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A Systematic Review of Financial Intermediaries Research

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ABSTRACT

The purpose of this study is to conduct a systematic review on Financial Intermediaries (FI) with a view to review extant discourses, identify gaps and provide directions for future research in this area. The Systematic Assessment Quantitative Technique (SQAT) developed by Australian researchers Catherine Pickering and Jason Anthony Bryn in (2013), was used to identify and review 43 peer- reviewed Financial Intermediaries (FI) articles from ten high quality academic databases. The primary focus of FI articles in this review were on nine themes and two theories were predominant. The various themes developed from literatures were discussed. The findings of this study would look to guide policy planners and managers on the integral role of financial intermediaries in their daily activities stressing how its overarching function cuts across all facets our financial lives.

SARI PATI

Tujuan dari penelitian ini adalah untuk melakukan tinjauan sistematis pada Perantara Keuangan (FI) dengan maksud untuk meninjau wacana yang ada, mengidentifikasi kesenjangan dan memberikan arahan untuk penelitian masa depan di bidang ini. Systematic Assessment Quantitative Technique (SQAT) yang dikembangkan oleh peneliti Australia Catherine Pickering dan Jason Anthony Bryn pada tahun 2013 digunakan untuk mengidentifikasi dan meninjau 43 artikel Financial Intermediaries (FI) yang telah ditelaah dari sepuluh database akademik berkualitas tinggi. Fokus utama artikel FI dalam tinjauan ini adalah pada sembilan tema dan dua teori yang dominan. Berbagai tema yang dikembangkan dari literatur dibahas. Temuan penelitian ini akan memandu perencana dan manajer kebijakan tentang peran integral perantara keuangan dalam kegiatan sehari-hari mereka dengan menekankan bagaimana fungsi menyeluruhnya melintasi semua aspek kehidupan keuangan kita.

INTRODUCTION

The seminal role of Financial Intermediaries cannot be overemphasized. In part, the banking sector alone accounts for 70percent of deposits in Bulgaria, 70.3percent in Slovenia and 73.8percent in Slovakia; with an average of 6.5percent return on investment in European Union (EU) countries; a loan–deposit ratio of 132percent and a lofty 188,851 new service outlets in the euro area that necessitated the employment of 2,864,106 people in the year 2015 (EBF, 2016). This gives credence to the foremost role it has on the growth and development of economies across the globe (Goldsmith; 1969; Nkoro & Nko, 2013; Sims-Hum, 2017). This overarching function makes financial intermediaries act as lubricants that keeps the engine of the economies running (Wu et al., 2010; Oni & Daniya, 2012). Consequent to this, the efficacy of financial intermediaries is that of a channel concerned with gathering data, conducting appraisals of projects and borrowers periodically and monitoring borrowers' activities or performance (Claus & Cerimes, 2003). To this end, "satisfying the individual portfolio preferences of parties involved and the nature of services requested or rendered by such intermediaries is vital" (Claus & Cerimes, 2003, p.6).

Fundamentally, the term financial intermediaries is used interchangeably with financial institutions to attribute its function to that of an organization such as banks, trusts, insurance companies and investment dealers, charged with conducting financial transactions such as; investments, accepting deposits and issuing same to prospective borrowers (Gennaioli et al., 2014). Worthy of note, is the fact that financial intermediaries are mere channels that facilitate exchanges between holders of assets or cash (depositors) and seekers or borrowers (Andrikopoulos et al., 2014). The pervasive nature of financial intermediaries propels them to discharge auxiliary functions such as insurance portfolio analysis and selection for investors (Aziakpono, 2005).

Principally, these functions and nature of financial intermediaries should stimulate economic growth (Cheng & Degryse, 2010). However, despite the many benefits of this nexus, financial crisis have plagued economies of the world, with increasing questions on the efficiency and effectiveness of financial intermediaries from investors, government and other stakeholders is a discussion far from settled (Chernobai et al., 2011; Erkens et al., 2012). In examining the eight stock market crashes recorded globally; from Black Monday in 1987 to the Chinese stock market crash of 2016 (Tamakoshi & Hamori, 2013 ; Selvakumar & Kirubakaran, 2016 ; Han & Liang, 2017), "whilst Black Monday, the bubble burst of 2000 and the great financial crisis of 2008 marked incredible turnaround in global economies, the remaining five ranging from Asian crisis in 1997 to European debt crisis of 2011, and the 2016 crisis were quite catastrophic on the economies affected in terms of financial instability" (Selvakumar & Kirubakaran, 2016, p.1).

Responding to these, government from all quarters, as well as important stakeholders have sought to stiffen regulations of financial intermediaries to guide against future market crashes. Notably is the Dodd –Frank Wall Street Reform and Consumer Protection Act passed into law by the United States as an effort in curtailing the 2007-2008 financial crisis (Coffee, 2011). The act stipulates that financial intermediaries operate in a manner that depicts transparency, accountability so as to engender financial stability and consumer protection (Coffee, 2011). "Despite its promises, there has been a lot of criticisms of the act" (Coffee, 2011, p.5). Thus, it is pertinent to note that different countries of the world have their own peculiar regulatory frameworks with some international financial regulations such as World Bank and International Monetary Fund (IMF) as their benchmark (Otker-Robe et al., 2010; Henning, 2011; Zheng, 2011)

More so, financial intermediaries have sought to adopt risk assessment measures and techniques of risk sharing and pooling to guide against impending crisis or financial instability (Yang & Zhou, 2013; Bhagat et al., 2015; Rampini et al., 2017).

