

RESEARCH PAPER

# CORPORATE BOND MARKET DEVELOPMENT IN SMALL JURISDICTIONS

EXPLORING THE MINIMUM REQUIREMENTS OF INVESTORS'  
ENGAGEMENT IN THE CORPORATE BOND MARKET



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## **Abbreviations**

CRA: Credit Rating Agency

CARICRIS: Caribbean information & credit rating services limited

CARICOM: Caribbean Community

CSME: CARICOM single market and economy

CCP: Central Counter Party

Central Bank: Centrale Bank van Curaçao en Sint Maarten

CSD: Central Securities Depository

DVP: Delivery versus Payment

DCSX: Dutch Caribbean Securities Exchange

EMC: Emerging Markets Committee

ETF: Exchange Traded Funds

ETP: Electronic Trading Platform (ETP)

ICMA: International Capital Market Association

IMF: International Monetary Fund

IOSCO: International Organization of Securities Commission

OTC: Over the Counter

OECD: Organization for Economic Cooperation and Development

SME: Small and Medium-sized Economies

## Table of Contents

1	Introduction .....	7
1.1	Theoretical relevancy.....	8
1.2	Practical relevancy .....	8
1.3	Research setting.....	8
1.4	Overall economy in Curaçao .....	9
1.5	Capital Market in Curaçao.....	9
1.6	Problem Statement.....	9
1.7	Thesis structure.....	9
2	Literature review.....	9
2.1	Investors.....	11
2.2	Requirements for the corporate bond market development.....	12
2.3	Regulatory framework .....	12
2.4	Primary market infrastructure .....	13
2.5	Benchmark yield curve.....	15
2.6	Credit Rating Agencies .....	16
2.7	Secondary market infrastructure.....	19
2.8	Transparency.....	21
2.9	Money markets .....	22
2.10	Banking sector.....	23
3	Methods .....	24
	Assumptions & Delimitations.....	24
3.1	Research question.....	25
	Investors' Model Sub-questions .....	25
3.2	The sub-questions.....	25
3.7	Conceptualization of the benchmark for development of corporate bonds.....	26
3.3	Model .....	28
3.4	Explanation of the model.....	28
3.5	Participants .....	29
3.6	Sampling method and sample size.....	29
3.7	Validity of the research .....	29
3.8	Recruitment strategy .....	29
3.9	The method of interview .....	30

3.10	Triangulation .....	30
3.11	Data gathering .....	31
3.12	Interview with Central Bank .....	32
4	Results and analysis .....	32
4.1	Coding description .....	32
4.2	Coding Framework .....	33
4.3	General.....	36
4.4	Regulatory framework .....	37
4.5	Primary market .....	39
4.6	Secondary market .....	41
4.7	Credit rating agency .....	43
4.8	Benchmark yield Curve .....	45
4.9	Scaling of the benchmark.....	47
4.10	Central Bank.....	47
5	Discussion.....	49
5.1	General.....	49
5.2	Regulatory framework .....	49
5.3	Primary market .....	50
5.4	Secondary market .....	50
5.5	Benchmark yield curve.....	50
5.6	CRA .....	51
6	Conclusion.....	52
	<b>General Questions.....</b>	<b>59</b>
	<b>Regulatory framework section .....</b>	<b>59</b>
	<b>Primary market section.....</b>	<b>60</b>
	<b>Secondary market section.....</b>	<b>60</b>
	<b>Benchmark yield curve section .....</b>	<b>60</b>
	<b>Credit Rating Agency (“CRA”) section.....</b>	<b>60</b>
	<b>Figure 1: Conceptualization model</b>	<b>27</b>
	<b>Figure 2 Conceptual Model</b>	<b>28</b>
	<b>Figure 3 : Path towards answering research question</b>	<b>30</b>
	<b>Figure 4: Answering the research question</b>	<b>31</b>
	<b>Figure 5: Pathway analysis- Regulatory framework</b>	<b>38</b>
	<b>Figure 6: Primary market Pathway analysis</b>	<b>40</b>

<b>Figure 7: Pathway Analysis: Importance of Secondary Market</b>	<b>42</b>
<b>Figure 8: Pathway analysis-CRA</b>	<b>44</b>
<b>Figure 9: Pathway analysis-Benchmark yield curve</b>	<b>46</b>
<b>Figure 10: Interconnection of required components</b>	<b>48</b>
<b>Table 1: Results of the Interviews: General perception of Corporate Bond Market _____</b>	<b>36</b>
<b>Table 2: Results of the interviews: Regulatory Framework _____</b>	<b>38</b>
<b>Table 3: Depicting the different pathways: Need for Primary Markets _____</b>	<b>40</b>
<b>Table 4: Depicting the different pathways: Importance of Secondary Market _____</b>	<b>42</b>
<b>Table 5: Depicting the different pathways: Credit Rating Agency _____</b>	<b>44</b>
<b>Table 6: Depicting the different pathways: Benchmark Yield Curve _____</b>	<b>46</b>
<b>Table 7: Benchmark of elements Ranked in Order of Importance _____</b>	<b>47</b>
<b>Table 8: Results summary _____</b>	<b>51</b>

## Executive summary

This research is aimed at uncovering the minimum requirements investors demand regarding the corporate bond structure, when investing in corporate bonds in small jurisdictions. This research is an explorative and qualitative research, where the pathway analysis was used as the method of analysis of qualitative data. Results of this research suggest that by having a proper regulatory framework, primary market, and secondary market would be sufficient to attract knowledgeable investors to engage in the corporate bond market in a small jurisdiction. Furthermore, the capacity of the investors to perform their own due diligence is the reason why they can cope with only the above-mentioned elements. Still, the investors demand high levels of transparency from the issuing companies for conducting their own due diligence. Future research would be to investigate issuers' interest and required conditions to issue bonds in small jurisdictions.

## 1 Introduction

The importance of a corporate bond market for the development of a country's economy has been published in several research papers. According to the International Capital Market Association (“ICMA”) (2013), corporate bonds can help a government in different ways, such as offering relief in global public policy regarding aging population. In addition, a corporate bond market can help maintain economic growth amid possible crises like the one suffered in 2008. Furthermore, it is a good alternative to government bonds and other investment instruments. The corporate bond market as an alternative for banks providing a source of capital is an important factor for the stabilization of an economy during bank crisis. Besides, the economy can withstand a lot more having a healthy corporate bond market in place (Aguilar, Cardenas, Melendez, & Salazar, 2007). The literature suggests that a well-developed corporate bond market can relieve an economy's financial burden and difficulties.

Consequently, a number of countries have been working on the development of a sustainable corporate bond market. In all the developments that have been going on around the world on these elements, even in the Caribbean area some developments can be seen, examples are the countries members of the CARICOM (Pemberton, Stewart, & Watson, 2005). In the case of Curaçao, the need of a corporate bond market is becoming detrimental to the financial success of the island (Tromp, 2013). Institutional investors who previously had invested in government bonds of Curaçao are looking for new attractive investment instruments that would provide them with profitable yields. Therefore, the Centrale Bank van Curaçao en Sint Maarten (“Central Bank”) Central Bank has implemented a policy to facilitate and participate in bond issues of enterprises in Curaçao, as a way to promote the corporate bond market on the island (Tromp, 2013). This means that in Curaçao the need for a corporate bond market has been recognized by financial policymakers. While the intent of the Central Bank in trying to promote the corporate bond market is positive, continued efforts must be targeted towards analyzing what the needs of the investors are in regards to a corporate bond market structure.

The aim of this study is to explore the requirements of the investors in regards to details of a corporate bond market structure. This information can be useful for regulators, as they would get an idea about the corporate bond structure elements that would instantly entice investors' confidence in a small jurisdiction. In most of the literature available, researchers evaluate corporate bond development in emerging markets, as emerging markets range from huge countries to small islands who are also trying to emerge. It is a broad category, and not all corporate bond market development structures would be

suitable or realistic for a small jurisdiction such as Curaçao, as they would be for large jurisdictions (IOSCO, 2012). In order to start a corporate bond market, the market needs to appeal to both the issuers and investors. The aim of this study is to explore the requirements of the investors in regards to details of a corporate bond market structure.

### 1.1 Theoretical relevancy

The creation of new knowledge is important to contribute to science. In this section the theoretical relevancy of this study is explained, describing why this research will lead to an overall contribution to science.

Most of the research conducted in the field of corporate bond market development in emerging markets is focused on emerging large countries. Furthermore, those researches are more focused on how those emerging markets can develop a well-functioning bond market. But none of those researches focuses on the requirements of investors' engagement in small emerging markets. It is logical that the construction of the required components to attract investors is important to insure their participation in bond markets. A research conducted in the Caribbean area, describe a set of requirements for the development of a well-functioning corporate bond market. This research focuses on the overall development of an ideal bond market. However, this research did not explore whether investors would be willing to invest in markets that don't have the ideal requirements for a well-developed bond market. Several researches mention the participation of investors in un-developed corporate bond markets, but none of them investigated what are the minimum structural (bond market) conditions investors are willing to accept when engaging in a corporate bond market.

A proof of the scientific value of this research is being backed by a study which suggests that not all elements in a well-developed corporate bond market in large jurisdictions can be easily replicated in small jurisdictions (IOSCO, 2012). The development of an investor base for a bond market is conditioned on several factors that must be present for completeness of the whole framework. It is important to mention that there is no "one size fits all" solution when it comes to the required components that are needed to attract investors to engage in capital markets (IOSCO, 2012). These articles are proof that the topic regarding the exploration of minimum requirements of the investors regarding their engagement in corporate bond market, especially in an emerging small jurisdiction, has not yet been evaluated. This new knowledge is important as this research aims at establishing a required corporate bond market structure that would appeal to investors in small jurisdictions as a stepping stone for the creation of a corporate bond market, considering that in small jurisdictions not all the ideal components can be replicated.

### 1.2 Practical relevancy

There are several institutional investors in Curaçao who previously purchased government bonds, and are now looking for other suitable investment options. The Central Bank facilitated and participated in the recent bond issuance of government enterprises in Curaçao to promote the local bond market (Tromp, 2013). This means that there is a need for a study to be conducted to assess the needs of investors regarding development of a corporate bond market.

### 1.3 Research setting

This section will be focused on the general economic setting of the Island of Curaçao to contribute possible elements that will be used when assessing and analyzing all of the components needed to develop a well-functioning corporate bond market in Curaçao.



#### 1.4 Overall economy in Curaçao

Curaçao has a small but diversified economy based basically on, dry docks, tourism, oil refinery, transshipment port, and international financial services. While becoming autonomous in 2010 with a sizeable debt relief, still efforts are being done to safeguard future financial sustainability (IMF, 2014).

#### 1.5 Capital Market in Curaçao

The Netherlands took over almost all of the public debt of the Netherlands Antilles, repackaging a significantly smaller portion of the value of the public debt into government bonds with longer maturity and lower yield than before. These bonds are shared by both Sint Maarten and Curaçao and their latest maturity date is 2044, with a 2.13% yield (Central Bank of Curacao and Sint maarten, 2014), resulting in a moderate public debt for Curaçao.

Although Curaçao has a moderate public debt, this does not imply that the island is out of economic problems. Evidence of this is that the real GDP of Curaçao has contracted during 2011-2013 by an average of ½ percent. Future expected growth is being linked with possible large infrastructural projects, which if implemented would increase the GDP by 1-1¼ percent. The possibility of normalization of the interest rates in the US looming may pose a problem for the economy of Curaçao as capital outflows will surge requiring tighter policies to hold capital in the country (IMF, 2014). There is the possibility that this can impact the corporate bond market development on Curaçao, as more attractive yields in international markets can attract capital that otherwise would have been invested locally.

#### 1.6 Problem Statement

The problem that is being focused on in this research is "The implications of no corporate bond market for the Curaçao economy". Participants in Curaçao's economy lose major financial opportunities and advantages by not having access to a sustainable corporate bond market.

Opportunities:

- Access to capital resources;
- Investors having more investment options; and
- Curaçao being able to diminish the capital outflow to foreign countries.

#### 1.7 Thesis structure

The thesis is structured in the following way: The first chapter is a brief introduction explaining the overall elements of the thesis and the aim of this study. In the second chapter, one will find the literature review, offering careful and detailed attention towards the core of the all elements. In the third chapter, the methods of this study will be elaborated on, including the interpretation of sub-questions that ultimately will be the basis of our research question. The analysis and the results will be presented in the fourth chapter, whilst in the fifth chapter, the analysis and results are discussed. The sixth and final chapter presents the conclusions drawn and recommendations provided.

## 2 Literature review

The literature review describes several elements that have been identified as being key to the development of a sustainable corporate bond market. According to Lian (2002), as seen in (Pemberton, Stewart, & Watson, 2005), in order to have a well running and efficient corporate bond market, the presence of the following subjects are required:

- Well-functioning money market;

- Primary market;
- Secondary market;
- Well defined Benchmark yield;
- Credit Rating Agency;
- Proper regulatory framework;
- Transparency; and
- A competitive balance between bonds and banking system.

Having these requirements in place will contribute with a sustainable market that has:

- Enough liquidity;
- Depth; and
- Good price discovery and transparency.

The importance of a capital market is that it is a productive and a diversification catalyst, in the sense that it provides capital finance to the most productive and innovative entrepreneurial activities (ICMA, 2013), (CSME, 2006). Furthermore, the dynamics of a capital market makes it possible to access vital information regarding economy prospects (CSME, 2006). In the case of Caribbean Region, it has been recommended that the capital market should have some integration with foreign major capital markets in order to make their domestic capital markets stronger. By integrating with international markets, capital markets in the Caribbean Region can have better domestic market liquidity and cheaper finance of domestic firms (CSME, 2006). It has been found that excessive reliance on intermediated credit (for example bank loans) is one of the fundamental reasons for the financial crisis in Asia. In the case of Asia, a quick action towards promotion and sophistication of the corporate bond market has been a major factor in the fast recovery of Asia from global financial crisis (Hack & Close, 2013). In the recent global financial crisis, the bond market was one of the key elements cushioning the negative financial impacts of a credit squeeze. In countries such as France, debt securities are one of the main contributors to compensate for the credit contraction (Kaya & Meyer, 2014).

In the following section, a more detailed explanation will be provided about corporate bonds, and how this financing instrument can be crucial for the financial and economic development. Often issued in multiples of \$1,000, corporate bonds are debt instruments that companies use as an alternative for bank loans and other financing possibilities. Bonds are often called fixed income securities; they provide the investor who invests in the bonds with a fixed income during a specified period denominated as the period before maturity. The maturity is the date where the issuer will pay back the principal value of the bond, each bond valued at \$1,000. In case of default, the bondholders as creditors have legal priority over common and preferred shareholders. This does not mean that bondholders are acquitted from the possibility of losing money. Insufficient cash flow can cause a company to default on interest payment to the bondholder (Fabozzi & Mann, 2005).

The importance of the corporate bond lies in the fact that economies can benefit from having a corporate bond market as an alternative to bank loans, especially in periods of a bank crisis. A corporate bond market in place gives companies in an economy more options regarding financing possibilities. Besides, companies that normally would have difficulties going to a bank, have an alternative in corporate bonds when looking for a needed capital injection (Aguilar, Cardenas, Melendez, & Salazar, 2007). Due to the fact that companies have the power to determine their own fixed investment terms,

companies can more effectively match their expected cash flows with bond maturities. This would increase the capabilities of companies to avoid default, more easily than would be possible with bank loans. This is a key flexibility offered by corporate bonds in comparison to common bank loans (ICMA, 2013). A sustainable bond market can enhance economic welfare, since bonds complement other financial instruments (Raghavan, Sahoo, Hait, & Ghosh, 2011).

