A Systematic Review of the Field of Debt Financing

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Abstract: The provision of debt finance has a long history that continues to be transformed as technology develops, keeping it an all-time viable and popular option for business owners. Financing through debts has asserted itself over time as an important source of capital and sustenance funds for both new and existing ventures as, compared to equity financing (selling the shares or ownership interests of a business to raise capital), debt financing lowers the probability of leaking value-creating intellectual property to competition and does not require giving up ownership or control. Considering the significance of debt financing to business and invariably countries, as well the fact that there are problems that need to be curbed for debt financing to be a good rather a bad phenomenon, it is necessary that the field of debt financing be thoroughly explored so as to make informed decisions. This study thus systematically reviews existing literature on the field of debt financing with a view to identify gaps and recommend areas for future research in the field. The Systematic Quantitative Assessment Technique (SQAT), introduced by Pickering and Byrne (2013), was used to examine trends and gaps in the time dispersions, geographical distributions, article types, research methodologies, themes of focus, and theories of 75 gotten from 6 high quality academic databases. Most of the articles reviewed were empirical in nature, utilizing mainly panel data analysis for collection of data. Furthermore, the role of government and effect of corruption were least discussed. Agency, Pecking-order and Trade-off theories were predominant. The findings thus provide researchers, prospective and existing, with a deep view into the discourse on Debt Financing, exposing researchable gaps.

Keywords: Debt Financing, SQAT, Financial Crises, Firm Performance
Introduction

The origin of debt financing can be dated as far back as the middle ages when money lending services were made accessible to traders from the city of Venice (Sluga, 2017). This was followed by the emergence of international banking in the 18th century, led by the Rothschild family (Chaldeos, A. 2016). Fast forward to the 1980s, the internet was introduced into debt financing procedures, with Quicken Loans processing loan applications online for the first time (Turvey, 2017). Debt financing refers to the act of borrowing funds from companies and investors through the use of bonds, banks, or financial institutions, in order to support a business’s operations (Fong, 2015; Ključnikov & Belás, 2016; Kraemer-Eis & Lang, 2017). The lender of such fund is repaid the total amount borrowed, plus the interest accumulated on it, at a later point in time (Bratton, 2016).

At the onset, many businesses do not have sufficient funds to operate, let alone sustain their operations. Hence, they decide to borrow, either from personal sources such as family and friends, as is common to small and medium scale enterprises (SMEs), or impersonal sources such as banks and other financial institutions, as is common with large firms (Coleman et al., 2016). Several means of external financing exist, however, certain reasons exist which compel business owners to opt for debt financing. Funding through debts proves to be critical to business success (Plummer et al., 2016) as it ensures that the business owner is constantly conscious of running the business well so as to be able to pay back such debts (Ding et al., 2016). Also it can be less costly as interest paid on money borrowed for business activities are tax deductible (De Mooij & Keen, 2016; Collard et al., 2017).

Debt financing instruments like bonds ease the pressure on bank lending, particularly longer-term lending, and allows a wider range of corporate credits to access investment markets and seek more finance than the banks or government agencies could provide (Véron & Wolff, 2016). In contrast, there are some challenges associated with debt financing such as obligations to make payment even if your business fails, high-interest rate which will vary with macroeconomic conditions, history with the banks, business credit rating and your personal credit history and collateral (Allen, 2018). Secondly, there are risks associated with debt financing such as country’s stability, concession period of the funds and financial crisis (De Marco & Mangano, 2017). In addition, there is the challenge of government policies (monetary policies), and the capital market (Massa and Zhang, 2013; Du et al., 2017).

More and improved research in the field will enable business owners as well as the government to make policies and regulations favourable to businesses that intend to finance through debt. In light of these, this paper conducts a systematic quantitative review of relevant articles on debt financing, with the view to identity gaps and trends that will inform future researchers of the areas to focus on. The next section provides a discussion of methodology used in this study, the findings, discussions and directions for future research based on these findings. Finally, the conclusion is provided with the limitations and additional suggestions for future research based on these limitations.
Systematic Review
This study is a conceptual analysis of the field of debt financing, structured as a review, as this approach was found by the researchers to be reasonable and easily replicated. The research method used was a systematic review which employed the Systematic Quantitative Assessment Technique (SQAT) developed by Pickering and Byrne (2013). This was deemed appropriate as it enables the researcher to easily spot important opportunities for further research from the geographic distribution, time dispersion, focus areas, article types, theories and research methodologies of the journal articles assessed.

