline by investing only in creditworthy projects. Moral hazard issues inherent in other concessionary finance approaches are therefore largely avoided.

Arguments against the implementation of tax incentives or allowances, according to Glasser *et al.* (1998:97) are as follows:

- ❖ Tax concessions require higher tax rates and affect competitiveness. Since, tax preferences narrow the income tax base, these revenue losses may need to be offset with higher tax rates (to the extent revenue requirements are not reduced by the effects of the tax incentive). High tax rates can render a country less competitive as an international investment destination.
- ❖ Tax incentives can be inequitable in granting preferential treatment to a few sectors, thereby burdening the other sectors with higher tax rates. For example, if municipal debt for infrastructure were tax advantaged, but not private debt for municipal infrastructure, the public sector would have a competitive advantage in providing services to citizens.
- ❖ Tax incentives can distort relative prices, leading to misallocation of scarce resources. Municipalities will gain access to cheaper funds on the capital markets. This may result in more municipal investments in infrastructure projects, at the expense of operational spending.
- Tax incentives tend to distribute the tax burden unequally across different categories of taxpayers. The principle of horizontal equity is compromised in the process. Some see tax incentives as subsidy payments to 'preferred taxpayers' and not as an outlay reflecting expenditure programme intent. The concern is that these preferences could create a situation where influential groups of taxpayers (probably the more affluent ones) pay less than their fair tax bill. Since different taxpayers have different levels of income, they will not benefit to the same extent.
- ❖ Tax incentive schemes facilitate arbitrage activities. Controls on arbitrage would be needed if tax advantages for municipal infrastructure investment were implemented. Monitoring costs would increase.
- It is hard to know whether a particular assistance should be delivered through the tax system or by outright subsidies. If tax incentives were chosen, efficient budget programme planning would suggest that these programmes should be made as transparent as possible. Thus, a programme budgeting process could quantify such tax expenditures as "outlay equivalents."

Finally, by examining the issues regarding the probability of tax privileges of municipal bonds in South Africa Glasser *et al.* (1998:97) concluded that tax privileges in South Africa should be approached with caution, and stated that all advantages and disadvantages should be taken into account. The following was recommended:

- ❖ If new privileges are to be pursued, a study should be undertaken to evaluate the leveraging effects of any tax privilege against the revenue losses due to a tax exemption in the specific case of South Africa.
- ❖ Any tax privilege should be available equally to holders of municipal debt and to holders of private debt incurred as part of a project to provide public infrastructure.

As mentioned in chapter two, the number one reason for investor appetite or one of the most obvious market strengths underlying the municipal bond market is the fact that the United States market mainly trades in tax-exempt municipal bonds which has a host of benefits to the investor. If South Africa should manage to supply such a tax-exempt municipal bond within the newly proposed municipal bond model, it must take all the factors proposed by Glasser *et al.* (1998:97) into account. If the interest from these bonds could be made tax-exempt, and if a culture of paying for services could be promoted in South Africa, Van Zyl (2003:267) says that the bonds of larger authorities could be a valuable source of income.

3.9. Possible Characteristics of the Municipal Bond Market in South Africa

3.9.1. The Role Players in the South African Municipal Bond Market

For a healthy municipal securities market to develop certain pricing and trading mechanisms, such as exchange and listing operations, settlement and clearing practices, must operate efficiently. Slow and imprecise mechanisms drive up transaction costs and add to the risks for investors. One advantage for municipal bond market development is that South Africa has a relatively sophisticated financial sector, with up-to-date exchange and clearing operations, and there are no fundamental impediments, from a mechanical or regulatory point of view, to the development of a vibrant municipal securities market. Satisfactory infrastructure exists to support the development of both an over-the-counter and an exchange-based trading system, and the clearing and settlement procedures are adequate and straightforward.

The government Republic of South Africa bonds (similar to U.S. treasuries) and large parastatal issues, conceptually similar to municipal securities, trade easily within the existing framework where settlement is handled electronically, with delivery of funds against bonds, and within three days of trade - all in accordance with international practice. Therefore, contrary to other emerging economies, no change to the operation of the actual market is required for the development of a successful municipal bond market in South Africa (National Treasury, 2001:194).

The existing components, which are already in place for this market to develop, according to Glasser *et al.* (1998:70) include the Bond Exchange of South Africa (BESA); broker/dealers; clearing systems, commercial banks; the DBSA;

INCA; financial planners; institutional investors; issuers; jobbers; market makers; merchant banks; paying agents; and trustees.

To conclude, although secondary market municipal bond transactions were legally required to be executed through the Bond Exchange, Glasser *et al.* (1998:71) have found that many trades were completed without the use of BESA. This fact contributed to their overall view, in which they suggest that a formal bond exchange might not be the most useful medium for an efficient and actively traded primary or secondary municipal bond market to develop over the long run. With respect to relatively small amounts of municipal debt, issued by a wide variety of names, there may well be a lot of daily activity but rarely in the same name. By considering all these facts, Glasser *et al.* (1998:71) proposed that such trading might ultimately prove to be more suited to the over the counter (OTC) markets as in the United States municipal bond market experience.

3.9.2. The Size of the Market

The market for municipal bonds in South Africa is limited and has stagnated, and only three municipal bonds issues is currently listed on BESA, with the last of these bonds issued prior to 1993 (BESA, 2003a).

The only exception for infrastructure finance by local governments in South Africa is via INCA which finances municipalities through the bond market by making use of the medium-term note programme. The medium term note programme is a debt instrument that is offered to investors on continuous bases without having to cost each bond separately. The advantage of the medium term note programme is that it provides flexible access to the bond market and decreases the delays inherent in the issuing procedure by allowing issuers to go through the listing procedures once, and by providing issuers with the advantage of brief periods of low interest rates by selling previously listed securities at a moment's notice. In this way, smaller municipalities are therefore also financed through the bond market indirectly via INCA (Van Zyl, 2003:275).

3.9.3. The Municipal Bond Market Structure

The municipal bond market consists of the primary market, which deals in the new securities of issuers, and the secondary market, where securities are bought, sold, and traded after they have been issued.

a) The Primary Market

Government in South Africa wishes to promote the emergence of a vibrant and innovative primary and secondary market for short and long-term municipal debt and in pursuing this goal, central government wants to avoid the

apartheid-era practice of generally underwriting municipal borrowing and, in effect, transferring municipal liabilities onto itself. The central objective therefore is not to produce a short-term inflow of “soft” or subsidised funds to municipalities, but rather to develop a sustainable market for municipal debt where risk is properly priced. In the long term, an environment needs to emerge where loan finance becomes increasingly available and decreasingly costly to municipalities because the regulatory and institutional frameworks encourage appropriate behaviours, municipalities are increasingly well managed, and ancillary market facilitators are increasingly active. The main elements of this market were already discussed earlier in this chapter (National Treasury, 2001:7).

b) The Secondary Market

The secondary market consists of the activity and trading in securities after they have been sold as new issues, and supports the primary market by providing liquidity to investors - who are more likely to buy a security if they know they can sell that security at a fair market price prior to its stated maturity (Public Securities Association, 1995:34). Because of the absence in municipal bond trading, the secondary market is illiquid. This is one of the major obstacles in the development of a new municipal bond market, and will be discussed in chapter four.

3.9.3.1. The Issuer

3.9.3.1.1. Debt Issuance in South Africa

Restrictions Regarding Debt Issuance in South Africa

According to Glasser *et al.* (1998:7), South Africa had a tradition of classifying (or “grading”) municipalities, which limited the ability of some municipalities to issue debt. The National Treasury (2000:12) acknowledged that it is unnecessary to continue with this approach because of two reasons:

- ❖ First, government indicated that there is no need to limit borrowing by legislative or administrative action, since the main problem in South Africa is lack of access to credit, not over-borrowing by un-creditworthy municipalities. Because of the fact that there are no sovereign guarantees to municipal debt, government stated that the market has clearly demonstrated that it will be selective in extending credit to municipalities, and is best placed to distinguish good from bad credits (The National Treasury, 2000:12).
- ❖ Secondly, government stated that practices that promote creditworthiness should be encouraged, private investment should be maximized, and good financial management needs to be encouraged. In order to achieve this, market access cannot be limited. By classifying municipalities, it would lead to the exact opposite effect they wish to achieve (The National Treasury, 2000:12).

To conclude, all municipalities must enjoy equal borrowing powers in law and government stated that the optimum policy approach therefore should be to avoid any legal distinctions amongst municipalities as to their powers and duties with respect to borrowing (National Treasury, 2000:12).

3.9.3.1.2. Powers to Issue Debt

The municipal council, without any requirements for national or provincial approval, should authorize borrowing according to the National Treasury (2000:13). The reason for this is firstly, that this approach is consistent with the fiscal constitution of the local sphere and was stressed repeatedly in the White Paper as one of the primary virtues of allowing sub sovereign access to capital markets. Secondly, it removes any implicit national or provincial government liabilities, which might easily arise if national, or provincial spheres authorized local borrowing, thereby explaining the overall policy stance of government in avoiding implicit or sovereign guarantees. Third, investors - whose funds are at risk when lending capital - are aided by credit rating agencies and all their new accounting rules and strong incentives could help in determining whether any municipality is capable of borrowing. This makes them much better placed than any organ of government (National Treasury, 2000:13).

With respect to authorization within the council, government stated that the municipal council, at the recommendation of the chief executive, should authorize borrowing. Local government should also only issue long-term debt once a written debt policy and a capital improvement strategy (which may form part of the Integrated Development Plan) are in place to ensure maximum public accountability and sound financial management. The debt policy determined by Council would establish the overall limits and general direction to executive officials in the planning and issuance of debt whereas, the investment plan should broadly prioritize a municipality's capital needs (National Treasury, 2000:14).

3.9.3.1.3. The Purpose of Long-Term Debt to be issued in South Africa

The Municipal Finance Management Bill determines the rules about the purpose of debt that can be raised in South Africa. Under these rules, municipalities may incur long-term debt but only for the purpose of capital expenditure on property, plant or equipment, to be used for the purpose of achieving local government objectives as set out in the national constitution. Municipalities may also re-finance existing long-term debt, but only if such re-financing is in accordance with a prescribed framework. Government stated that a municipality, in respect of which a financial emergency has been declared, may incur long-term debt but only to support financial restructuring in accordance with the approved recovery plan. Lastly, government also emphasized the fact that long-term debt should under no condition be used to finance current budget deficits (National Treasury, 2000:16).

3.9.3.1.4. The Quantum of Debt to be Issued in South Africa

The South Africa government decided not to implement any municipal credit limits, either by legislation nor regulation since these limits according to government would be unnecessary, impractical to implement, and would run contrary to the decentralist policy orientation of its overall approach to municipal borrowing. Government clearly stated that the amount of borrowing municipalities incur is a matter left for municipalities themselves and the market to decide (National Treasury, 2001:16).

Because of this unlimited credit availability, government immediately started to warn municipalities against over-borrowing. If however, municipalities do begin to over-borrow and if, because of this over-borrowing, investors find it difficult to recover their investments government unsympathetically made the following statement, regarding municipalities and investors: *“they will both need to face the full consequences of their decisions”* (National Treasury, 2001:16.)

3.9.3.2. Other Market Players

The functions important to healthy municipal bond markets either already exist or are likely to evolve without support from them. The evolution and specialization of the following functions still need to be addressed:

- Financial advisors can assist municipalities in developing and implementing financial strategies.
- ❖ Underwriters can help package and pre-sell initial issues of municipal debt to a wide range of investors.
- ❖ Legal counsels to assist various actors and to assure compliance with disclosure regulations are available, though experience will be gained over time.
- Bond insurers are likely to begin operations in South Africa as the volume of municipal debt increases. Such insurers can greatly facilitate the evolution of markets by removing most of the risk from the investor.
- ❖ Existing financial institutions can play the role of trustee, paying agent, and registration agent, which are important in assuring predictability and objectivity.
- ❖ To support the growth and evolution of market facilitators such as credit rating agencies, underwriters, bond insurers and so on (National Treasury, 2002:21-22).

In chapter two one can see that in the United States municipal market, there is a central repository and a limited number of officially sanctioned (but privately owned) repositories whose primary function is to collect certain information, to make it available, to ease certain burdens within the investor market and to improve distribution of disclosure information to borrowers.

Glasser *et al.* (1998:30-35) suggested that it would be a wise decision for the South African government or the securities market to also establish and make use of such an institution, where disclosure information could be made more widely available, and the creation of such a central repository system or institution would be “*easily achievable, given the small size of the South African investment community*”.

The South African government supports this view. In the Policy Framework for Municipal Borrowing and Financial Emergencies (2001:21), government clearly stated that an official or officially sanctioned repository system for filing and dissemination of disclosure information would be established as soon as there is an increase in the volume of municipal securities issues. Because some or all disclosure obligations could be satisfied by filing disclosure information centrally, such a repository system could make it easier for municipal issuers to comply with initial and continuing disclosure requirements. A public repository system could also make it easier for potential investors, rating agencies, and news services to access the information. However, government believes that it need not be established until and unless there is sufficient industry demand to make such an operation self-financing.

3.9.3.3. The Rating Agencies

The three most prominent credit rating agencies in the South African bond market are, Moody’s Investor Service, Global Ratings, and Fitch. The different scales that are used to rate the credit worthiness of issuers are similar to that of international ratings used in chapter two.

Objective credit ratings of municipal securities by independent credit rating agencies are a key support for an active market in municipal securities. They help individual and institutional investors make judgements about credit quality without the burden of investigating and analysing each issue. Several private agencies such as CA Ratings (affiliated with Standard and Poor’s) and Global Credit Ratings are already developing informational databases on a large number of municipalities, and rating the credit quality of a smaller number. These agencies have evolved substantially over the last several years. They need reliable data from potential municipal issuers, including audited financial statements, and clear and well-documented projections about future conditions. By improving municipal capabilities in these areas, and by reporting in accordance with new accounting rules, these agencies will probably be provided with increasing impetus.

Although the South African rating agencies have made substantial progress in the municipal field over the past few years not all segments of the investor community are fully familiar with the rating resources and, hence, may not use ratings agency information to facilitate secondary market trading (e.g. with use of private or “shadow” ratings, special

studies and similar products). In addition, some investors expressed fundamental reservations about the value of credit ratings in general. The former problem is likely to diminish because of rating agency marketing efforts. In some cases, the latter problem will persist in the long run because it is borne of a fundamental distrust of the rating process worldwide, rooted in well-known instances in which the rating agency response to changes in credit quality have lagged behind rapidly moving events (Glasser *et al.*, 1998:68).

3.9.3.4. The Investors

Although the local government debt market in South Africa is in a state of transition, the following type of potential investors can be classified:

a) Public Sector Investors

The DBSA is the largest public sector holder of debt, due to its expanding role as a source of finance to local government.

b) Private sector

Banks and insurers are the main private lenders to municipalities with bank loans dominating the supply of private sector credit in South Africa. Other private sector investors consist of insurers pension funds and the private intermediary debt provider, INCA that have been already been discussed in this chapter. Mutual funds in South Africa have not purchased much municipal debt in the past and therefore have not appeared to be a significant source of municipal lending (Glasser *et al.* 1998:92).

The amount and type of investors are likely to change in the near future, and South Africa like the United States should concentrate on making municipal bonds more attractive for individual or household investors, since they would enjoy most of the infrastructure and service advantages accomplished via the issuance of municipal bonds. The South African government could aid this by having certain investor campaigns etc.

3.9.3.5. The Regulators

Because of the large size and diversity of the municipal market in the United States, it is of utmost importance for them to regulate, control, and monitor all functions underlying such a market. In South Africa, the municipal bond market will operate on a much smaller scale. To regulate, control and monitor all operations of the security instruments will be much easier. In South Africa the Financial Services Board (FSB) are likely to perform all of the functions done by

these institutions, since the FSB already “*supervises the exercise and control over the activities of financial institutions, financial services and the participation bonds industry*” in South Africa successfully (South Africa, 2002:1).