As discussed earlier, the significance of financial intermediaries in the growth and development of an economy is vital (Moore & Zhou, 2012). However, the intricacies involved in the operation of these intermediaries makes stakeholders (investors, savers, lenders and government) to stay on alert owing to the previous financial crisis (Gup, 2011). Many of the causative agents of the crisis were internal to the financial intermediaries and could have been avoided (Lane & Maeland, 2011; Owens, 2012). But, that was not the case. Instead, billions of dollars were lost from the market crisis (Johnson & Mamun, 2012). Despite these episodes, financial intermediaries are integral to daily living, as we all need some sort of intermediation to facilitate a payment for a product or service or invest in a new venture. Hence, this study sought out to conduct a systematic review on financial intermediaries of peer-reviewed journal articles in order to provide insights on issues pertaining to the field.

In this review, Systematic Quantitative Assessment Techniques (SQAT) developed by Byne and Pickering (2013) was adopted to operationalize two main objectives. First, it aimed to categorize key characteristics of FI research (i.e. the number of journal articles published, the time and geographic distribution of these articles, the type of articles [conceptual vs. empirical], the research themes explored by these articles, the research methods adopted, and the theories used). Second, it endeavoured to provide directions for future FI research whilst drawing insights from the characteristics explored which will be valuable to existing financial intermediaries, researchers as well as providing a starting point for new researchers who are considering delving into the issue of FI research.

The rest of this review proceeds as follows: The next section is the methodology section, which discusses the method and procedures utilized in conducting this study. This is followed by findings and discussions with highlights on 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.

METHODS

A systematic quantitative literature review was conducted on Financial Intermediaries (FI) research using the ''Systematic Quantitative Assessment Technique'' (SQAT) developed by Pickering and Bryne (2013). The SQAT is used to assess only original peer-reviewed English journal publications in determining their inclusion or exclusion criterion (Pickering and Bryne, 2013). SQAT allows researchers, to thoroughly analyse existing academic literature to produce a structured quantitative summary of the field (Pickering and Bryne 2014). The method explores the geographical spread of the literature, the research methods employed, the type of literature, their individual major focus, and theories used (Roy et al., 2012). The researcher found SQAT to be well structured, comprehensive, and easily replicated. Also it illuminates the most critical subjects and variables for future research which are all important components of a systematic review.

To categorise the articles and to provide structure for the review, SQAT recommends a classification framework consisting of five dimensions. Each dimension and how it is applied in this study is described. Within this framework, a total of forty-three peer-reviewed English FI articles were compared across the dimensions outlined in Table 1.

FINDINGS, DISCUSSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Time Distribution of FI Articles

Evidence from Figure 1 shows that 43 peer-reviewed English journal articles were adopted in this study, with the earliest publications in 2008 (Chue & Cook, 2008; Cumming et al., 2008; Fecht et al., 2008) within the last decade the study covered. The year 2008 had the earliest FI research with five articles followed by 4 articles in 2009.A peak was reached in 2016 (6 articles), with publications constant in

Table 1. Description and Application of SQAT

	Dimensions	Application in current study
1.	Define topic	A Systematic review of Financial intermediaries research
2.	Formulate research questions	Six research questions: 1. What is the time distribution of FI research articles? 2. In which countries were these articles written? 3. What kind of FI articles were published? (Conceptual vs. Empirical) 4. What theories were adopted by the articles? 5. What are the specific themes these papers explored? 6. What research methods were utilized to conduct the research?
3.	Identify key words	"Financial Intermediaries"
4.	Identify and search databases	1. 10 databases utilized: Elsevier; Springer; Wiley; Taylor and Francis; JSTOR; Emerald; Sage; Inderscience; Cambridge Journal; Heinonline; 2. "All in title" search using "Financial Intermediaries"
5.	Read and assess publications	1. Abstracts of only original peer- reviewed English journal publications found to be dealing with ''Financial Intermediaries'' were read. 2. Literature reviews book chapters and conference proceedings were not included; only peer-reviewed conceptual and empirical papers were assessed.

2011, 2012, 2014, and 2017 (5 articles). 2010 and 2013 revealed the least number of articles published with one (1) and two (2) respectively.

The search results were extended to include 2018 as the study was to cover the last decade. But, after the analysis, no paper publications were recorded in 2018 as at the time this review was conducted. In the light of this, the current paper is expected to be a publication for the year 2018 and the first systematic review in the FI research field.

Remarkably, to ascertain the level of importance researchers give FI research over the last decade, a ratio of the number of articles published in each year of the last decade is computed. The ratios were computed in percentages by dividing the number of articles published in a year by the total number of articles adopted in this study in other to rank the time periods with the highest publications.

From the analysis shown in Table 2, there were steady interest in financial intermediaries articles by

