COUNTRY'S CHARACTERISTICS, BANK LIQUIDITY AND BANK RISK-TAKING: A REVIEW

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Abstract:

This article conducted review of empirical literature on the effect of country characteristics, bank liquidity on bank risk-taking behaviour and pointed out directions for future research. Studies on country's characteristics, bank liquidity and bank risk-taking have identified risk associated with the distinct characteristics of different countries and how they affect the banks' risk-taking behaviour. This paper discusses different scholar's findings and highlight areas of concern. Recent studies focus on risk-taking behaviour with emphasised on areas of culture, development, political stability, ownership structures, and beliefs. The paper discussed issues that are important to countries' risk-taking behaviour and discovered areas for future research.

Keywords: - Countries' characteristics, banks' liquidity, risk-taking behaviour

Introduction

Banks risk-taking behaviour have been the major concerned to stakeholders, particularly, the regulatory authority. This is because banks' excessive risk-taking have been argued as one of the key factors that caused banking crises as well as the financial crises which had eroded the banks' assets and subsequently led to instability in the banking industry through systemic risk. To ensure stability in the banking sectors, supervisory authorities from selected countries had agreed on an enhanced and common supervisory measure that would minimise banks risk-taking. Thus, the Basel Committee on Banking Supervision (BCBS) was formed in 1974 under the Bank for International Settlement (BIS) to make recommendations on banking regulation to ensure quality and stable banking industry across the globe (Alsharif, Md Nassir, Kamarudin, & Zariyawati, 2016). The Basel came up with the first accord, Basel 1 (the capital accord) in 1988 which recommended among other things, the review of banks' capital requirements as a benchmark for assessing the soundness of banks. As a result, banks' regulators across the globe had increase the minimum capital requirement to comply with the Basel 1 standard. This has brought about innovation and liberalisation in the banking sector that subsequently resulted to high risk-taking. As a result, there was systemic banking crises which caused banks huge losses particularly in Asia and Eastern Europe (Alsharif et al., 2016; Pedro, 2013).

Similarly, the 2007-2008 global financial crisis (GFC) was believed to have erupted some few years after the implementation of Basel II accord. The Basel II was introduced in 2004 to further strengthen the stability and soundness of banks, particularly, the international banks (BCBS, 2004). This accord introduced three pillars as measures to improve soundness and stability of the banking sectors. The pillars included the minimum capital requirement which required the banks to maintain capital as a buffer to credit risk, market risks as well as operational risks (BCBS, 2004). On the other hand,the pillar II and III are the supervisory review and evaluation process and market discipline that are concerned about banks' internal risk assessment and strategies, and the disclosure on allocation of capital and risk exposure (BCBS, 2004). However, the recommendations, particularly, pillar II and pillar III does not

reflected on banks behaviour as studies such as by Acharya and Naqvi (2012) Berger and Bouwman (2017), Demirgüç-Kunt and Huizinga (2010), Mairafi, Hassan, and Mohamed-Arshad (2018), and Sanusi (2011) argued that high risk-taking was the main cause of the 2007-2008 GFC which claimed many banks world over. For example, Sanusi (2011) maintained that Nigerian banks were affected by the 2007-2008 GFC as a result of excessive lending in the risky sectors, because the real sector of the economy could not absorbed the banks excess liquidity. Meanwhile, Demirgüç-Kunt and Huizinga (2010) stated that in the USA and Europe the interbank lending had been to a factual stagnation due the effect of the crisis. Similarly, Neaime (2013) stated that financial markets of Egypt, Jordan, Kuwait, Morocco, and United Arab Emirates (UAE) are affected by the GFC because of high exposure with global markets. This is because international trade and investment inflows provided linkages for transmitting the crisis.

