CHAPTER 2

LITERATURE REVIEW ON MERGERS AND ACQUISITIONS (M&As)

2.1 Introduction

This chapter reviews the existing literature of M&As in two banking sectors, i.e., conventional and Islamic banks, to provide context for the present study. This chapter is divided into seven sections. The following section provides a review of the background of M&As. Then the theoretical, and operational framework are presented in Section 2.3, and 2.4. Section 2.5 states research hypothesis while M&As in the Islamic banking sector are discussed in Section 2.6. Section 2.7 discusses the research gap, while the last section concludes the chapter.

2.2 Background of Mergers and Acquisitions (M&As)

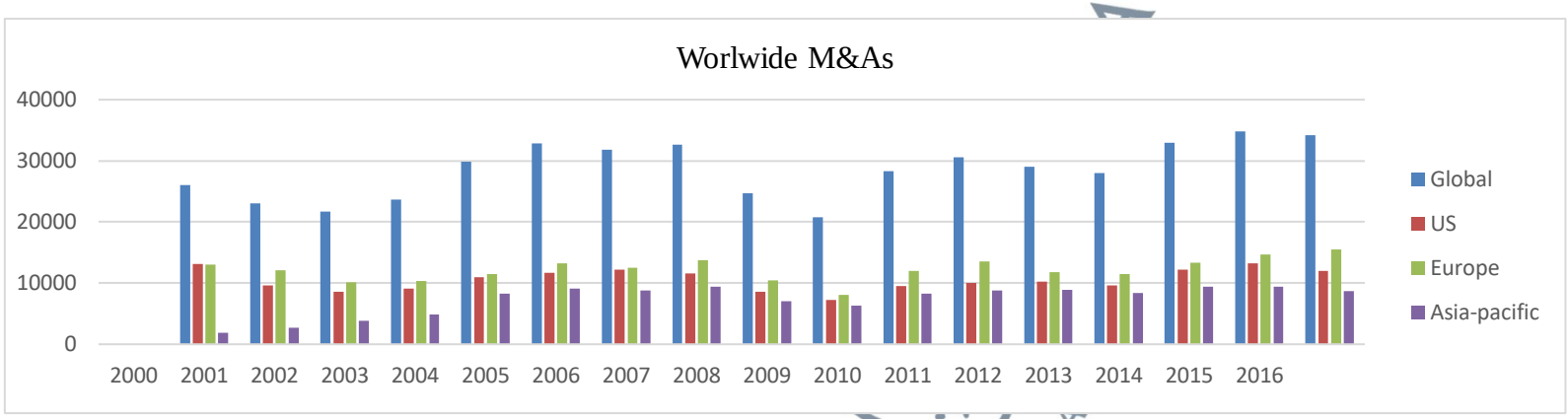
The growth of M&As has received significant attention in the last sixteen years (i.e., 2000 to 2016). Table 2.1 shows worldwide M&As based on regions in terms of both size and volume. The highest M&As activities occurred in 2015 (i.e., 34,838 deals) with the largest size of USD3,640 billion, while the lowest was in 2002 (i.e., 21,737 deals) and the size was USD8,564 billion. In terms of volume, M&As was the highest in Europe (i.e., 2,07,617 deals) while Asia- pacific was the lowest (i.e., 1,24,235 deals). In the aspect of M&As size, the US records the highest (i.e., USD19,684 billion) while Asia- Pacific region (the region chosen for this study) is the lowest (i.e., USD7,465 billion). In 2016, the M&As deals reduced in the US and Asia Pacific region while Europe showed positive growth. Notably, in 2008 and 2009, during and after the financial crisis the volume and values significantly reduced. In 2008, the growth volume

decreased to 24%, while values reduced to 45%. In 2009, the volume reduced to 16% and values reduced to 15%. In addition, M&As have declined in terms of volume and values for Asia-Pacific in 2008 and 2009. This shows that the financial crisis has had significant impacts on global M&As trends. The graphical presentation of volume and values are shown in Figure 2.1 & Figure 2.2 respectively. In a nutshell, the main purpose of showing Table 2.1 is to show the world-wide M&As trend scenario in terms of volume and size globally, especially in the US, Europe and Asia-Pacific. It is shown that there is an increasing trend of M&As in terms of volume and size around the Globe, especially the US, Europe and Asia-Pacific.