Articles on debt financing were collected from 6 electronic databases: Emerald, Elsevier, Springer, Wiley, Sage, and, Taylor and Francis, using “All in title” search of a single combination “Debt” + “Financing”, on Google Scholar advanced search. This process ensured that only 75 English scholarly papers which were relevant to the review topic were selected, as the abstracts of the papers were read to ensure that they were focused on debt financing, particularly in business organizations. The extent of inclusion or exclusion of each paper in the research process was thus determined.

Findings And Results
Time distribution of debt financing articles
In the year 2009, which was the beginning year specified for this study (2009-2018), not many articles were recorded as only 3 publications were discovered. However, publications remained steady and increased to 5 articles in 2010 and 7 articles in 2011. In the next two years however, there was a decline in the number of articles as the year 2012 and 2013 each recorded only 5 articles. Nevertheless, publications again shot up to 7 articles in 2014, immediately followed by an even sharper rise to 13 articles in 2015. There was a slight decrease in 2016 to 10 articles; however, 2017 recorded an upsurge to 19 articles (see Figure 1.). In 2018 though, only 1 debt financing journal article has been published so far: note that the papers were collected in January 2018.
Geographical Distribution of Debt financing Articles

Figure 2 shows the geographical distribution (continent-wise) of the debt financing articles reviewed in this study. From figure 2, we observe that Asia has the greatest number of articles published (30) which is closely followed by North America (29), Europe published (13), Africa (2), and Australia (1).

From the geographical distribution of the countries reviewed, 34 countries were represented in the study. It is shown from figure 3 that although Asia as a continent has the highest number of articles, USA actually has the highest number of articles (26), followed by China (10), Korea (7), Germany (6),
Taiwan (3) and Japan (3). The remaining countries have one or two articles representing them.

**Article type**
The articles reviewed in this study were divided along two main categories: conceptual and empirical. The articles that were conceptual in nature focused on concepts and theories that explain factors that pertain to the topic of debt financing, alongside the relationships that exist between them. On the other hand, those articles that were empirical in nature used experiments and other practical means to collect the data that formed their concluding stances, providing the basis for new theories (Thapliya, 2016). See Figure 4.

**Research Methods**
In this part of the study, the researchers identified the primary research methods that were used by the articles that were reviewed; Panel data (68.60%), content analysis (18.60%), theoretical (4.65%), survey (3.48), interview (3.48) and case study (1.16).
The panel data analysis represents about 68.60% of the articles reviewed dealt with the considerations or specific factors that is taken into account when making debt financing decisions (Minnis, 2011; Ghosh and Moon, 2010; Coleman et al., 2016). The use of panel data is relevant as it provides information in data bases that could be access by researchers for the study of debt financing.

Content analysis took up 18.60% of the articles (De Marco and Mangano, 2017), and the theoretical analysis took up 4.65% (Mun and Jang, 2017; Zhang, 2016). The interview of debt financing stakeholders (Singh and Kalidindi, 2009; Chowdhury and Maung, 2013) and the use of survey (Chua et al., 2011; Rassenfosse and Fischer, 2016; Baber et al., 2013) were methods utilized equally by 3.48% of the articles reviewed. One article adopted case study.

**Theories/frameworks for debt financing articles**

For the purpose of this study, 16 theories were utilized in the articles reviewed. In all of the 16 theories utilized there were 3 prominent theories: Agency theory which was used by 10 of the articles reviewed, followed by Pecking order theory and Trade-off theory which had 8 articles each. The remaining 13 theories only had one, two or three articles in which they were represented. It is to be noted that only 29 of the 75 articles reviewed used theories/ framework, the other 46 articles reviewed used neither theories nor framework (Yazdanfar, 2015; Chua et al., 2011; Munir et al.,2017; Metamilola and Ahmed,2015; Denison et al.,2014; Freund et al.,2017).
Debt Financing Research Themes

Figure 7 reveals the seven debt financing themes that were explored by the 75 articles reviewed in this study. The themes includes considerations in debt financing 54.70%, role of policies in debt financing 16.00%, debt finance and firm performance 12%, risks in debt financings 8%, debt financing and financial crisis 6.70%, effect of corruption on debt financing 1.3% and lastly means to debt finance 1.3%. The top five themes were discussed.
Discussion of Findings

A continuous, though unsteady growth trend in research was observed between 2009 and 2013. However, from 2014 there seemed to be an upsurge in interest of scholars on the topic, though still fluctuating. As for 2018, it is quite understandable that it is still early in the year; therefore it is possible that more researchers will take interest in the field of debt financing as the year runs along.