Certain rules and regulations regarding municipal securities in South Africa are in place, and others no longer seem appropriate. Government have recently published new laws and regulation (like the Municipal Finance Management Bill and the Framework for Municipal Borrowing and Financial Emergencies) to make way for a municipal bond market. By comparing the municipal bond market of the United States to ours, it has become evident that effective legislation and regulation to support the entire market evolved over time (Public Securities Authority, 1995:157-169). This will also be the case in South Africa. Once active trading in municipal securities begins on full scale, legislation and regulation underlying this will fall in place.

Glasser *et al.* (1998:36) highlighted the fact that it would be good practice for an authority such as the Financial Services Board to maintain a simple registry of municipal debt, security interests, and defaults. Although there is currently a limited support for such a registry, among the participants and potential participants in the municipal debt market, Glasser *et al.* (1998:36) despite of this, reason this approach essential, and believe that it should be given continuing consideration in the re-emergence of the municipal debt market.

3.9.3.6. Continuing Education

Most of the success the United States experienced in their financial sector is because of investor education campaigns (Levit, 1995:3). South Africa can learn from this experience, by educating the possible investors of municipal bonds. This may contribute to a faster growth in municipal bond trading and it may provide familiarity of the municipal bond market in our country (one of the strengths of the United States bond market).

3.10. Summary

The aim of this chapter was to provide information about the residual municipal credit market in South Africa, and to explain the two models underlying this municipal credit market. The first model is the “municipal bond model” and the second model is the “municipal lending model.” The major differences between these two models is the fact that, the “municipal bond model”, provides direct access to municipalities, and involves the issuance of bonds whereas the “municipal lending model” provides indirect access and involves either the provision of loans or bond issuance, depending on the type of intermediary that is used. Countries all over the world are increasingly moving towards the

use of the “municipal bond model.” South Africa is no exception. The South African government already has a framework in place to support the “restart” or “re-emergence” of the old municipal bond market. This framework involves direct access of capital, via a security or “municipal bond model” rather than a so-called “municipal lending model.” Although this is ultimately what the South African government wishes to achieve, current data regarding municipal debt show clearly that the composition of debt is changing. Loan debt remains increasing while securities debt is declining. Therefore, the residual municipal credit market is largely an intermediated one, with banks and other financial intermediaries holding most loans. This is inconsistent with that which government wishes to achieve, and it remains one of the largest limitations to municipal bond market development.

The other aim of this chapter was to provide the reader with information regarding the mechanics of the South African bond market, its structure, the way in which it operates and its role players. What became clear is that there are no fundamental impediments from a mechanical or regulatory point of view to the development of a vibrant municipal securities market. Other bonds trade easily within this market, and no change to the operation of the actual market is required for the development of a successful municipal bond market. There is however other limitations to the development of such a market. All of this is discussed in chapter four.

Chapter 4

The Municipal Bond Market in South Africa

4.1. Introduction

Before one can grasp the entire situation surrounding the current municipal bond market in South Africa, it is first important to understand something about the municipal or local government structure, the municipal financial situation, municipal creditworthiness, and municipal borrowing, since all of these factors will determine the ability of South African municipalities to access the long awaited municipal bond market. The aim of this chapter is to discuss these issues, together with the reasons the previous municipal bond market collapsed. For this purpose, this study divides the municipal financial situation into three periods. All of these periods relate to the specific time of local government transition in South Africa, and this study divides it into the following: (i) municipal finance and municipal borrowing during the “apartheid regime” (prior to 1994), (ii) municipal finance and municipal borrowing during local government restructuring (1994-2000), and (iii) municipal finance and municipal borrowing in South Africa after 2000. This chapter ends with discussing the favourable conditions in today’s market, with regard to municipal borrowing or bond issuance, the greatest obstacles or limitations to the development of a municipal bond market, and lastly this chapter proposes certain solutions, which South Africa could use to reduce or eliminate its greatest obstacle in municipal bond market development at this stage.

4.2. Municipal Finance and Municipal Borrowing during the Apartheid Regime

4.2.1. Local Government Structure and Municipal Finance (prior to 1994)

Under the apartheid regime of the old South Africa, government divided local government authorities or municipalities into two groups, White Local Authorities (WLA’s) and Black Local Authorities (BLA’s). The White Local Authorities were relatively prosperous local governments with strong revenue bases - mainly gained from property taxes paid by homeowners and businesses, and electricity, and water charges. These municipalities were well managed, and they were provided with a quasi-sovereign guarantee, which contributed to the widespread belief that central government would have intervened, in case something like municipal default occurred. Because of all these “advantages” White Local Authorities had no difficulty in accessing long-term finance, which they used to finance long-term investments for various local government service provisions (World Bank, 2003:1-2).

During this regime, long-term finance was done via two ways, either through negotiated bank credits, and/or through bond issues. Bond issues were the most attractive and were particularly issued by the larger and richer White Local Authorities of that time. The situations of Black Local Authorities were very different. White Local Authorities found

it relatively easy to manage their finances without problems, while Black Local Authorities were almost uniformly in fiscal crisis from the dates of their creation. Although a variety of ad hoc measures were taken to keep essential services running in Black Local Authority areas - including intergovernmental transfers and loans, assignment of Regional Service Council revenues and even on occasion grants from the private sector - the Black Local Authorities could not raise funds in the market at all. The government or the DBSA financed their capital programmes by grants or loans (National Treasury, 2001:23).

Black Local Authorities had no property to tax (since the central government owned and rented out homes) and the main source of revenue for Black Local Authorities came from central government subsidies (World Bank, 2003:1-3). Needless to say, in these circumstances Black Local Authorities had no access to the long term capital market or to capital grants, built much less infrastructure and provided far fewer services. White municipalities had the only advantages of issuing municipal bonds.

4.2.2. Characteristics of the Municipal Credit Market during the Apartheid Regime

During the apartheid regime, the municipal bond market in South Africa had the following characteristics:

a) South Africa Had a Strong and Active Municipal Bond Market During This Period

During this period (prior to 1994) South Africa appeared to have “*a vigorous but deceptive history of municipal lending*” (Peterson and Phelps, 1997:105). The municipal borrowing that did take place was characterized by a relatively strong and active municipal bond market, and a substantial track record of commercial bank lending, both for investment and for cash-flow purposes.

According to Leigland (1997:4) approximately R19 billion in municipal debts was outstanding in 1995, being mainly sold by municipalities or utilities (“local service providers”), such as the Rand Water Board.

b) Municipal Bonds Were Issued Solely, by Well-funded White Local Authorities

As has already been mentioned, one of the major characteristic of this era was that solely larger and richer white municipalities issued municipal bonds. Long-term loans were more “*disguised grants rather than loans*,” according to the World Bank (2002:2) and were made available by the Black Local Authorities to public owned entities, such as the DBSA. Black Local Authorities had no other access to long-term capital. This distorted borrowing greatly.

c) South Africa Had a Prescribed Investment Regime

The apartheid government sold local authority debt during this period under government’s “*prescribed investment regime*” (Peterson and Phelps, 1997:105). Under this regime, financial institutions were required to invest designated percentages of their portfolios in government debt. This debt was usually in the form of either national

government debt or local government debt such as municipal bonds. In this environment, municipal debt posed to be more attractive because it carried a moderate interest-rate premium and it was widely viewed as being risk free. Although it was the intention of this regime to increase investment in government securities, it had the exact opposite effect and delayed the development of a functioning bond market. It in turn, it created a captive but very small community of institutional investors, to whom specially tailored municipal bonds were sold via private placement (Leighland, 1997:8).

d) National Government Guaranteed Municipal Bonds and Municipal Loans

Municipal bonds and municipal loans during this period were widely viewed as guaranteed by the national government, which implies that government of this era would have intervened, and would have come to the aid of any issuing authority, in the event that it encountered financial trouble. Although the guarantees were implicit, it was assumed valid by most institutional purchasers (Peterson & Phelps, 1997:105).

e) Municipal Bonds Experienced No Defaults

Municipal debt during this period proved to be a very low-risk investment. Prior to 1995, the Local Authorities Loan Fund of South Africa had an eighteen-year history of no loan defaults, and defaults on municipal bonds in particular were zero (Peterson & Phelps, 1997:106).

4.3. Municipal Finance and Municipal Borrowing during Local Government Restructuring

4.3.1. Local Government Structure and Municipal Finance (1994-2000)

The local government sphere in South Africa since 1993 has undergone three major restructuring phases. Each phase involved the creation of new municipalities, with new boundaries, as they moved from interim (1993) to transitional (1995) and to new (2000) municipalities. The numbers of municipalities reduced from 843 to 284 in December 2000, and the new municipalities are of three types: one-tier metropolitan (or category A) municipalities, two-tiered district (category C) municipalities and local (or category B) municipalities. All of these changes affected the financial stability of municipalities, such as staff, income, expenditure, assets, liabilities, plans, and budgets (National Treasury, 2003:27).

The amalgamation process, which combined White Local Authorities with Black Local Authorities contributed mostly to the financial problems and challenges. According to the White Paper on Local Government (South Africa, 1998), the most important of these challenges seem to be the fact that the amalgamation of the previously divided jurisdictions massively increased the population that municipalities had to serve, all of this without a corresponding increase in the tax base. This combined with service backlogs, collapsed or deteriorating infrastructure, and deteriorating creditworthiness and borrowing capacity, caused some municipalities to experience major financial stress, and in some

instances even crisis. The situation was worsened by the fact that some municipalities experienced upward pressure on salaries, the loss of experienced finance personnel, problems related to non-payment for services, and difficulty in the extension of effective property taxation to the former township areas (South Africa, 1998).

Some municipalities also experienced inadequate financial management capacity, and as a result, their budgeting, accounting, credit control, and financial reporting systems became weak. Together with this, the budget process was not properly linked to municipal planning, and it was not always open to community participation. In other cases, revenue was overstated, and this resulted in unrealistic budgets. All of these problems put pressure on municipal cash flows and financial management. Many municipalities have responded to all of this by spending accumulated reserves, reducing capital expenditure, deferring payments to vendors, utilizing bridging finance and refinancing or extending their long-term debt. The national government's monitoring exercise, Project Viability, confirms all of this, by referring to the municipal situation as the *"generally deteriorating aggregate financial position within the local government sphere"* (South Africa, 1998).

As can be seen from the above-mentioned facts, this local government transition period contributed greatly to the appalling municipal financial situations, experienced both then and now. All of this caused great uncertainty within the municipalities, and among investors. Some causes of uncertainty according to Peterson and Phelps, (1997:106) were the following:

- The revenue structure and expenditure obligations of municipalities were not fully clarified.
- ❖ Quality information on local authority financial condition was generally not available, because of the fact that local governments were unable to supply it.
- ❖ Financial institutions that held local government debt during this period generally did not actively monitor individual authorities' financial condition.
- ❖ The legal and regulatory status regarding municipal debt during this period was unclear. During the transition process, local authorities that have borrowed in the past were subjected to a state of interim fiscal and legal structures, for which basic legal questions such as the priority of claims in the case of insolvency, the legal steps available to enforce debt payment, and the procedures to be followed in the case of municipal bankruptcy were unresolved. Some of the major concerns regarding the legal structure and the way in which government solved it will now be discussed.

(i) A regulatory and legislative vacuum existed regarding the financial structure and the borrowing powers and obligations of municipalities.

Before the amendment of the South Africa constitution, section 230 thereof granted to municipalities the right to

borrow and created the expectation that government would regulate these rights through legislation passed by them. During most of the transition process central government neglected to develop a sufficiently thorough regulatory framework established in law in this area and the legislation regarding this - which addressed local authority borrowing issues - did not properly take into account the changed institutional and policy environment which existed during this time. This resulted in great uncertainty, which impeded investor interest. The South Africa government soon realized this vacuum and corrected it through enactment of the Municipal Finance Management Bill of 2002 and the Policy Framework for Municipal Borrowing and Financial Emergencies (National Treasury, 2000:2).

(ii) South Africa's law on remedies in the context of municipal debt and regarding municipal default was underdeveloped.

If a lender is to invest a significant amount of capital, it must have confidence that the borrower will repay the debt. This means that the municipal council must have both the legal right to bind the municipality over the long term, and the right to make commitments in connection with the future budgets and revenue that will secure the debt. During the transition process, municipal councils could not make such binding commitments. This limited investor's willingness to invest their capital. Once a municipality makes a binding promise to pay, investors will want clear remedies if the municipality should fail in its obligations. Because municipalities seldom, if ever, defaulted on their debts under the apartheid regime, South Africa's law on remedies in the context of municipal debt was underdeveloped. This led to prolonged uncertainty and ineffective remedies in some municipal default cases.

Creditors and borrowers alike will benefit from clarity about the consequences of non-payment. Knowing what happens if things go wrong reduces uncertainty, and thus reduces the cost of credit to a municipal borrower. Government realized this and developed new legislation on municipal borrowing and financial emergencies. This provides clarity about municipalities' ability to secure their debt through collateral promises and about what happens in the event of a municipal financial emergency. These legislative provisions are included in the Municipal Finance Management Bill (National Treasury, 2001:196).

(iii) Government introduced the White Paper on Local Government and proposed that municipalities engage in additional finance

Government became aware of all these municipal problems and challenges, and knew that in order for local government to meet all their infrastructure backlogs, and in order for local government to secure access for all too basic services, local government had to engage in additional investment. Because of this, the South African government took their first step in proposing a solution for local government problems, and published the White

Paper on Local Government in 1998. In this paper, the South African government proposed three key areas of municipal finance, which could support additional investment in the municipal sector. These areas are (i) government stressed the importance of increasing the borrowing and investment powers of municipalities, (ii) making use of certain credit enhancement techniques, and (iii) government proposed that municipalities make use of concessional loan finance.

a) Borrowing and Investment Powers of Municipalities

During this period government began to realize the deteriorating municipal financial situation, and started proposing for municipalities to consider expanding their borrowing and investment powers. Government believes that a vibrant and innovative primary and secondary market for short and long-term municipal debt in South Africa should ultimately emerge. To achieve this government demanded firstly that national government define the basic “rules of the game,” and secondly, that local government would need to establish its creditworthiness (through proper budgeting and sound financial management, including establishing firm credit control measures, and affordable infrastructure investment programmes). Government also proposed that a growth in the quantum, scope, and activities of underwriters and market facilitators (such as credit-rating agencies and bond insurers) was required (South Africa, 1998:142).

Government suggested that if private investment were to be encouraged, greater clarity would need to be achieved with respect to the security of loan investments. Government also emphasized the importance of achieving financial discipline through decentralized market relationship (between borrower and lender), rather than the direct, centralized control of local government, which correlates to the fiscally decentralized orientation of the Constitution (South Africa, 1998:142).

Lastly, government indicated that the rules governing intervention in the event that municipalities experience financial difficulties needed to be clearly defined and transparently and consistently applied. Government also stated that municipalities, investors, national government and provincial government, have to have a clear understanding of the character of their respective risks and commented that risks should not be unduly transferred to national or provincial government (South Africa, 1998:142).

b) Credit Enhancement Mechanisms

Government proposed for municipalities to make use of certain credit enhancement mechanisms, such as:

- ❖ **Municipal Bond Insurance** - Insurance by investors to protect them against risks in the market place.
- ❖ **Treasury Trusts** - Treasury trust funds are funds that may be established for investing in non-

marketable debt of provincial governments and municipalities.

- ❖ **Interception of Intergovernmental Transfers** - The interception of intergovernmental transfers due to municipalities, to third parties as collateral.
- ❖ **Debt Syndication** - The formation of a consortium of investors in order to finance and mitigate against risk.
- ❖ **Bond Banking** – Financial transactions involving trade in bonds to investors, banks, etc. in order to create a market in such stock (South Africa, 1998:155).