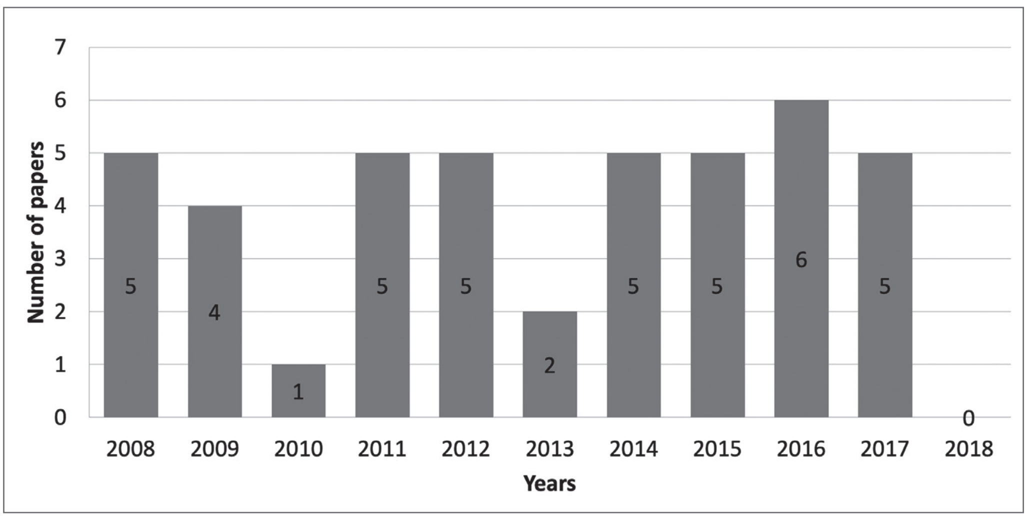

Figure 1. Time Distribution of FI Articles

Table 2. Ratio of FI articles in percentages

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Overall
FI articles	5	4	1	5	5	2	5	5	6	5	43
Ratio (%)	11.63%	9.3%	2.33%	11.63%	11.63%	4.65%	11.63%	11.63%	13.95%	11.63%	100%

researchers: 2008, 2011, 2012, 2014, 2015 and 2017 with percentage ratios at 11.63 percent. However, 2016, revealed a spike in financial intermediaries research due to several events across the globe: Collapse of the Chinese stock market that saw a sharp fall of about 7percent which extended to global markets, with Dwjones falling behind by 5 percent and the US stock indexes that caught the interest of researchers (Johnson & Mamun, 2012; Selvakumar & Kirubakaran, 2016).These events attracted various scholarly interest, necessitating studies on the 8 major stock market crashes with focus on the Chinese economy and its effect on other economies across the globe (Selvakumar & Kirubakaran, 2016). But unfortunately, there was a decline in 2009 (9.3 percent) with a least interest recorded in 2010 (2.33 percent).

According to ft.com, the year 2010, allayed fears of Greek bankruptcy with several opinions that Portugal and Spain could be next on the list and ended with a forced bail-out of Ireland (ft. com, 2016). Consequent upon this, there were worries that this could result in the collapse of the euro which in turn will result in European debt crisis (Ft.com, 2016). It would then suggest that research interests on FI reached its lowest because researchers sought to observe the intricacies of the impending crisis and made up with a surge 5 papers in the following year 2011.

Worthy of note, is the aftermath of the 2008 financial crisis that affected some of the world's best financial institutions (Helleiner, 2011). Observably, one can posit that this tragic event sparked interest in financial intermediaries research. Despite the recovery from the crisis, there were only 13.95% increase in research in the decade under study. This shows that there is a need for researchers to devote more time on financial intermediaries research to give informed analysis and assessment of the activities of financial institutions to curtail impeding future recession or economic crisis that would affect national or global financial intermediation.

Geographical Distribution of FI Articles

Financial intermediaries has appealed to various scholarly interest across the world. Although, research is predominantly from, North America (22 papers), other continents are represented, including: Europe (10 papers), Asia (8 papers) with South America, Africa and Australasia having one (1) paper each. From the above, majority of the papers in this review, focused on North America. This can be attributed to the wake of 2007-2008 financial crisis that resulted in scarcity of valuable assets in the market and the collapse of the financial sector (banks) in the world economy (Helleiner, 2011), the event was felt more by this region.

The question here is then, what is the gap? Considering the disparity in the number of published articles across the globe? In answering this question, it is important to put into consideration the peculiarities of events in the various continents explored. First, the 2007-2008 crisis as mentioned earlier accounts for the surge in researches in North America. Secondly, "the frictions in Greece that led to its collapse and subsequent recue by the European institutions and International Monetary Fund is a massive default in debt" (Selvakumar & Kirubakaran, 2016 p.1) spurred financial intermediaries research interest in Europe. It is pertinent to stress that the American