Asian counties are seen to have dominated the attention of researchers, whereas, Africa and Australia have been scarcely researched. Meanwhile, African countries for one have lingering debt financing issues. Also, South America was not even represented at all. This is quite surprising, as corporate debt in the region has been on the high side, especially in the private sector (14.3%) in recent years. In 2016, statistics show that South America’s ratio of external debt to Gross Domestic Product was 48% and this increase in demand for debt finance could be attributed to low cost of credit in recent years, which has caused companies and governments in emerging market to increase their debt issues (“corporate debt a ticking time bomb in Latin America”, 2016).

As observed in Figure 4, majority of the articles reviewed (73 out of the 75) were empirical in nature (which entails adopting practical measures to know the issues prevalent in the field of debt financing, issues associated with debt financing and issues relating to debt financing), this is commendable though as it gives the researchers the opportunity to actually understand and explore the activities in the field and also help them to get a first-hand knowledge on business reaction to the field of debt financing (De Marco & Mangano, 2017; Yazdanfar & Ohman, 2015; 2013; Honghai et al., 2011; Lemma, 2015; Khasawneh & Dasouqi, 2017).

Articles that used Agency theory developed by Jensen & Meckling (1976) discussed problems such as
unaligned goals, as well as differences in risk taking decisions (particularly when it comes to deciding whether to finance a business through debt or equity), that occur between shareholders and management (Lioa, 2015; Yazdanfar & Ohman, 2015; Jung et al., 2016; Isin, 2018), while some discussed agency theory as relationship existing between debt holders and the business owners (Chau et al., 2011). It was also integrated with the Pecking Order theory, which predicts that the higher a firm’s profitability, the lower its need for debt, and as such, its total debt level (Myers & Maluf, 1984), and Trade-off theory which posits that firms with higher profitability will use more debt in anticipation of greater tax savings resulting from its usage of debt (Wu & Yue, 2009).

Over half of the articles reviewed (54.7%) dealt with the considerations in debt financing. Typically the authors empirically analysed the factors which business consider in making financing decisions, either in start-ups (Chau et al., 2011; Coleman et al., 2016), in growth and expansion (Egami, 2010; Zhang, 2015), corporate governance (Tanaka, 2014; Kim et al., 2015; Ghouma et al., 2017; Mande et al., 2012), in SMEs (Du et al., 2017) and shareholders (Honghai et al., 2011) among others. The authors would analyze the roles that the factors in consideration play in debt financing and conclude by making recommendations that will help in the considerations in debt financing decisions (Metamilola and Ahmed, 2015; Godlewski et al., 2011).

Secondly is the role of policies in debt financing decisions, which is about 16% of the articles that were reviewed by this study. The articles in this category described the function policies play in firm’s debt financing decisions. Such policies include government intervention and bank competition (Du et al., 2017; Dawachter and Toffano), monetary policies affecting business decisions (Massa and Zhang, 2013; Hebous and Ruf, 2017), management arrangements that are put in place that are likely to affect business decisions (Zhang, 2016; Ghouma, 2017; Wang and Lin, 2013) and creditors protection laws/credit ratings among others (Qi et al., 2017; Chong et al., 2015).

The third theme described debt financing with respect to firm performance (12%). The articles explain the effect debt finance has on firm performance as regards to their profitability, firm value, competitive, innovativeness to meet up with demands of customers and growth (Yazdanfar, 2015; Czarnitzki and Kraft, 2009; Haw et al., 2014).

The fourth theme of focus deal with the role of risk in debt financing (8%), it explored the part risk play in debt financing as regards to country instability index, (De Marco and Magano, 2017; Lung, 2014) concession period, asymmetric loss (one party has loss while the other gains i.e. a win loss situation) and the biases of debt holders (Aglardi et al., 2015; Bae et al., 2017).

The fifth most common theme was debt financing and financial crisis (6.7%). It explored the assessment of debt financing in period of currency crisis, recession and periods preceding the financial crises (Zhang, 2015; Pianeselli and Zaghini, 2014; Ko and Yoon, 2011) and also debt financing in a period of currency depreciation (Vanacker and Manigart, 2010).
Recommendation and Implications
Considering that most business owners find financing their businesses via debt acquisition more probable at the end of the day, though stressful, than via any other means, especially when they are limited in knowledge about alternative options, more research should be conducted on the topic. (Chau et al., 2011, Ding et al., 2016). Also, it is pertinent and recommended that more studies, especially inclined towards Africa, Australia, and South Africa, be carried out, so as to have all-inclusive results in the debt financing research field.