These Credit Enhancement techniques are further discussed later in this chapter.

c) Concessional Loan Finance

Lastly, government proposes for municipalities to make use of concessional loan finance. Government realized that municipalities, apart from having extensive borrowing powers, were constrained in their ability to raise loans because of certain conditions, both in local government and in the capital market. Therefore, government proposed concessional loan finance.

According to the White Paper on Local Government this type of finance, when offered through a public sector financial intermediary, could prove to play an important role in enabling municipalities that cannot gain access to credit from the capital market to borrow at an affordable price. Concessional loan finance is development finance or concessional loans to municipalities made via parastatal development finance institutions, such as the Development Bank of South Africa (South Africa, 1998:155).

4.3.2. Characteristics of the Municipal Credit Market during the Restructuring Period

During the transition period, the municipal bond market was mainly characterised by the following:

a) The New Government Ended the “Prescribed Investment Regime”

Since 1993, the domestic financial sector in South Africa liberalized, and this caused the prescribed investment regime to end. Because of the fact that there was no government prescribed allocation of private-sector credit to the municipal sector or to the public sector at large, it resulted in the removal of an automatic demand for local authority debt (Peterson and Phelps, 1997:106). This also contributed to the collapse of the municipal bond market during this period.

b) Government Started To Make It Clear That It Does Not Want to Guarantee Local Authority Debt

Unlike the pre-1994 era, government during this period decided not to guarantee funding for capital investments in the municipal sector by the central treasury. Government believes that municipalities instead, would have to raise private finance on their own books and bear the responsibility for servicing that kind of debt themselves. Government also stated that this policy shift (from national guarantees to local responsibility for private debt) would need to require the introduction of a legal and regulatory framework, which would clarify the rights and obligations of borrowers and creditors, with regard to this. Without this vital necessity, government believes that a broad municipal finance market may be extremely slow to develop, with market players that will remain unwilling to make investments in the municipal sector (National Treasury, 2000:2).

c) Municipal Debt Started To Experience Default during This Period

As noted previously, until June 1995, the Local Authority Loans Fund had an 18-year history of no loan default. Since 1995, defaults have accelerated immensely. By December 1996, 48 of the 425 local authority borrowers that participated in the Local Authority Loans Fund were in default. In the 18 months ending December 1996, payments in arrears at Local Authority Loans Fund climbed from R25 000 to R 9.1 million. Some large private institutional holders of local authority debt also reported that missed payments from local authorities had escalated dramatically in the final quarter of 1996 (Peterson and Phelps, 1997:106).

4.4. Municipal Finance and Municipal Borrowing (after 2000)

4.4.1. Local Government Structure and Municipal Finance (after 2000)

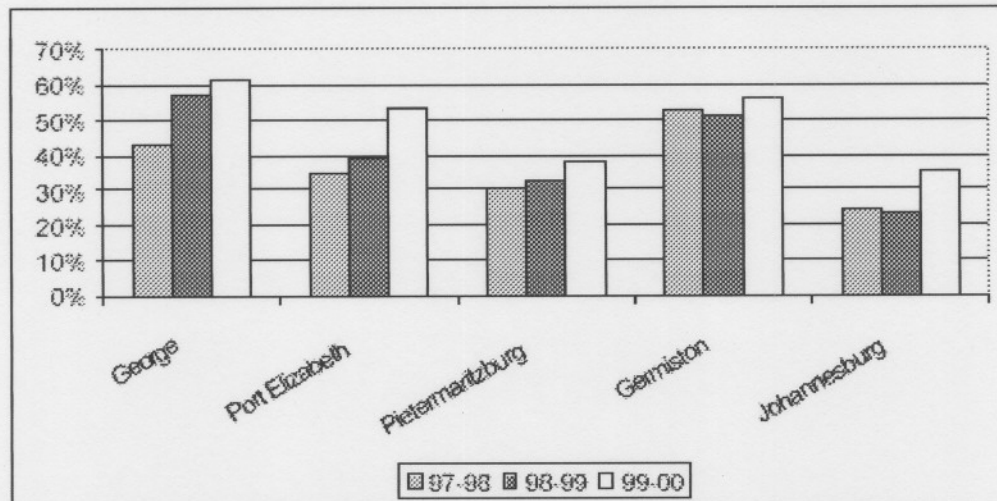
Although one would expect the South African municipal finance situation to be stable and predictable, considering that the last transformation process ended nearly three years ago, municipalities in 2003 still face various problems. The three problems that pose the greatest threat to municipal finance at this stage is, (i) the insufficient revenue streams that resulted mainly because of revenue collection problems, and outstanding debt, (ii) the lack of adequate reporting and disclosure of financial information, and (iii) lack of municipal credit ratings. This is discussed below.

a) Lack of Sufficient Revenue Because of Revenue Collection and Outstanding Debtors Problems

A major financial problem in the local government sphere today is the inadequate collection of revenue due. This, according to National Treasury (2001:150), is rooted in outdated billing and accounting systems, and in the increasing level of outstanding debtors. The result of this is year-end deficits, a reduction in services to balance the budget, and higher fees and taxes for those who do pay. The level of outstanding debtors as a percentage of annual billing in some selected municipalities in South Africa has also increased, dramatically. Figure 4.1 on the next page shows this. In this figure, the outstanding debt as a percentage of annual billing for

Johannesburg increased from 22 percent in 1997 to approximately 35 percent at the end of 2000. This is one of the greatest threats to municipal income, and if not managed it could distort municipal borrowing greatly.

Figure 4.1: Outstanding Debtors as a Percentage of Annual Billing (1997-2000)



(Source: National Treasury, 2001:150)

More recent surveys that were done by the Department of Provincial Affairs and Local Government show that municipalities have accumulated an enormous R24.3 billion in outstanding debtor balances or unpaid consumer bills recently. This accumulation represented approximately 10 percent of the total operating budgets for municipalities from 1998-2003. This means that municipal accumulated debtor balances rises by about R1.8 billion annually, thus representing 3 percent of the total annual expenditure of municipalities (National Treasury, 2003:44). This immense annual rise in consumer debtors shows the severity of the problem. If government ignores this, it could have major consequences for municipal income.

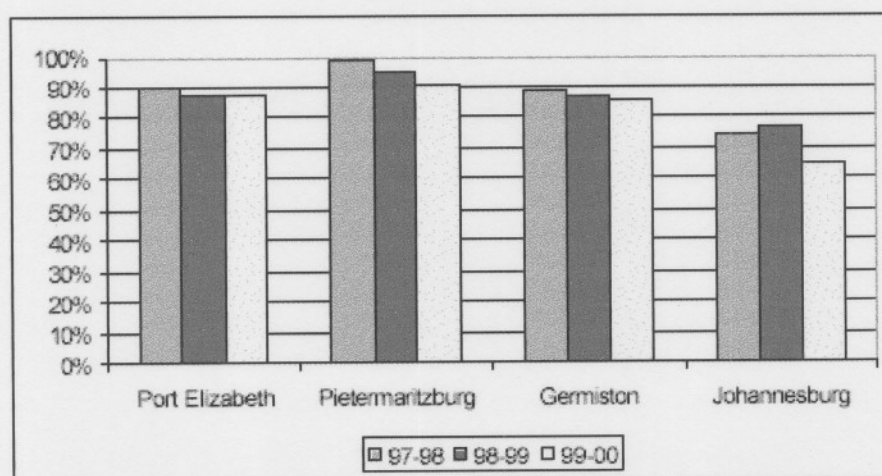
The outstanding consumer debtor percentage is not the same for all the provinces and categories of municipalities in South Africa. Table 4.1 on the next page provides a national aggregate of outstanding consumer debtors broken down by province and category of municipalities for June 2002. Of the total outstanding consumer debtors, R15 billion (63.5 percent) is owed to metropolitan municipalities, R8 billion is owed to municipalities in the Free State, Gauteng and KwaZulu-Natal, and a smaller proportion to district municipalities because their main source of revenue is transfers and regional levies (National Treasury, 2003:44).

Table 4.1: Outstanding Consumer Debtors (June 2002)

R thousands	Category A (Metros)	Category B (Locals)	Category C (Districts)	Total
Eastern Cape	845 688	952 584	1 576	1 799 848
Free State	—	1 800 980	—	1 800 980
Gauteng	10 737 100	1 450 080	—	12 187 180
KwaZulu-Natal	1 832 880	1 169 430	53 834	3 056 144
Limpopo	—	331 470	—	331 470
Mpumalanga	—	800 283	—	800 283
Northern Cape	—	539 929	13 689	553 618
North West	—	917 960	5 460	923 420
Western Cape	1 699 250	625 174	9 911	2 334 335
Total	15 114 918	8 587 890	84 470	23 787 278

(Source: National Treasury, 2003:44).

According to the National Treasury (2001:151) revenue collection problems have also worsened over the period 1997 to 2000. Figure 4.2 below shows this. It is evident that the four municipalities used in this example, namely, Port Elizabeth, Pietermaritzburg, Germiston and Johannesburg experienced great difficulty in collecting their revenue. Figure 4.2 further shows that Johannesburg only collected 73 percent of all its revenues in 1997, and this deteriorated by approximately 10 percent in 2000. The rest of the municipalities, also seem to struggle with this problem.

Figure 4.2: Revenue Collection Levies (1997-2000)

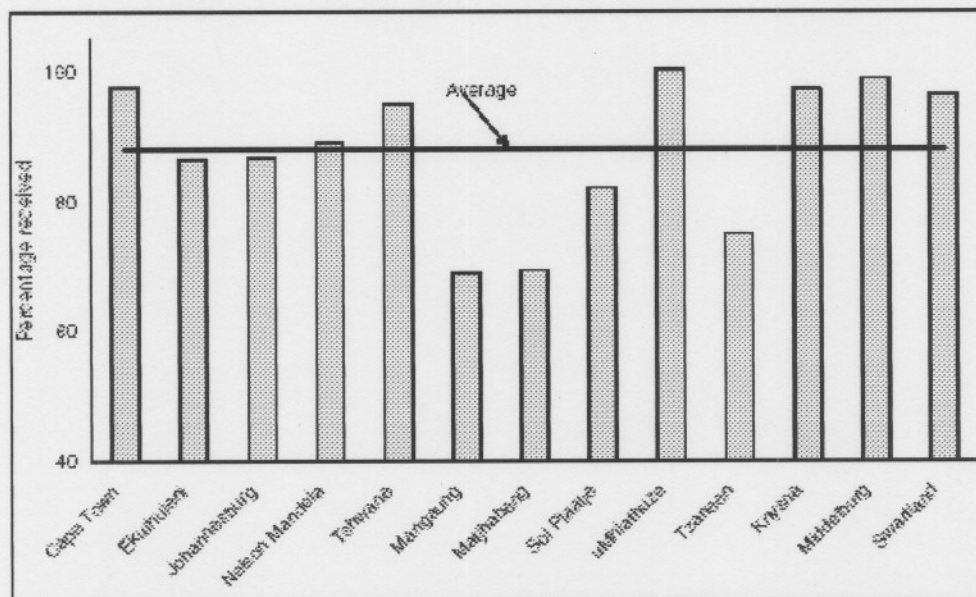
(Source: National Treasury, 2001:151)

Figures 4.3 and Figure 4.4 below and on the next page show more recent municipal revenue collection figures, and demonstrate collection levels reported for other municipalities. Only metropolitan and local municipalities are

reflected, as district municipalities do not have significant amounts of outstanding debtors due to the nature of their functions.

Figure 4.3 show collection levels for 2001 and 2002 reported by thirteen municipalities. Of these thirteen municipalities seven municipalities show collection levels of below 90 per cent and of these, seven municipality's two municipalities show collection levels below 70 per cent. When the most recent revenue collection levels of Johannesburg (for 2002) is compared to the revenue collection levels of the previous figure (for 2000), it shows that the municipal revenue collection for Johannesburg have increased during these two years, but generally still remains under 90 percent. This means that 10 percent of the revenue for Johannesburg city can not be collected. When one takes into account that Johannesburg is one of the larger municipalities (which implies that it could easily access the municipal bond market via municipal bond issuance) the outstanding 10 percent of its municipal revenue could have an enormous effect on municipal finance, and municipal creditworthiness.

Figure 4.3: Revenue Collection in Selected Municipalities (2001-2002)



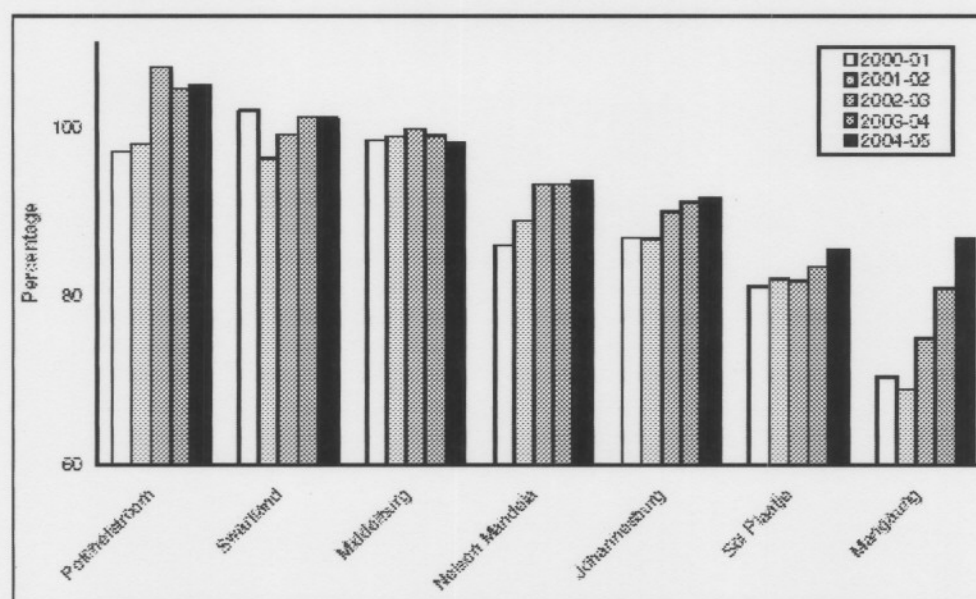
(Source: National Treasury, 2003:45)

Figure 4.4 below shows trends in collection levels for seven municipalities projected over the next five years (from 2000-2005). This figure shows that some municipalities do not appear to be adequately engage in this challenge, as four municipalities still plan to be collecting less than 95 per cent in 2004-05.

When one again takes Johannesburg as an example what becomes evident, is that government projects that municipal revenue collection figures should raise over the next few years. This could affect the municipal bond

market positively in years to come but this is a fact that remains to be seen. For now, the low percentage of revenue collection of most municipalities influences the inadequate stream of revenue flow which could distort municipal borrowing and this could hinder the development of the municipal debt market.

Figure 4.4: Revenue Collections in Selected Municipalities (2000-2005)



(Source: National Treasury, 2003:45).

b) Lack of Adequate Financial Reporting – Disclosure Problems

Another critical problem South African municipalities face, is the failure by a significant number of municipalities to submit their financial statements on time (or at all). Table 4.2 provides the latest information on municipal financial statements for September 2002 as supplied by the National Treasury (2003:46). This information shows that by September 2002, 38 municipalities (5 percent) and 236 municipalities (77 percent) respectively still had financial statements for the municipal financial years of 2000/01 and 2001/02 outstanding. The table also show that of the 543 audits issued, only 29 percent of them did have financial statements. This means that of the 543 audits that have been issued, an overwhelming 71 percent of all municipal financial information were unqualified, disclaimed or had audit opinions outstanding.