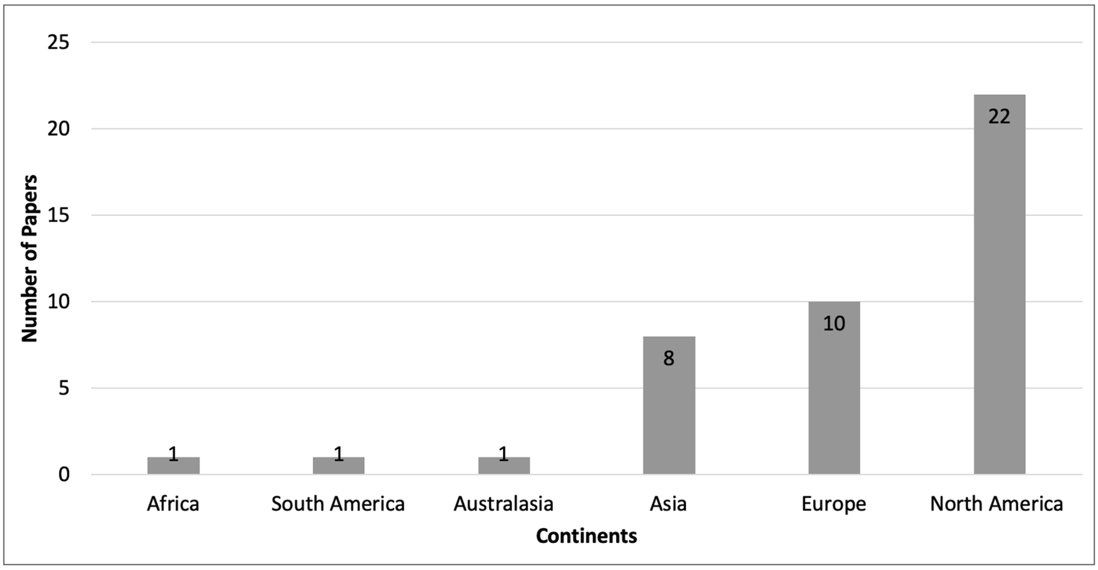

Figure 2. Geographical Distribution of FI Articles

and European economies were most affected by the crisis. Hence, financial intermediaries in these regions are adopted as models by other countries while developing or strengthening their institutions. Therefore, future studies need to identify the critical success factor of models adopted for financial intermediation in these continents given their peculiarities.

Another gap is the sparse literatures in Africa. From the 43 articles reviewed in this study, only 1 paper was published in Africa. The researcher attributes this to the developing nature of the country, non-disclosure of data regarding their institutions and less interest in the field. Despite these shortcoming, future research should be carried out in the continent by using evidences from Europe to make a comparison of the strengths and weakness of domestic institutions.

Research countries

From a country perspective, 22 countries were represented in the systematic review of FI research. Figure 3 presents the top four countries where

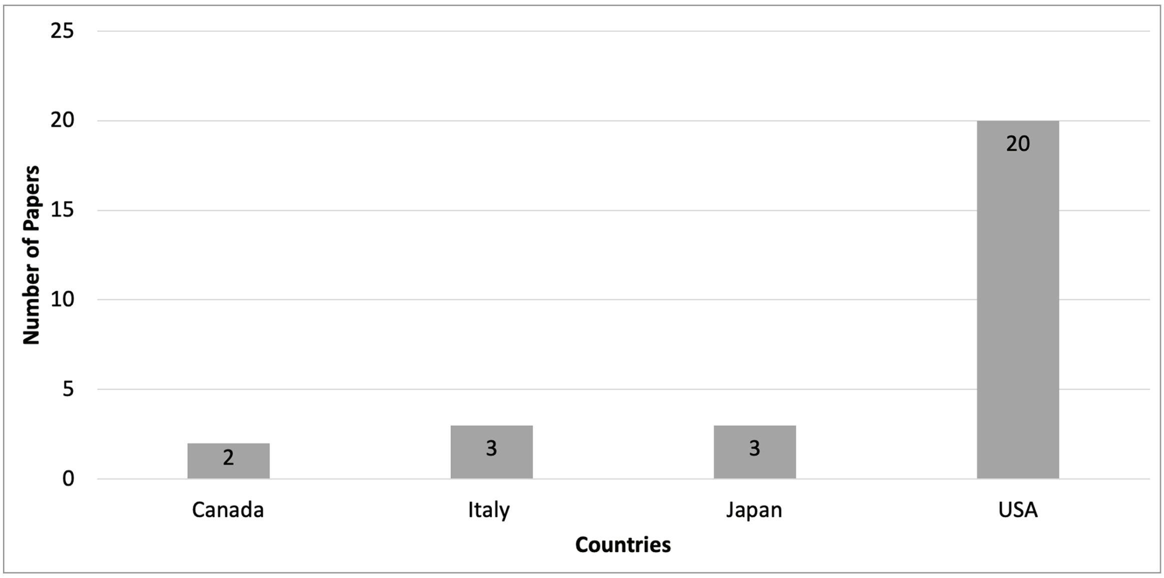

Figure 3. Top FI Research Countries

FI research was conducted. It can be seen that although North America as a continent had the greatest number of articles (Figure 2), USA actually had the greatest number of articles (20), followed by Italy and Japan with (3) each and Canada(2). The remaining 18 countries only had one article each representing them.

According to worldatlas.com, there are currently 196 countries in the world (World Map, 2017). As mentioned earlier, only 22 of these countries had FI articles published in them in this review. Observably, this study only included articles published in English, this fact must be taken with that in mind. But still, many countries of the world are not represented in FI research, considering the fact that financial intermediaries are central in all economies of the world. A crisis or setback in its operations could trigger economic recession. Hence, the need for researchers to delve into this field is both urgent and important, as it will x-ray the activities of financial institutions domestically and internationally.

Article Types

In order to properly classify the 43 articles, they were divided into two categories: conceptual and empirical article types. Conceptual articles were defined as those that provided theoretical models or typologies on FI, whilst empirical articles were those which collected data quantitatively or qualitatively in order to test a particular hypothesis in the real world (Conceptual and Empirical: Which is Better, 2016). Figure 4 presents the breakdown of the 43 articles based on this categorization.

As shown in figure 4, 19 out of the 43 articles reviewed representing 44.2% are conceptual in nature, whereby the authors gave insights on models of FI (Fecht et al., 2008; Bertocco 2011; Dewachter & Wouters, 2016). Interestingly, a large number of the peer-reviewed English journals (55.8%, 24 out of 43) are empirical in nature and focused mainly on risk management (Alexander & Baptista, 2009; Gounopoulos et al., 2013; Delis et al., 2014,), international debts (Chue & Cook, 2008), trading schemes and internet banking (Zhang et al., 2012; Atanasov et al., 2015), economic fluctuations and money laundering (Otusanya et al., 2011 ; Lhuisser, 2017), financial regulations (Kim, 2011; Beck et al., 2014; Habel & Werfel, 2016), financial vehicles (Ciccarone, 2008 ; Morgan & Samolyk, 2012), reputation and borrowing (Fishman, 2009; Chen et al., 2017) and ownership structure and firm value (Fischer & Mahfoudhi, 2009 ; William & Young , 2012).