## 2.1 Investors

When this study refers to investors, it is referring to knowledgeable or professional investors. Knowledgeable investors can be divided into two groups: institutional investors and private investors. Institutional investors are mainly insurance companies, pension and mutual funds (Pemberton, Stewart, & Watson, 2005), (IOSCO, 2011). Bond investors lend money to companies with the expectation of earning a positive rate of return on their investment. These individuals and institutions are exposed to the failures and inefficiencies of companies who were the recipients of such capital injection. Thus, investors have to deal with certain calculated risks while providing their capital to possible candidates. A bond market is attractive for an investor, since the investment is relatively safe and if the financial gains match its financial goals. In other words, an investment should match investors' risk appetite, and still provide enough economic benefit for the given risk (Pemberton, Stewart, & Watson, 2005).

In the past, institutional investors invested and managed their portfolio by dividing their capital equally between bonds and equities. In the last decade, there has been a change where they are focusing more on bonds (OECD, 2013). Institutional investors have played a significant role in the development of emerging markets, as markets with plenty of institutional investors normally allocate resources more efficiently to companies requiring funds. Furthermore, institutional investors are capable of exerting more pressure on corporations to improve their transparency and corporate governance. This fact is very important, as enhancement of overall transparency and corporate governance of companies can enhance the quality of the bonds issued.

Capabilities, diversity, demands and requirements of institutional investors, can all influence the stability and growth of a capital market. As a result, local, knowledgeable investors can be a pillar of support for a capital market (Luengnaruemitchai & Ong, 2005). The participation of investors can have a significant influence on the development of the structure of a bond market (Sharma & Sinha, 2005), (Pemberton, Stewart, & Watson, 2005).

Institutional investors must comply with a number of specific guidelines that create the need for them to diversify and maintain liquidity (IOSCO, 2012). Furthermore, instrument complexity, credit risk and time to maturity are all responsible for an increase in bond trading cost. It would be beneficial for both the issuer and the institutional investor if bonds issued where more simple (Harris & Piwovar, 2006). In a market where there is not much liquidity, a large volume of transactions can impact the market price significantly. Furthermore, buy and hold strategies can reduce the amount of bonds available for trading (IOSCO, 2012).

A research in the Caribbean Community ("CARICOM") area, showed that there is a lack of confidence in the bond markets in that respective area. Still, investors in the CARICOM area would participate if the debt securities market in these respective areas would improve (Pemberton, Stewart, & Watson, 2005).

## 2.2 Requirements for the corporate bond market development

The aim of this section is to determine the requirements for the development of a sustainable corporate bond market. Several countries around the world are recognizing the benefits of a corporate bond market for their economies, and therefore, are trying to develop or improve their bond markets. Over the years, countless research papers have been written in several parts of the world about the development of bond markets. In this research, focus will be directed the Caribbean Region, namely the CARICOM sub-region.

In the research of Pemberton, Stewart and Watson (2005) the authors elaborate and provide recommendations on the elements that are capable of supporting a well-developed bond market. In a research conducted in South East Asia, the authors mentioned similar elements as proposed in the Sub-region of CARICOM. The process of developing a sustainable corporate bond market is an incremental process, where it would take several years to reach all those requirements. Moreover, these measures should be taken rather gradually than rapidly to make sure that the target is reached (Sharma, 2000). Another research conducted in the area of Southeast Asia stressed on the fact that an efficient market infrastructure and low cost of issuance would promote investor participation, thus ensuring the growth of a corporate bond market (Hack & Close, East Asia Corporate bond markets, 2013). It has been stated that countries in emerging markets with a non-existent corporate bond market, should let the relevant authorities establish the fundamental key elements in order to ensure the proper and required growth in the corporate bond market. Key elements include necessary regulatory framework, tax framework, market infrastructure, the establishment of a strong investor and issuer base, and also facilitate entry of strategic bond market intermediaries (EMC and IOSCO, 2011).

The elements included in the recommendations in the research of (Pemberton, Stewart, & Watson, 2005) will be used as the basis of our research. This due to the fact that many of the elements that are found to be contributing to corporate bond market development in the CARICOM sub-region are the same elements that contributed to corporate bond market development in several other countries. It is important to mention that the economic similarities of the islands in CARICOM and Curaçao facilitate the use of the mentioned corporate bond market development requirements as the benchmark for the conduction of this study.

## 2.3 Regulatory framework

### **Introduction**

A regulatory framework is one of the most important elements underlying a properly developed corporate bond market. A regulatory framework designed to maintain a balance in the corporate bond market can help catapult the given corporate bond market to become efficient and sustainable. The regulatory framework is the main instrument from which the whole corporate bond market is structured and designed. Growth in the corporate bond market is promoted, by designing a flexible regulatory framework that in turn would raise the appeal to issuers. Regulatory obstacles embedded in the primary market, which impede participation and promotion of such, should be evaluated in order to make sure that the overall growth of a corporate bond market is not obstructed (IOSCO, 2011).

### **Main section**

The regulatory framework should be designed in a way that it would acknowledge influences of all the different intermediaries and market players (EMC and IOSCO, 2011). Regulators in emerging markets

tend to focus more on the supervision and regulation of the equity market rather than focusing on the bond market. A plausible reason is that institutional investors as major participants in bond markets normally have their own supervisors monitoring prudential regulation of companies that are issuing bonds (EMC and IOSCO, 2011). That is the reason why, technical skills and expertise on corporate bond issuance and bond market application in emerging markets is mostly below par, due to the fact that regulators are more focused on the equity markets. Research suggests that in countries with two or more regulatory authorities, the possibility of choosing only one regulatory authority for the supervision and regulation of the corporate bond market (EMC and IOSCO, 2011) should be explored. In the case of Curaçao you have the Dutch Caribbean Stock Exchange (“DCSX”), which is being supervised by the (Central Bank) (DCSX, 2015) .

Emerging markets with a relatively nascent corporate bond market tend to use a merit-based approval approach embedded in their regulatory framework. A merit-based review is an approach where the regulator does a comprehensive assessment of the issuance to determine merit and viability of the corporate bond issuance. It is very important for the regulators to assess the primary market’s efficiency to find ways to facilitate bond issuance. The length of approval period for the issuance of bonds, if too long may cause the issuer to miss his window of opportunity for issuance of bonds and additionally increase issuance costs (Sharma & Sinha, 2005).

According to IOSCO (2012) in the case of China, commissions, fees, and taxes all constitute explicit transactions cost. Furthermore, the higher the transaction costs and more complicated the transaction, the more complicated and difficult trading becomes for market participants. Additionally, this hampers investment strategies that require a high degree of trading. Thus, in the regulatory framework, attention must be directed towards minimizing hurdles that could hamper market activities, and attention should be paid to the simplifying transactions. In Brazil, the demand for corporate issuers was limited due to tight regulatory requirements that prevented investors other than those who are buying to hold bonds, from participating actively in the corporate bond market. Regulatory restrictions on banks that use that restrict the use of bonds in repurchase agreements, limit the development of liquidity in the secondary market (Luengnaruemitchai & Ong, 2005).

## **Conclusion**

The main reasons for regulating the debt security market regulation include; investor protection, systemic risk reduction, and creation of a more transparent, fair and efficient market. However, the regulatory framework must not interfere with marketability, liquidity and growth of the market (Pemberton, Stewart, & Watson, 2005). Penalties should be enforced when market players are found guilty of not conforming to regulations. In addition to this, it is suggested that when regulating the corporate bond market, that companies should prepare their accounting figures according to international reporting standards.

## **2.4 Primary market infrastructure**

### **Introduction**

A major part of the trading activities in a corporate bond market takes place in the primary market. The primary market can be considered the birthplace of a bond, where investment firms and trust companies participate as intermediaries. The primary market is where investment intermediaries are

tasked with matching issuers' financing needs with investors' demand (Gray & Talbot, 2007), (ICMA, 2013).

### **Main section**

There are several ways to issue bonds in a primary market; one specifically recommended bond issuance method for the CARICOM region is the fixed price re-offer method. This method enforces a contractual agreement that during a specified period of time, bonds cannot sell for less than an agreed upon price. Although this method can lead to allegations of collusive behavior by the investors, it is a method that will help ensure proper pricing of new bonds. This method of issuing can discourage competition which can lead to under-provision of investment banking services (Pemberton, Stewart, & Watson, 2005).

A second method of issuing is pure private placement, which is regarded as the method that offers the lowest degree of investor protection. Limited information disclosure and restricted trading are traits of the pure private placement method that reduces investors appeal. This method appeals more to issuers, as access to the bond is quick and requires less information disclosure. Access to bond capital is best achieved when the balance between investor protection and reduction of issuers' cost and requirements are met (EMC and IOSCO, 2011). Reduced expenses and risks can be achieved by efficient offering methods in the primary market.

A third method of issuing is the public offering method, and is regarded as the method that provides the most investor protection. The high cost related to this method discourages the use of bond financing for smaller and less established issuers (EMC and IOSCO, 2011). Several emerging markets around the world have public or private placement methods in work. The preference between these two is related to either regulation or cost efficiency. In the case of public placement, a prospectus is needed for each bond issuance, and high fees are required for issuance, although prospective issuers do need to wait a long time for authorities' approval. In countries with a more dominant public offer mentality, a private placement is not widely accepted by institutional investor and regulators.

The Hybrid offering method is an additional method being used instead of private and public placement offering methods. The aim of the hybrid method is to minimize the cost of access to bond market and also minimize the regulatory burden while simultaneously aiming for the secondary trading and investors' protection to keep on attracting investors. To achieve a more attractive offering method, regulators must adopt lighter regulations and simple corporate bond instruments (EMC and IOSCO, 2011). Moreover, growth in the corporate bond market can be stimulated through flexibility in regulatory system, as it has been shown that flexibility in offering methods in the primary market is critical for facilitation of access in corporate bonds.

### **Conclusion**

The time consuming primary market issuance process can be a reason why corporations may find entering the corporate bond market challenging. Certain features that can be found in the primary market that are responsible for limitations in the secondary market are the following: buy and hold strategies, Issuance of bonds specifically tailored to specific needs of market participants, stringent guidelines for investors' protection in the primary market, tax structure imperfections, and below standard market infrastructure, the inaccessibility of Small and Medium Size Enterprises ("SMEs") to the

debt market (Sharma & Sinha, 2005). According to Raghavan, Sahoo, Hait and Ghosh (2011), the following elements can help develop the primary market.

- Encouraging corporations to issue bonds instead of acquiring bank loans;
- Introduce market makers, such as investment banks, in the corporate bond market in the same system as the primary dealers in the government market;
- The consolidation of privately placed bonds issuance and avoidance of multiple issues and fragmentation can both help improve liquidity and raise the popularity of public issuance over private placements; and
- The creation of a primary issuance database to provide useful information that can be used by the investors to make adequate decisions. In addition, credit rating and credit migration information should be provided.

## 2.5 Benchmark yield curve

### Introduction

This section will elaborate on the definition of benchmark yield and its importance for the development of a corporate bond market. According to Pemberton, Stewart and Watson (2005), one of the fundamental requirements for a sustainable bond market is the availability of a proper benchmark yield curve. A benchmark yield curve can provide useful information to investors, and these can be used to extract bond prices from the available data given. Furthermore, the same article states that construction of bond indices can be done by using this tool, which provides the ability to do better analysis for portfolio choices. According to Board (2012), the yield curve is very useful when companies want to arrive at a price for bonds they are about to issue. The comparative ability that benchmark yield curve provides, namely data availability, will make it easier to analyze the given capital market.

### Main section

A yield curve is an interest rate presented with its maturity date plotted in a graph that represents the curve. These curves are based on currently trading bonds or estimates of underlying interest rates. The yield curves represent the crossing point between supply and demand of the market following specific structural characteristics (Board, 2012). The benchmark yield curve is highly related to government bond rates, this because of the common perception that it would be very difficult for the government bonds to default. In addition a government is often able to offer bonds with a longer maturity, and that makes it easier to construct yield curves (Wooldridge, 2001). Lin & Sun (2007) state that yield curves are often considered by underwriters when they determine yield levels for bonds in the issuance process. The benchmark yield curve in developing markets is often influenced by the amount of liquidity in the market. This implies that it is crucial for emerging markets to monitor liquidity concentration while estimating the yield curve (Lin & Sun, 2007).

There are several challenges that can affect the development of a benchmark yield curve in emerging economies. According to EMC and IOSCO (2011), these challenges are the following: (1) A shortage in supply of government bonds, (2) The unstructured and sporadic manner of government bond issuance in a country, particularly occurring when there are no proper debt management programs, (3) In pursuit

of cost-efficiency and optimization, governments in emerging markets tend to issue government bonds in windows of opportunities, making issuance of government bonds in irregular intervals rather than prioritizing the development of benchmark yield curve. When there is no benchmark yield curve available, interbank lending rates are used as a substitute, although it is not as effective. Another method that was explored as an alternative in other countries was the issuance of quasi-sovereign bonds in order to construct the benchmark yield curve (EMC and IOSCO, 2011).

The narrow spectrum of maturities and the infrequent issuance of bonds constraints the depth and liquidity of the bond market. This makes it difficult to develop a benchmark yield curve that relates the maturity structure of several bonds to interest rates plotted in the yield curve (CSME, 2006). In the article of Changa & Hung (2010), it has been found that market liquidity is a key determinant for credit spreads. According to Pemberton, Stewart and Watson (2005), there is incompleteness in the area of CARICOM regarding benchmark yield curves; this is due to little activity around the complete spectrum of maturities. The more active the bond market is, the easier it is to develop yield curves. A possible solution for this would be for the government to issue bonds with a wider spectrum of maturity, in order to have more data from which a benchmark yield curve can be constructed (Pemberton, Stewart, & Watson, 2005).

### **Conclusion**

This research will investigate the perception of the investors in a small jurisdiction such as Curaçao relative to the benchmark yield curve. The result will be used as a reference for the possible requirements of investors in small jurisdictions. Government securities in their role of a benchmark play an important role in the development of corporate bonds, due to the fact that government securities have a low level of default risk, and so making it possible to use other securities with a low level of default risk as a benchmark. The use of government securities as a natural provider of benchmark due to their capabilities has facilitated corporate bond issuance in the private sector. Moreover, the development of government bonds, such as market infrastructure, investor base and institutions and systems could all contribute to the development of a corporate bond market (Luengnaruemitchai & Ong, 2005).

## **2.6 Credit Rating Agencies**

### **Introduction**

A Credit Rating Agency (“CRA”) is an element that is important for the efficient operation of a corporate bond market. The task of a CRA is to monitor issuing firms throughout the bond issuance process. CRAs are closely linked to investors as the ratings given by these agencies are monitored by investors (Ory & Raimbourg, 2008). The clients of the CRA are the issuers, but the main beneficiary out of this relationship is the investor. The factors included in the assessment of a rating of a company are the following, market of operation, the nature of the security and the overall economy. These factors are used by CRA’s to conduct credit risk assessments (Pemberton, Stewart, & Watson, 2005). CRA’s with high rankings are the ones that offer the lower rates of return, and the opposite is for the CRA’s with low rankings. Ratings are often grouped in three categories:

- Investment grade



- Speculative-grade
- Default

### **Main section**

The main objective of a CRA is to facilitate investors with proper information for their trading activities. The information provided by CRA's greatly supports capital market activity, and in that way enhancing the level of liquidity in a market (Ory & Raimbourg, 2008). According to Bongaerts, Cremers and Goetzmann (2012), bond ratings are not only useful for risk assessment, but they are useful for classification of securities into investment grades.

According to Dass (2008), credit ratings are a tool that can be used by potential investors to analyze their options and can help them arrive at rational conclusions that match their expectations, which can be based on risk tolerance or their savings objectives. According to Ekins and Calabria (2012), CRA offers possible predictions on the default of debt instruments. In other research it was mentioned that the most important thing to identify is those companies that are at risk of default, these authors emphasized that credit rating agencies do not provide recommendation on trading aspects (IOSCO, 2008). CRA provide risk assessments and these are presented in a way that makes it easier for investors to compare potential investments (Ekins & Calabria, 2012).