Table 4.2: Status Report from the Auditor General

Number	2000-01	2001-02
Municipalities	843	284
Audits to be performed	777	306
Financial statements yet to be submitted 30/09/2002	38	236
Audit reports issued with financial statements	543	unknown
Audit reports not qualified	159	unknown
Either qualified / disclaimed / opinion outstanding	384	unknown

(Source: National Treasury, 2003:7)

The main reason for all of this is that municipalities experience significant delays when finalising financial statements. Some delays occur because of poor quality of financial statements, lack of audit personnel, or other reasons. Out of 31 pilot municipalities examined by the National Treasury 8 municipalities attained unqualified audit reports on their 2000-01 financial statements. The reasons cited for the unqualified reports were insufficient provision to cover exposure with irrevocable debtor balances, failure to write off irrevocable consumer debtors, lack of policy for recovering the outstanding consumer debtors. Together with this, asset registers were also not updated regularly, and the incomplete accounting records did not support stated amounts and transactions (National Treasury, 2003:47). These poor financial statements are necessary for public disclosure. If a municipal bond market is to develop successfully, improvements in the quality of financial information is of utmost importance.

c) Municipalities Lack Sufficient Credit Ratings

Another survey, also done by the National Treasury (2003:43) reflected that 39 of all municipalities in South Africa currently make up 70 percent of all municipal borrowing in South Africa. In this survey, it was found that category A municipalities accounted for 93.4 percent of all municipal borrowing, category B municipalities for 6 percent, and category C municipalities negligible percentages, with only five municipalities in the whole of South Africa reporting having credit. Table 4.3 below shows this (National Treasury 2003:43).

Table 4.3: Borrowings by Category – Pilot Municipalities

	Current Borrowings	Planned Borrowings	No. of Municipal Credit Ratings
R million			
Category A (Metros)	19 236	1 000	4
Category B (Local)	851	223	1
Category C (Districts)	80	13	–
Total	14 167	1 236	5

(Source: National Treasury, 2003:43).

All of the above mentioned problems, namely (i) the insufficient flow of municipal revenue due mainly to the lack in revenue collection and the outstanding debt, (ii) the lack in adequate financial reporting, and (iii) the lack of municipal credit ratings affect municipal finances in South Africa today. These problems will definitely hinder the development of a municipal bond market. This will become clear later in this chapter.

4.4.2. Characteristics of the Municipal Credit Market in South Africa (after 2000)

Although borrowing from the private sector continues to be an attractive option for financing infrastructure, the most recent data from the National Treasury (2003:42) show that the municipal bond market is still stagnant and remains largely untapped. At the end of December 2002, the total outstanding borrowing by municipalities amounted to R20.2 billion, and only a few lenders and larger urban municipalities participated in borrowing. Most figures show that the main source of public sector credit to municipalities is sourced from the Development Bank of Southern Africa (DBSA), commercial banks and the Infrastructure Finance Corporation – INCA (refer to section 3.3). Securities used to be the main instrument of municipal borrowing, but because of the fact that the DBSA increased its market share mainly through granting long-term loans to municipalities, securities debt declined. The absence of tradable municipal securities poses a great challenge to the development of a municipal bond market in South Africa.

4.5. Favourable Conditions in the Development of a South African Municipal Bond Market

There are two favourable conditions identifiable, which would aid South Africa in the re-emergence of the municipal bond market. They are (i) the South African government's supportive approach towards the development of a municipal bond market, and (ii) certain positive economic conditions that would aid the emergence of the municipal bond market. They will subsequently be discussed.

4.5.1. Government's Supportive Approach to Municipal Bond Market Development

National government is strongly committed to the re-development of a strong municipal borrowing market, and has taken a number of steps to facilitate borrowing and to reduce investor uncertainty. These steps include factors like the completion of the local government-restructuring period, and the introduction of certain legal and regulatory reforms that would aid the development of a municipal bond market.

a) Completion of the Local Government Restructuring Period

According to the National Treasury (2001:194), there has been a view among certain South African investors that the previous municipal transition period has diluted the value of formerly sound investments and investors have often cited concern about the potential for further dilution as a reason for their reluctance to lend more to municipalities. However, since the local government elections of December 2000, which have earmarked to a great extent the long awaited local government transition process a lot has changed with local government.

Government established firm municipal boundaries and addressed most of the concerns and insularities that resulted because of this. Although a lot still has to be achieved within the new system of local governance, and while certain gaps within this system remain, most long-pending questions that have caused investor discomfort within this market have been resolved.

b) The Introduction of Certain Legal and Regulatory Reforms by Government

The introduction of certain legal and regulatory reforms that supported government's vision, like the constitutional amendment, the finalization of the Municipal Finance Management Bill and the adoption of the Policy Framework for Municipal Finance and Financial Emergencies, ensured that most legal and regulatory aspects are now in order to support the development of the possible bond market.

c) The Enactment of Constitutional Amendments

Section 230 of the Constitution of South Africa has in the past granted general powers to municipalities to borrow, and created the expectation that these rights will be coherently regulated by legislation passed by central government. Until a few years ago, a partial regulatory and legislative vacuum in respect of the financial structure of the local sphere and borrowing powers and obligations of municipalities existed. Government realized this and amended clause 9 and 10 of the Constitution in 2001. Both amendments give effect to the published "Policy Framework for Municipal Borrowing and Financial Emergencies" and the Municipal Finance Management Bill, both endorsed by Cabinet and published on 28 July 2000 (South Africa, 2001:2).

The object of clause 9 is to help municipalities to continue functioning whilst experiencing serious problems as they restructure to resolve such problems. The Bill enables Parliament to enact legislation to allow for the exercise of executive and legislative authority on behalf of a municipality in circumstances where the council of a municipality for any reason cannot function or when this becomes vital to resolve a financial emergency in a municipality (South Africa, 2001:2).

The object of clause 10 is to empower local governments to borrow long-term funds. It seeks to empower municipalities to bind themselves in future in the exercise of their executive and legislative powers in order to borrow funds for capital at a cheaper rate and over a longer term (South Africa, 2001:2).

d) The Finalization of the Municipal Finance Management Bill

Cabinet approved a revised version of the Municipal Finance Management Bill during August 2001. Chapter five of this Bill makes certain clarifications on how municipalities can borrow, for what purposes, and describes the undertakings they can give to bondholders, lenders, and investors in order to attract investment. Draft legislation on municipal financial emergencies is also included in the Bill. These provisions offer options for municipalities in extreme financial distress to deal with problems they cannot solve themselves.

Once this draft legislation becomes law, government believes that the legal framework will then be in place to make it possible for municipalities to borrow responsibly from private lenders by means of the capital market. Borrowers and lenders will both be able to understand exactly what happens in the event that debt is not paid as, and when, due. This clarity will reduce the risk premium for all municipalities, and can make the debt of a well-managed municipality attractive to investors. The virtual elimination of legal risks helps municipalities that borrow wisely to access the markets at the lowest cost (National Treasury, 2000).

e) The Adoption of the Policy Framework for Municipal Borrowing and Financial Emergencies in 2000

In 2000, government adopted the “Policy Framework for Municipal Borrowing and Financial Emergencies.” This was published together with the Municipal Finance Management Bill, which contains the legislative provision to give effect to the policy framework. This document merely expands the framework for municipal finance and focuses, in particular, on the design of the regulatory framework for local government borrowing. In addition, it deals in detail with the related matter of central government’s response to the financial and fiscal difficulties that the municipal sector confronts.

The central objective of the document is twofold: first, to provide the policy framework for the overall financial structure of the local sphere and the borrowing powers of municipalities; and, second, to outline government's main initiative in respect of municipalities, which face financial crisis (National Treasury, 2000).

4.5.2. Positive Economic Conditions in South Africa

Inflation, interest rates, and other economic factors have enormous influences on municipal bonds and debt issuance. These factors may have positive or negative effects, both for investors and lenders (municipalities) over the short-term, and over the long-term. One of the greatest advantages to the re-development of a South African municipal bond market would be the fact that certain economic conditions would contribute favourably to the re-development of the market.

One such an example for South Africa is inflation. Inflation has been declining over the long term, from an annual rate of over 16 percent in the early 1990's, to well under half that rate, today. This trend, together with other positive economic factors also resulted in lower interest rates. Lower interest rates obviously mean that borrowing will be cheaper. All of this will mean that the level of debt service will buy more infrastructures, and revenue-generating projects that were not viable at higher interest rates would become more attractive to municipalities and investors alike. This will contribute to investor appetite for municipal bonds (National Treasury, 2001:195). Some of these positive economic conditions include the falling inflation, local political stability, the predictability of international transfers, and the clarity on default.

a) Falling National Inflation

Financial restraints and better tax collection at the national level have reduced budget deficits, and thus reduced the national government's need to borrow. In 2000/01, the public sector borrowing requirement amounted to only 1.7 percent of GDP, down from a height of 5.3 percent in 1996/1997. This decline in national government debt is expected to continue, and has already freed up significant amounts of investor capital for other quality investments. From both a municipal infrastructure perspective and a capital market-liquidity perspective, national government is interested in seeing high quality, tradable, municipal securities on the capital markets (National Treasury, 2001:195).

b) Local Political Stability

With the December 2000 municipal elections, local councils were put in place for at least the following five years. This put councils in an excellent strategic position to assess their infrastructure needs and debt capacity, and to make plans for the responsible use of debt as part of their service delivery and economic development strategies (National Treasury, 2001:195).

c) Predictability of Intergovernmental Transfers

Without stable, predictable, and adequate revenues, municipal borrowing may well be unwise. For municipalities that cannot rely on own-source revenues from taxes and tariffs, predictability in intergovernmental transfers is a key to leveraging private investment. With three-year indicative allocations in both the equitable share and capital programmes, national government is committed to give local government the information they need to make informed decisions about borrowing. Leveraging private capital on the strength of committed future transfers can be a responsible local choice. By providing clear commitments (and limitations) as to future transfers, national government can empower rural municipalities without significant own-source revenues to access private capital markets, and realize well-targeted capital investment (National Treasury, 2001:196).

d) Clarity on Default

If a lender is to invest a significant amount of capital, they must have confidence that the borrower will repay the debt. This means that the council must have the legal right to bind the municipality over the long term, and they must have the right to make commitments in connection with future budgets and revenues that will secure the debt. The weight of legal opinion is that a municipal council probably cannot make such a binding commitment given the current political situation in our country. This limits investors' willingness to invest their capital. Once a municipality makes a binding promise to pay, investors will want clear remedies if the municipality should fail in its obligations. Because municipalities seldom, if ever, defaulted on their debts under the apartheid regime, South Africa's law on remedies in the context of municipal debt is underdeveloped. This has led to prolonged uncertainty and ineffective remedies in some recent municipal defaults. Creditors and borrowers alike will benefit from clarity about the consequences of non-payment.

Knowing what happens if things go wrong reduces uncertainty, and thus reduces the cost of credit to a municipal borrower. New legislation on municipal borrowing and financial emergencies has since been developed. This will provide clarity about municipality's ability to secure their debt through collateral promises and about what happens in the event of a municipal financial emergency. These legislative provisions are included in the Municipal Finance Management Bill.

Balancing the disclosure regulations with market activity will be an ongoing challenge. Government is aware of the fact that the goal is to assure investor confidence in municipal securities without hindering the development of a municipal securities market by over regulation. Thus, government intends to take a step-wise approach to the evolution of regulations and institutions to support municipal securities disclosure. While basic disclosure and protection against fraud is critical, it is important not to burden the market with overly stringent disclosure regulations too early in its development. (National Treasury, 2000:21).

4.6. The Greatest Obstacle in the Re-emergence of a Successful South African Municipal Bond Market

From all the facts previously mentioned it is evident that many important changes have occurred within the South African municipal environment over the last few years, and most of these factors have not really contributed to the development of a successful municipal credit or bond market. Some of the factors include the decrease in private lending, the stagnation of long-term debt, loan debt outperforming security debt, the end of the prescribed investment regime, no government guarantee, debt experiencing default, investor uncertainty and financial difficulties within the municipal sector. Certain indirect but critical elements are necessary to support the South African local government, in their access to the credit market. Before any municipality can access the municipal credit or bond market, they have to be creditworthy. Mabogunje (2002:3) stated that: *“the bottom line in any city’s ability to exploit municipal bonds as a reliable funding source, is improving the municipal authority’s creditworthiness ... ”*

A municipality is “creditworthy” when it meets the risk standards of a lender. Most investors, like mutual funds, pension funds, or insurance funds, generally will establish a minimum level of credit quality that an issuer must have, and unless a municipal lending institution sets clear and prudent rules for lending, it is likely to have a hard time raising capital on the private market (Peterson, 1998:5).

Peterson (1998:5) states that there is no absolute level of credit risk that comprises creditworthiness. This is explained where one municipality may propose two loans, one of which may be creditworthy, while the other is not, all depending upon the specific credit protections built into the loan agreement.

In a market situation, where higher credit risk is compensated by higher interest rates, municipal creditworthiness is important, because when investors invest in municipal bonds their primary concern is the issuer’s ability to meet their financial obligations. As mentioned in chapter two, the United States’ issuer’s of municipal bonds have very low credit risks, since they have an outstanding record of meeting interest and principal payments in a timely manner. This is one of the most important - if not the greatest - contributors to the success of the municipal bond market in the United States. This low credit risk can be ascribed to three things: (i) United States municipalities have sufficient revenue streams, (ii) the issuer’s disclose the details of their financial condition (timely and efficiently) and (iii) municipal bonds in the United States are successfully graded by rating agencies (The Bond Market Association of New York, 2002b:4).

To conclude, by examining, the municipal bond market in the United States and by focussing on the ability of their municipalities to access the bond market via bond issuance, one market strength stands out. This market strength is the creditworthy state of most municipalities in the U.S. As can be seen from all the above-mentioned facts regarding the current municipal credit market situation in South Africa, South Africa municipalities lack all of these requirements. (i)

They do not have adequate revenue and budget surpluses to support borrowing, (ii) they lack reliable financial information, for disclosure purposes, and (iii) proper credit ratings are only found in five South African municipalities. The three requirements that ensure municipal creditworthiness will now be explained.

a) Adequate Revenue to Support Borrowing

One of the best ways in which municipalities can achieve creditworthiness according to Glasser *et al.* (1998:7), would be if they have “adequate revenue to support borrowing” and if they, according to Mabogunje (2002:3) could “generate budgetary surpluses of sufficient, reliable and sustainable proportions to make them attractive bond issuers.” This implies two things, South Africa municipalities (i) need to improve the efficiency of their revenue-collecting capabilities, and (ii) they should decrease the amount of municipal debt.

Without stable, predictable, and adequate municipal revenues, a framework for municipal borrowing is unnecessary and may be unwise (Glasser *et al.*, 1998:10). Municipalities, which rely substantially on own-source revenues, or municipalities which have the capacity to do so, control their own destinies. Any municipality that cannot generate sufficient own-source revenue will need intergovernmental transfers, which are predictable in amount and capable of being pledged as security, if they are to borrow.

Most South African municipalities today, as can be seen from all the previously mentioned information and figures, have inadequate revenue streams, experience major financial stress, have no budgetary surpluses and struggle with revenue collection. All of this influences the credibility of municipalities among investors, and this seems to be the first problem in the way of achieving current municipal creditworthiness – a necessity in the development of a municipal bond market.

b) Reliable Financial Information

Before municipalities can even consider borrowing, and before they can even hope to interest investors, municipalities must have the most recent audited financial statements available. This is one of the starting points to analyse a municipality’s ability to engage in debt, and is beneficial to both municipalities and investors. High quality financial information according to the National Treasury (2001:198) is: “one of the most essential keys to municipal borrowing, since it enables municipalities to borrow at reasonable rates and since it also contributes to borrowing by providing a wide variety of lenders and investors.”

According to Phelps (1997:12), the lack of necessary information could impede market development more than any other single market factor. Necessary information allows investors to identify new markets, to select and monitor investments, and it allows municipalities to communicate conditions and performances and to measure progress - all very important factors in the development of municipal bond market. Many forms of information are important, including credit rating criteria and ratings, accounting standards, disclosure standards for the issuance of

bonds and other financial instruments, and systems for demand forecasting and performance measurement. Since the availability of information greatly affects the attractiveness of debt securities, inadequate information may inhibit lending - as investors are unable to measure or quantify risks - and it may drive up the cost of borrowing.