This disproportionate representation is an obvious gap in FI articles which future researchers should address. Whilst it is laudable that financial intermediaries researchers are adopting ways to regulate and mitigate inherent risk in their investment portfolio in order to avoid financial distress, empirical evidences will determine the nature of such financial intermediations and

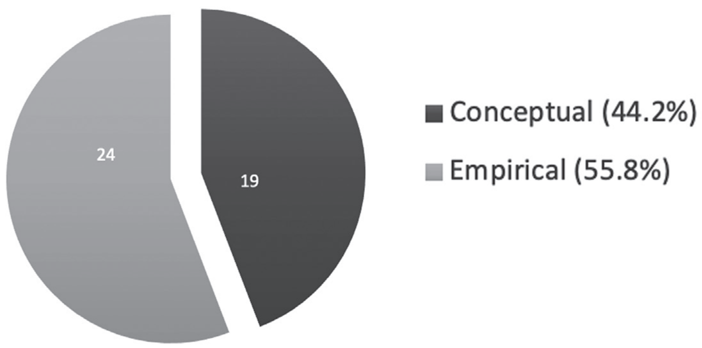

Figure 4. Article Type

provide more backing for their real life application and execution. Hence, there is a need for more empirical studies.

The descriptive statistics from figure 4, revealed an imbalance in the number of conceptual and empirical articles. This difference is suggestive that most empirical evidences (economic fluctuations in form of financial crisis, money laundering) are real life events, giving credence to the number of empirical papers. Hence, there is a need for future researchers to investigate further into daily financial intermediation in order to empirically test for trends likely to result in financial distress or economic fluctuations. The attainment of this would mitigate impending crisis or frictions in the economy or business by identifying re-occurring trends that points towards financial crisis.

FI Themes

From the papers assessed in this systematic review, 32.56percent representing 14 papers were on models of financial intermediaries that developed theoretical models to simulate the variables explaining financial intermediaries or intermediation. To begin with, financial intermediaries were proposed as banks in defining their role of creating and making money available for investment (Bertocco 2011), thereafter, in understanding the variables of loans in the banking sector, as well as conditions which pertains to when the borrowed funds would be repaid, the dynamics of the underlying factors were seen as causes of financial shocks (Mimir, 2016; Ucar, 2015), how net borrowing and net savings could stir up conflicts amongst affiliates and administrators (Fischer & Mahfouhi 2009), and how the volatility of an environment (economy) could encourage investments as well as factors of growth and nature of market in channelling risks (Fecht et al., 2008; Ohio & Sugawa 2016; Dewachter & Wouters, 2016). Also noted were likely moral hazards of financial intermediation across borders and the associating externalities that would require international regulations (Kim, 2011).

Based on the above explanations, financial intermediaries have been modelled to facilitate investments (Bertocco 2011). But, in achieving this function, they must assess the portfolios of investments available to them in order to curb or mitigate impending risk that would result in a loss, hence the need to manage risk arising from financial intermediations.

The second most common theme focused on Risk Management (16.28percent). The papers explored the use of “stress testing to set risk exposure limit” as an approach to managing risk (Alexander & Baptista, 2009) and how the international focus of large firms makes them susceptibility to currency risk (Gounopoulos et al., 2013). Consequently, the use of financial statements and internal risk factors of firms were assessed as part of effort towards ensuring a proper credit evaluation (Jaaskelinen & Maula, 2013; Delis et al., 2014; Sekkel, 2015). Also discussed, were how natural disasters affects the operations of financial intermediaries in some countries owing to the fact that, in most cases, borrowers affected by such disasters are unable to repay the amount of money borrowed (Collier & Skees, 2012). Subsequently, the approach used by a bank (investment analyst) was stressed as indices relative to the bank that could be used as a basis to explain future obstacles or failures (Desai et al., 2016).

These several approaches or factors adopted in risk management would then be strengthened by stiffening regulatory frameworks that would ensure that investors’ funds and interests are well protected. This leads us to the next theme.

Financial regulation (13.95percent) were the third most common theme amongst the FI articles reviewed. “Financial regulation is perceived as a truism that usually evolves in response to financial crisis” (Begg, 2009, p.2). In responding to crisis, specific rules governing the conduct of business, practices that can curb sharp practices by banks, and a liquidity level that matches sector level monitoring of financial institutions were seen