For investors, a CRA will prompt a more efficient use of resources, and additionally the information provided by credit ratings will increase the confidence of investors in the bond market. For the companies trying to raise funds, credit ratings provide the opportunity to access funds from a wider spectrum of sources. Credit rating enables a more efficient pricing of bonds, which in turn reduces the cost of acquiring capital, (Dass, 2008). In the case of the CARICOM region, it was shown that credit ratings affect bond yields and bond prices. Furthermore, the CRA in the CARICOM sub-region demonstrated the ability to facilitate efficient pricing in the secondary bond market of this region (Pemberton, Stewart, & Watson, 2005).

Credit ratings support financial transparency and access to better analysis and corporate governance. The transparency that the credit rating offers makes the capital market more attractive for investors (Dass, 2008). In a study conducted in East Asia, it was found that a domestic credit rating or a credit rating with an insight on how the domestic economy performs can improve assessment and rating of corporate bonds. This is because a domestic CRA can develop ratings that are better suited for the given economy.

Notwithstanding the above mentioned, a domestic credit rating should still link with foreign credit ratings in order to help accelerate corporate bond market growth (Hack & Close, East Asian Corporate bond market, 2013). CRAs can better help analyze the credit risk of corporate bond issuance, seeing the underdeveloped nature of the corporate bond market in emerging markets. Besides, institutional investors in emerging markets are strictly mandated by the market regulators to make use of CRAs ratings while investing. Credit ratings can in cases of newly developed corporate bonds, act as an independent source of information regarding the creditworthiness of issuers. In addition, it can be used as a mechanism that would make sure that issuers would adhere to the given conditions established for corporate bond issuance (Sharma & Sinha, 2005).

Due to several cases of questionable ratings in the past years, CRAs have been attracting a lot of negative attention. Several of these cases were due to conflict of interest, lacking in the objectivity of the rating process and rating criteria, lack of transparency, inadequate supervision and lack of

knowledge of complexities in bond structures. A proper regulatory framework would have mitigated such problems. There is a need for stronger credit risk assessment and the need for the investors to be less dependent on credit rating agencies (EMC and IOSCO, 2011).

Credit risk is the willingness and ability of the issuer of a debt security to meet its financial duties, which is monitored and analyzed by CRAs and reflected in a bond's rating (Jollineau, Tanlu, & Winn, 2014). The better a corporation's bond rating the more transparent and reliable they are perceived to be, with low issues with information asymmetry.

The fewer chances a company has to access credit markets, fewer capabilities that company has to raise new debt (Dell'Acqua, Etro, Teti, & Barbalace, 2013). The recent financial crisis pushed regulators towards extending their supervisory scope into assessing CRAs in their given countries (EMC and IOSCO, 2011). Issuers and suppliers each in their own role, use credit ratings in order to assess their needs, which for the issuer is for example price discovery and for the investors is risk analysis. As institutional investors have their own capacity to produce their internal credit analysis, they mostly use one or two credit ratings, mostly for certification and sometimes for evaluation (Baker & Mansi, 2002).

In an article written by Dass (2008), it has been suggested that it would be better to have a CRA that specializes in rating companies established in the Caribbean Region. Such agencies would provide information that is more relevant to investors in the region because the analysis could focus on key financial factors specific to this region that might be downplayed on a more global level.

The CARICOM sub-region is a proven example on how a domestic CRA can be beneficial for corporate bond development (Pemberton, Stewart, & Watson, 2005). CariCris the CRA of the CARICOM sub-region was initiated to support the development of debt markets in the Caribbean Region. Its purpose is to provide a regional and relevant risk assessment of debt issued by local entities, while holding in account an extensive analysis of economic and financial trend and developments in the region (CariCRIS, 2014). The history of CariCRIS according to CariCris (2014): "CariCRIS was established in Port of Spain, Trinidad and Tobago in 2004. The CariCRIS initiative was widely supported by developmental and financial institutions from across the Caribbean, driven by the realization that a local CRA in the region will facilitate the development of the Caribbean capital markets. The idea of a local CRA in the Caribbean has rightly found mention in the deliberations of market reform experts and economic forums, particularly in the late 1990's. A more tangible foundation for CariCRIS was laid when a feasibility study was commissioned in 2003, which covered several Caribbean nations and over 250 financial market participants, to conclude that the region collectively offers substantial economic size, a conducive economic and business environment and a progressive regulatory regime, to favor the prospects for a regional CRA. It was also identified that a local CRA could help bridge the large gap that existed in terms of investor information needs and available sources of publicly available information and analysis". --<sup>1</sup>

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<sup>1</sup> *In Colombia, pension funds tend to typically require an AAA-rating when they are about to invest in big bond issues. And that is why in Colombian companies that do not reach an AAA rating tend to be reluctant to issue bonds. In the case of Malaysia, major players in the corporate bond markets are not able to invest more than 15 percent of their portfolio in low-rated corporate bonds, thus preventing the investment in companies that are not able to reach a high degree of credit rating (Luengnaruemitchai & Ong, 2005).*<sup>1</sup>

## Conclusion

The overall success of a regional CRA depends on the trust and degree of credibility among the given market players (Pemberton, Stewart, & Watson, 2005). One point that needs to be taken in consideration is the conflict of interest that can arise in CRAs when these are getting the majority of their profit from companies that approach them to rate their securities product (IOSCO, 2008).

## 2.7 Secondary market infrastructure

### Introduction

Secondary market infrastructure is an important factor for a sustainable bond market. In the secondary bond market, a bond can be bought and sold subsequent to its initial issue (Gray & Talbot, 2007). In the case of the secondary market, the issuing company is not participating in the trade, the cost of debt and maturity are self-regulated by the market. Additionally, an environment where the secondary market is self-regulated without the influence of government is a market that can be functional, but still in terms of the main goal of bond issuance this market won't reach its potential (Gray & Talbot, 2007).

### Main section

According to Gray & Talbot (2007), the secondary market, when working efficiently, can serve as means of pricing for future fixed income securities. A secondary market consists of wholesale and retail dimensions, where wholesale participants play a bigger role when bonds are issued. In the case of the retail sector of corporate bonds, it is a more flexible sector where savings instruments are available for the public. Important functions that can be provided by the secondary market are;

- Continuous Trading;
- Price discovery and market access; and
- Influences demand both in the primary and secondary market.

Market transparency is enhanced when the above mentioned are being perceived. The price achieved in primary markets is in a great degree being influenced by the quality of the secondary market, as well as the composition and size of the investors in that market, which is influenced by trading infrastructure (Balogh & Koczan, 2009).

Factors such as: 1. Information asymmetry, 2. Low level of transparency, 3. Narrow investor base can negatively affect liquidity (EMC and IOSCO, 2011). Due to the fact that corporate bond doesn't provide a lot of liquidity in emerging markets, market regulators should provide new methods enhance the level of the liquidity in the market (ICMA, 2013). A liquid bond market reduces uncertainty for the investors (Mizen & Tsoukas, 2010). Due to the buy and hold investment strategy in corporate bonds in emerging markets, liquidity is very scarce in the secondary market in these emerging markets. The limited amount of corporate bonds being issued hampers the possibility of market participants to offer two-way price quotations, which is an instrument that can help develop liquidity in the corporate bond market. Furthermore, electronic systems in the secondary market must have efficient price discovery and need a market making facility to facilitate bond trading and liquidity.

According to (Raghavan, Sahoo, Hait, & Ghosh, 2011), the introduction of exchange traded derivatives could provide the option of hedging risk and the holding of physical bonds. Moreover, an efficient repurchase market is a very important element in a liquid bond market, and it supports activity in the secondary market. A developed repo market could provide an array of options for market players, such

as the possibility to take a short or long position by taking advantage of yield curve arbitrage opportunities and the facilitation of portfolio management.

An element that is essential to the secondary market is the clearing and settlement system. This system can increase the number of transactions by eliminating the counter-party risk that would have otherwise increased the confidence participants have in the system Reinstein (2002) as seen in (Pemberton, Stewart, & Watson, Improving the effectiveness of the market for bond in the CARICOM sub-region, 2005). The clearing and settlement system has three main elements: Short settlement period, Central Securities Depository (“CSD”), and the Delivery versus Payment system (“DVP”). With shorter settlement periods the risk of a counterparty not being able to pay the bond contract decreases. The DVP system ensures that both bond and the payment for the bond are simultaneously transferred (Pemberton, Stewart, & Watson, 2005). This ensures that the one selling the bond will receive the money, at the same time as the one giving the money receives the bond. The CSDs concentrate all the physical bond papers in one place. This will contribute to minimum errors and failures being done in bond transactions. It is mentioned that dematerialized bonds contribute with this system, making transactions even more rapidly, thus encouraging the use of an electronic system in the CSD (Pemberton, Stewart, & Watson, 2005). Because of the importance of payment and settlement system for the financial markets and the economy, Central Banks have always had a watchful eye on these systems in their given economy, in order to ensure that they have an efficient operation and functioning (Bank for international settlements press & communication, 2005).

Low trading cost, good price discovery, modest price volatility, and wide dissemination can all be achieved by having efficient trading and good depository settlement and clearing systems. Institutional investors in emerging markets usually prefer the use of Over the Counter (OTC) markets in order to be able to negotiate directly with the counterparty. OTC trading is a method of trading that provides information needed for valuation. In the research done in CARICOM, it was found that an OTC market it is recommended to use in a secondary market of corporate bonds. It not only promotes transparency but also gives dealers access to important trading data. It will maintain relevant current information accessible, and this will encourage more trading, raising the liquidity in the secondary market (Pemberton, Stewart, & Watson, 2005). Furthermore, liquidity in CARICOM markets where being led by market makers. These organizations maintain an inventory of securities which they will sell later on to keep the market liquid. Although this method gave the market the needed liquidity, there existed the counter-party risk. This is the risk that the counterparty in an agreement would default (Pemberton, Stewart, & Watson, 2005).

Before introducing Electronic Trading Platforms (ETP’s) sufficient market liquidity had to be ensured, due to the fact that without sufficient liquidity, ETP won’t reach the necessary level of efficiency given the investment that would be needed to support and operate such platform. Another important aspect that attention must be focused on is the Central Counter Party (CCP), which is a system used to reduce risk in the market environment, risk controls on all participants and multilateral netting of trades. This system is an invaluable asset to a market that handles corporate bonds (EMC and IOSCO, 2011).

Clearing and settlement systems are extremely important for ensuring settlements of obligations between market intermediaries/ participants. Additionally, investors would be more confident investing in a bond market that would have a reliable clearing and settlement system. According to (Luengnaruemitchai & Ong, 2005), clearing and settlement systems are important instruments in ensuring credibility, efficiency, undisturbed flow of information and efficient price discovery.

The main use of a secondary market is to facilitate liquidity of the bonds for investors. So in this case the bond is traded between the investor and the bond purchaser, giving the corporate bond market flexibility (ICMA, 2013).

## **Conclusion**

It can be concluded that in a secondary market the primary need is transparency and liquidity. Moreover, reliability in the type of settlement and information asymmetry may influence investors' desire to participate in a corporate bond market. The main items that these elements constitute for are; transparency for the investor, liquidity, reliability in settlements and information asymmetry.

## **2.8 Transparency**

Financial transparency is important for the capital market, as Investors trust their money to issuing companies. Financial transparency of a company also is crucial for the sustainability of the capital market. This became evident when the financial problems of the Dotcom companies and Enron in the U.S, propelled the enactment of Sarbanes-Oxley. The Sarbanes-Oxley Act was implemented in an attempt to protect investors from malicious and unethical conduct of management. Transparency also gives the investors more information on how managers are using their money, and therefore investors' financial risk can be mitigated.

According to (Mande, Park, & Son, 2012), conducting due diligence, and in-depth evaluation of a company's corporate governance system can benefit the capital market, as corporate governance of companies describes the internal management dynamics of a given company. In a Colombian study it was found that family companies in particular were very reluctant to give out important information to third parties; information that is normally relevant to investors when they want to monitor the company that they invested in (Silva & Aaron, 2009). A study conducted in Argentina, suggests that companies evade transparency due to the benefits they receive when not adhering to financial transparency is higher than the possible benefits that they would receive from the issuance of their bonds. This would be the case if these companies are evading taxes and are engaging in other unethical pursuits (Fernandez, Pernice, & Streb, 2007). It is generally known that in Curaçao companies are very reluctant to become financially transparent, still the cause is not very well documented.

The demand for exchange listing makes it easier to have an informed assessment of credit risk and greater access to information for investors. Additionally, standardized documentation and good issue processes with high levels of transparency contribute to an efficient and effective market where institutional investors are confident to trade as they have more confidence in the market (ICMA, 2013). The reason for the above mentioned is that if investors don't feel safe investing their money then the bond market will fail. That is why the development of a corporate bond market must be accompanied by stringent investors' protection and solid supervisory and regulatory frameworks. These include timely disclosure by issuers, assessment or the use of ratings, price and trading transparency and stringent market surveillance, while also trying to develop ways to enhance restructuring and bankruptcy regulations (IOSCO, 2011).

Transparency and the governance of corporate bonds are key factors influencing investors' confidence. Using pre-trade and post-trade information investors can accordingly assess different key factors pertaining to the issuers, such as the characteristics of the bond issue, price discovery and the most important its creditworthiness. As such transparency has a key role in providing market liquidity and attracting more investors to the corporate bond market. This all heavily dependent on the issuers' level of disclosure and other elements such as timeliness, and quality of the data being disclosed by the

issuer ; each are important for facilitating the decision making of investors participating in the corporate bond market.

There is a tendency in emerging markets regarding the corporate control of issuers being in the hands of the managing owner, who often may not cooperate with good governance practices. This is why it has also been noticed that information disclosure in the cases of shareholders has not been as transparent as disclosures to bond investors. This is remarkable considering the priority corporate bondholders enjoy as creditors. Transparency in the secondary market can be enhanced by introducing trade publications and trade reporting systems, such systems would enhance transparency, and also enable maintenance of a comprehensive database (EMC and IOSCO, 2011). According to (Luengnaruemitchai & Ong, 2005) it has been argued that the improvement of corporate governance can also improve financial markets. Corporate governance can be improved by improving laws and regulations, and the supervision and enforcement of private contracts. The quality of creditor control also depends heavily on accounting standards and financial reporting standards being implemented. Additionally, securities laws are important, as individual bond holders who are commonly dispersed have less bargaining power in a case of default.

## 2.9 Money markets

### Introduction

Money markets serve as an equilibrating mechanism to even out short-term surpluses and deficits. It helps the Central Banking system by bringing out variations in the liquidity profile of the economy. The Money market helps banks, firms, and the government to meet short-term financial requirements, by allocating surplus funds. Basically, the money market is an instrument that balances short-term liquidity in the economy. That is why a sound money market is one of the key elements for growth and development of an economy (BSICA India, 2014) and (Dodd, 2012).

### Main section

An efficient money market needs to have the following:

- It should have mechanisms in place to even out deficits and short-term surpluses;
- It should provide the means for the Central Bank to intervene and influence liquidity in the economy; and
- It should be able to provide access to users of short-term money, meeting their requirements with a realistic price (BSICA India, 2014).

The money market enables trading of wholesale short-term funds; its participants include banks, institutional investors and corporations. Moreover, a key contribution of money markets is that they assist with effective implementation of monetary policy. There is a mutual relationship between money market and monetary policy as these tend to reinforce each other, as one cannot exist without the other. Moreover, a competitive and liquid market will automatically result in a better monetary policy (Gray & Talbot, 2007).