Consequently, the BCBS had introduced the Basel III in the aftermath of the 2007-2008 GFC to ensure stability and sustainability in the banking sector by regulating the banks' high risk-taking. The Basel III introduced additional standard on capital and new liquidity standards to intensify regulations, especially, on the banks high risk-taking behaviour and ensure the long-term sustainability of the banking sector. Basel III require the banks to meet two different minimum liquidity ratios namely, (1) liquidity coverage ratio (LCR) and (2) net stable funding ratio (NSFR). The LCR require banks to hold adequate liquid assets to cover thirty days of cash outflows during a crisis period whereas the NSFR require banks to finance their medium and long-term loans with stable funds that are not likely to run during the crisis period. In response to the Basel III liquidity standards, banks have to increase the amount of the liquid assets and cash they hold to hedge against liquidity risk (DeYoung & Jang, 2016; Khan, Scheule, & Wu, 2017). The new Basel III standards have received heightened attention across the globe, especially the liquidity standards which are new to the Basel requirements. The liquidity standards required banks to hold more high-quality liquid assets (HQLA) such as government bonds, financial assets such as securities issued or guaranteed by specific multilateral development banks or sovereign entities, and publicly traded common stock and investment-grade corporate debt securities of nonfinancial sector corporations (BCBS, 2013).

The new standards are considered as a catalyst to improve the banks' ability to enhance their risk-return profile (Strategy&, 2017). Similarly, scholars such as Bonner (2016) and King (2013) argued that the new liquidity standards are considered as a measure to control the bank risk-taking behaviour especially, during the period of abundant liquidity. Moreover, the new standards will increase the banks' ability to absorb shocks, especially during the crisis period (Drehmann & Nikolaou, 2013). However, the magnitude of the new liquidity standards could have different effects on countries around the world, particularly, as the countries across the globe have distinct characteristics. More so, countries are classified as low income, middle income and high-income. This is because the new liquidity standards which emphasised on the need to maintain HQLA required a country to have a functional and well-developed bond markets, as well as the adequate financial instruments for banks to efficiently allocate and manage their portfolios. Conversely, the distinct characteristics of countries stemming from differences in the political systems, religious beliefs, legal systems, natural endowment, level of development, and cultural system among others have made them to have different levels of financial market development. For example, International Monetary Fund (2017) and Strategy& (2017) reported that Middle East and North Africa (MENA) region does not have consistent and deep securities and bond market to provide such kind of HQLA. Consequently, banks in the region are highly vulnerable due to the paucity of financial instruments for the banks to diversify their assets portfolio. This has resulted to the high assets concentration on loan. Moody (2015) reported that, in the event of default, there will be significant effect among the banks in the MENA region because of the

high loan concentration. Bacha (1998) and Laeven (1999) have shown that high loan concentration is an indication of high risk-taking that could have adverse effect on banks because of high exposure to financial risks.

Moreover, although the adverse effects of the GFC have severely affected the banking sectors in many countries, Ashraf, Zheng, and Arshad (2016) argued that the severity vary amongst banking sectors in different countries. As a result, studies on determinants of cross-country differences in bank risk-taking received more attention. Accordingly, this study conducted literature review on the effect of country's characteristics, bank liquidity on bank risk-taking behaviour. We found that most of the studies mainly focused on factors such as national culture (Ashraf et al., 2016; Gaganis, Hasan, Papadimitri, & Tasiou, 2019; Mourouzidou-Damtsa, Milidonis, & Stathopoulos, 2017), factor endowment (González, Razia, Búa, and Sestayo, 2017), political and legal systems (Ashraf, 2017; Laeven & Levine, 2009; Srairi, 2013). However, studies on how country's characteristics, bank liquidity affects bank risk-taking are relatively scanty in the banking and finance literature. As such, there is a need for further research in the area, particularly, with focus on the relationship between bank-specific variables such as capital and liquidity with country's characteristics and bank risk-taking.