By ensuring the availability of information in South Africa (which would allow investors to satisfy themselves as to municipal creditworthiness), effective financial information would be critical for two reasons: (i) because of the expansion of the overall volume of investment in the municipal sector, and (ii) it is necessary in shifting to the character of the market from a predominantly bank-based model (where both liquidity constraints and loan structures are not particularly appropriate for large capital investment in infrastructure) to the desired securities based model (Phelps, 1997:12).

South African municipalities often do not have adequate, clear, and accurate financial information available, and mostly supply information late. This seems to be the second greatest threat in the way of achieving municipal creditworthiness – another important factor underlying the success of a municipal bond market.

c) Proper Credit Ratings

Another way to establish municipal creditworthiness or to evaluate an issuer is to regard the municipality's credit rating. According to the Bond Market Association of New York (2002b:4) bond ratings are: *"important benchmarks because they reflect a professional assessment of the issuer's ability to repay the bond's face value at maturity."*

Peterson (2002:12) stated that there has been a tendency to rely on credit-rating agencies as the *"gate keepers"* in developing countries' local credit markets, and municipalities issues bonds in the domestic market only if they attain such a minimum credit rating from an authorized credit rating agency.

When one considers the fact that only five municipalities in South Africa, recently had credit ratings, it becomes apparent that this is also a very large factor contributing to the un-creditworthy state of municipalities – hence again limiting the ability of municipalities to access the municipal bond market.

It is clear that South Africa lacks proper revenue streams, adequate financial information, and proper credit ratings, thus it is obvious that municipalities in South Africa, (when compared to the necessary requirements as set out by the United States' model) is un-creditworthy.

According to Glasser *et al.* (1998:92), one of the biggest concerns in the bond market supply side seems to be because: *"some market players esteem the municipal sector unworthy or think the municipal sector is not worth their attention."* This will continue, unless South African municipalities, start doing something about their

creditworthiness, which at this stage seems to be the greatest obstacle in the re-development of a municipal bond market. There is still hope however, and South Africa can overcome this problem by reducing municipal credit risk.

4.7. Reducing Municipal Credit Risk

Reducing credit risk in the municipal market is perhaps the most natural definition of credit enhancement. Credit enhancement mechanisms are used to strengthen or enhance the credit of a lower-rated entity such as a municipality by improving investor concerns about the credit quality of underlying issuers. Credit enhancement mechanisms may include making use of government lending, grants, subsidies or guarantees, applying bond insurance, lending through a private sector intermediary, structured finance, securitization, and bond banking. Although several methods of credit enhancement exist in the world today, there will only be an in-depth look at one of the most frequently overlooked methods, namely the bond bank. All of this will now be discussed.

4.7.1. Government Lending

One municipal credit enhancement option government could use is for the National Treasury, or another government agency, to lend directly to sub-national governments. This creates the following advantages; (i) national government can borrow funds for use by provinces and municipalities at very low cost, and (ii) it gives national government the ability for direct lending to priority programmes. The main disadvantage usually associated with such programme is the moral hazard implicit in government-to-government business transactions and the potential crowding out of the private sector (National Treasury 2001:200).

4.7.2. Government Grants

One of the most direct forms of financial assistance to municipalities is to provide investment capital directly to the needy municipality. There are existing grant programmes, such as the Consolidated Municipal Infrastructure Programme (that is discussed below), that do this, and these grants will continue to play a role in the near future. The main advantages of these grants are simplicity and the fact that national government can control the flow of funds and influence or direct what is being built.

One disadvantage is that the spending costs real money and that money cannot be leveraged. The other disadvantage is that limited resources constrain the pace at which the infrastructure is being built and local communities do not always share and agree national government's view of their specific needs or of what projects are appropriate to address those needs. Projects mandated by national governments in many countries, including South Africa have been criticized as inappropriate for local conditions and as expensive or impossible to maintain. Some of these effects can be limited with

adequate community involvement, provided that due account is taken of the financial realities of municipalities (National Treasury 2001:199).

The Consolidated Municipal Infrastructure Programme (CMIP) is a grant fund designed to further the aims of the Reconstruction and Development Programme, which placed specific emphasis on the development and upgrading of household infrastructure, as part of a basic needs programme. According to the Department of Provincial Affairs and Constitutional Development (2002:1-2) the CMIP accomplishes this through two things:

- ❖ One, through the provision of internal bulk and connector infrastructure in support of household infrastructure to needy South Africans in ways that enhance the integration of previously divided areas.
- ❖ And two, through enhancing the development impact of the delivery process, for example, by focusing on the transfer skills and the promotion of small, medium, and micro-sized enterprises or (SMMEs), by using labour-intensive construction processes, and maximizing job-creation opportunities.

The CMIP also aims to enhance long-term sustainability and the rapid improvement of delivery through a capacity-building programme. The programme will focus on strengthening the institutional ability of municipalities, including their contract management and operation and maintenance capacities. The CMIP consolidates previous grants for municipal infrastructure, such as the municipal infrastructure programme, and the bulk and connector infrastructure grants, into a single, coherent funding process. According to the Department of Provincial Affairs and Constitutional Development (2002:1-2), some CMIP principles include:

- ❖ Providing at least a basic level of services for all South Africans within 10 years.
- ❖ Long-term financial sustainability.
- ❖ The strengthening of the institutional capacity of municipalities.
- ❖ A single, coherent funding process for municipal infrastructure.
- ❖ Rapid movement of delivery.
- Housing and infrastructure delivery must be synchronized.
- ❖ Integration of apartheid areas, and urban and rural service delivery.
- Existing grant-funded programmes for municipal infrastructure.

4.7.3. Government Subsidies for Local Borrowing

Some countries provide subsidies for local government borrowing, often in the form of tax-exemptions on income generated by municipal debt. The United States is the most commonly cited example, and this study discussed this in chapter two. Such tax subsidies are often criticized because they erode the tax base. They also tend to create a preference for the public sector at the expense of the private sector, and are less transparent than budget allocations for the same purpose. Non-tax subsidies are also possible. According to the South African Department of Treasury, the

challenge would be to design a pure subsidy that minimizes distortion of capital markets. This is an especially difficult challenge given that municipal capital markets in South Africa are dormant (National Treasury 2001:200).

4.7.4. Government Guarantees

Government guarantees are less direct measures than outright lending to local governments. The main advantage is that guarantees are less costly than direct lending, or at least in the short term. Furthermore, a national government guarantee can induce private lenders to provide credit for sub-national borrowers at low rates. There are four principal disadvantages associated with these guarantees:

- ❖ Such guarantees increase government's contingent liabilities.
- ❖ The cost of guarantees is difficult to predict and quantify.
- ❖ The investor's focus shifts from the creditworthiness of the borrower and/or the project to the creditworthiness of national government.
- ❖ Investors become willing to lend to any guaranteed borrower regardless of its independent ability to repay, or the project's financial viability (National Treasury, 2000:2).

Guarantees are an indirect form of financial assistance and due to their contingent nature; their cost is not always easy to measure at the time the guarantee is given. Broad guarantees could lead to lax lending practice and hinder the creation of effective markets (Glasser *et al.*, 1998:62).

The South African, central government today made it clear both in the Municipal Infrastructure Investment Framework and in the Policy Framework for Municipal Borrowing and Financial Emergencies that it intends to reduce to an absolute minimum its use of central guarantees to facilitate municipal credit. Municipalities instead, have to raise private finance on their own books and bear the responsibility for servicing that kind of debt themselves (National Treasury, 2000:2).

4.7.5. Interception of Intergovernmental Transfers

Interception of intergovernmental transfers is a form of credit enhancement that involves the transfers of intergovernmental transfers that are due to municipalities, to third parties as collateral. This form of financial assistance need not have any significant cost to the national government. Such mechanisms may be more effective the more dependent the community is on transfer payments from other spheres of government.

For many South African municipalities that are financially self-sufficient a transfer payment intercept would be of modest credit enhancing value. However, as the national operating and capital assistance formulas are revamped and aid is concentrated on the poorest (and often least creditworthy) communities, this device may become a more

powerful tool. A stream of stable, predictable intergovernmental transfers that are made specifically pledgeable and interceptable could be one of the best means to enhance creditworthiness. Significant penalties and/or administrative fees could discourage municipalities from relying on the intercept mechanism, and encourage them to manage their own debt payments. Such a mechanism would leverage private sector funding, rather than crowding it out (Glasser *et al.* 1998:63).

4.7.6. Municipal Bond Insurance

Bond insurance is a legal commitment by an insurance company to make payments of principal and interest on debt, in the event that the issuer is unable to make those payments on time. Generally, such payments will be made as originally scheduled, and the principal will not be accelerated (paid earlier than its scheduled date). Bond insurance typically covers the full maturity range of the bonds. The role of municipal bond insurance in the market is threefold: (i) to reduce interest costs to issuers, (ii) to provide a high level of security to investors, and (iii) to furnish improved secondary-market liquidity and price support (The Bond Market Association, 1997:5).

Municipal bond insurance protects investors in two ways:

- a) Occasionally cities or states that issue debt securities get into financial difficulty. When this happens, payment of interest and principal on schedule might become difficult and/or even impossible. Even if an issuer does not default, the ratings on an issuer's securities, if its financial condition deteriorates, will cause the market value of its securities to decline. Investors in bonds insured by Triple-A rated municipal bond insurers are insulated from these risks because they can depend on the insurer, whose claims-paying ability is rated Triple-A, to make timely payment of scheduled principal and interest. United States history regarding bonds has shown that insured bonds have more liquidity and price protection than uninsured bonds and municipal bond insurance proved very successful - where many financial institutions experienced difficulties bond insurers posted record performances.
- b) The insurance policies written by municipal bond insurers guarantee that interest and principal will be paid as scheduled, should the issuer default. Each guarantee is unconditional and irrevocable and covers 100 percent of interest and principal for the full term of the issue. A bond may be insured in the primary or secondary market. While many investors are aware of the protection municipal bond insurance offers against default, they may not realize it also shields them from other risks as well. These risks may include, for example, natural disasters (earthquakes, floods, tornadoes, etc.) and environmental hazards. If an insured bond defaults, the insurer would

immediately step in and make the scheduled payments. An investor would not experience any interruption in the timely payment of income (The Bond Market Association, 1997:1-12).

Insurance also adds several value-enhancing features to municipal bonds. Insured bonds are much safer and of a high quality, they have high ratings strengths, are liquid in the U.S. market, and in most cases Triple-A rated insured bonds offer slightly higher yields than Triple-A uninsured securities, and therefore also creates an opportunity for higher earnings (The Bond Market Association, 1997:5).

In the past 15-20 years, bond insurance has played an important role in the growth of the US municipal bond markets where individual investors rely on bond insurance to enhance the quality of the assets they are willing to hold and allows non-creditworthy issuers to have market access. The insurance by "AAA" rated insurance companies allows small issuers at the lower end of the investment grade ("BBB" and "A") to access the national market for high investment grade debt. This enhances the liquidity of the issues, which can then trade on secondary markets. Close to 50 percent of total US municipal bond (75 percent of "BBB" and "A") issues are covered by bond insurance. Providing insurance coverage only to investment grade (i.e. low default risk) credits while charging low premium makes the economics of insurance attractive to issuers (El Daher, 1997:5).

There is not a large enough pool of municipal debt issues in the South African market to make pure bond insurance feasible without public subsidy. Moreover, the risks of municipal bonds have as much to do with uncertainty about future fiscal rules, the future legal environment, and the future political situation as they do with known and measurable financial risks. This situation makes the pricing of insurance extremely difficult if not impossible in the intermediate term for South Africa (Peterson and Phelps 1997:112).

The payoff to municipalities from buying insurance is also highly uncertain. At present, market interest rates charged to borrowers are not greatly influenced by credit rating differences. It is difficult to imagine that the bond insurance, whose principal impact on interest rates is realized indirectly through better credit ratings, could be cost effective to issuers without substantial subsidy. In the South African context, the assistance that bond insurers provide in reducing local project risk and supplying monitoring and surveillance is probably more important to market development than the pure insurance component (Peterson and Phelps, 1997:112).

A number of financial institutions such as the DBSA in South Africa have already considered the creation of a private bond insurance programme. In this environment such a bond insurance programme would: (i) give municipalities access to the bond market as an alternative to bank loans; (ii) reduce the costs of bond issues; (iii) tide bond issuers

over liquidity squeezes; (iv) help to facilitate a more active secondary market in municipal bonds thereby reducing the cost of borrowing; and (v) encourage the retail market for municipal bonds (Peterson, 2001:31).

A range of municipal issuers as well as financial institutions could make use of this product, depending on their need for risk management. One of the advantages if a local institution does this is that they would be better able to assess risks in the market. Among the concerns that arise in this context, as in the case of a guarantee fund, are the lack of incentives for good quality bond issuers to buy the insurance, making it difficult to develop a well-diversified pool, and the need for grant funds or risk capital that ideally would not expose the institution to currency risk. The general conclusion of this assessment is that there are more fundamental developmental issues standing in the way of an active municipal finance market that will need to be addressed, before bond insurance is a viable product (Peterson, 2001:31).

A bond insurance mechanism, even if developed by a private entity, has some inherent risks such as questions about credit quality, its value to borrowers at this time in the development of the market, and the small size of the pool. Many of the logical insurers of municipal bonds in the South African market are already large primary purchasers of such bonds, which remarked that they would in effect be insuring themselves against credit risk, or diverting credit assessment capacity to an insurance pool when they could earn higher returns as an active buyer/seller in the municipal market (Peterson, 2001:31).

4.7.7. Bank Letter of Credit

Letters of credit (LOC) increases market access for an issuer that may have difficulty in selling its bonds due to a perceived weakness in its ability to meet its obligations. An LOC issued by a suitable bank or lending institution will enhance the quality and appeal of the bond issue, by substituting the paying ability of the bank for that of the bond issuer. A commercial bank generally issues a letter of credit and it represents a contract between the issuing bank and the bond trustee. Under the letter, the bank irrevocably agrees to pay the trustee upon demand monies in an amount necessary to cover all payments due on the bonds. Letters of credit have two purposes, (i) to facilitate credit and (ii) to enhance liquidity. The letter of credit in the municipal market enhances the credit of a bond issue and thus protects investors from a default (The Public Securities Association, 1996:139).

4.7.8. Structured Municipal Finance

“Structured” financings have become part of the municipal debt markets. Structure instruments are conventional debt instruments combined with derivative products such as futures, options, and swaps. As mentioned in chapter two,

futures are contracts where financial commitments between two parties are settled at a future agreed date. Options are buy/sell agreements where, against an up-front fee, one party acquires the discretionary right-with no obligation-to settle a financial contract at an agreed price and time. Swaps are contracts whereby two parties agree to assume each other's financial liabilities as these come due. While derivatives may be used for speculative purposes, they are also powerful instruments for hedging risk, thus protecting a financial position against unwanted market price movements. Structured financings may entail risk mitigating and credit enhancement features embedded in the debt instruments (El Daher, 1997:3).

4.7.9. Special Purpose Intermediaries

Not every small municipality can access capital markets directly, so there must be market intermediaries that step financial flows down to user-friendly levels (see chapter three). Such intermediaries can be especially useful for small and medium-sized municipalities in South Africa, where (i) municipalities struggle financially, and (ii) where the creditworthiness of the municipalities seems to be a great obstacle. The two most important intermediaries operating in the current municipal credit market, as indicated in chapter three, is INCA and the DBSA. Although these intermediaries seem to be very successful within the South African market place, each intermediary has a potential problem. Because of the fact that INCA is a private, profit driven institution its motive for lending and its role within the current credit market, might be more profit orientated than developmental orientated, and this might affect its eagerness to lend to the smaller "un-creditworthy" municipalities. The biggest problem underlying the DBSA is the fact that the low interest rates they provide can crowd out the private sector. These two problems result in INCA and the DBSA only lending funds to larger urban municipalities (again see chapter three).