### Conclusion

The money market is one of the main catalysts for a well-developed capital market (CSME, 2006). According to Pemberton, Stewart, and Watson (2005), the money market is one of the prerequisites for a well-functioning corporate bond market, because it provides a price for liquidity. Furthermore, it was advised that members of the CARICOM sub-region develop more money market instruments for their respective money markets to provide more diversification in the corporate bond market. The money market provides a benchmark for credit quality, liquidity and maturity for other financial instruments.

Additionally, it plays a critical role in facilitating cash management for financial intermediaries and corporations, which means that the money market can help with the development of longer-term debt markets (Luengnaruemitchai & Ong, 2005).

## 2.10 Banking sector

### Introduction

Decisions made by a Central Banking system regarding the determination of interest rates are affected by that country's political and legal systems. All three systems have a direct impact on the yields of corporate bonds. Furthermore, the numerous legal processes required to issue corporate bonds is different from the simple path followed to get a bank loan (Silva & Aaron, 2009). Reliance on bank loans is reduced when companies have the option to issue bonds. It is a very important for growing companies that have reached an upper limit in bank borrowing, to have the ability to venture into corporate bonds to fund their activities. Corporate bonds ease the pressure from obtaining particularly long-term lending from banks, and also makes the companies independent of bank loans making overall capital finance more competitive (ICMA, 2013). In contrast to bond financing, banks demand greater control and place higher demands on borrowing companies. On the other hand, due to the dynamics of bank loans, it is easier and more cost efficient to restructure debts if the company becomes financially stressed (Ailis & Bauers, 2013). But according to Sharma & Sinha (2005), the events in the recent financial crisis related to the banking industry, show us that if the banking industry is the sole source of long-term investment, an economy can become vulnerable to external shocks. Consequently, bond financing reduces macroeconomic vulnerability to external shocks and systemic risk through diversification of credit and investment risk.

### Main section

In Europe, banks use their close ties with the community and influence in the political arena to maintain their grip on corporate debt finance, in that way hampering further growth of the corporate debt market (Pictet asset management, 2014). Significant progress has been made in the corporate bond market of Colombia after they eliminated economic policies that forced companies to be dependent on bank loans (Aguilar, Cardenas, Melendez, & Salazar, 2007). Banks in overall economies have a lot of power and influence, and they can use these to hamper corporate bond market growth. Consequently, (Pemberton, Stewart, & Watson, 2005) conclude stringent supervision and restructuring of the banking sector and policies must be conducted, to pursue proper balance between the bond market and banking sector. Methods such as preferential tax and regulatory treatment of the banking sector must be eliminated to ensure that the banking sector is market driven thereby facilitating bond market development. The case of Argentina is a good example, as when bonds started to receive the same tax treatment as the banking sector, as a consequence the corporate bond market flourished (Fernandez, Pernice, & Streb, 2007).

Despite all that is mentioned above, all is not lost for banks; banks have the opportunity to generate revenue by underwriting bond offerings with no extra risk (Kaya & Meyer, 2014). Depending on the economic scenario and market conditions, bank loans can still have a competitive advantage over corporate bonds. The issuance of corporate bonds requires a number of expenses that bank loans do not have, and expense must be incurred to maintain a well-functioning bond market. In addition, banks have an information advantage, as they often have a strong relationship with the firms to which they lend.

Firms in emerging markets are typically small, making it more difficult for these firms than it is for larger firms to access the bond market. However, as banks are able to provide small and short term capital investments, the corporate bond market is able to provide these issuers with larger and longer term capital investments (EMC and IOSCO, 2011).

### **Conclusion**

There is a difference in how information asymmetry is dealt with in the banking sector and the corporate bond market. Banks tend to reduce risk by monitoring the borrowers while in the case of a corporate bond market, corporate bond risk is spread among several bond market participants. Most of the time the banking sector offers more short-term loans in contrast to corporate bonds that provides a long-term debt financing. A sustainable and well-developed corporate bond system is considered healthy competition for offerings of corporate debt financing (Raghavan, Sahoo, Hait, & Ghosh, 2011)

### **Overall conclusion**

Out of all the mentioned subjects, the following subjects were found to have an influence on investors appeal towards a corporate bond market.

- Regulatory framework;
- Primary market;
- Secondary market;
- Benchmark yield curve; and
- CRA.

## **3 Methods**

### **Assumptions & Delimitations**

#### **Delimitations**

- Currency development in the bond market will not be investigated in this research as it would make the research too extensive.
- The possibility of foreign investment in corporate bonds issued in Curaçao will not be part of this research as the focus will be more on local investors supporting the corporate bond market development.
- This research will not test the influence of market intermediaries on investors' appeal to the corporate bond market, as it will make the research too extensive.
- In this research, the issuers appeal for engagement in the corporate bond market will not be analyzed, as it will make the research too extensive.

#### **Assumptions**

- It is assumed that issuers in this small jurisdiction are interested in corporate bond development.
- It is assumed that the Institutional investors in Curaçao are knowledgeable enough to participate in a well-developed corporate bond market.
- It is assumed that retail and institutional investors have equal knowledge about bonds to classify both as knowledgeable investors.
- It is assumed that if local investors are interested in engaging in the bond market, that it will pave the way for further development of the bond market that will attract international investors.



### 3.1 Research question

**What are the minimum requirements deemed essential for investors to engage in a corporate bond market in a small jurisdiction such as Curaçao?**

#### Investors' Model Sub-questions

As mentioned earlier, the 5 subjects/variables that will be explored are the following;

- Regulatory framework;
- Primary market;
- Secondary market;
- Benchmark yield curve; and
- CRA.

Each of the following sub-questions is focused on one of the 5 variables. These variables are considered critical to the development of a sustainable bond structure in large countries. As mentioned before, not all of these variables are as relevant in small countries as they would be in larger countries. The sub-questions were designed to determine which of these variables would be the most critical for a small country. The degree of criticality of a variable will increase the likelihood that it will be one of the investors' minimum requirements.

#### 3.2 The sub-questions

- ***Is a regulatory framework one of the minimum requirements that would influence investors to engage in a corporate bond market?***

*The answer to this sub-question will reveal whether the regulatory framework is part of the minimum requirements for an investor's engagement in the corporate bond market in a small jurisdiction such as Curaçao. Please refer to figure 3, where the conceptualization model explains all the items that a regulatory framework accounts for. The critical need of these items explains the critical need of a regulatory framework.*

- ***Is the benchmark yield curve one of the minimum requirements that would influence investors to engage in a corporate bond market?***

*The answer to this sub-question will reveal whether a benchmark yield curve is part of the minimum requirements for an investor's engagement in the corporate bond market in a small jurisdiction such as Curaçao. Please refer to figure 3, where the conceptualization model explains all the items that a Benchmark yield curve accounts for. The critical need of these items explains the critical need of a Benchmark yield curve.*

- ***Is a primary market one of the minimum requirements that would influence investors to engage in a corporate bond market?***

*The answer to this sub-question will reveal whether a primary market is part of the minimum requirements for an investors' engagement in the corporate bond market in a small jurisdiction such as Curaçao. Please refer to figure 3, where the conceptualization model explains all the items that a primary market accounts for. The critical need of these items explains the critical need of a primary market.*

- ***Is a secondary market one of the minimum requirements that would influence investors to engage in a corporate bond market?***

*The answer to this sub-question will reveal whether a secondary market is part of the minimum requirements for an investors' engagement in the corporate bond market in a small jurisdiction such as Curaçao. Please refer to figure 3, where the conceptualization model explains all the items that a secondary market accounts for. The critical need of these items explains the critical need of a secondary market.*

- ***Is a Credit Rating Agency one of the minimum requirements that would influence investors to engage in a corporate bond market?***

*The answer to this sub-question will reveal whether a CRA is part of the minimum requirements for an investors' engagement in the corporate bond market in a small jurisdiction such as Curaçao. Please refer to figure 3, where the conceptualization model explains all the items that a CRA accounts for. The critical need of these items explains the critical need of a CRA.*

### 3.7 Conceptualization of the benchmark for development of corporate bonds

The conceptualization model is used to conceptualize the elements that our benchmark is consisted of. The need of a conceptualization process pictured in figure 3, is due to the fact that the elements in the benchmark have a significant influence on the items that they account for. Each element that is part of the benchmark has certain connotations and functions that are not evident at first sight. These functions are listed as items, which denote the essence of the given element. This method of conceptualization was used to uncover items that are related to each element. The conceptualization model clarifies for the reader the items to which each element pertains. When one can understand what items each element account for, one can better analyze the need of the elements in the benchmark, as these items are the catalyst behind the interest of investors in certain elements. When data analysis must be performed, the relevancy of certain items will describe the need of the element that is accounting for the given group of items.

Figure 1: Conceptualization model

**Elements**

**Items**



### 3.3 Model

**Independent Variable**-*Investors' appeal*

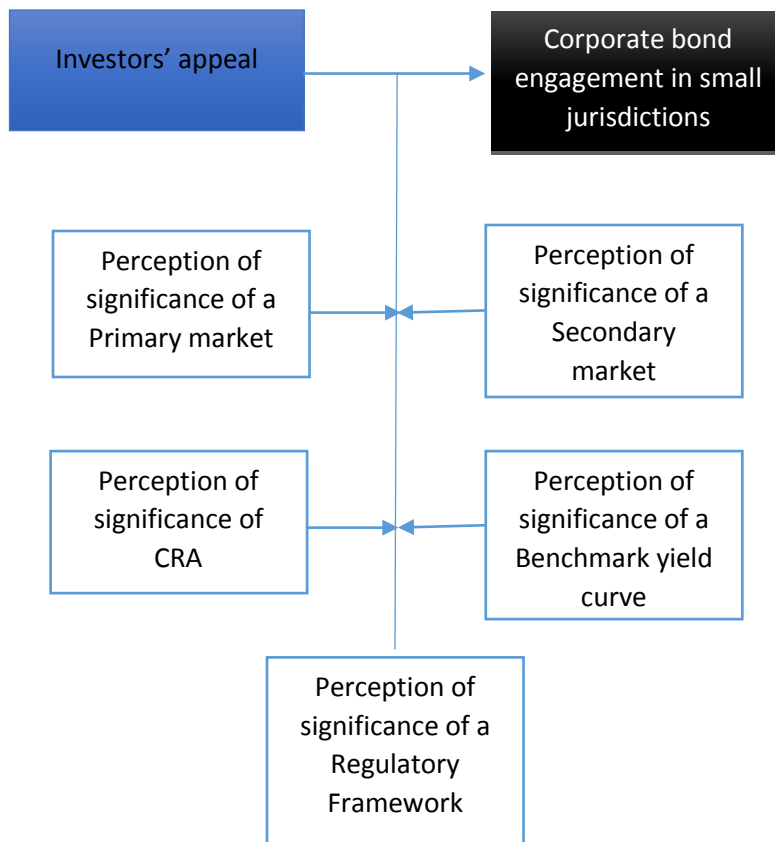
**Dependent Variable**-*Corporate bond engagement in small jurisdiction*

**Intervening variables with a moderating influence:**

- *Perception of Primary market*
- *Perception of Secondary market*
- *Perception of Credit rating agency*
- *Perception of Benchmark yield curve*
- *Perception of Regulatory framework*

All have a moderating influence on the dependent and independent variable, since they can influence whether investors would or would not engage in the corporate bond market.

Figure 2 Conceptual Model



### 3.4 Explanation of the model

Investors' appeal in the corporate bond market is what induces an investor to engage with the given corporate bond market. The elements that are part of a bond market structure are potential elements that can raise the appeal of the investors to engage in a given bond market. Therefore, the investors' perception of the degree of significance of an element complements its appeal for engagement in a corporate bond market. The analysis of the data gathered describes the elements that are the most

significant for investors' engagement in a corporate bond market in a small jurisdiction, which ultimately answers the research question.

### 3.5 Participants

In this study, the participants were knowledgeable investors. Purposeful research selection was used to reach individuals who are experienced in the subject (Sargeant, 2012). In this case, individuals with experience in the field (knowledgeable investors) were selected to participate. In the investment organizations that were chosen, only managers of the investment departments were interviewed.

Furthermore, the interviewed investors were asked if they know other knowledgeable investors that would be able to answer the questions in the interview; this method is deemed as the snowball sampling (Zikmund, 2003).

### 3.6 Sampling method and sample size

The qualitative method requires sampling of the target population for the research study. In this research, purposive sampling method was used to define the sample for the study. Purposive sampling is a non-probability technique, in which the sampling of the population is based on the judgment of the researcher. There are different types of purposive sampling methods; in the case of this study expert sampling which is a part of purposive sampling method will be used. According to (Laerd, 2015) expert sampling is used when the study is aiming to gather knowledge from individuals who possess a certain expertise that is of importance for the focus of the study. According to (Weiss, 1994), due to the possibility of small samples when using expert sampling method, it is advisable to try to achieve range instead of random sampling which instead would require a larger sample. Furthermore, to achieve the mentioned range, significant variation in the sample must be achieved. In this study, the investors' side supplies significant variation by itself, due to the fact that institutional and retail investors will be part of the sample group. Data was gathered from 13 interview respondents, consisting of a mix of representatives of retail investors and financial managers at the different funds, insurance companies, and investment institutions. Due to the purposive method used, 13 experienced respondents were deemed sufficient to supply the needed data for analysis.

### 3.7 Validity of the research

The reliability and validity of a research is very important, as these elements can add to its generalizability. In the pursuit of both validity and reliability in a qualitative research study, triangulation is the best method used to achieve the above-mentioned (Golafshani, 2003). There are several methods of triangulation; the method that will be used in this research study is methodological triangulation. Methodological triangulation is a validity method where the researcher uses more than one research method, either different methods of qualitative/quantitative research method or both to assure the validity of the study (Guion, 2002). In the case of this study triangulation will be achieved, by having three sources of information, namely the benchmark from the literature (content validity), the investors' perspective derived out of the interview and the Central Bank's perspective.

### 3.8 Recruitment strategy

According to (Weiss, 1994), sponsorship association would enhance the researcher's ability to recruit participants for the study. As the study focuses on determining the level of interest investors, and possibly issuers, might have in a bond market, sponsorship by the Curaçao Financial Group (CFG) would enhance the study's credibility and thus the chances of gathering respondents for the study. The

provided sponsorship of the CFG was their contacts, as they are very well connected to institutional investors, helping in the facilitation of interview subjects.

For the purpose of data gathering, an in-depth interview was conducted. For such interview, notes and a tape recorder were required. A list was composed with all the names of financial institutions where investment is conducted. Interviews with respondents were conducted at meeting points that were more convenient for them. Most of the interviewers wanted to maintain their confidentiality that is the reason why a list of the companies interviewed is not provided.