Table 2.1: M&As Based on Region from 2000 to 2016

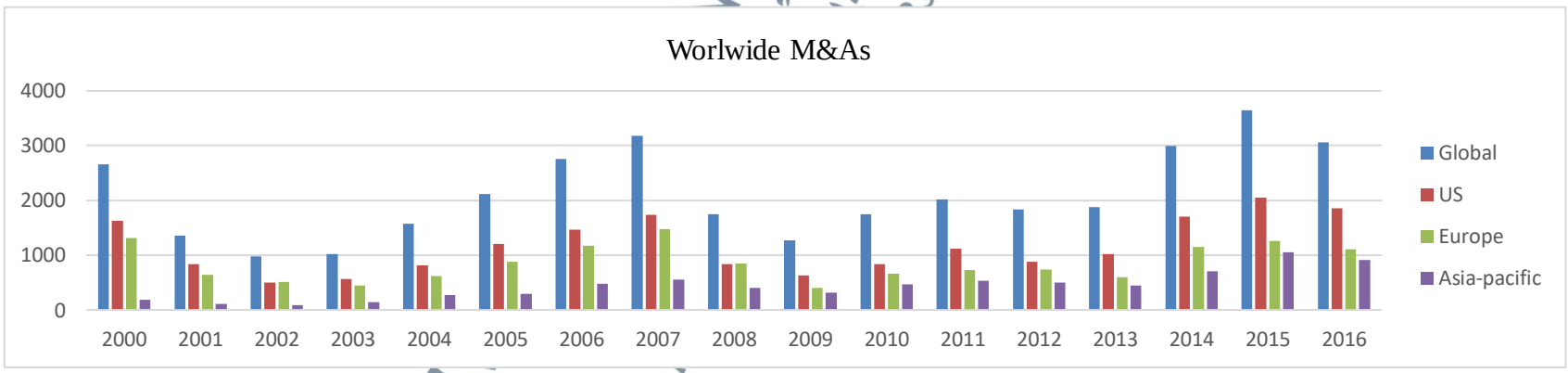
Year	Global				US				Europe				Asia-Pacific			
	Vol	Growth	Value (USD bill)	Growth	Vol	Growth	Value (USD bill)	Growth	Vol	Growth	Value (USD bill)	Growth	Vol	Growth	Value (USD bill)	Growth
2000	26030	0	2658	0	13103	0	1631	0	13042	0	1316	0	1902	0	184	0
2001	23000	-12%	1358	-49%	9596	-27%	838	-49%	12143	-7%	639	-51%	2727	43%	107	-42%
2002	21737	-5%	981	-28%	8564	-11%	497	-41%	10136	-17%	510	-20%	3800	39%	90	-16%
2003	23663	9%	1021	4%	9140	7%	569	14%	10347	2%	441	-14%	4892	29%	142	58%
2004	29815	26%	1570	54%	10932	20%	816	43%	11510	11%	618	40%	8268	69%	271	91%
2005	32879	10%	2112	35%	11732	7%	1208	48%	13272	15%	883	43%	9098	10%	296	9%
2006	31833	-3%	2755	30%	12224	4%	1466	21%	12533	-6%	1168	32%	8807	-3%	481	63%
2007	32610	2%	3174	15%	11551	-6%	1733	18%	13734	10%	1471	26%	9410	7%	551	15%
2008	24655	-24%	1748	-45%	8609	-25%	836	-52%	10452	-24%	843	-43%	7083	-25%	404	-27%
2009	20808	-16%	1271	-27%	7278	-15%	627	-25%	8038	-23%	401	-52%	6338	-11%	320	-21%
2010	28320	36%	1744	37%	9518	31%	835	33%	12047	50%	666	66%	8304	31%	469	47%
2011	30600	8%	2021	16%	10072	6%	1119	34%	13567	13%	732	10%	8799	6%	531	13%
2012	29055	-5%	1833	-9%	10190	1%	882	-21%	11816	-13%	740	1%	8848	1%	500	-6%
2013	27952	-4%	1880	3%	9637	-5%	1020	16%	11466	-3%	601	-19%	8368	-5%	445	-11%
2014	32933	18%	2996	59%	12243	27%	1702	67%	13368	17%	1147	91%	9452	13%	704	58%
2015	34838	6%	3640	21%	13211	8%	2046	20%	14657	10%	1262	10%	9444	0%	1057	50%
2016	34191	-2%	3057	-16%	11968	-9%	1859	-9%	15489	6%	1104	-13%	8695	-8%	913	-14%
Total	**484,919**		**35,819**		**179,568**		**19,684**		**20,7617**		**14,542**		**124,235**		**7,465**	