INCA and DBSA instead of providing access and supporting the smaller, much needier municipalities - their number one goal - only provides capital to larger, more creditworthy urban municipalities. To make credit more available to these smaller municipalities, many countries around the world have developed special purpose intermediaries, such as bond banks and bond pools. This study will subsequently discuss one of the credit enhancement mechanisms, namely, bond pooling via bond banks as an option South African municipalities could use in solving the problem mentioned above.

4.8. Bond Banks and Bond Pooling

4.8.1. Introduction

Municipal bond banks first appeared in Canada in 1956 and in the United States in 1970. These banks were created because many small municipalities lack knowledge of financial markets, and they normally only need to borrow relatively small amounts of capital. Municipal bond banks have been offering a unique and very advantageous way for small communities to finance municipal projects, by enhancing credit ratings and by lowering the cost of debt for municipalities. The process of hiring an investment bank to float a small amount of normally an illiquid, possibly un-rated debt issue can significantly increase the cost of borrowing for municipalities. Together with this, small or poorly rated municipalities often face many borrowing problems because of low credit ratings, and because of financial problems within the municipality. All of this can be eliminated by making use of a municipal bond bank (Ghon Rhee and Stone, 2003:2).

The principle behind the bond bank is very straightforward. Municipal bond banks operate as credit enhancing organizations by “pooling” multiple municipalities’ borrowing needs into a single bond bank debt issuance, thereby modifying two important characteristics of the municipality’s debt according to Ghon Rhee and Stone (2003:3-5), namely:

- a) The credit rating associated with the debt is changed. Municipal bond banks must have strong credit ratings if they want to fulfil the purpose for which they are intended. Bond banks operate by re-lending the funds obtained with their higher credit rating to the municipalities with lower credit ratings, a process known as “credit rating arbitrage.”
- b) The second characteristic modified by a municipal bond bank is that the debt issuance is the size of the issue. By “pooling” multiple municipalities borrowing needs together, municipal bond banks are able to offer larger debt issues, which typically make the primary market offering more competitive. With more competition in the primary market, one can expect the price of the bond to rise and the municipality’s debt servicing cost to fall. Municipalities might realize savings through a reduction in transaction costs associated with the economies of scale in the underwriting process, other savings might also occur from the anticipation of the increased liquidity in the secondary market due to the increased size of the offering.

4.8.2. Bond Bank Definition

A broad definition of a bond bank is an entity (private, non-profit, governmental or others which normally only issues debt for single purposes) that sells its own securities and relends bond proceeds to local government entities. A more limited, traditional definition of a bond bank is a state-sponsored entity that makes local infrastructure projects feasible by providing access to the municipal bond market and by providing direct and indirect financial subsidies to localities primarily through debt issuance (Government Finance Group of the United States, 1997:1-3).

These bond banks sell their own securities in the public bond market and relends the proceeds to local governments. In so doing, the bond banks not only provide communities access to the economies and efficiencies of the public debt market (especially smaller towns lacking the financial expertise and credit history to go to the bond market on their own), but they also pool a number of smaller issues together, and back them with state credit. Thus, they further reduce the cost of borrowing for the locality. Most bond banks in the United States have contributed to infrastructure finance mainly by providing financing for community water and sewer needs, while other contributions were mainly for schools, transportation, solid waste management facilities, and economic development (Government Finance Group of the United States, 1997:1-3).

4.8.3. The Operation and Function of Bond Banks

In the United States to be qualified for bond bank participation, municipalities must first undergo their required jurisdictional obligations for issuing debt, and this usually requires obtaining either the approval of the citizens or the approval of the bond counsel. The municipality then submits an application to the municipal bond bank. When making a decision as to whether to include a certain municipality's debt, the municipal bond banks examines the same information as the credit ratings agencies. This information includes the amount of the bond, whether or not the issue was publicly voted on, what assets or taxes in addition to property taxes are pledged, the project feasibility study, the intended sources and uses for the bond bank funds, the outstanding municipal debt, previous municipal defaults, the local economy, the largest employers, population figures, property tax statistics, the current years' budget etc. All of this will affect the bond bank's decision (Ghon Rhee and Stone, 2003:8-12).

Once the bond bank decides to accept the municipalities into the debt pool, the municipalities pay the same rate of interest on the borrowed funds as all the other municipalities involved in the debt issuance. That is, after being accepted, the municipality's credit rating ceases to be a distinguishing factor. After the bond bank entered the capital market, and after it combined all the approved borrowers in a single pooled bond issue, the financing team determines if bond insurance is needed and whether it is cost effective or not. The necessary documents and copies of the applications are then submitted to the rating agencies for a credit rating review and update. After the ratings are

obtained, a new preliminary official statement is printed and mailed to all investment firms. Most bond bank bonds are offered first to municipal individual investors and then to institutional investors, which may include banks, mutual funds, insurance companies and other corporations (Ghon Rhee and Stone, 2003:8-12).

When the municipal bond bank has accumulated a sufficient amount of debt or the regularly scheduled debt issuance date arrives, the bank then floats the issue and in some cases, an additional 10 percent designated for a reserve or sinking fund is set aside. The reserve fund is there to make individual bond payments in the event that its borrowers are unable to make their payments. This fund serves as a credit enhancement for the individual municipalities, and helps lower the cost of debt by reducing the default risk faced by investors. The reserve fund is typically equal to one year's worth of principal and interest payments and can be used in the event of slow pay or default by a municipality. The reserve fund is usually invested in Treasury Securities and the interest rate spread between the return on taxable government securities and the tax-exempt bond bank issues is an arbitrage profit for the bond bank. In order of priority, the collateral behind the municipal bond bank's debt issues are the reserve fund, the full faith and credit of the municipality, a possible lien on state grants in aid to municipality or an "intercept mechanism," and finally, the moral obligation of the state to replenish the reserve fund in case of depletion (Ghon Rhee and Stone, 2003:8-12).

The interest rates are established through negotiation with the selected senior managing underwriter and are based on the order demand from investors, current national interest rates and a review of recent comparable financings. Borrowers are protected against having their interest rates increased due to a changing market. However, in the event interest rates decline by a substantial amount the bond bank will refund the existing bonds and pass the savings through to the borrowers.

The bond bank and its advisors are constantly monitoring interest rates to watch for refunding opportunities, and when a refunding occurs, the bond bank will immediately notify the municipalities. Unfortunately, because of the pooled methodology for bond sales, individual municipal loans cannot be refunded, only an entire series of bonds (Ghon Rhee and Stone, 2003:8-12).

Most bond banks are financially self-supporting and are not reliant on the state to provide operating appropriations. Self-supporting bond banks rely on a variety of sources to pay for operations, but the most common means of support is fees charged to local borrowers. Contrary to this, some bond banks levy large lump-sum fees at closing, while others charge an annual fee based on outstanding loan amount or mark-up interest rates. Other bond banks partially or fully fund operations from appropriated cash balances and interest earnings balances that the bond bank has accrued over year of existence. The banks that are not self-supporting rely on state appropriations to subsidize their operations. Some banks in the United States have received state appropriations in the early years of its existence but since then have funded its operations with interest earnings on unexpected state appropriations and other available bond bank funds (Government Finance Group of the United States, 1997:13-14).

There are a number of different types of financing programmes that bond banks offer local governments. Most programmes can be categorized into three primary types: (i) long-term bond pools including refunding (ii) cash flow financing, and (iii) equipment lease financing. All the different types of financing programmes that bond banks offer local governments will subsequently be discussed.

a) Long term Bond Pool

Bond banks will issue bonds and will use the bond proceeds to purchase debt obligations of localities. Bondholders generally are secure by loan repayments from the pool of local borrowers as opposed to new locality and in some cases have additional credit enhancement from the state. Because of diversification offered in the pool, investors generally require lower interest rates than the interest rates they would have needed if they were purchasing a single obligation from the one locality. The pooling concept provides certain economies of scale by spreading fixed cost of issuance (e.g. rating fees, official statement pricing, etc.) across several borrowers and by negotiating lower fees for bond insurance and gaining coverage for smaller loans not insured on a stand-alone basis (Government Finance Group of the United States, 1997:3-5).

Other advantages of bond pooling, according to a public finance clearinghouse in California called ebondpool.com (2003) include the following:

- ❖ Pooled bond issuance provides package programmes with proven financing teams.
- Rationalized documentation reduces municipal staff time requirements.
- ❖ Long-term finance of capital projects, in some cases for even up to 30 years.
- ❖ In some cases, municipalities need no cash fund requirements.
- ❖ Providing frequent market access with 2 to 3 pools per year.
- ❖ Lowering the underwriter's discount and insurance premium paid to underwriters and credit enhancers.

b) Cash Flow Financing

Localities in many states in the United States face operating cash flow shortfalls because of differences in timing between the receipt of revenues and timing of operating expenditures. Certain bond banks issue short-term pooled issues to provide localities with interim funding until it receives its operating revenues. These programmes are very similar to long-term bond pools in terms of their pooled structure and ability to provide economies of scale and interest rate savings, but vary in maturity and length and purpose of issuance (Government Finance Group of the United States, 1997:3-5).

c) Equipment Lease Financing

Vendor financing or conventional debt financing for relatively small equipment purchasers is often prohibitively expensive for small entities, while up-front purchases deplete limited cash reserves. Although the programmes vary from state to state, bond banks generally act as a placement agent or pass-through entity by placing the loans with one or several banks. The bond bank typically provides standardized loan and security documentation that modernises the process and allows banks to bid aggressively on the loans because of their increased comfort with the credit of the local borrower. The loans can be pooled or placed on a stand-alone basis (Government Finance Group of the United States, 1997:3-5).

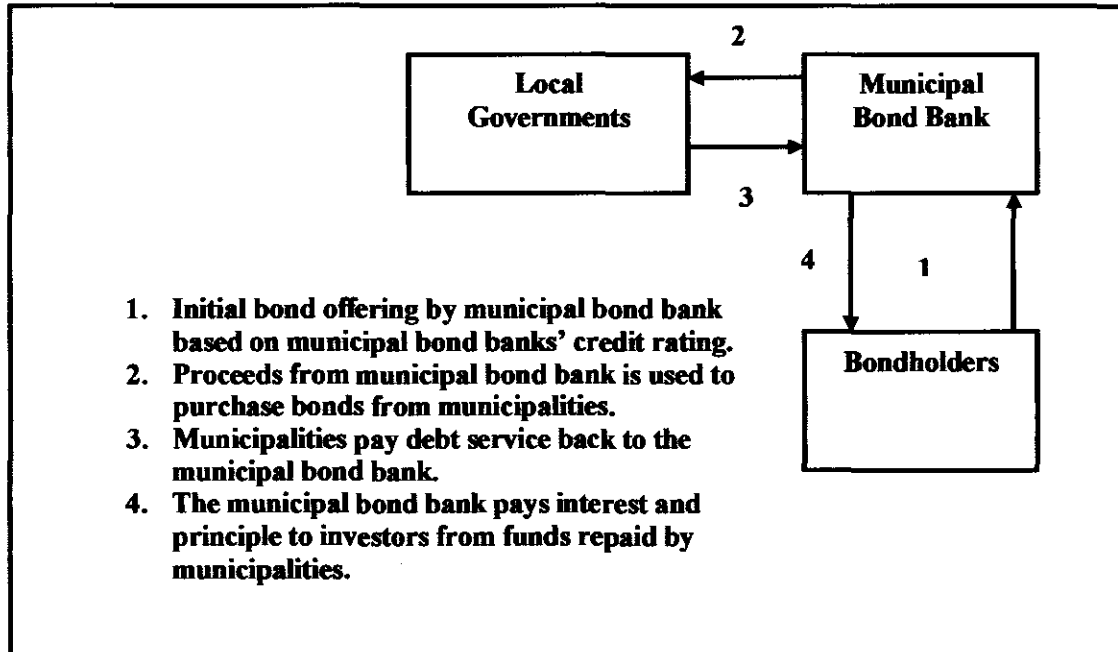
4.8.4. Municipal Bond Bank Structure

Municipal bond banks are structured in a variety of different ways. Because individual bond banks are designed to exploit the cost saving inefficiencies present in their particular region, bond banks try to organize themselves in such a manner as to focus on their region's greatest inefficiency. Typically, this means focusing the bank's operations to take advantage of either the potential for credit rating arbitrage or the size of the debt issue aspect.

Two broad generalizations can describe bond bank structures. In one structure, the municipal bond bank issues "revenue bonds" in the national bond market using its own name, and then purchases "general obligation bonds" from the municipality. When operated this way, municipal bond banks pass the debt service costs through to the municipalities and the term structure of interest rates for the municipalities is equal to that of the municipal bond banks. This allows the municipality to take advantage of the credit rating arbitrage process. In this case, the bonds are revenue bonds because the source of their principle and interest payments is the cash flows generated by the municipalities (Ghon Rhee and Stone, 2003:8-12).

Figure 4.5 on the next page demonstrates this. First, the municipal bond bank sells securities to investors or bondholders, based on the municipal bond banks credit rating. The proceeds that then originate because of this are then used to purchase bonds from municipalities. After this, municipalities pay debt service back to the municipal bond bank. Lastly, the municipal bond bank pays interest and principle to investors from funds repaid by the municipalities (Ghon Rhee and Stone, 2003:8-12).

Figure 4.5: A Bond Bank Focussed on the Credit Rating Effect

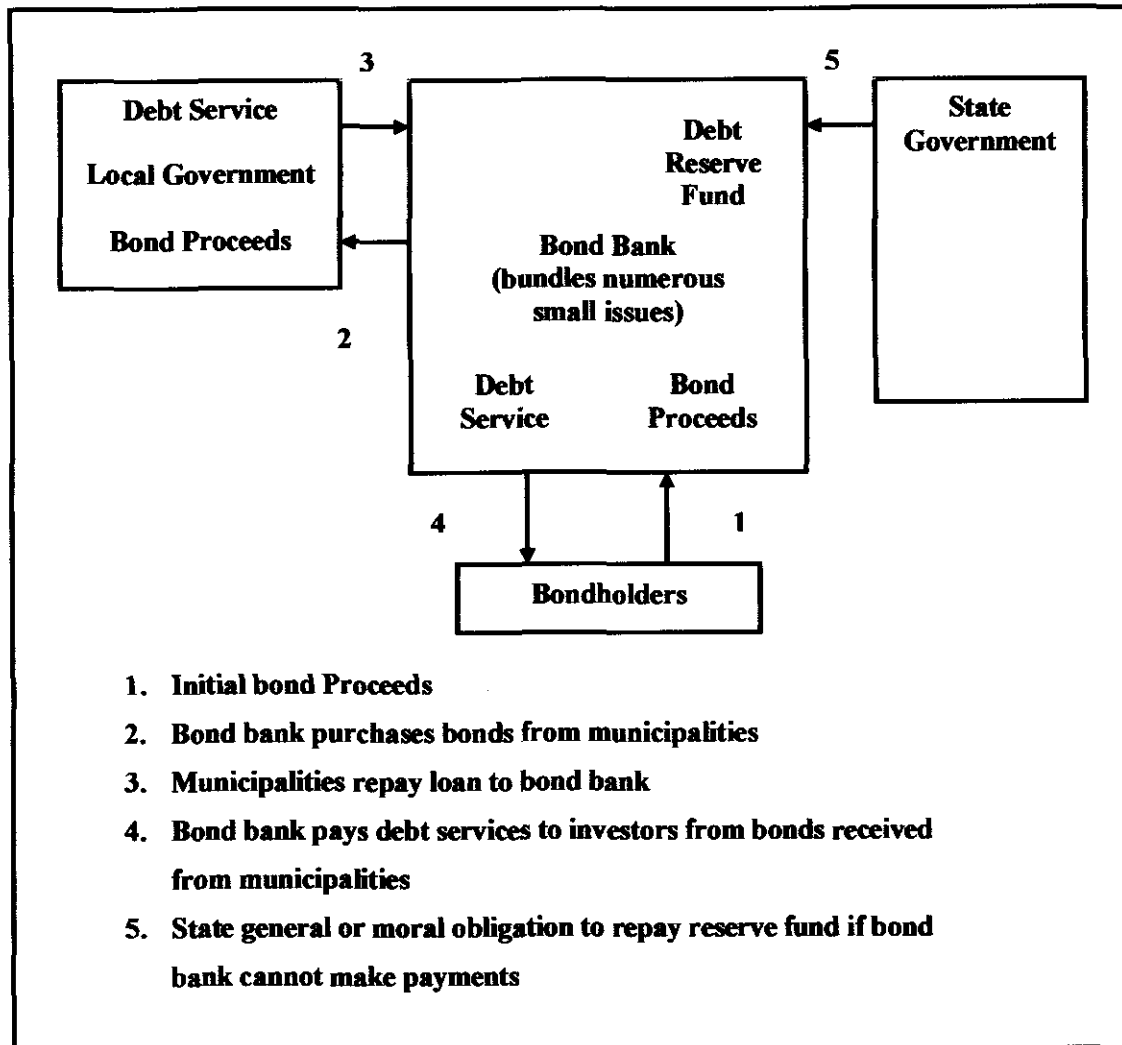


(Source: Ghon Rhee and Stone, 2003:8-12)

In the second operating structure, the municipal bond bank ascertains the borrowing needs of the municipal applicants together and issues debt in one large “pool,” taking advantage of the increased size of the issue.