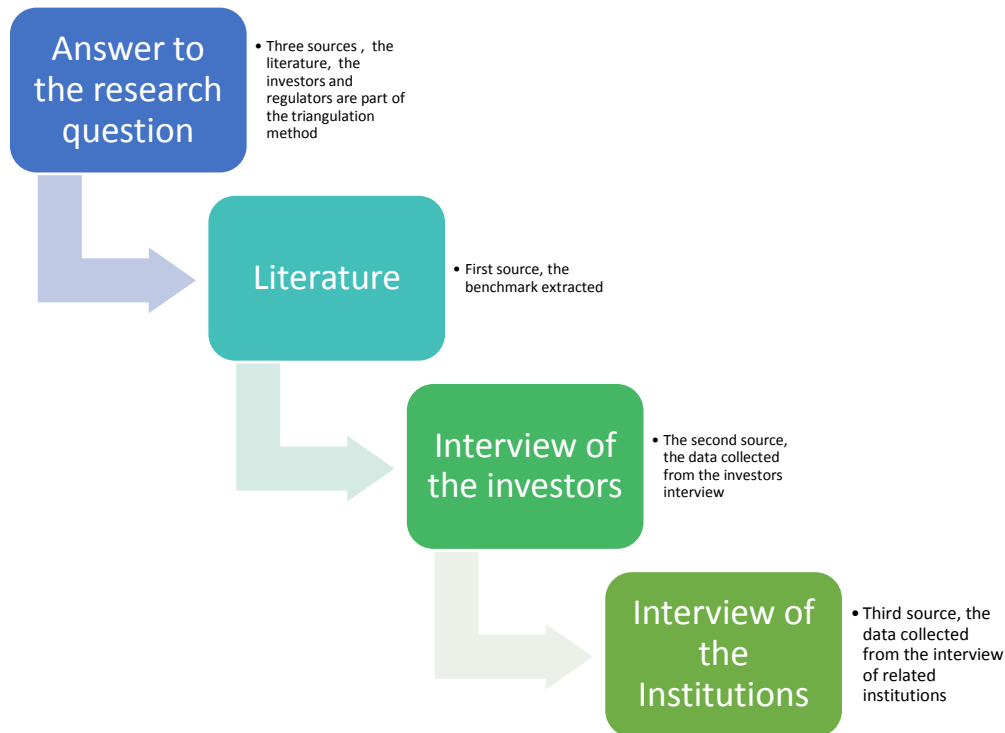
### 3.9 The method of interview

In the appendix the interview questions are provided. The questions were a pre-determined set of questions. Based on the answers, additional and explanatory questions were asked. All the interviews were recorded and from the recordings transcripts were made. Only one interview was conducted with each participant as it is very difficult to get follow-up interviews with the participants, as they have very tight schedules. Each interview had a duration of approximately one hour, and the interviews were conducted at meeting points that were more convenient for the investors. According to (Zikmund, 2003) response bias is when in this case the interviewee deliberately or unconsciously answers a question that unnaturally points into a certain direction. In this research this was mitigated by making sure that all respondents were knowledgeable about the topic. Furthermore, due to the confidential nature of the interviews, the interviewee was able to express his/her opinion, in this way minimizing social desirable answers. Before the conduct of the interview, the questions of the interview were tested and revised by experts in the financial arena to assess the design, content, and fluidity of the interview questions.

### 3.10 Triangulation

Chart 2 depicts the path towards the gathering and validation of the data that will support the main model of this research. As previously mentioned validation of the data will be achieved through triangulation of the data. The method of triangulation will be the use of three different sources of information, namely Literature, Interview of the potential investors, and interview of the institutions closely related to corporate bond market development. Out of the literature, a benchmark for corporate bond-engagement of investors was constructed. This benchmark will be the basis for establishing investors' minimum requirements. Interviews will be conducted to assess which benchmarks are included in the investors' minimum requirements.

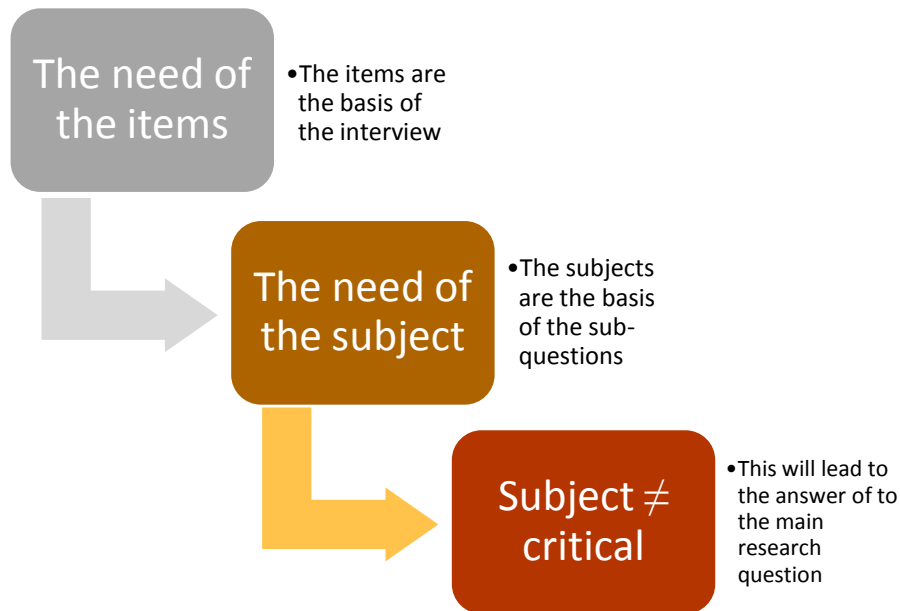
*Figure 3 : Path towards answering research question*



### 3.11 Data gathering

Interview was the method used to gather data on the subject. The interview was designed by using the items extracted from the conceptualization model. The conceptualization model, as previously explained, was constructed using information found in previous research. After pre-designed questions were answered by investors, in the sample group, when relevant, follow-up questions were asked. In the appendix the interview questions are provided, the questions were pre-determined set of questions. Based on the answers, additional and explanatory questions were asked. All the interviews were recorded in their entirety, and from the recordings transcripts were made. Only one interview was conducted with each participant as it is very difficult to get follow-up interviews with the participants, as they have very tight schedules. The interviews were conducted face-to-face, and at meeting points that were more convenient for the investors, and each interview had a duration of approximately one hour.

*Figure 4: Answering the research question*



### 3.12 Interview with Central Bank

An interview with Mrs. Sumaya Sinlae-Elhage, treasurer of the Central Bank, was conducted on June, 12, 2015, to determine whether Curaçao has the capabilities to support the minimum requirements preferred by the investors. The interview conducted was an in-depth interview, to gather as much information possible from the respondent. This section of data gathering was performed to complete the triangulation process as described before, since the triangulation method involved gathering data from three different sources, the third person/entity being the Central Bank. The questions were open questions, and were based on the results and analysis of the interviews conducted with the investors. The questions were focused on the advancements of the corporate bond market in Curaçao, and her views on the minimum requirements of the investors.

## 4 Results and analysis

For the purpose of analysis, Case-oriented understanding was used. Case-oriented understanding is a method based on which an attempt is made to understand a case or a happening from the participant's perspective. It is a method from which the standpoint of a participant can be explored (Schutt, 2015).

### 4.1 Coding description

The coding process is a way to transcribe and organize the information obtained from respondents during their interviews so that concepts can be generalized for the purpose of analysis (Weiss, 1994).

The purpose of this study is to uncover the elements investors in Curaçao believe are the minimum requirements for the development of a corporate bond market. Based on a review of the literature, the five elements, below, were identified as generally needed to sustain a well-functioning corporate bond market:

- Regulatory framework;
- Primary market;
- Secondary market;
- Benchmark yield curve; and



- CRA.

Transcriptions of the interviews were used to construct a coding framework. The codes are expressed in a way that it would describe the essence of groups of questions that would define or point out the perception of the investors. That is why each subject, will have certain code concepts, based on grouped questions that are aimed to explore a point of view. The interview questions are in the appendix, where you can see that the questions are grouped based on each element; regulatory framework, primary market, secondary market, benchmark yield curve, CRA.

## 4.2 Coding Framework

In the coding framework each of these sections are linked to groups in the interview question document displayed in the appendix.

### **General thoughts of investors regarding corporate bonds.**

This section is linked to the general question section displayed in the interview question document found in the appendix of this research document. The questions in the general section of the interview are summarized in two categories that explains the essence of all the questions posted in this group. These two categories and there descriptions and possible answers are the following:

**Engaged-** Already investing in bonds nationally or internationally and having investment strategies set-up for bonds.

Possible answers;

- Yes
- No

**Enthusiastic-** Investors confident and ready to engage in corporate bonds in the local market.

Possible answers and there explanations;

- **High**-meaning that they totally believe in a corporate bond market development in Curaçao.
- **Medium**-meaning that they have some doubts about the development of the corporate bond market in Curaçao.
- **Low**-meaning that they don't believe in a corporate bond market in Curaçao.

Because of the use of Case-oriented understanding, several matrixes were developed in order depict the results using pathway analysis. In that process, each of three different coding concepts are combined together to explore how critical the subject at hand is. The results are based on the importance of the subject; the most critical subjects will be part of the investors' minimum requirements for participation in a corporate bond market.

This is the theoretical formulation of pathway analysis:

### **Stringency\*Required\*Can cope without--- Result (degree of criticality)**

Each category; *Stringency, required, Can cope without*, stands for the summary of questions of a given element in the interview question, by combining the summarized answers of these categories, one can arrive at the result which is the degree of criticality of an element.

### **Regulatory framework**

This section is linked to the regulatory framework section displayed in the interview question document found in the appendix of this research document. The questions in the regulatory framework section of the interview questions can be summarized in three categories that explain the essence of all the questions posted in this group (*please refer to the interview questions in the appendix*). The three categories and descriptions follow; **relevancy, level of confidence, can cope without**

**Relevancy:** This refers to whether the respondent, an organization/ investor, considers a regulatory framework an important part of any bond market.

- Relevant
- Not-relevant

**Confidence:** Respondent's level of confidence that a regulatory framework would reduce risks for an investor and the bond market. Responses are divided among the categories of high, medium and low levels of confidence in a regulatory framework being instrumental in both reducing risks and raising transparency levels.

- High
- Medium
- Low

**Can cope without-** The respondent's willingness to cope without a regulatory framework.

- Yes
- No

### **Primary market**

This section is linked to the primary market section displayed in the interview question document found in the appendix of this research document. The questions in the primary market section of the interview questions can be summarized in three categories that explain the essence of all the questions posted in this group(*please refer to the interview questions in the appendix*). The three categories, their description and possible answers follows; **stringency, required, can cope without,**

**Stringency-** The need of the investor for the primary market to be flexible or stringent.

- Stringent
- Flexible

**Required-** Being regarded as an integral part of an investment in corporate bonds.

- Yes
- No

**Can cope without-** The willingness to cope without a primary market.

- Yes
- No

### **Secondary market**

This section is linked to the secondary market section displayed in the interview question document found in the appendix of this research document. The questions in the secondary market section of the

interview questions can be summarized in three categories that explain the essence of all the questions posted in this group (*please refer to the interview questions in the appendix*). The three categories, their descriptions and possible answers follows; **relevancy, stringency, can cope without**:

**Relevancy**- The secondary market being used or acknowledged by the organization/ investor as being an important part of the corporate bond market.

- Relevant
- Not-relevant

**Stringency**- The need of the investor for the secondary market to be flexible or stringent.

- Stringent
- Flexible

**Can cope without**- The willingness to cope without a secondary market.

- Yes
- No

### **CRA**

This section is linked to the CRA section displayed in the interview question document found in the appendix of this research paper. The questions in the CRA section of the interview questions can be summarized in to three categories that explains the essence of all the questions posted in this group (*please refer to the interview questions in the appendix*). The three categories, their descriptions and possible answers follows; **relevancy, required, can cope without**;

**Relevancy**: CRA being used or acknowledged by the organization/ investor.

- Relevant
- Not-relevant

**Required**- CRA being regarded as an integral part of investment strategy.

- Yes
- No

**Can cope without**- Has other alternatives when CRA is not available.

- Yes
- No

### **Benchmark yield curve**

This section is linked to the benchmark yield curve section displayed in the interview question document found in the appendix of this research document. The questions in the benchmark yield curve section of the interview questions can be summarized in three categories that explain the essence of all the questions posted in this group (*refer to the interview questions in the appendix*). The three categories, their descriptions and possible answers follows; **relevancy, required, can cope without**:

**Relevancy**: Benchmark yield curve being used or acknowledged by the organization/ investor.

- Relevant
- Not-relevant

**Required-** Benchmark yield curve being regarded as an integral part of the investment strategy.

- Yes
- No

**Can cope without-** Has other alternatives when benchmark yield curve is not available.

- Yes
- No

### 4.3 General

In this section the general perceptions of the investors are presented to establish the overall perception of the investors regarding corporate bonds as an investment instrument.

**Engaged-** Already investing in bonds nationally or internationally and having investment strategies set-up for bonds.

**Enthusiastic-** Confident and ready to engage in corporate bonds in the local market. **High** meaning that they totally believe in a corporate bond market development in Curaçao. **Medium** meaning that they have some doubts about the development of the corporate bond market in Curaçao. **Low** meaning that they don't believe in a corporate bond market development in Curaçao.

**Requirements-** Requirements for engagement in local bonds is divided in structured and unstructured. Structured being defined as needing covenants and or collaterals in place. Un-structured defined as needing financial statements and corporate governance reports before engaging in a corporate bond.

*Table 1: Results of the Interviews: General perception of Corporate Bond Market*

<b>Amount of interviewee</b>	<b>Engaged</b>	<b>Enthusiastic</b>	<b>Requirements</b>
1	Yes	Medium	Structured
2	Yes	Medium	Structured
3	No	High	Un-structured
4	Yes	High	Un-structured
5	Yes	High	Un-structured
6	Yes	High	Structured
7	Yes	High	Structured
8	Yes	Medium	Un-Structured
9	Yes	High	Structured
10	Yes	High	Structured
11	Yes	Medium	Un-structured
12	Yes	High	Un-structured
13	Yes	High	Un-structured

Table 1 reveals that 92% of the investors that were interviewed are engaged in corporate bond in Curaçao. Around 69% of the investors are very enthusiastic about corporate bond development in Curaçao. Furthermore, more than half of the investors would engage in a corporate bond market having unstructured requirements for issuers. That means that most of the investors interviewed, would want to have access to financial statements, management, board and corporate governance information. The other investors have more structured requirements, this denoted as the need of covenants, banks as brokers, and audited companies.

**Key points that were mentioned:**

That maybe a bond market would not be in the best interest of all financial players, especially banks. The need for investors to invest locally is very great, as it is mandatory to invest 60% of the capital locally. Furthermore, Companies and corporations linked to the government are less attractive, as political influence can be harmful to a company's overall soundness.

4.4 Regulatory framework

**The sub-question for regulatory framework:**

Is a regulatory framework part of the minimum requirements that would influence investors to engage in a corporate bond market?

**Coding of the regulatory framework:**

**Relevant:** This refers to whether the respondent, an organization/investor, considers a regulatory framework an important part of any bond market.

**Confidence:** Respondent's level of confidence that a regulatory framework would reduce risks for an investor and the bond market. Responses are divided among the categories of high, medium, and low levels of confidence in a regulatory framework being instrumental in both reducing risks and raising transparency levels.

**Can cope without-** The respondent's willingness to cope without a regulatory framework.

***Theoretical formulation of the pathway analysis***

**Relevant\*Confidence\*Can cope without--- Result (degree of criticality)**

The theoretical formulation diagram was used to arrive at the degree of criticality of a subject. The box in blue represents the subject being analyzed. The boxes in white represent the coded answers that have a positive influence on the degree of criticality of a subject. The boxes in red have a negative influence on the degree of criticality of a subject. The results are formulated in the following way, for example; if for the regulatory framework the answer on the first section (relevant) is **yes**, second section (confidence level)-**high** and third section (can cope without)- **No** than it can be concluded that this element is highly critical for the investors.