Recently, studies on how bank liquidity influences their risk-taking behaviour were carried out by Acharya and Naqvi (2012), Berger and Bouwman (2017), Drehmann and Nikolaou (2013), Khan et al. (2017) but mainly focused on developed nations. A study by Dahir, Mahat, and Ali (2017) was carried out using a sample form Brazil, Russia, India, China, and South Africa (BRICS) countries. Similarly, a study by Ha and Quyen, (2018) only focused on funding liquidity risk and bank risk-taking in Vietnam. However, the scope of their studies is only limited to the effect of bank specific factor on the banks' risk-taking with lesser emphasis on how the distinct feature of those countries influenced banks' liquidity and the risk-taking behaviour. A better understanding of the potential relation between country's characteristics and how they affect the banks liquidity and their risk-taking behaviour is imperative as it will provide additional insights on the implication to different country. As such, the Basel III capital requirement and the new liquidity standards will not be regarded as a one size fit all policy for all the countries. Particularly, when the current regulatory reforms in global banking regulation have focused on getting banks to become more liquid than they have been in the past, and how different countries are labouring to comply with the Basel III requirements (Strategy&, 2017).

Our paper differs from existing literature survey on banks' risk-taking that have focused on factors such as Islamic banks (Mairafi et al., 2018a), and liquidity (Mairafi, Hassan, & Mohamed-Arshad, 2018b). However, none of the aforementioned studies focused on the country's characteristics and how they vary among countries in the world and which explained the different behaviour. In addition, this paper focused on the more recent studies on country's characteristics and risk-taking behaviour, particularly, in the aftermath of the GFC.

The remaining sections of this paper are as follows; Section 2 provided theoretical insight on country characteristics, while Section 3 elaborated on recent empirical studies that have attempted to provide evidence on how a country distinct feature can affects the bank risk-taking behaviour. Lastly, Section 4 concluded the study.

2 Theoretical Framework

Countries across the world have distinct characteristics due to factors such as natural endowment, political system, religious believe, legal systems and cultural systems, among others. These differences result to differences in the level of growth and development, political system, business environments,

as well as risk-taking behaviour. In line with this, Leamer (1993) maintained that factor endowment supply is one of the main factors that distinguished one country from another, which in turn influences their economic activities due to availability of natural resources. Consequently, the level of risk-taking behaviour of such countries will be different from others that are endowed with such resources. As a result, Hill (2004) argued that the level of economic activities as well as entity's risk-taking could differ in different countries due to competition that could occur because of the economic activities within the territory. Undoubtedly, these economic activities are required to be facilitated by banks through financing and payment services. This is because the key roles of banks include financial intermediation and provision of financial services (Akerlof, 1970; Allen & Santomero, 1998; Benston & Smith, 1976; Berger & Bouwman, 2009; Cornett, McNutt, Strahan, & Tehranian, 2011; Diamond, 1984). Hence, banks intermediate by provision of liquidity, risk transformation and delegated monitoring. In doing so, Berger and Bouwman, (2009, 2017) have pointed out that liquidity creation which is one of the essential functions of banks in creating economic growth and development is not a new concept, as it dated back to Smith (1776) who maintained that bank liquidity creation is a key factor for the economic growth.

Another factor that can influence the bank risk-taking behaviour in a country with relatively high economic activities is competition and concentration. Banking competition influences the liquidity and risk-taking behaviour of banks and leads to instability in the sector. According to the competition-fragility hypothesis, competition encourages banks to take on more risk to increase returns. Banks competition decreases profit margins, reduces the market value of banks beyond their book value (Allen & Gale, 2004; Berger, Klapper, & Turk-Ariss, 2009; Markus, 1984).