Figure 4.6 on the next page shows this. The Bond Bank sells securities to investors or bondholders and uses the proceeds of these securities to purchase bonds from numerous municipalities where all the small issues are bundled together. The municipality repays the loan to the bond bank then pays debt services to investors from bonds received from municipalities. Lastly in case of default or in the case where the bond bank could not make payments the state general or moral obligation have to repay the reserve fund (Ghon Rhee and Stone, 2003:8-12).

Figure 4.6: A Bond Bank Focused on the Size of the Debt Issue



(Source: Ghon Rhee and Stone, 2003:8-12)

4.8.5. The Advantages of Financing with Bond Banks

Bond Banks have many significant advantages, namely:

a) Better Access to the Municipal Bond Market

The number one reason stated for making use of bond banks, according to the Government Finance Group of the United States (1997:11), is that they provide far better access to the municipal bond market. This can be ascribed to the much lower cost of capital (reflected in both interest rates and cost of issuance).

b) Credit to Smaller Communities, Projects or Municipalities

Bond banks are of great value to local borrowers for projects that are too small to be sold publicly on a stand-alone basis and on a cost effective manner, primarily because the fixed costs of issuance that are too great. Through bond banks smaller municipalities can easily be a part of the municipal bond market (Government Finance Group of the United States, 1997:11).

c) Lower Interest Rates

Because of the bond bank's experience, credit ratings, and reputation in the capital market, they are able to obtain very low interest rates (Vermont Municipal Bond Bank, 2003).

d) Lower Fixed Costs

There are many fixed costs involved when a municipality wishes to sell its bonds. These costs include both an expensive issuance fee and an underwriter fee. Consolidating all of the approved municipalities' bonds and selling them at one time, spreads the fixed costs for all municipalities involved, and ultimately lowers the costs for the taxpayers (Idaho Municipal Bond Bank, 2003).

e) Credit Enhancement & Security

Most bond banks in the United States is highly rated by credit rating agencies and has been able to obtain competitive low cost AAA bond insurance that further reduces the interest rates (Idaho Municipal Bond Bank, 2003).

f) Lower Costs of Issuance

The bond bank usually pays for all the costs associated with the bond issue. The only costs the municipalities pay for are local bond counsel fees and a financial audit costs (Vermont Municipal Bond Bank, 2003). Other costs such as printing of the official statements, rating agencies, underwriter, financial advisor, bond insurance, and bank trustee the bond bank pays.

g) Simplification

The bond bank will help municipalities complete the application. If the application is approved, all the municipality then has to do is sign a few documents completed by local bond counsel and wait for the bond proceeds to be wire transferred after the sale and closing. The bond bank completes all the remaining documents and takes care of all the ongoing requirements (Vermont Municipal Bond Bank, 2003).

h) Federal Disclosure Requirements

Federal tax laws in the United States requires ongoing secondary market disclosure of each bond issue while borrowers through a bond bank are not required to provide this information (Maine Municipal Bond Bank, 2003).

i) Credit Monitoring

Another advantage that bond banks can offer is their ability to monitor local credits and to act as a buffer between themselves and the ultimate investor, in case real or potential repayment difficulties arise. This role of monitor and mentor when and if trouble arises helps both investor and local government (Maine Municipal Bond Bank, 2003).

j) Bond Banks Are Economically Efficient

Bond banks are economically efficient. The following example proves this. The bond bank of Alaska has produced excess returns to the state every year since 1977 for a cumulative \$23.2 million. This sum is more than the State of Alaska's original investment in the bond bank of \$18.6 million. While this may seem to be a relatively poor rate of return on capital, one must remember that municipal bond banks are not profit organizations. The bond bank's primary purpose is to pursue lower cost loans for the state's municipalities. The Alaska bond bank secured over half a billion dollars of funding for Alaskan communities and in the year 2001 alone, the bond bank issued \$50 million in debt and saved the communities an estimated \$4 million in reduced interest costs. The turning of a small profit, while reducing the cost of debt, only emphasizes the magnitude of the efficiency gains that these organizations produce (Alaskan Municipal Bond Bank Authority, 2003).

k) Ensures Strict Monitoring and Prevents Liability to the Government

In the U.S., municipal bond banks are separate legal entities from the state in which they operate. Typically, the full faith and credit of the bank is pledged to the payments of principal, redemption premium, and interest, but this is not a legally enforceable obligation upon the state - although the state often pledges its moral obligation to the maintenance of a debt service reserve for all of the bond bank's bonds.

Default problems rarely arise. One such an example is Leukerbad in Switzerland in 1998. Leukerbad a small ski and tourist town, unwisely borrowed to the point where it could no longer make its interest payments, and it defaulted. The Swiss government, under no legal obligation to help, stayed away from the situation. Several things make this less likely to happen when a bond bank is involved. First, bond banks examine the ability of the municipality to repay its borrowings. If the bond bank believes the community cannot repay its debt, the bond bank will refuse to issue bonds for that community and the community would need to seek alternative methods of raising capital or forgo their intended project. Secondly, the bond bank is a separate entity from the state of government.

Should a community fail to repay its debt, and the bond bank also defaults, the chain of liability stops with the bond bank and the state need not step up and make the interest and principle repayments for the bondholders, thereby limiting the liability of the state (Ghon Rhee and Stone, 2003:8-12).

l) The Bond Bank Could Provide Municipalities With Certain Credit Evaluation and Monitoring Functions

Bond Banks could assist the market by providing certain useful and accurate municipal credit evaluation techniques. By using municipal financial information, this “in-door” credit rating system could improve market disclosure. Credit risk could also be limited to a large extent because by providing its own credit evaluation model bond banks could be able to allocate certain risks within its own portfolio and this in-turn could limit municipal default. Bond banks could also improve guidelines regarding accounting, disclosure, auditing, and credit rating for South Africa and would provide a good credit worthiness policy to South African municipalities. A good credit worthiness policy ensures municipal loan repayments. This way bond banks can identify possible financial problems or possible default early on. Lastly, one other credit monitoring advantage that bond banks could offer is their ability to monitor local credits and to act as a buffer between municipalities and the ultimate investor, in case real or potential repayment difficulties arise. This role of monitor and mentoring when and if trouble arises would aid both investor and local government.

m) Other Advantages

Other advantages bond bank could provide include: technical and administrative expertise in the complex area of debt issuance, provision of all the compiling, printing, and distribution of information, the responsibility of attending to all the details of the bond sale, the difficult job of obtaining credit rating ratings for the bonds, the periodic follow-ups with the credit rating agency, the payment of bank trustees and paying agent fees, monitoring transfer and bond registration records, scheduling of bond sale dates. Additional tasks include the answering of all the ongoing questions, and the handling of all the requested information from the bondholders, rating agencies, and other interested parties etc. (Vermont Municipal Bond Bank, 2003).

4.8.6. Municipalities That Benefit Most from Bond Bank Participation

Because of the heterogeneous nature of various municipalities, municipal bond banks offer different benefits to their participants, and some municipalities benefit more than others do from bond bank participation. Studies that have been done previously by Ghon Rhee and Stone, (2003:12-15) showed that almost all municipalities benefited from making use of bond banks. The only municipalities that did not benefit were municipalities with large, competitive bid bond issues from issuers with Aa ratings or better.

4.9. Bond Banks for South Africa

4.9.1. Introduction

As already mentioned in chapter three, the world's capital markets convey huge flows of money every day, and these international capital flows are likened to high-tension power transmission lines. High voltages are necessary to move power efficiently over large distances, but these transmission lines are either unavailable, or dangerous to small users of power (or capital). To overcome this, Glasser *et al.* (1998:63) proposed for South Africa to make use of special step down transformers to reduce these voltages to usable levels. The intermediary discussed earlier in this study, namely INCA, is one example of such an institution that steps the voltage down to a level that is appropriate for a broad range of users. For still smaller users, that need only small and occasional capital flows, Glasser *et al.* (1998:63) stated that "*further step-downs is needed*".

Although the power (or capital) can still come from the grid, separate facilities are needed, not to generate the power (or capital), but rather to intermediate and distribute it. As noted in the White Paper on Local Government (South Africa, 1998), such special intermediaries should not replace existing commercial institutions, but should rather complement them. According to Glasser *et al.*, (1998:63) private sector representatives have indicated that they may be able to provide such intermediation, without the need to create a new agency or function for government. In principle, this is desirable, but small issues may still not attract the market's attention.

Although many intermediaries do exist in the world today, this study will only focus on municipal bond banks, which makes use of bond pooling, as one such an intermediary. The reason for this is that an intermediary similar to that of the United States' municipal bond bank could offer a unique and advantageous way for small South African municipalities to finance municipal projects. This could be done by enhancing municipal credit ratings and by lowering the cost of debt for municipalities, via bond pooling. Since many small municipalities in South Africa (i) lack the knowledge of financial markets, (ii) only need to borrow relatively small amounts of capital, (iii) since the process of hiring an investment bank will normally result only in an increase in the cost of borrowing and (iv) since most municipalities today are poorly rated, and (v) most municipalities face many borrowing problems (because of low credit ratings and financial problems), municipal bond banks could well be the only hope for these smaller "un-creditworthy" South African municipalities to ever access the municipal bond market.

The bond bank, once established, could by means of pooled finance provide the following functions: (i) it could assist and support local governments in South Africa to access the capital market in a much easier, and more successful way than would otherwise have been achieved, (ii) it could provide various forms of technical assistance, training and

support to municipalities, regarding municipal creditworthiness, municipal finance, the municipal credit or bond market, debt issuance etc.

4.9.2. Possible Operation and Function of a Bond Bank in South Africa

The proposed bond bank's primary function would be to assist South African local governments with infrastructure finance. Any South African municipality therefore, that has difficulty in financing capital improvement projects or infrastructure such as schools, water and sewer systems, and/or public buildings could approach the proposed bond bank for help.

Large metropolitan municipalities in South Africa generally do not have a problem accessing capital for infrastructure purposes, and currently borrows most of its money from INCA and the DBSA. These municipalities would have no problem in accessing the bond market, if, and when it re-emerges, but the problem lies with small and medium sized municipalities, which usually find it much more difficult to access the capital market. These municipalities are not so fortunate.

Bond banks would especially contribute to these small and medium sized municipalities, which infrequently or irregularly issues debt because of the following reasons:

- ❖ Firstly, smaller municipalities in South Africa have much more constraints, infrastructure backlogs, improper service provision and are generally much needier.
- Secondly, most South African municipalities lack knowledge of financial markets and bond markets, they do not have qualified or educated staff to assist them in accessing these markets, and they have limited finances. Hiring professionals that do have the necessary expertise is expensive. Smaller municipalities usually suffer financially and to put an extra financial burden on them regarding municipal bond market access is inadvisable.
- ❖ Thirdly, the greatest impediment South African municipality's face, when compared to the underlying strengths of the United States municipal bond market, is the fact that South African municipalities are seldom creditworthy, since they have low bond ratings, lack investor familiarity, they lack proper financial information vital for disclosure, and many of the municipalities today experience great financial difficulties.
- Lastly, the process of hiring an investment bank to float a small amount of what will be an illiquid, and possibly un-rated debt issue, can significantly increase the cost of borrowing for municipalities and would not be economically feasible.

Therefore, it is evident that South African municipalities experience major disadvantages in the capital market. They have limited (if any) access to municipal debt and investors and lenders do not have a market appetite for municipal bonds because they are sceptical and feel that municipalities must first prove themselves creditworthy.

The framework which government proposed for municipalities to access the bond market involves direct access via bond issuance. By using the United States' municipal bond model as a background comparison, it is evident that South Africa municipalities lack the number one requirement – municipal creditworthiness – that is necessary for this framework to work. Since most municipalities in South Africa are un-creditworthy and since only a handful of South Africa municipalities currently have the necessary requirements to access the capital market via bond issuance, and given the fact that the municipal finance situation continues to deteriorate, it could take years for South Africa to see the long awaited municipal bond market re-developed.

Government could solve this problem through the proposed bond bank, where the most important function of the bond bank would be to make use of “bond pooling.” This process would involve the merging of a variety of bonds issued by different South African local municipalities, into a single large bond, which could then be sold on the open market. By selling this large bond, rather than a bunch of smaller bonds issued by different South African municipalities, could lead to all of the bond bank advantages that were mentioned above.

Another great advantage of such an intermediary for South Africa could be that this one institution could single-handedly change and reduce all the unknown anticipation and investor uncertainty within today's unfamiliar municipal debt market environment. The one or two creditworthy municipalities in South Africa that would have faced the risk of entering this unstable market alone, need not explore this unfamiliar territory by themselves anymore. By making use of the “pooling” mechanism via the proposed bond bank, a few municipalities can share this risk. The proposed bond bank could therefore act as a forerunning soldier in a battlefield. If it could manage to destroy the uncertainty and if it could victor this current unfamiliar territory, it could leave a place for all other market players to get involved in the market, simply by restoring market interest.

4.9.3. Advantages South Africa Could Enjoy By Making Use of the Proposed Bond Bank

The advantages that South Africa will gain by making use of the proposed bond bank - if structured and operated correctly are endless. For the purpose of this study, these advantages are divided into two types, (i) the advantages bond banks could offer municipalities in particular, and (ii), the advantages bond banks could offer the entire market. Most advantages that bond banks could provide municipalities include better access to the municipal bond market,

credit provision to smaller municipalities, lower costs of issuance, simplification etc. Most of these advantages were already mentioned above. This study will now discuss the advantages that bond banks could offer the entire market.

4.9.3.1. The Advantages Bond Banks Could Offer the Entire Market

a) The Bond Bank Could Increase Municipal Bond Market Liquidity

The proposed municipal bond bank could sell its bonds on the national market and could then utilize the proceeds of its sales to purchase the bonds of other municipalities, thereby providing these municipalities with the funds for their capital, or infrastructure projects. As municipalities pay principle and interest to the bond bank on their debt, the bond bank could use these payments to pay the debt to their bondholders thereby improving market liquidity by increasing the volume of trading. The larger bond issues would attract buyers who are interested in large purchases, that could create a wider distribution of fixed costs through economies of scale, and this could broaden the demand of municipal bonds on a national level.