Figure 5: Pathway analysis- Regulatory framework

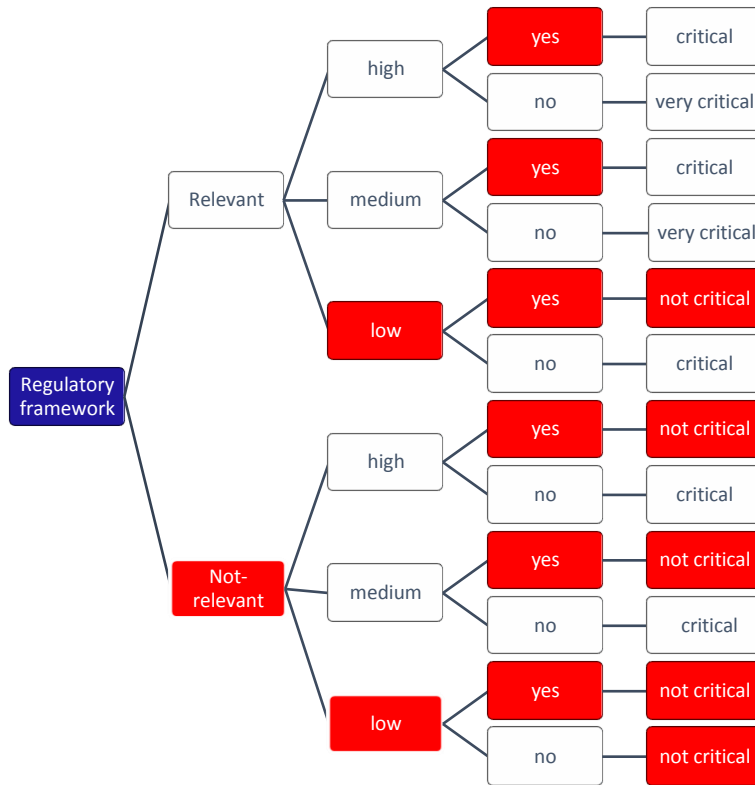


Table 2: Results of the interviews: Regulatory Framework

<b>Amount of interviewee</b>	<b>Relevant</b>	<b>Confidence</b>	<b>Can cope without</b>	<b>Results</b>
1	Yes	High	Yes	<b>Critical</b>
2	Yes	High	Yes	<b>Critical</b>
3	Yes	Medium	Yes	<b>Critical</b>
4	Yes	Medium	Yes	<b>Critical</b>
5	Yes	Medium	Yes	<b>Critical</b>
6	Yes	High	Yes	<b>Critical</b>
7	Yes	High	yes	<b>Critical</b>
8	Yes	High	No	<b>Very-Critical</b>
9	Yes	High	No	<b>Very-Critical</b>
10	Yes	High	No	<b>Very-Critical</b>
11	Yes	Medium	Yes	<b>Not-Critical</b>
12	Yes	High	No	<b>Very-Critical</b>
13	Yes	Medium	No	<b>Very-Critical</b>

Table 2 reveals that all respondents think that a regulatory framework is an integral part of a well-developed corporate bond market. Around 80% of the investors think that a regulatory framework is

integral to eliminating systemic risks in the bond market. However, 61% of the interview candidates would engage in corporate bonds without having a regulatory framework in place.

**The result of pathway analysis:** The result shows that a regulatory framework is critical for the investor's engagement in corporate bonds, however, slightly more than half of the investor would engage in corporate bonds even if a regulatory framework is lacking

**Key points that were mentioned about the regulatory framework:**

*It was mentioned that the regulation is there to protect the investors, for the unexperienced and retail investors this is highly required in order to protect them. The financial savvy investor has the capability to invest regardless of having a regulatory framework in place.*

*In regards of protection clauses, all the investors would feel more protected if it would be included in the regulatory framework.*

*Although all the investors would like to see a regulatory framework in place, the majority of them are prepared to invest in bonds regardless of the presence of a regulatory framework. This is the case, as the majority of the investors would rely on their own due diligence, in order to analyze investment prospects that are not issued through a framework. There are other investors, who have a more strict orientation in regards to investments, as it is very difficult for them to engage in an unregulated bond market. This in order to mitigate hidden risks that might otherwise be managed by a regulatory framework, and to comply with either organization's policies or clients risk appetite.*

**Answer on the Sub-Question:** Yes, The regulatory framework is part of the minimum requirements that would influence an investors' engagement in the corporate bond market.

#### 4.5 Primary market

**The sub-question for primary market:**

Is a Primary market part of the minimum requirements that would influence investors to engage in a corporate bond market?

Coding of the primary market:

**Stringency-** The need of the investor for the primary market to be flexible or stringent.

**Required-** Being regarded as an integral part of an investment in corporate bonds.

**Can cope without-** The willingness to cope without a primary market.

**Theoretical formulation of pathway analysis:**

**Stringency\*Required\*Can cope without--- Result (degree of criticality)**

The theoretical formulation diagram was used to arrive at the degree of criticality of a subject. The box in blue represents the subject being analyzed. The boxes in white represent the coded answers that have a positive influence on the degree of criticality of a subject. The boxes in red have a negative influence on the degree of criticality of a subject. The results are formulated in the following way, for example; if for the primary market the answer on the first section (stringency) is **Stringent**, second

section (relevant)-**yes** and third section (can cope without)- **No** than it can be concluded that this element is highly critical for the investors.

Figure 6: Primary market Pathway analysis

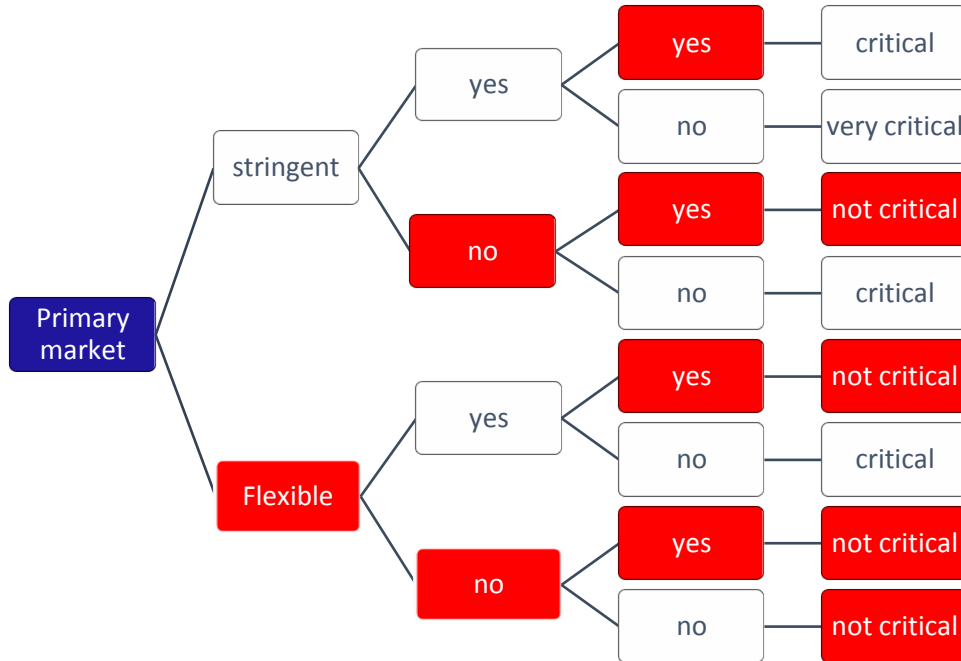


Table 3: Depicting the different pathways: Need for Primary Markets

<i>Amount of interviewee</i>	<i>Stringency</i>	<i>Required</i>	<i>Can cope without</i>	<i>Results</i>
1	Stringent	Yes	Yes	Critical
2	Stringent	No	Yes	Not critical
3	Flexible	Yes	Yes	Not-Critical
4	Flexible	Yes	Yes	Not-Critical
5	Flexible	No	Yes	Not critical
6	Stringent	Yes	Yes	Critical
7	Stringent	Yes	Yes	Critical
8	Stringent	Yes	Yes	Critical
9	Stringent	Yes	No	Very critical
10	Stringent	Yes	No	Very critical
11	Stringent	Yes	Yes	Critical
12	Stringent	yes	No	Very critical
13	Flexible	Yes	Yes	Not-Critical

Table 3 reveals that approximately 69% of the investors would prefer a stringent control in the primary market. Yet, 76% would be willing to cope without a primary market, although they think it is an integral part of doing investments in corporate bonds.



**The result of pathway analysis:** The result shows that a primary market is critical for the investor's engagement in corporate bonds.

**Key points that were mentioned:**

*Some investors mentioned that if you are a financial savvy investor, you don't really need a primary market. The stringent control required by the investors is linked to the need of transparency of the issuers, as this would make it easier for the investors when doing due diligence. The stringent control required is also linked to the preference of the majority of the investor for a primary market that has public offering method. The public offering method, is a method that is very stringent and offers great degree of transparency, but still there are some investors who think that a flexible control and a flexible offering method would be ideal for a small jurisdiction. The reason they gave for this is that, due to few amount of issuers, combined with regulations that would raise the price of issuance would result in fewer companies being able to issue.*

**Answer on the Sub-Question:** Yes, a primary market is part of the minimum requirements that would influence an investors' engagement in a corporate bond market.

#### 4.6 Secondary market

**The sub-question for the secondary market:**

Is the secondary market part of the minimum requirements that would influence investors to engage in a corporate bond market?

**Coding of the secondary market**

**Relevant-** The secondary market being used or acknowledged by the organization/investor as being an important part of the corporate bond market.

**Stringency-** The need of the investor for the secondary market to be flexible or stringent.

**Can cope without-** The willingness to cope without a secondary market.

**Theoretical formulation of pathway analysis:**

*Relevant\*Stringency\*Can cope without--- Result (degree of criticality)*

The theoretical formulation diagram was used to arrive at the degree of criticality of a subject. The box in blue represents the subject being analyzed. The boxes in white represent the coded answers that have a positive influence on the degree of criticality of a subject. The boxes in red have a negative influence on the degree of criticality of a subject. The results are formulated in the following way, for example; if for the secondary market the answer on the first section (stringency) is **Stringent**, second section (relevant)-**yes** and third section (can cope without)- **No** than it can be concluded that this element is highly critical for the investors.

Figure 7: Pathway Analysis: Importance of Secondary Market

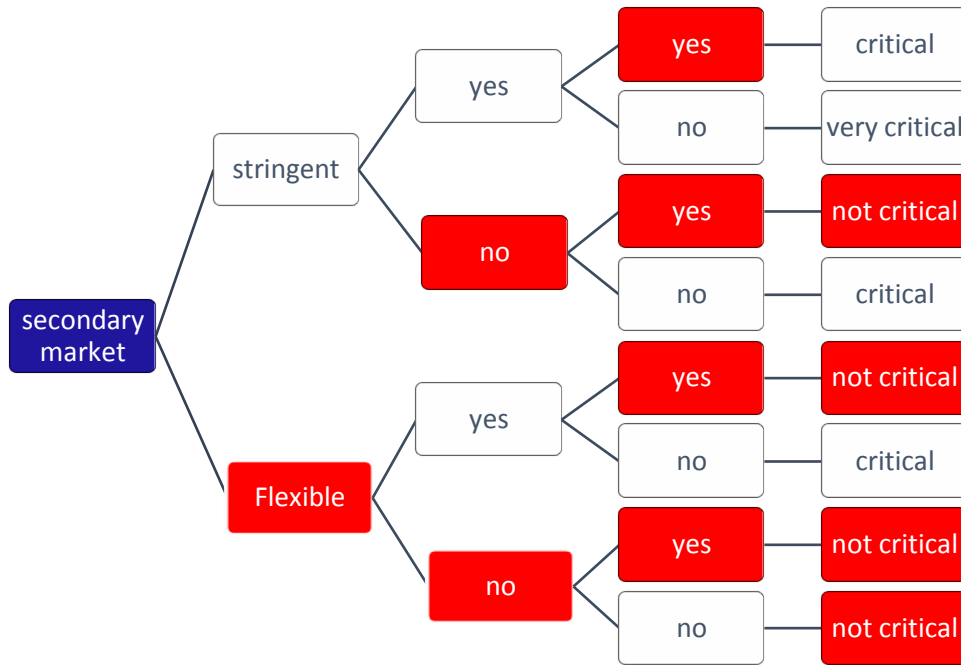


Table 4: Depicting the different pathways: Importance of Secondary Market

Amount of interviewee	Stringency	Relevant	Can cope without	Results
1	Stringent	No	Yes	Not critical
2	stringent	No	Yes	Not critical
3	Stringent	Yes	Yes	Critical
4	stringent	No	Yes	Not critical
5	Flexible	No	Yes	Not-critical
6	stringent	No	Yes	Not-Critical
7	stringent	Yes	No	Very critical
8	stringent	Yes	Yes	Critical
9	Stringent	Yes	No	Very critical
10	Stringent	Yes	No	Very critical
11	stringent	Yes	Yes	Critical
12	stringent	Yes	Yes	Critical
13	stringent	Yes	No	Very critical

Table 4 reveals that 61% of the investors think that a secondary market would be integral for the development of a corporate bond market. With regard to the level of stringency in the bond market, 100% of the investors would prefer for the secondary market to be stringent.

The result of pathway analysis: The result shows that a secondary market is critical for the investor’s engagement in corporate bonds.

## Key points that were mentioned in the interview:

*The majority of the investors would be willing to cope without a secondary market. This is the case as the majority of the investors practice buy and hold. Furthermore, they state that they already invested in corporate bonds in Curaçao without the availability of a secondary market. Other investors mentioned secondary market as important for the liquidity it could offer. It was mentioned that without a secondary market, there would be no liquidity for the bonds traded in the primary market.*

*It would be attractive to have trading data available. Although others mentioned that they don't need continuous trading data as long-term bonds are not priced every day.*

*To avoid information asymmetry, individuals close to the issuing company should not be participating in the bond investment of that given company. But still complete elimination of information asymmetry on a small jurisdiction such as Curaçao is nearly impossible. It was also mentioned that technology should be implemented to help mitigate information asymmetry.*

*The majority of the investors mentioned that a central depository system would be beneficial. But others mentioned that a guaranteed transaction system instead of a central depository system would be more useful in order to add flexibility to the secondary market. Although it was mentioned that, the organization managing either the guaranteed transaction system or the central depository system should be very reputable and independent.*

**Answer on the Sub-Question:** Yes, The secondary market is part of the minimum requirements that would influence an investors' engagement in a corporate bond market.

## 4.7 Credit rating agency

### The sub-question for the CRA:

Is having a CRA part of the minimum requirements that would influence investors to engage in a corporate bond market?

### Coding of the Credit rating agency.

**Relevant-** CRA being used or acknowledged by the organization/investor.

**Required-** CRA being regarded as an integral part of investment strategy.

**Can cope without-** Has other alternatives when CRA is not available.

### Theoretical formulation of pathway analysis:

*Relevant\*Required\*Can cope without--- Result (degree of criticality)*

The theoretical formulation diagram was used to arrive at the degree of criticality of a subject. The box in blue represents the subject being analyzed. The boxes in white represent the coded answers that have a positive influence on the degree of criticality of a subject. The boxes in red have a negative influence on the degree of criticality of a subject. The results are formulated in the following way, for example; if for the CRA the answer on the first section (relevant) is **yes**, second section (required)-**yes**

and third section (can cope without)- **No** than it can be concluded that this element is highly critical for the investors.