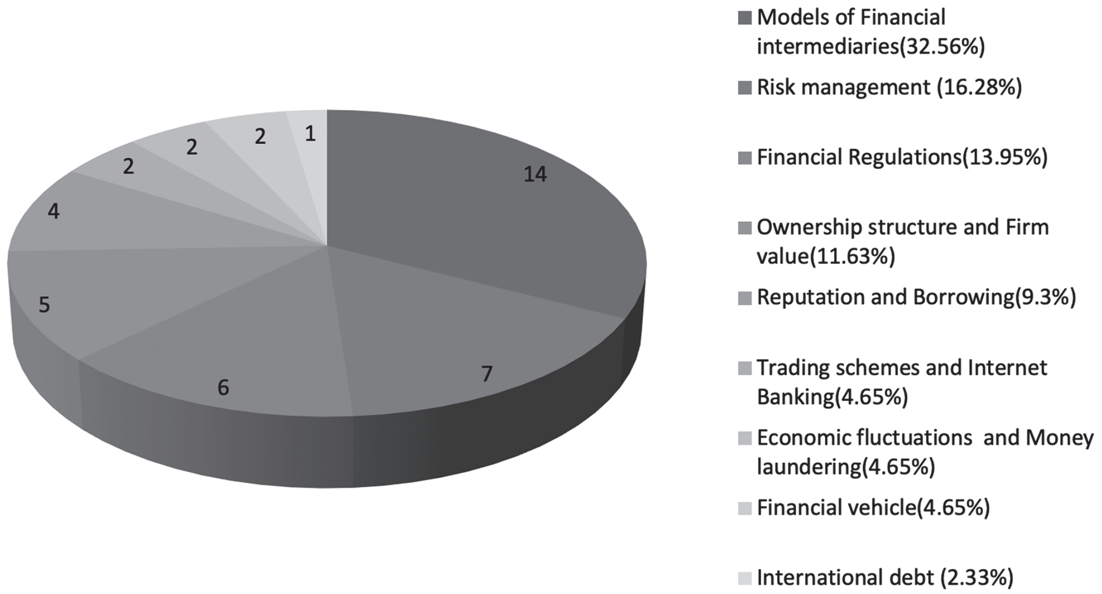

Figure 5. FI Themes

as ways of regulating financial intermediaries (Begg, 2009; Beck et al., 2014).Consequent to this, regulatory and supervisory frameworks were suggested to guide financial intermediation globally just like the private sector would have (Dombret & Ebner, 2013).

The fourth most common theme is "ownership structure and firm value" (11.63percent). This category of papers examined the extent to which a capital provider for an investment affects the ownership structure of a firm and determines the sources of funding available to the firm that would increases its value (Cumming et al., 2008; Vintila & Gherghina, 2014) .They went further to discuss the capital market with keen interest on mergers, acquisitions and takeovers to explain the effects of capital market intermediation on the ownership structure and value of a firm and how asset quality, stability and dynamics of financial institutions defines the net proceeds of a firm (William & Young, 2012; Mirza et al., 2015).

Fifthly, discourses on "Reputation and Borrowing" (9.3percent) would start by stressing how firms and individuals that are credit worthy engender a positive reputation in terms of loyalty to their lenders (Gopalan et al., 2011; Piskorski et al., 2015). Consequently, ethics and transparency related issues were addressed as key in fostering a reputable image for firms seeking to go public as they determine the perceived interest of underwriters (McLeod et al., 2016; Chen et al., 2017).

The next group of articles with the most common themes were "trading schemes and internet banking" (4.65percent), "economic fluctuations and money laundering" (4.65percent) and "financial vehicle" (4.65percent). For the "trading schemes and internet banking" theme, articles reviewed examined the influence of financial intermediaries on the behaviour of traders in a stock exchange market with central focus on the many incentives they get from their unscrupulous activities (Atanasov et al., 2015). Subsequently, the various approaches used in adopting e-service channels by financial intermediaries as well as, how it is deployed in stock trading were also pinpointed (Zhang et al., 2012).

On the other hand, is "economic fluctuations and money laundering" articles that set out to explain how certain activities, practice of political office holders and experts (lawyers and other professionals) in the economy causes business fluctuations and support fraudulent activities (Otusanya et al., 2011; Lhuisser, 2017). Also discussed were heads of financial institutions use their office in aiding money laundering (Otusanya et al., 2011).

In addition is "financial vehicle" (4.65percent) representing 2 papers out of the 43 articles reviewed in this study. This category of papers discussed how the efficiency of capital internal to a firm and that of other investments facilitates business development and the participatory role of various investment groups in capital provision for a business (Powell et al., 2008)). Subsequently, the extent to which credit rationalisation affects the financial strength of a business was examined. (Biza-Khupe et al., 2012).

Lastly, the "international debt" (2.33percent) theme included one article that sought to examine how short term borrowing, specific foreign currencies used by intermediaries and disparities in currency deposits and domestic currency assets increases or decreases international debts (Chue & Cook, 2008).

Meditating upon the various FI themes identified in this review, it can be observed that majority of researchers have focused on models of financial intermediaries. In the various models explored, they sought to simulate various activities and roles of financial intermediation to form a theoretical background for explaining their behaviours in both future and present scenario. Intuitively, the aftermath of the eight (8) global financial crisis, that spurred the warnings of distress and impending risk afforded intermediaries frameworks for understanding the behaviour of the market. Regardless of the number of interest researchers gave it, future researchers should also look to simulate previously tested theories to determine their relevance given the global trends that has constantly changed economies of the world.

Trading schemes and internet banking articles adopted in this study represents 2 out of the 43 journals reviewed. Central to their discussion is the manipulative tendencies obtainable in floor trading and the use of e- communication to improve the performance of financial intermediaries (Zhang et al., 2012; Atanasov et al., 2015). This figure is almost negligible which suggests that researchers should focus on the specific elements of stock or share prices that incentivise floor traders whilst quantifying an aggregate of their indices for analysis. To this end, the use of internet banking for stock trading is another area for future research.

Despite the likely causes of financial crisis identified by Chue and Cook (2008), it is equally important that future researchers explore the drawbacks in international borrowing taking into consideration the country specific attributes that could influence the economy of the lending countries or foreign financial intermediaries. The study reviewed only 1 out of 43 papers dealing with the issue of international debt. This shows gross under-representation in the 43 sample of FI articles adopted in this study.