One other alternative the bond bank could use is to buy back bonds from current holders, and then to resell them on the secondary market. The bond bank could fulfil this function by, either serving as its own market maker, or another financial institution could pay the bond bank to perform such a service. By doing this one of the major obstacles in the South African municipal bond market, namely the issue surrounding liquidity because of an insufficient trading volume, could be limited, both for the primary, and secondary market. When designating a market maker the intermediary institution like this, could also potentially overcome the scale problem by pooling demands for financing, and by financing them through a single large bond issue (see bond pooling).

b) The Bond Bank Could Increase Market Competition

By “pooling” multiple municipalities’ borrowing needs together, municipal bond banks could be able to offer larger debt issues, which typically make the primary market offering more competitive. With more competition in the primary market, one could expect the price of the bonds to rise and the municipality’s debt servicing cost to fall.

c) Bond Banks Could Introduce and Structure Credit Enhancement Mechanisms

The bond bank could introduce, and could structure credit enhancement mechanisms, like bond insurance, securitization and other diversification and transfer measures to the South African market – which could only work in the case of an expanded and diversified pool of issuance.

d) The Liability of the Bond Bank Regarding Municipal Default Could Protect the South African Government

Bond bank bonds are the bond bank's responsibility to repay, not the governments. This means that the South African government would not be held liable for any municipal default. This could be a great motivation for government and it could encourage the South African government to support, and to get involved in the development of such a bond bank.

e) Municipalities Could Gain a Higher Risk-Return Trade-off

Municipalities in South Africa have low credit ratings, and many are not creditworthy. One of the basic ideas of diversification is that whenever the returns of individual securities do not perfectly correlate, the risk of a portfolio of these securities reduces. This same idea could be applied to the "pooling" and reselling of bonds from multiple municipalities. Because of the fact that the economies of most South African municipalities differ, and because of the scepticism within the market, the risk of the overall portfolio of bonds from South African municipalities could have a better risk return trade-off, and this could result in lower costs of capital, if bond banks bonds instead of ordinary municipal bonds are used. These savings could be passed on to the different borrowing municipalities.

f) Municipal Assistance and Training

According to Glasser *et al.* (1998:57) some municipalities, because of the small size of their financing needs, their inability to do the analysis and planning necessary, or because of their inability to speak the language of the capital markets, still cannot gain access to the private credit market. This gap could be bridged by assistance and training. This study divides assistance and training into two separate parts. Firstly, technical assistance and training could assist municipalities in becoming more creditworthy, by providing them with information on how to increase the reliability of their financial information, their capital planning information, information on how to increase effective management, and by assuring financial viability in order to ensure achieving the most sustainable capital finance system. Secondly, and most importantly, financial assistance and training, in order to increase capital market access assistance (especially for smaller municipalities). This would be one of the most important functions of the proposed bond bank in South Africa.

According to Glasser *et al.* (1998:59) technical assistance and training, which assist municipalities to become more creditworthy, is the category most likely to efficiently increase private sector capital investment, least likely to result in crowding out and least likely to incur moral hazard risk. Technical assistance and training could aid municipalities in accounting and budgeting, by identifying capital investment projects, by analyzing capital investment projects, operating and managing facilities and/or by collecting and disbursing funds.

The measure of creditworthiness of any municipality correlates positively to investor interest. If South African municipalities are educated and assisted to improve their creditworthiness, it could have a profound effect on the

number of investors and the quantity of investment capital. This could directly contribute to an increase in demand for municipal bonds and could reactivate the municipal bond market.

Technical assistance, which assists municipalities in becoming more creditworthy, is not the only solution. Municipalities also need to improve their financial assistance through providing access to the capital markets in order to obtain funds for infrastructure development. Providing municipalities with the necessary financial assistance will be the most important function of the proposed bond bank in South Africa.

4.10. Summary

The South African municipal credit or bond market experienced major transformation during each of the local government transition periods. Each period was characterized by many factors that contributed to the municipal credit market situation South Africa experiences today. The most important obstacle in the way of municipal bond market development is the un-creditworthy state of most South African municipalities. This situation would first have to improve before municipal borrowing is undertaken in South Africa, since no investor would substitute a high potential investment for a risky municipal bond investment.

One solution to all of this could be if South Africa reduces the municipal credit risk through certain credit enhancement mechanisms. Not only could these credit enhancement mechanisms bring additional investment within the municipal sector, but it could also aid municipalities in accessing the long awaited municipal bond market. When one considers and compares all the different credit enhancement mechanisms, such as government lending, grants, subsidies, guarantees, interception of intergovernmental transfers etc., it becomes apparent that the most effective credit enhancement technique, which provides the most advantages, would be making use of a special purpose intermediary. Although two types of intermediaries are available within the South African market, they only borrow to larger urban municipalities. The majority of smaller much needier municipalities in South Africa do not have any hope of ever accessing the capital market via municipal bond issuance, or via the direct access method which government proposed. Our country needs special step down transformers. The United States have also experienced this problem, and successfully solved it by making use of a concept called “bond pooling” via municipal bond banks. This aim of this chapter was to discuss the different credit enhancement options, the bond pooling concept via a proposed municipal bond banks, with the sole purpose of proposing this same intermediary for South Africa.

Chapter 5

Conclusion

5.1. Introduction and Conclusion

South African municipalities today face enormous challenges. Not only are they faced with severe infrastructure backlogs, increased service provision and deteriorating municipal finance, but they also have to provide certain constitutionally assigned municipal services to all citizens. These services, which include water, sanitation, electricity, and waste disposal, are essential for the basic needs of all citizens in South Africa, and contribute greatly to local economic development. The problem South African municipalities face regarding this is that they neither have the necessary revenue to supply these services, nor the necessary infrastructure to support these services. In order not to cause further deterioration of municipal service provision, additional municipal infrastructure investment is needed.

Additional infrastructure investment can come from various sources, but the ultimate goal which government wants to achieve is to ensure the flow of private finance or private capital to the municipal sector. This can be achieved either through issuing municipal bonds, or by providing bank loans to municipalities. In the past, South African municipalities have borrowed extensively from the private sector by using both these methods. They issued municipal bonds and they made use of loans, but today the situation surrounding private finance is changing. Although private lending has continued throughout the transitional phase from 1994 to 2000, there has been no new private lending to local government in South Africa recently. Private finance stagnated, and the long-term debt market - which is especially critical for providing financial resources for municipalities for investment in infrastructure that is critical to both economic and social development (water, electricity, roads and waste) - has stagnated.

Only a limited number of new municipal bonds was issues recently, and only a few of the previously issued municipal bonds do trade. Although the private sector continues to be an attractive option for financing infrastructure, it remains untapped. The municipal market in South Africa today, is only concentrated among a few lenders and larger urban municipalities. The majority of the private investment community draws back from the municipal sector, and access by municipalities to private capital is becoming harder.

The residual credit market in South Africa is largely an intermediate one, where banks and other financial intermediaries hold most loans. Government wishes to see this market supplemented by the development and expansion of a securities market, or a "bond model" that lowers the cost of capital to the municipal sector. This market

will imply that municipalities (usually the larger ones) issue debt in the form of bonds, which then trade in the secondary market. To encourage this, government in South Africa designed the main elements of a municipal debt market necessary to support such a framework. Not only will this framework promote the emergence of a vibrant and innovative primary and secondary market for short and long-term debt, but it could also support the growth of a market for other forms of debt i.e. bank lending. The only problem regarding this framework seems to be the effectiveness this framework would have in stimulating bond issuance by municipalities given today's municipal financial situation. This study addressed this problem.

To achieve this, the first objective accomplished was to investigate the function and operation of municipal bonds, and the municipal bond market and to examine the underlying requirements and strengths of this U.S. municipal bond market, in order to use it as a background, and comparison to the South African municipal bond market situation. One of the first things that became apparent regarding this is that in a market such as that of the United States, where capital market access is achievable through municipal bond issuance, a few essential things have to in place first before municipalities issue bonds. When one considers the underlying strengths of this market, one of the most important facts is that U.S. investors are familiar with the municipal bond market, and they have confidence in the municipalities' abilities to repay their interest and principal. If municipalities are able to pay back their interest and principal, they are generally considered creditworthy. To remain creditworthy municipalities need to have three things in place (i) adequate revenue that supports borrowing, (ii) reliable financial information, which is necessary for public disclosure, and (iii) proper credit ratings. By identifying this, this study fully accomplished its first objective.

The second objective this study set out to achieve was to create an understanding regarding municipal credit, the two models the municipal credit market rely on, the remaining municipal credit market in South Africa, its function and structure, and the relevance thereof to the primary problem of this study.

The municipal credit market consists of two models, a municipal bond model, and a municipal lending model. The municipal bond model implies a market where municipalities issue municipal bonds to finance infrastructure via direct access to the capital market and the municipal lending model implies a market where municipalities makes use bank loans to finance infrastructure via financial intermediaries, thereby accessing the capital market indirectly. What became evident is that the remaining credit market in South Africa is an intermediate one, with the two most important market players being INCA and the DBSA who together held more than half of all municipal debt in 2001.

The relevance of all of this to the primary problem of this study is because the indirect access method is inconsistent to that which government wishes to achieve, it remains one of the largest obstacles in the development of a South African

municipal bond market. As have already been mentioned government wishes to achieve market access via municipal bond issuance rather than indirect market access through intermediaries, which is currently the case.

After this study successfully reached this objective, it achieved the third objective, which was to investigate why the previous municipal market collapsed, and to determine the current ability of municipalities to access the municipal bond market. What became evident was that one of the greatest factors that contributed to the collapse of the previous South African municipal bond market was investor uncertainty, which resulted because of the inevitable local government transition period at that time.

The fourth objective this study accomplished was because it successfully identified and proposed certain critical requirements that need to be in place first before the municipal bond market could re-emerge successfully, given all the factors prevalent in the current South Africa market place. What became evident was that South African municipalities today experience great fiscal and financial constraints and they face major revenue collection and outstanding debtor problems, which resulted in inadequate revenue to support borrowing. Together with this, the financial information of most municipalities in South Africa - which is imperative for public disclosure - is usually absent, late or unreliable, and lastly only five municipalities in South Africa currently reported having credit ratings. All three these elements are important to ensure municipal creditworthiness – the greatest market strength underlying the municipal bond market. Because of the fact that most municipalities in South Africa today lack this very essential requirement, the ability of municipalities to access the capital market via bond issuance, is dubious.

The second last objective this study set out to achieve was to identify the greatest limitation currently in the way of municipal bond market development in South Africa, and to introduce certain solutions government could use to decrease the effect of this limitation. It is obvious from all the facts mentioned above that the un-creditworthy state of most municipalities in South Africa is currently the single greatest obstacle in the way of municipal bond market development. If South Africa wishes to achieve a successful and efficient way to re-emerge the municipal bond market, via bond issuance, it would have to re-establish municipal creditworthiness through reducing the credit risk of most municipalities. One way to reduce municipal credit risk could be by making use of credit enhancement mechanisms.

The last objective of this study was to compare all the possible credit enhancement solutions in order to propose the most effective credit enhancement mechanism that government could use to overcome the “un-creditworthiness” obstacle, given all the information that was obtained during the course of this study.

This study achieved this objective by introducing all the different credit enhancement mechanisms. These credit enhancement mechanisms includes government lending, government grants, government subsidies, government guarantees, interception of intergovernmental transfers, municipal bond insurance, bank letters of credit, making use of special purpose intermediaries. Although many special purpose intermediaries exist in the world today, this study only discussed one of the most frequently overlooked methods, namely the bond bank. What became apparent is that in the light of all the information given regarding these different credit enhancement mechanisms, and regarding all the information about municipalities in South Africa it seems that the municipal bond bank could well be the only workable solution effectively used in the re-activation and stimulation of a long desired municipal bond market.

A bond bank is an agencies created by some states in the United States to buy entire issues of bonds of municipalities. The purchases are financed by the issuance of bonds by the bond bank. The purpose is to provide better market access for small, lesser-known issuers via a process known as bond pooling. Bond pooling involves a principle where a few small municipalities pool their issues together to create one large bond pool with numerous advantageous.

The conclusion of this study is that larger municipalities in South Africa would have no problem accessing the municipal bond market directly, through government's proposed framework of municipal bond issuance, but the majority of the smaller much needier, un-creditworthy municipalities in South Africa still face a problem. These municipalities would find it difficult to access the municipal bond market. One solution to the problem could be if the smaller poorly rated municipalities started making use of a municipal bond bank, similar to the municipal bond banks in the United States. The proposed bond bank besides providing access assistance to smaller municipalities to the capital market could also provide certain technical assistance and training concerning the municipal bond market, bond issuance, the role of municipalities in this market, and municipal creditworthiness. Since most South African municipalities do not have the necessary requirements to access the capital market via the direct bond issuance method proposed by government, accessing the capital market indirectly through a bond bank could prove to be more effective. This way South Africa can also achieve two very important market strengths of the United States' model namely (i) investor confidence in the market, and (ii) the assistance of financial intermediaries.

5.2. Recommendations

The conclusion of this study is that government could do better by establishing a bond bank that (i) could eliminate or reduce the greatest obstacle in the way of municipal bond market development (namely the un-creditworthiness of municipalities) and (ii) could provide capital market access to all municipalities. Although the bond bank concept might work, and although it may seem rather favourable as a solution to local government access to capital in South Africa, it will remain risky. Establishing such a proposed bond bank for South Africa would be very costly, and if not operated and managed correctly, it could result in major financial losses for the country. Bond banks in the United

States each developed differently, based on its statutory mandate, political backing, state financial support, local need and other factors. Because of this, the composition of operation, function programmes, and programme structures of each bond bank are markedly different from one another.

In the case of South Africa, the proposed bond bank, although similar in various ways to that of the U.S. would have to be uniquely structured, functioned, managed, and operated, to reflect the South African municipal and financial environment. To adopt this model and to make it fit into the South African environment, this model would have to undergo various changes.

Some of the questions that might arise when deciding on such a possible bond bank for South Africa could include any of the following:

- ❖ The form of umbrella or governing body of the proposed bond bank.
- ❖ The role local government would play in all of this.
- ❖ Whether or not an existing commercial bank should fulfil this function.
- ❖ Should a new more closely government related entity, perhaps through the Local Government Department, undertake the role of the umbrella?
- ❖ Should issuers of bonds or makers of loans be created to fulfil this function?
- ❖ Should a private entity like that similar to INCA undertake this role, with the additional advantage of creating competition within the new municipal bond market?
- ❖ Will the national government undertake even a minimal effort to regulate the local government credit by using a moral obligation make up provision or a reserve fund model for loans of bonds?
- ❖ What would governments' opinion be regarding this?
- ❖ Would the government offer direct financial assistance such as credit enhancement (e.g. in the form of debt positions or guarantees), and would government provide interest rates at or below market rates?

Other questions and important elements surrounding the bond bank might include:

- ❖ The structural and regulatory conditions needed to establish the bond bank need to be defined.
- ❖ The elements of public support (such as central capital grants or subsidies) initially needed/acceptable to assist the bond bank intermediary in leveraging their equity resources through bond issuance on private credit markets need to be defined.
- ❖ The strategic objectives and main institutional factors of the bond bank need to be defined.
- ❖ The different products ranges (loans, guarantees, equity participation, technical assistance, advice, and pooled finance ex.) offered by the bond bank need to be defined.

- ❖ Operational features including guidelines for portfolio diversification amongst sectors/borrowers need to be defined.
- ❖ The main financial parameters related to bond banks funding, lending, and product-pricing policies need to be defined.

5.3. Further Areas of Study

One very important aspect that government should take into account, before South Africa adopts this process of pooled finance via a financial intermediary such as bond bank, is that the whole process needs to be very carefully researched and analysed, to address the uncertainties identified in the recommendation. International aid and experience should be consulted regarding this specific issue. More can also be done to address the financial and administrative problems that municipalities in South Africa are facing.

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