Figure 8: Pathway analysis-CRA

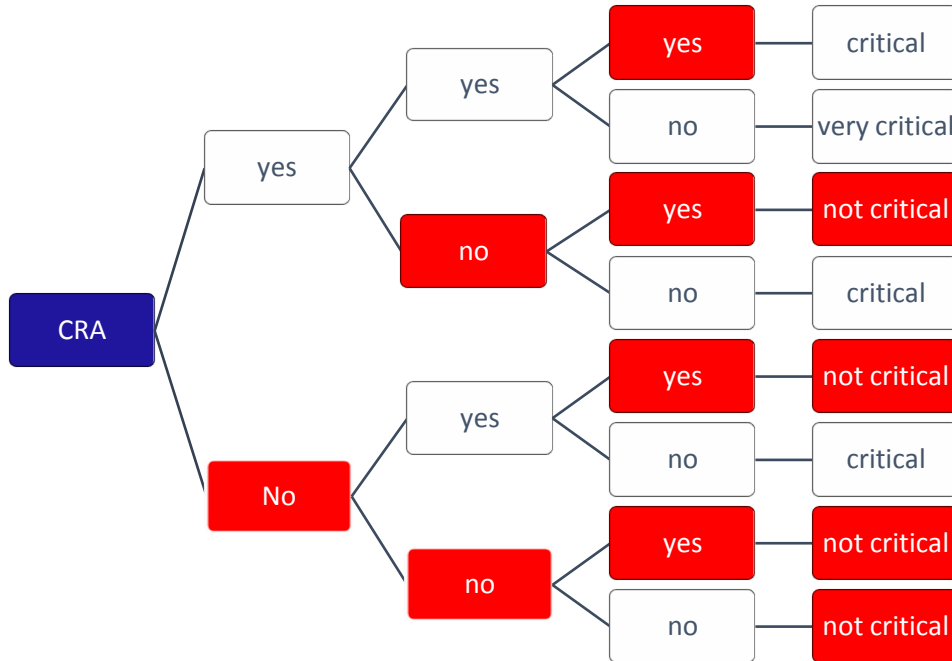


Table 5: Depicting the different pathways: Credit Rating Agency

Amount of interviews	Relevant	Required	Can cope without	Results
1	yes	Yes	Yes	<b>Critical</b>
2	yes	No	Yes	<b>Not-critical</b>
3	yes	No	Yes	<b>Not-critical</b>
4	yes	Yes	Yes	<b>Critical</b>
5	yes	no	Yes	<b>Not-critical</b>
6	yes	no	Yes	<b>Not critical</b>
7	yes	no	Yes	<b>Not-Critical</b>
8	yes	no	Yes	<b>Not-Critical</b>
9	No	yes	Yes	<b>Not-Critical</b>
10	yes	yes	No	<b>Very critical</b>
11	yes	no	Yes	<b>Not-Critical</b>
12	yes	yes	Yes	<b>Critical</b>
13	yes	yes	Yes	<b>Critical</b>

Table 5 reveals that around 92% of the investors have found the CRA to be relevant, but 53% found it not to be strictly required before they would engage in a corporate bond market. This correlates with most of the investors being able to cope without a CRA, as they are able to do their own due diligence.

**The result of pathway analysis:** The result shows that a CRA is not critical for the investors' engagement in corporate bonds.

**Key points that were mentioned:**

*Some investors mentioned that they still would do their own due diligence, regardless of having a CRA in place. This is the case, as looking back to the year of 2008 where there were several cases in which the CRA can be scrutinized. There is the possibility that the credibility that CRA's enjoyed in the past isn't present anymore. The case is also that most of the investors are able to do their own analysis if the information is available.*

*When asked about the possibility of a connecting with a regional, or developing a national CRA, most of the investors were positive about the idea of connecting with a regional CRA. But still the track record of such CRA should be evaluated for consistency. A national CRA would be very difficult to develop, in the opinion of the interviewed investors, as transparency and the close ties in a small jurisdiction would make it very difficult. Some investors were of the opinion that the limited number of companies that would be able to issue bonds is not enough to sustain a CRA*

**Answer on the Sub-Question:** No, a CRA does not form part of the minimum requirements influencing investors' engagement in a corporate bond market.

#### 4.8 Benchmark yield Curve

**The sub-question for the benchmark yield curve:**

Is the Benchmark yield curve part of the minimum requirements that would influence investors to engage in a corporate bond market?

**Coding of the benchmark yield curve:**

**Relevant-** Benchmark yield curve being used or acknowledged by the organization/investor.

**Required-** Benchmark yield curve being regarded as an integral part of investment strategy.

**Can cope without-** Has other alternatives when benchmark yield curve is not available.

**Theoretical formulation of pathway analysis:**

**Relevant\*Required\*Can cope without--- Result (degree of criticality)**

The theoretical formulation diagram was used to arrive at the degree of criticality of a subject. The box in blue represents the subject being analyzed. The boxes in white represent the coded answers that have a positive influence on the degree of criticality of a subject. The boxes in red have a negative influence on the degree of criticality of a subject. The results are formulated in the following way, for example; if for the Benchmark yield curve the answer on the first section (relevant) is **yes**, second section (required)-**yes** and third section (can cope without)- **No** than it can be concluded that this element is highly critical for the investors.

Figure 9: Pathway analysis-Benchmark yield curve

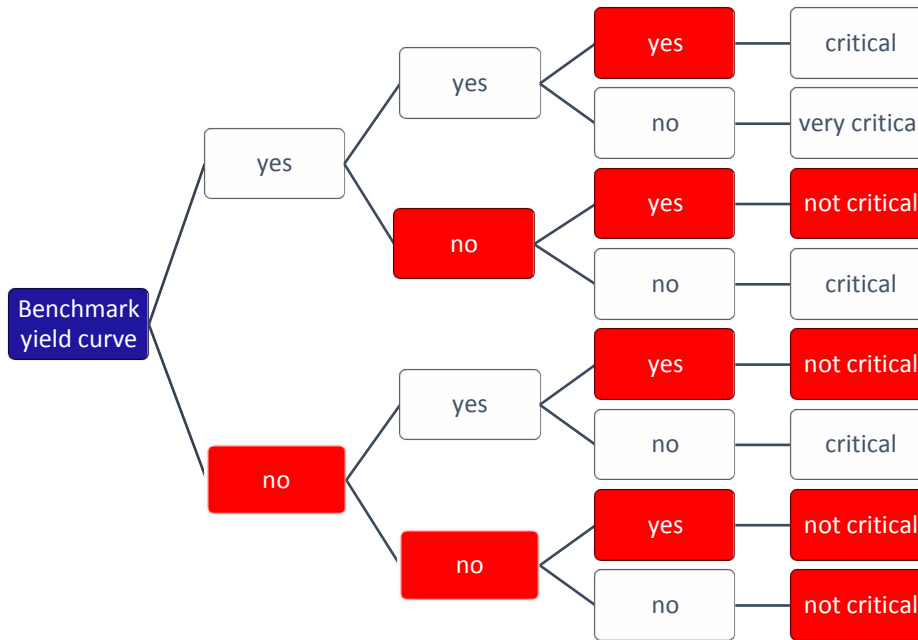


Table 6: Depicting the different pathways: Benchmark Yield Curve

Amount of interviews	Relevant	Required	Can cope without	Results
1	Yes	No	Yes	Not-Critical
2	No	No	Yes	Not-Critical
3	No	No	Yes	Not-Critical
4	No	No	Yes	Not-Critical
5	Yes	yes	Yes	Critical
6	Yes	no	Yes	Not-Critical
7	Yes	no	Yes	Not-Critical
8	Yes	yes	Yes	Critical
9	Yes	yes	No	Very-Critical
10	Yes	yes	No	Very-critical
11	Yes	no	Yes	Not-Critical
12	Yes	yes	Yes	Critical
13	Yes	yes	No	Very-critical

Table 6 reveals that around 76% of the investors regard a benchmark yield curve as relevant in a bond market structure, although 53% of the investors don't regard it as a required subject. In addition, 76% of the investors would cope without a benchmark yield curve.

**The result of pathway analysis:** The result shows that a benchmark yield curve is not critical for the investors' engagement in corporate bonds.

**Key points that were mentioned:**

*Investors mentioned that because of the possibility of the bonds in Curaçao being isolated, they would compare the bonds with alternatives benchmark yield curve. Others mentioned a risk-free rate and interbank rates as alternatives. Some even mentioned that benchmark yield curve is a good to have, but still other parameters such as financial figures, management, and corporate governance record of the issuing company are even more important.*

**Answer on the Sub-Question:** No, Benchmark yield curve does not form part of the minimum requirements influencing investors’ engagement in a corporate bond market.

**4.9 Scaling of the benchmark**

The investors were asked to give each subject a grade from one to five. With five (5) being the most important for engagement in a corporate bond market, and one (1) being the least important. None of the subjects could have the same grade. In the table below the result of this section are presented, where the average of each subject was taken to present the scale of importance of each subject. The investors were required to rank the benchmark of components in order of importance.

*Table 7: Benchmark of elements Ranked in Order of Importance*

<b>Regulatory framework</b>	*****
<b>Primary market</b>	****
<b>Secondary market</b>	***
<b>CRA</b>	**
<b>Benchmark yield curve</b>	*

**Conclusion**

The result above shows that a regulatory framework, primary market, and the secondary market are the most important factors for the investors relative to their possible engagement in the corporate bond market. Information will be provided in the discussion section, highlighting the possible reasons why the elements of the benchmark are ordered in the sequence depicted in table 7.

**4.10 Central Bank**

An interview with Mrs. Sumaya Sinlae-Elhage, treasurer of the Central Bank, was conducted on June, 12, 2015, to determine whether Curaçao has the capabilities to support the minimum requirements preferred by the investors.

**Key points that were mentioned:**

**Regulatory framework**

*It is deemed an important factor in the development of a corporate bond market. In Curaçao, the regulatory structure of a settlement and clearing system is being developed. However, additional*

legislations have been drafted to further strengthen the investors' protection and consumer protection mechanisms.

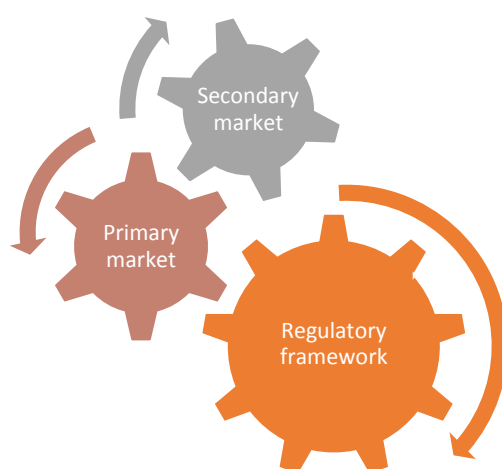
### Primary market

The primary market is also a very important element for the development of a bond market. Financial transparency and good corporate governance should be in place before issuance in the primary market, as this will facilitate the due diligence that the investors must perform on the companies. Currently, Curaçao is very bank-centric, most companies would prefer to go to a bank instead of looking for capital in bond issuance. The accessibility and cost of going to a bank is still favorable, which hampers market based financing facilities and possibilities.

### Secondary market

“The principles of IOSCO state that you need to have a DVP in place for the secondary market (Sumaya, 2015)”

Figure 10: Interconnection of required components



**Relevant:** Relevant to the completeness of a sustainable bond market.

Table 7: Results of interview with the Central Bank relative to regulatory developments

Subjects	Relevant	Regulatory developments
Regulatory framework	Yes	Sufficient
Primary market	Yes	Insufficient
Secondary market	Yes	Insufficient

### Conclusion

The result above shows that a regulatory framework, primary market, and the secondary market are the most important factors for the investors relative to their engagement in corporate bonds.



## 5 Discussion

The aim of this study was to explore the minimum requirements to achieve investors' engagement in the corporate bond market in a small jurisdiction such as Curaçao. The relevancy of this study lays in the fact that it is not feasible for small jurisdictions to apply the needed elements that are normally used in larger jurisdictions (IOSCO, 2012). Much of the studies done for the development of corporate bonds are directed towards emerging markets. Countries that are considered emerging economies, often range from small islands to big countries. It is important to take into account the existence of financial and economic discrepancies between these smaller and larger countries emerging countries.

As the development of a corporate bond market is heavily influenced by the local investors in that given market, it is important to explore the structural requirements of investors in regards to a corporate bond market. By having an idea about the minimum requirements of investors in small jurisdictions, it is possible to know if the investors in small jurisdictions will demand the same structural level as investors in larger jurisdictions. With that information, it is possible for regulators in small jurisdictions to start a corporate bond market, aiming at the most critical subjects that influence the investors' engagement.

Out of the literature, five subjects were found to be the utmost influential in an investors' engagement with corporate bonds. The five Subjects that were deemed important for a bond structure in regards to an investor are; 1. Regulatory framework, 2. Primary market, 3. Secondary market, 4. Benchmark yield curve, 5. CRA. These subjects are variables that influence the relationship between an investor and its engagement in a corporate bond market. Out of these 5 subjects, 3 subjects were deemed critical for investors in Curaçao: regulatory framework, primary market, and secondary market.

### 5.1 General

The results show that most of the investors are currently participating in bond acquisitions either locally or internationally. Furthermore, all the investors are very enthusiastic about the development of a corporate bond market in Curaçao, and most would cope with an unstructured corporate bond market, meaning that most of them would invest without the need of all the details of a bond market structure in place. Reasons for this is that there is an investment rule in place locally called the 60/40 rule, this entails that 60 % of a company's capital is required to be invested locally, while the remaining 40% may be invested internationally. That mandates investors to look for local investment alternatives, possibly lowering their corporate bond structure requirements. Due to the small size of the island, most investors are familiar with potential investment prospects and have a certain indication of their creditworthiness. Still, the disclosure of adequate financial figures and sound corporate governance of potential investors' prospects are highly necessary. Corporate governance and financial disclosure with proper accounting standards are elements that can improve financial markets (Luengnaruemitchai & Ong, 2005). By having high levels of transparency, and enforcing standardized documentation, institutional investors will feel more confident about engaging in the market (International capital market association, 2013).

### 5.2 Regulatory framework

The results show that regulatory framework was the most critical and required structure subject for investors' engagement in the corporate bond market. It is a factor that is highly required, and most of the investors have confidence that a regulatory framework would mitigate both an investors' exposure

to risks and systemic risk of the market itself. Still, the participants had divided opinions about their willingness to invest while not having a regulatory framework in place. This is remarkable as the regulatory framework is an integral part of a bond market, and the absence of this would leave the investor exposed.

The lack of knowledge, transparency and inadequate supervision can be mitigated by having a proper regulatory framework (EMC and IOSCO, 2011). The participants were knowledgeable investors, and most of them would rely on their own due diligence. Still, the general influence that a regulatory framework can have on a bond market is attractive for the investors. As through a regulatory framework, requirements such as accounting reporting standards and an issuer's corporate governance statements can be enforced (Pemberton, Stewart, & Watson, 2005). That is the reason why it is the most critical subject in regards to the development of a bond structure, in the views of the investors. Since, the regulatory framework can enforce standards that can facilitate due diligence.

### 5.3 Primary market

The results of the primary market show that the primary market is the second most critical subject for investors' engagement in a corporate bond market. The analysis shows that a primary market is highly required, although most of the investors can cope without a primary market. Regarding the level of stringency of primary market entrance, most investors would like to have a balance between stringency and flexibility of the primary market. However, most investors would like to see more stringency before flexibility.

The stringency of a primary market is strongly linked to offering method. In the case of the investors, a public offering was the most favored method. This is positively linked with their choice for stringency in a primary market. Public offering method is the method that provides the most investor protection, although it discourages less established issuers to participate in the bond market (EMC and IOSCO, 2011). This is very interesting, as most of the investors in Curaçao still would cope without a primary market. Most of the investors have high demands regarding financial control, transparency, and mitigation of risk. But since they have the ability to perform their own due diligence, they can operate without the whole corporate bond structure in place.

### 5.4 Secondary market

Out of the results, it was found that the secondary market is the third most critical subject required in corporate bond structure. Most of the investors regarded the secondary market as relevant, still due to buy and hold investment strategies some regarded a secondary market as not that important for their engagement in a corporate bond market. The main purpose of a secondary market is to provide liquidity in the market for those who want to sell their bonds (ICMA, 2013). Most of the investors would want to have a stringent secondary market containing instruments and trading infrastructure that would ensure investors protection. Investors are more confident when there is a clearing and settlement in place, since these instruments can ensure efficiency, credibility, and trading data in that way enhancing price discovery (Balogh & Koczan, 2009). Still most of them would engage in a corporate bond market without having a secondary market in place.