Religious beliefs and political systems are another country's characteristics that can influence the banks risk-taking behaviour. For example, Islam has forbidden the given out and/ or receiving in payment of interest in any financial dealings, and other practices of the conventional banking system. This had led to the emergence and proliferation of the Islamic banking system in many Muslims countries across the globe. During the past three decades, the field of banking and finance in the MENA region have experienced an evolution of the Islamic mode of banking (Gonz´alez et al., 2017; Hasan & Dridi, 2011; Mollah, Hassan, Al Farooque, & Mobarek, 2017; Srairi, 2013; Turk-Ariss, 2009). Prior to the emergence of Islamic banking, the conventional banking system was the only banking system that monopolised the financial intermediation services within the MENA region. Then in the early 1960s, Islamic banking started as an ordinary deposit taking and lending facility under the Islamic Shariah principles. Late 1960s and 1970s during the boom of oil price, a significant amount of capital inflow was directed into some of the MENA countries that further boost the Islamic banking. Islamic banking has since gained acceptance and is consistently growing. Islamic banks hold 80 percent of the over USD2 trillion total assets of Islamic finance (Abedifar, Ebrahim, Molyneux, & Tarazi, 2015; Aliyu, Hassan, Yusof, & Naiimi, 2017; Hussain, Shahmoradi, & Turk, 2015; Mollah et al., 2017; Srairi, 2013). According to the Islamic Financial Services Board (2016), Islamic banking in the MENA region represents about 80 percent of the total Islamic banking system globally. The emergence of Islamic banking in the MENA region and its rapid growth across the world have created competition among the two banking systems.

Similarly, countries with abundant natural resources attracts trade integration with other countries, especially resources that are used as major raw materials for industrial use and major energy sources such as oil and gas. Trade integration with other countries through bilateral trade relation increase economic activities as well as the vulnerability among countries. This is because the relationship attracts huge foreign direct investment (FDI) and foreign portfolio investment (FPI) during a boom

period in another country. Also, it leads to withdrawal of such during the crisis period in the host country. For example, Caporale, Pittis, and Spagnolo, (2006), Dornbusch, Park, and Claessens (2000), Mairafi (2011) argued that the increased level of financial integration among world economies in recent times, especially bilateral trade relations between the developed and emerging economies has promoted the rapid contagion and spillover of the GFC to other economies which hitherto thought they were insulated. Similarly, Sanusi (2011) explained that the 2007-2008 GFC had adversely affected the Nigerian stock market and the oil and gas industry where the Nigerian banks significantly exposed to. The effect was due to significant withdrawal of foreign investors and the falling price of the crude oil in the world market. Large amount of foreign portfolio investment into the NSE is as result of the bi lateral trade relationship the country has with other foreign countries. That has boosted the NSE and made more attractive that the Nigerian banks had taken high risk by excessively lending into the sector.

Furthermore, differences in national culture is an important factor to be considered in assessing the bank risk-taking behaviour. This is because bank risk-taking behaviour is a phenomena that is largely at the discretion of banks, as such it gives more rooms for culture which is an informal social institution (Ashraf et al., 2016). They further showed that a survey conducted by the Pricewaterhouse in May 2008 revealed that "culture and high risk-taking" are the remote and immediate caused of the GFC. It is argued that national culture can directly influence the decision-making attitude of managers or indirectly affect the formal institutions and level of financial and economic development (Ashraf et al., 2016). Graham, Harvey, and Puri (2013) Hilary and Hui (2009) Tse, Lee, Vertinsky, and Wehrung (1988) have shown that prevailing culture of an individual has significant effects on corporate risk-taking.

Empirical Review

Recently, many studies have been carried out assessing how distinct characteristics of a country influences the banks' risk-taking behaviour and how the risk-taking behaviour differs from one country to another. The strand of literature on the effects of country's characteristics and bank risk-taking behaviour are divided into two categories. The first group which is considered as the non-cultural group comprises of studies that examined the effects of factors such as regulations, governance, institutional, and financial on the bank risk-taking. On the other hand, the second group focused on the effects of culture on bank risk-taking behaviour. This group examined the relationship between factors such as individualism, collectivism, hierarchy, assertiveness, trust and so on.