Another gap that has been identified is the sparse literatures on economic fluctuations and money laundering. Only 2 out of the 43 articles reviewed addressed this issue. Hence, there is an urgent need for researchers to use forensic accounting to dissect the likely causes of economic fluctuations and money laundering with emphasis on sharp practices or frictions that triggers inflation.

More importantly, is the 2 out of 43 articles on financial vehicles adopted in this study. In discussing the many benefits they bring, literature suggests that without individuals and their deposits in banks, there would be no intermediation (Morgan & Samolyk, 2012). It is therefore pertinent for future researchers to examine the intricacies of financial vehicles and recommendations on the most profitable ones should be studied.

Research Methods

This section, seeks to identify the major research

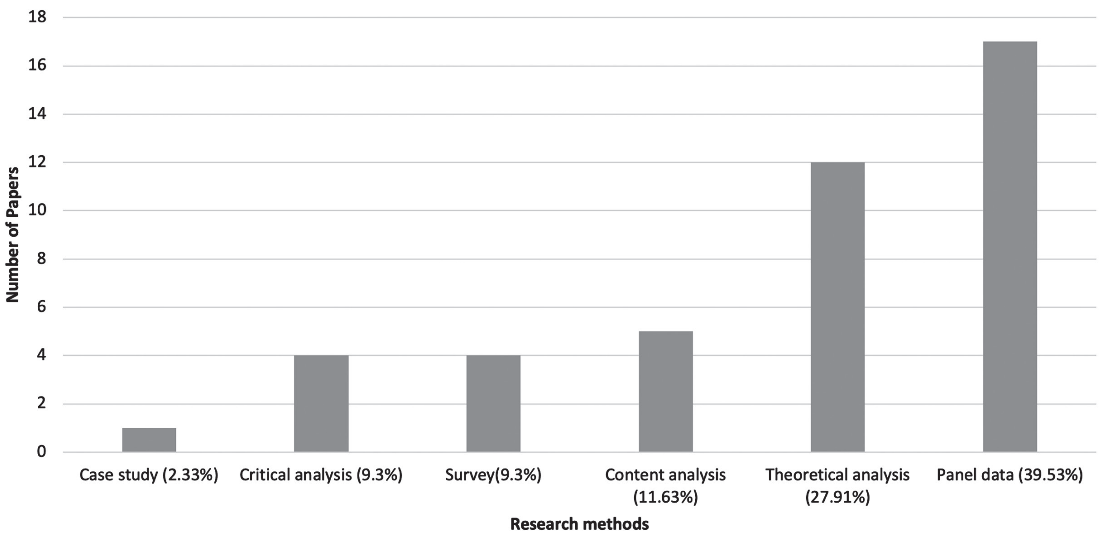

Figure 6. Research Methods

method employed in each of the 43 FI articles reviewed in this study. Figure 6 provides a summary of the findings.

A wide range of methods has been used to assess FI articles adopted in this study. Majority of the literatures (39.53percent) employed the use of panel data. Studies using this method dealt chiefly with issues regarding risk management, financial regulations and international debt.(Chue & Cook, 2008 ; Alexander & Baptista, 2009; Gounopoulos et al.,2013; Delis et al.,2014,) As described earlier, these studies would assess investment portfolios, stiffen regulations to guide against impending financial distress and evaluate the role of currency gaps in financial intermediation (William & Young, 2012; Jaaskelinen & Maula, 2013; Vintila & Gherghina, 2014; Mirza et al., 2015).

Theoretical analysis which involved the use of simulations (Fecht et al., 2008; Bertocco, 2011; Dewachters & Wouters, 2014; Fishman, 2009) was the second most common research method, representing 27.91percent of the FI articles reviewed.

Closely trailing theoretical analysis, is the third most common research method “content analysis” representing 11.63percent of the 43 articles reviewed in this study. Five articles (Otusanya et al., 2011; Collier & Skees., 2012; Mcleod et al., 2016) adopted this method in this review.

The survey of financial intermediaries (Beck et al., 2014; Habel & Werfel, 2016) and the use of critical analysis to analyze financial intermediation variables (Wood & Wright , 2010 ;Bertocco, 2011; Dombret & Ebner, 2013) were methods utilized equally by 9.3percent representing 4 number of articles each reviewed. One article, Atanasov et al., (2015), adopted case study in their analysis, thus completing the six distinct research methods identified in this review of FI articles.

From figure 6, it can be clearly seen that a lot of studies have adopted panel data. Whilst this method is appreciated in understanding FI, there is a need for future studies to explore specific international debt instruments in relations to borrowers and lenders credit worthiness (reputation and borrowing) through surveys, critical analysis and case studies. Additionally, more panel data analyses can be employed to reveal the long term effect of reputation and borrowing on international debt financing.

Another opportunity for future research lies in the fact that most of the studies reviewed adopted the use of a single research method with focus on the exact variables they sought out to test. Future research can combine the use of theoretical proponents on each of the constructs understudy (for example risk management) with content and critical analysis in appraising investment portfolios.

Theories adopted

From the 43 peer-reviewed journal articles adopted in this study, twenty eight (28) out of 43 were identified to not have adopted the use of theoretical backings for their studies. In these studies (Fishman, 2009; Kim, 2011; Gounopoulos et al., 2013; Dewachters & Wouters, 2014) there were no theoretical underpinnings for their studies as revealed by this review. It is likely that their findings demystifies the notion that all research requires theories. Also, it could mean these studies were carried in order that their findings would be examined to represent theoretical frameworks.