### 5.5 Benchmark yield curve

The results show that benchmark yield curve is not critical for the investors' engagement in a corporate bond market. Investors recognize the usefulness of a benchmark yield curve, but for most of them it is not required for their engagement in a corporate bond market. Information for price discovery and

portfolio management can be extracted from the benchmark yield curve (Stewart and Watson, 2005). Still, results showed that most investors would cope without a benchmark yield curve in place. Instead of benchmark yield curve, interbank rates can be used as a substitute although it is not as effective (EMC and IOSCO, 2011). So there are alternatives that can be used instead of a benchmark yield curve, furthermore a number of bond prospects are not sufficient for the benchmarking of corporate bonds and government bonds against each other.

## 5.6 CRA

The results show that CRA is not critical for investors' engagement in a corporate bond market. Most of the investors recognize the importance of a CRA, but still don't require it for their engagement in a bond market. The investors are able to cope without a CRA, deeming financial and corporate governance details as more important. However, credit ratings can facilitate corporate governance and financial transparency, enhancing the attractiveness of the capital market (Dass, 2008). The bad reputation that CRA gained in the years following the financial crisis in 2008 explains why most of the investors lost confidence in a CRA and why it is not a critical requirement for their participation in a bond market.

Most investors mentioned the example of Lehman brothers' undeserved AA rating as misleading. As a result most of the investors would prefer to perform their own due diligence instead of fully trusting a CRA. Most of the investors already engaged in corporate bond markets locally without a CRA in place. Having a regional CRA that would specialize in companies in the Caribbean Region is very important, as more relevant and specific information is gathered for analysis (Dass, 2008). Most of the investors supported this idea, as this would provide more relevant information to the investors. Still, the investors mentioned that having a CRA in place would not make a difference in their need for extensive details of the companies to perform their own due diligence.

*Table 8: Results summary*

Standards	Status	Major Reason
<b>Regulatory Framework</b>	Part of the minimum requirements	Protection in the form of transparency
<b>Primary market</b>	Part of the minimum requirements	Regulate the entrance of new issuers
<b>Secondary market</b>	Part of the minimum requirements	Platform for regulation of custodians and clearing and settlement systems- Final goal: Liquidity
<b>CRA</b>	Not-Part of the minimum requirements	Investors prefer to rely on their own due-diligence
<b>Benchmark Yield Curve</b>	Not-Part of the minimum requirements	In the opinion of the majority of the investors, benchmark yield curve is not extremely necessary for their engagement in corporate bonds.

## 6 Conclusion

This research paper provides an overview of the role and importance of a corporate bond market for the development of an economy. An extensive discussion is presented in this paper about the different elements that are of importance for the development of a corporate bond market. A benchmark was extracted out of the literature, consisting of the following elements.

Elements:

- Regulatory framework;
- Primary market;
- Secondary market;
- CRA; and
- Benchmark yield curve.

Each element provides the required dimension to the completeness of a bond market. The focus was to explore the minimum requirements of investors in a small jurisdiction such as Curaçao relative to this benchmark. There is no universal solution when it comes to components that are important for investors' engagement (IOSCO, 2012). Still this paper is aimed at determining the required components for investors' engagement in a corporate bond market in a small jurisdiction such as Curaçao. The research question: "What are the minimum requirements deemed essential for investors to engage in a corporate bond market in a small jurisdiction such as Curaçao?"

The minimum requirements deemed essential where regulatory framework, primary market, and secondary market. It is important to mention that these investors are knowledgeable investors and have expertise in the (international) investment arena. That implies that in a small jurisdiction such as Curaçao, knowledgeable investors are prepared to invest in a corporate bond market consisting of only a regulatory framework, primary market, and a secondary market.

Investors consider the minimum required elements enough for their engagement in a corporate bond market. Regulatory framework, primary market, and secondary market are elements that represent the structure and platforms of a bond market which lead to standardization. When you have standardization all parties to that framework or market will be participating on an equal basis, rules, and regulations.

Standardization, consistency, and uniformity of a market are what entice investors in a small jurisdiction the most. Where small jurisdictions are lacking the power and capabilities to form a sophisticated bond market, the focus must be directed towards creating a platform that offers uniformity which leads to more transparency. The point of having a standardized market is that investors would have a better view of how the market is trending, and have more confidence in investing as they are confident that all stakeholders, investors in secondary market and issuers in the case of the primary market are being monitored by the frameworks and platforms. The standardization of a market is the contingency to the investors' willingness to invest in a bond market consisted of a regulatory framework, primary market, and secondary market. Standardization will ensure proper elements (accurate accounting data) and security for their engagement. In the majority of the cases, investors in a small jurisdiction are familiar with (prospective) issuing companies, they are aware of the background of the business, and sometimes

aware of the management style of the individuals in charge of such companies. This is due to the small size and culture of these small jurisdictions where Curaçao is no exception, where stakeholders in the community tend to know each other. This translates into the ability of the investors to better analyze the company, and enhances the investors' intuition about future growth or potential demise of that company. It is well known that the majority of SME's are family-owned, and this can be a hurdle in the development of the corporate bond market, since family-owned companies tend to facilitate high profile positions in the company to family members instead of offering these to better-suited candidates, as a result increasing uncertainty in the proper operation of such company.

Another possible difficulty for the development of the corporate bond market is the strong relationship between banks and SME's. Banks' advantageous position enables them to access the transactions of such companies, which makes it easier for them to provide loans as they have intimate knowledge of the company and the principals of the company. It is possible for the banks to offer capital loans without the need for the company to make its operations public. SME's that don't want their information to become public would logically choose a bank loan over corporate bonds or other market-based financing possibilities even if bank loans demand a slightly higher interest rate, and so increasing the cost of capital. It is highly critical for a small jurisdiction to develop laws that are aimed at increasing the level of requirements (corporate governance & accounting standards) of SME's and promote and reward transparency in companies. Curaçao is already making efforts to do so, with a law enacted on January 10, 2014, where board members are required to structure the corporate governance of business entities in Curaçao, based on the code of corporate governance Curaçao (De Gouverneur van Curaçao, 2014). This is very important for the development of a corporate bond market in Curaçao, as this law ensures proper corporate governance in all major entities.

The development of a corporate bond market is highly dependent on the level of transparency of the companies. The most important factor for the success of such is the continuous enhancement of overall accounting standards and requirements of corporate governance for SME's.

A CRA can be considered as a standardized risk assessment for a market, a risk assessment that is comprehensible and used by all stakeholders of a market. Additionally, it is a tool that can be used for price discovery. In this research, it was found that CRA was not part of the minimum requirements of the investors. Reasons for this is that CRA was highly scrutinized in 2008, as agencies that were responsible for credit ratings, provided misleading information that led to losses for the investors. This combined with the capabilities and propensity of the investors to perform their own due diligence, diminishes the need of a CRA. It can be concluded that the absence of a CRA will cause the lack of data and uniformity of credit risk assessment, which can cause information asymmetry. The reason for this is that it is more time consuming for investors to judge each other's due diligence and requirements, and make an investment decision based on those, which is the case of bond acquisitions in the secondary market. Still for any corporate bond acquisition, investors in a small jurisdiction such as Curaçao prefer to rely on their own due diligence. The need of a CRA for secondary market is lacking, as the majority of these investors are more interested in buy and hold to maturity. Benchmark yield curve is also one of the elements that is not part of the minimum requirements of the investors in a small jurisdiction such as Curaçao. The absence of a benchmark yield curve may cause the lack of data for price discovery and new bonds issuance assessment. That means that at the start of the development of the bond market in Curaçao, CRA and benchmark yield curve is not necessary for the bond market to appeal to the investors. Still, there is a need to look for alternatives for CRA and benchmark yield curve as the bond

market progresses as the secondary market which is part of the minimum requirements is often supported by these two elements. The risk assessment and trading data are factors that these elements account for, and are important for the depth of a corporate bond market.

Investors in a small jurisdiction such as Curaçao, are willing to invest in a market that is not totally efficient, considering the absence of their need of a CRA and a benchmark yield curve. Their willingness stems from their understanding of the limited capacity of a capital market in a small jurisdiction, which causes that an ideal bond market matching international standards cannot easily be replicated. Additionally, factors such as available trading data, price discovery, and standardized risk assessment are not explicitly required for the investors appeal in a corporate bond market in a small jurisdiction such as Curaçao.

In a small jurisdiction such as Curaçao, the development of a corporate bond market should start with the development of standardization for a market focused on the interaction between investors and issuer; the primary market. In addition a regulatory framework that would impose the needed transparency for investors to perform their own due diligence. Still, Investors demand a high degree of stringency in both primary and secondary market. For the primary market, this would entail that a very secure offering methods should be in place, offering such as public offering method is what is required by investors for a primary market. In the case of a secondary method, stringency is linked with custodians and clearing and settlement systems. Where central depository system is what would be one of the main criteria's in regards to the secondary market. This research clarifies that corporate bond market activity can be achieved without the need of all the required components that was suggested by previous studies. Still, stringency in the proposed minimum elements is important. On the other hand, the sustainability of such market can be scrutinized, as factors that would mitigate systemic risks, information asymmetry and enhance efficiency and liquidity would be absent.

The findings of this study are important, as a minimum starting point for a bond market in a small jurisdiction such as Curaçao has been established. This research identifies the first steps that should be taken in trying to entice the majority of investors in a small jurisdiction such as Curaçao. Furthermore, it can be concluded that institutional investors are willing to invest in corporate bonds without the need of all the requirements deemed essential for a sophisticated corporate bond market. This is an interesting fact, as it possible that investors in a small jurisdiction such as Curaçao are used to uncertainties and inefficiencies as they don't have structures and regulations that will protect them. In the past, they have found ways to invest in corporate bonds without any bond market structure. If only the investors' perspective is considered, it can be concluded that Curaçao is ready to start a bond market. A reason for this is that through this research it was shown that investors are ready to adapt and have the capabilities to operate in a bond market that is not considered to be ideal.

Furthermore, CRA's has shown us that a system that is considered perfect today, may not be perfect tomorrow. This research serves to highlight the volatility of human systems and markets, where sometimes you are obliged to add new elements to systems where other elements are deemed obsolete, or in this case you need to leave certain elements out of the development in order to facilitate advancement otherwise you will get stuck trying to find the way to perfectionism which actually does not exist. To conclude, corporate bond development should be paired with efforts to promote innovation and overall promotion of financial standards and ethical business practices to all stakeholders in small jurisdictions.

## **Practical recommendation & innovation**

In order to launch the bond market, a bond platform is required. This bond platform would pull major institutional investors together in order to form a syndicate. One of the most important factors for the development of the corporate bond market is to enhance the awareness of companies about the corporate bonds. The idea behind a syndicate is that such organization will try to convince and market the idea of issuance of bonds.

This syndicate would focus on improving transparency in the bond market, and also collectively help and monitor the development of a regulatory framework. The inputs and requirements of all the institutional investors together would greatly improve and speed up the process of making a regulatory framework. It would greatly benefit the bond market if this syndicate would gather their resources together to perform due diligence. By performing due diligence as a group, the syndicate would greatly lower the cost of its members.

Through the combination of different methods of due diligence, it is possible to have a superior perspective on investment prospects. This can improve the way companies are being scrutinized, and improve the level and quality of the bond market. This syndicate can develop their own rating system, as a way to standardize their due diligence. This rating system can be used for price discovery, data analysis and increase liquidity in the market, eliminating the need of an external CRA, and thus greatly reducing the possibility of a conflict of interest.

SMEs who are in need of capital injection would know that they have an alternative in the bond market. Furthermore, this syndicate can issue ETF's that can be sold internationally. Due to the high level of scrutiny and standardization of this syndicate, there is the possibility that such ETF's would be attractive in the international investment market. In that way, the liquidity and exposure of the market can be increased, and the risk on domestic corporate bonds can be spread. This would be also beneficial for market makers and financial advisors, as this method would provide instruments that can facilitate their operations. It is in their best interest to have a dynamic capital market, as this can ensure the continuity of their operations.

The DCSX is an organization that can develop such an idea, as they have all the networks and structure in place to do so.

## **Future Research**

In future research, attention must be drawn to the issuer side. It is important to uncover the needs of the issuer side in order to fulfill the balance between these two stakeholders. That would greatly improve developments of corporate bonds in small jurisdictions. Classification of countries of focus is very important. Maybe it would be more appropriate to classify countries in levels of financial development. This is important as there is maybe the chance that small jurisdictions with superior financial prowess can support a more advanced corporate bond market than other small jurisdictions. It would also be advised to include money market in the assessment of investors' engagement with corporate bonds.

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# Corporate Bond Development

## Interview questions

### Introduction

This interview is related to a research being conducted regarding corporate bond development in small jurisdictions. The aim of this research, is to uncover the minimum requirements deemed essential for investors to engage in a corporate bond market in a small jurisdiction such as Curaçao. By exploring the literature related to the topic, a benchmark has been developed, that contains subjects deemed essential for investors' engagement in corporate bonds. The framework of this interview, is divided in the several subjects that are part of the main benchmark. Subjects that are part of the benchmark are:

- ***Regulatory framework***
- ***Primary market***
- ***Secondary market***
- ***Benchmark yield curve***
- ***Credit Rating Agency("CRA")***

Testing the importance of these subjects, will help in setting up a more accurate corporate bond development plan for the investors' side.

#### **General Questions**

1. Does your company invest in fixed income or debt securities?
2. What are your thoughts about the development of a corporate bond market in Curaçao?
3. What is your opinion on corporate bonds as an investment instrument?
4. Is there any specific strategic investment layout in your organization for engagement in the corporate bond market?
5. Would you consider investing in local issued debt securities, such as for example from Aqualetra or UTS?

If yes: What would be the conditions for your investment?

#### **Regulatory framework section**

1. Would having a regulatory framework, such as including an investment protection clauses, in place for the corporate bond market make you feel more protected?
2. Do you think that a proper regulatory regime is critical or sufficient to mitigate systemic risk?
3. Do you think that a regulatory regime could provide the necessary transparency for you and/ or other investors to invest or purchase local corporate bonds?
4. Would you still invest in corporate bonds, even if there was no proper regulation? And how would you cope with or manage that?

**Primary market section**

1. Would you invest in a bond that was not issued through an official and regulated primary market?
2. What is more important in terms of primary market regulation, stringent control or the flexible availability of corporate bonds?
3. Does your organization have a long-term or short term investment focus?
4. What type of market offering method would be more suitable for your organization?

**Secondary market section**

1. When buying corporate bonds, would your focus be on Buy and hold, or continuous trading?
2. Do you render custodians important for the transactions of secondary market?
3. Would a clearing and settlement system enhance your confidence in a corporate bond market?
4. What would be your requirements to avoid information asymmetry?
5. Would you be comfortable investing in a corporate bond market without a central security depository system?
6. Would you invest in a corporate bond market that doesn't have the ability to offer you trading data?
7. Is a sound corporate governance in local companies necessary before they become investment prospects?
8. Would you still participate in the corporate bond market in the absence of secondary market?

**Benchmark yield curve section**

1. Do you use benchmark yield curve to assess or manage your investment portfolio?
2. Would you consider other alternatives as substitute for benchmark yield curve?
3. Is Benchmark yield required for your data analysis?
4. Would you still invest in the corporate bond market in the absence of a benchmark yield curve? And how would you cope with that?

**Credit Rating Agency ("CRA") section**

1. Do you consider a CRA instrumental in the task of assessing risk of corporate bonds?
2. How important is price discovery for your organization.
3. If there would be no CRA, is your organization capable to do its own internal analysis?
4. What do you think of having a regional or domestic CRA?
5. Would you still invest in the absence of a CRA or another similar organization? And how would you cope with that?

**Scaling the benchmark**

Out of the five subjects of the benchmark, please allocate each subject with a grade from 1 to 5, with your substantiation. The allocated grade should be based on the perceived importance, from 5 being very important as a contingency for your engagement and 1 being less important. Please note that the subjects cannot have the same grade.