Country characteristic in terms of political system and legal system are key factors that determined the banking regulations, governance, and ownership structure of banks. These factors have been identified by scholars such as by Agoraki, Delis, and Pasiouras (2011) Ashraf, Ramady, and Albinali (2016), Bougatef and Mgadmi (2016), Garcia-Marco and Roble-Fernandez (2008), Laeven and Levine (2009), Lassoued, Sassi, Ben, and Attia (2015), Mollah, Quoreshi, and Zafirov (2016), and Srairi (2013) as key factors that influences the bank's risk-taking behaviour. For example, Laeven and Levine (2009) argued that though the agency theories by Jensen and Meckling (1976) and John, Litov, and Yeung (2008) propounded that the ownership structure impact on the corporate risk-taking, national regulations is a key factor that shape the individual risk-taking behaviour. Furthermore, they argued that the effects of particular regulation could vary on the bank risk-taking behaviour based on the comparative influence of shareholders of each bank. For instance, a policy that allow private equity investors to have a stake in banks or limiting the ownership concentration could have different impact on banks risk-taking subject to the regulations of other banks (Laeven & Levine, 2009). Accordingly, the empirical findings by Laeven and Levine (2009) revealed that the effect of bank regulations on the

bank risk-taking depends mostly on the ownership structure of each bank. Moreover, Agoraki et al. (2011) and Laeven and Levine (2009) argued that the same regulation could negatively or positively affect the bank risk-taking behaviour in relation to the comparative market power situation. Meanwhile, study by Laeven and Levine (2009) has shown that the bank owners' incentive totake risk is affected by factors such as activity restrictions, shareholders' protection, deposit insurance, and capital regulation. Forexample,Keeley (1990) andMerton (1977) have earlier argued that the banks' ability and incentivesto takerisk increases due to deposit insurance provisioning.Accordingly, Laeven and Levine (2009) maintained that capital regulations forces the banks' owners to reduce risk-taking since the regulation mandate them to commit their resources in the bank. John et al. (2008) and Paligorova (2011) contended that risk-taking is positively associated with strong investors' protection. It is worth to note that factors such as deposit insurance, capital regulations, and shareholders' protection are some of the legal factors which varies among the countries that make them distinct from others that could have different effects on the bank risk-taking behaviour.

A study by Agoraki et al. (2011) used data of the banking sectors from Central Europe and the Eastern Europe over the period 1998-2005 and found relationship between legal factors such capital regulations and higher activity restriction and the bank risk. Meanwhile, Laeven and Levine (2009) who examined the effect of ownership structure on risk-taking behaviour in 48 different counties which included some of the Central Europe and Eastern Europe banks found that the extent to which regulation affects the bank risk-taking depends on the ownership structure of that bank. Similarly, Garcia-Marco and Roble-Fernandez (2008) assessed the risk-taking behaviour of Spanish commercial banks and Spanish Savings banks and found that there are differences in their risk-taking behaviour due to differences in the legal provision guiding them. This suggested that differences in legal system could have different effect on the bank risk-taking behaviour. Countries in the world have different legal and political system which could have different impact on banks operating within the affected countries. Mongid, Tahir, and Haron (2012) used data from a sample of 668 banks from eight ASEAN countries during the period 2003-2008 to assess the influence of capital on bank risk-taking using 3SLS method. The study found an inverse relationship between capital and risk-taking. That is, higher capital reduces banks' exposure to risk. Lee and Hsieh (2013) examined the effect of bank capital on risk and profitability from the period 1994-2008 using a sample of Asian banks. Their findings revealed that higher capital significantly enhances profitability and reduces risk. However, a study by Bougatef and Mgadmi (2016) used a sample of 24 banks operating in the MENA region during the period 2004-2012 revealed no such effect of capital and bank risk in the region. This could be attributed to the peculiar features of the regulation in the MENA region.