Also, an additional ten papers used one or combinations of theories to support their research (Ciccarone, 2008; Fischer & Mahfoudhi, 2009; Wood & Wright, 2010; Bertocco, 2011; Adrian et al., 2014). Amongst these theories were post Keynesian theory, equilibrium theory, and institutional theory.

Table 3. Top ranking articles using theories and those without theories

Theories	Number of times used in papers
Economic theory	3
Portfolio theory	2
None	28

*Note that the remaining 10 FI papers used a theory or combination of several other theories by 10 separate authors

Contrary to this, significant researches (Chue & Cook, 2008; Delis et al., 2014, Biza-Khupe et al., 2012), were observed to have adopted the use of economic theory as a theoretical framework backing their research. Typically, economic theory is defined as the "use of reports organized in such a way that it permits the calculation of an economic phenomena at either a firm-level or macroeconomic effect" (Nagel, 1963 p.1). First, the Studies adopting this theory sought to examine the empirical significance of variables of international debt on performance during the Asian crisis (Chue & Cook, 2008). Their findings revealed that the effects of the crisis were triggered by short-term borrowing, long-term international debt and the adverse in stock return of non-bankrupted intermediaries to indicate the nature of foreign currency and its effects on issuers. From the above, it is observed that the identified theory corroborates the empirical evidences gotten, hence the adoption of the theory is justified. Similarly, other studies (Delis et al., 2014) considered US bank risks using variables in profitability function to assess their capital and liquidity. However, their findings provided strong evidences that risk levels of large banks and banks that failed during the crisis were more than half in the financial sector with statistical prove that would help solve future solvency problems. These research outcomes were perceived to be macroeconomic variables that sought to examine characteristics of variables in an entire economy. Furthermore, Biza-Khupe et al (2012) stressed the significance of information intermediaries on the credit choices of consumers in order to maximise their standard of living. These individual level analysis is portrayed as a sovereign economic entity directed at judiciously matching their consumption needs to offers in the market (Rischkowsky & Doring, 2008). Their findings suggests that information intermediaries really do have influence on borrower's finance choices. Irrefutably, both findings (Delis et al., 2014, Biza-Khupe et al., 2012) satisfied the conditions of economic theory.

The gap here is that future studies should concentrate on adopting more of this theory to provide theoretical underpinnings for their research in terms of relevance and behaviour of economic variables in a given certain phenomena.

Consequently, another theory predominantly common to the economic theory in this review is portfolio theory. Markowitz (1991) defined portfolio theory as one that investigates how risk-averse investors structure their portfolios to optimize expected return given current risk level. It simply means, "Owning different kinds of financial assets is less risky than owning only one type" (Markowitz, 1991 p.7). Two studies (Alexander & Baptista, 2009; Collier & Skees, 2012) adopted this theory as a foundation for their research. Typically, researchers would employ the use of stress testing to appraise investment portfolios and their expected returns in portfolio selection by diversifying their investments (Alexander & Baptista, 2009). "Their use of stress testing was to expose impending risks and to set their exposure limit by way of adopting constraints to examine their skewness and kurtosis" (Alexander & Baptista, 2009 p.2). The research findings supports the theory by simplifying stress testing constrained portfolio problems into fund allocation of wealth.

On the other hand, is the work of Collier and Skees (2012), who examined how financial institutions can be resilient through portfolio-level insurance against natural disaster. Their findings is suggestive that financial intermediaries have adopted the use of insurance as a risk management plan to reduce the adverse of providing financial services (such as loans) to victims of natural disasters. The adopted theory, evaluates this situation and all the intricacies involved to inform the intermediaries on portfolio management.

The gap identified here is that, in spite the importance of this theory, only 2 papers out of the 43 peer-reviewed journal articles research employed this theory. The gap here is very much significant, hence future studies should focus on the use of portfolio theory to assess the inherent risk that comes with various investments by analysing their expected returns and risk. Also, future research should adopt elements of stress testing to set risk exposure limit by simulating the expected returns and impending risks associated with such portfolios.

MANAGERIAL IMPLICATION

The findings of this study would look to guide policy planners and managers on the integral role of financial intermediaries in their daily activities stressing how its overarching function cuts across all facets our financial lives.

Despite the relevance of theoretical frameworks, it is important that future research is tailored towards developing new theories as previous theories are still relevant but are due for a review (since they have been around for over 5 decades), and FI phenomena changes always.

There is still significant room for more conceptual researches in this area particularly in Africa. This is pertinent for a developing country as it will assist in devising a framework to guide the activities of FIs in this region.

CONCLUSION

In this review, 43 FI peer-reviewed journal articles were examined along six key categories, including the time distribution of the articles, geographical distribution of the article, article type, research themes, research methods and theories used. The results of the review were discussed and directions for future research were provided. However, the following are to be noted.

The major limitations of this study is the SQAT methodology adopted. This method restricted literature search to only ten (10) academic databases. While these databases contain high quality academic papers, future research can widen the scope of the database to gain more insights on FI research.

Also, the search term used to identify the theories (control 'F' then type 'theory' and click enter from a laptop) from the papers is likely to be a limitation. Future studies in using this function, should scan through the entire paper for relevant theories or type 'theories' and 'theory' as search titles as the need arises.

Another limitation in this review is the search title employed to source for articles from the databases. The review adopted the use of one title word "Financial intermediaries". Future research should employ the use of multiple search combinations to get more insights on financial intermediation.

However, despite these limitations, this study provides a quantitative summary of FI research with knowledgeable insights about the discourses and suggests areas for future research from the various themes explored in the 43 FI peer-reviewed journal articles. ■

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