Despite the advantages, goodness and merits found in going into the field for data collection, collating and evaluating of variables/ facts directly from principals in firms concerning issues that are linked to financing businesses through debt, there are numerous gaps to be filled from looking into extant literatures. Theories and concepts are significant to ensure their continuous relevance to the field of the study as it ensures the use of accurate variables to measure the accuracy of the results and provide strong backing. Thus the use of conceptual methods could be adopted by future researchers.

Two opportunities for further research on debt financing can be gleaned from the research methods that have been utilized in the articles reviewed. It can be seen from the figure 5, that many of the previous researches adopted the panel data analysis. Firstly from figure 5, it can be clearly seen that a lot of prior studies have adopted the panel data analysis. Although this method is valuable for understanding debt financing, there is a need for future studies to explore the concept of debt financing using interviews, survey and case study the research, the reason been that panel data has to do with stored up data over a specific time period and so it will be more effective if interviews, surveys and case studies are used to get new and recent information.

Secondly, future research could adopt one than one research method, the combination of two or more research methods, seeing that the studies reviewed adopted one single method. This approach will enable future research to gain a greater understanding of the debt financing field and also help to understand the field of debt financing from different dimension.

The top three theories used in the debt financing articles reviewed have been observed over time to be relevant to the field. This is observed in the way their constructs help business owners and economies make better and more informed decisions when it come to the issues associated with external financing choice. They have also been instrumental in helping to solve problems that arise in the process of debt financing. Therefore it is creditable that these theories have been mostly used by researchers in the field. However, other theories such as capital structure, optimal timing, real options, dynamic options and theory of reputation could be suggested for more use in future research.

From the various themes identified in this study, it can be observed that most of the researchers focused on the considerations in debt financing decisions in order to understand the factors that are considered by businesses in making decisions. Whilst this considerations are necessary it also important for businesses to understand the role debt financing play on firm’s performance as it enables the business
owners, lenders and the government to understand the effect debt finance has on growth, expansion and profits of the firm and also on the economy at large. Hence, it is necessary for future researches to focus on the role debt financing play in firm’s performance.

Another gap that has been identified is the effect of corruption on debt financing as only one of the 75 articles reviewed explored discussed this issue, it is therefore necessary that future researches focus on this aspect because corruption hampers the maturity structure of debt. It also affects the asset prices and also reduces the profitability of a business thereby retarding the business growth and the economy at large.

Conclusion

This paper reviewed 75 peer-reviewed journal articles dealing with debt financing. The research explores the time dispersions in the articles, geographical distributions of the countries where the researches took place, nature of the articles (conceptual or empirical), research methodologies, and theories on which the papers that are assessed were based and the various themes explored. The results of the review were discussed in the study, gaps and directions for future research were provided.

Although, a fair number of studies have reviewed the field of debt financing, there is still a wide aspect to be considered such as the effect of corruption on debt financing, policies that hinders debt financing and the means to debt financing, especially because of the important relevance the field has on the business environment and also on the economy a nation at large.

However, some limitations exist in the study, which serve as an opportunity for future researchers on the field to explore. The major limitation of the study is the methodology used, which is the use of title search in six databases for 10 years. While the databases contain high quality, peer-reviewed articles, they do not contain all peer-reviewed debt financing articles. As such, future systematic reviews can use a wider scope of the databases in order to have a greater view of the topic.

Secondly, the study only used journal articles in the review, whilst excluding books and conference proceedings. This is as a result of the SQAT methodology used in the review of the articles to obtain high quality articles. Notwithstanding, there are very useful information that can be gotten from text books and conference procedures that could be used by future researchers.

Lastly, the fact that a title word search was utilized rather than a key word search. A title word search gives a more concise search of articles that are dealing with debt financing. Nevertheless, a key word search would have produced a greater number of articles for the review. Some of the papers might not have been directly addressing debt financing, but might have provided an extra insight on the field.

However, despite these limitations, this study is relevant as it provides an understanding on debt financing for businesses, lenders and government, and gives direction for future researchers that will want to venture into the field.
Reference


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