Country characteristics in terms of factor endowment is key factor that boost the level of economic activities of a country. Country economy activity increase banks activities as well as competition and concentration. Recent study by González et al. (2017) has shown that banks operating in the Gulf Cooperation Council (GCC) countries have a higher level of competition due to the economy activities in the area which is a result of available resources such as oil and gas. Therefore, banking competition influences the liquidity and risk-taking behaviour of banks and leads to instability in the sector. Supporting this view, Bonner (2016) held that banks' liquidity is a major driver for banks risk-taking behaviour. However, the study mainly focussed on the impact of competition on the risk-taking behaviour of the banks in the MENA region. Contrary to the GCC countries, the Non-GCC part of the MENA region is reported to have lower level of bank competition. According to the stability-competition hypothesis, a reduction in the loan rates to borrowers decreases the probability of default (Boyd & Nicolo, 2005). On the other hand, the "Quiet Life" hypothesis maintained that lower competition results to a lack of relationship between market structure and bank performance because

banks become inefficient under low competition (Berger & Hannan, 1998). Consequently, the rise in competition from very low level can force banks to exit from their "Quiet Life" increasing their efficiency. With more efficiency, banks can be compatible with profitability and therefore reduce financial costs to borrowers.

Recently, on how national culture influences the bank risk-taking behaviour, studies have been carried out to further explain other important factors that could influence the bank risk-taking behaviour. Ashraf et al. (2016) stated that the cross-country differences in the bank risk-taking could be as a result of the differences in culture. Hence, they employed Hofstede's national cultural frameworks to assess the impact of national culture on the bank risk-taking on a sample of banks from 75 countries over the period 2001-2007. Their results showed that factors such as individualism, power distance, and uncertainty avoidance have significant influence on the bank risk-taking behaviour. Consistent to this findings Mourouzidou-Damtsa et al., (2017) found a significant correlation among national cultural values and the local banks risk-taking. They further showed that individualism and hierarchy are the key significant factors in explaining the effects of national culture on bank risk-taking in the Europe. Meanwhile, earlier studies by Kanagaretnam, Lim, and Lobo (2011: 2013), Zheng and Ashraf (2014), and Zheng, El Ghoul, Guedhami, and Kwok (2013) have shown the relevance of the national cultural values to the bank risk-taking behaviour.

Similarly, González et al. (2017) has shown that competition influence the bank risk-taking behaviour in countries that are relatively stable politically and countries that are endowed with more natural resources. This could suggest that the level of economic activities and political stability influences the bank risk-taking behaviour. Meanwhile, Abedifar et al. (2015) have highlighted the need to examine how banks' liquidity affects the risk-taking behaviour of banks in the oil-producing countries such as the GCC countries. This is because, the oil price boom often boosts the economic activities of the affected country and thus, increased the amount of deposit inflows into the banking sector. Thus, the banks in pursue of yield would increase their risk-taking by excessively giving out more loans that can eventually lead to high loan growth and concentration leading to an increase in the non-performing loans (NPLs). Studies by Acharya and Naqvi (2012), Dahir et al. (2017), Ha and Quyen (2018), and Khan et al. (2017) have shown that abundant liquidity aggravate the bank risk-taking behaviour through excessive lending and eventually lead to crisis.

3. Conclusions

This study conducted review of empirical literature on the effect of country characteristics, bank liquidity on bank risk-taking behaviour and pointed out directions for future research. Studies on country's characteristics and bank risk-taking have identified risk associated with the distinct characteristics of different countries and how they affect the banks' risk-taking behaviour. This paper discussed different scholar's findings form the two strands of literature on effects of national culture on the banks risk-taking and highlighted areas of concerned. Recent studies focused on risk-taking behaviour with emphasis on areas of culture, development political stability, ownership structures, and beliefs. The paper discussed issues that are important to countries' risk-taking behaviour and found that more research need to be carried out, particularly in developing nations with diverse national cultural values. Also, there is need to extend the studies to underdeveloped nations specifically, on factors such banks' liquidity, capital, and effectiveness of supervision on the bank risk-taking behaviour. This will further guide the regulators especially, at the global level to come with regulation that can suit divers characteristics of countries to ensure the sustainability of the banking industry all over the world.

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