Source: M&As Report (2017)



Source: Author's calculation

Figure 2.1: Worldwide M&As from 2000 to 2016 (Volume)



Source: Author's calculation

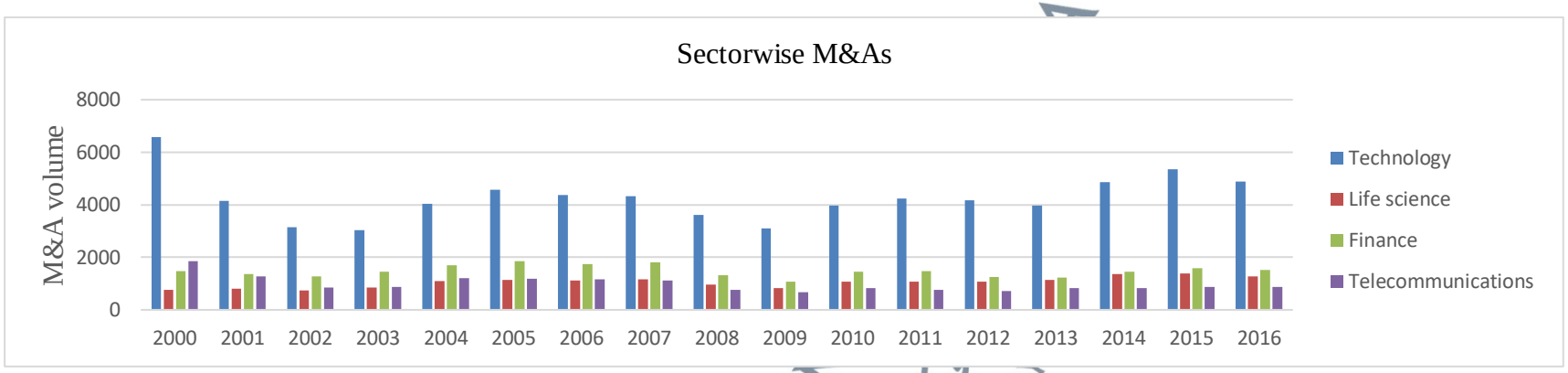
Figure 2.2: Worldwide M&As from 2000 to 2016 (Size USD Billion)

Table 2.2 shows M&As deals in specific sectors, namely technology, life science, finance, and telecommunication. In terms of volume, the highest was in technology (i.e., 72,371 deals) followed by finance (i.e., 25,012 deals) and the lowest was in life science (i.e., 17,812 deals). In the finance sector, in terms of volume, the highest number of deals was in 2005 (i.e., 1,862 deals) and the lowest number of deals was in 2009 (i.e., 1,072 deals) with the highest size recorded in 2007 (i.e., USD404 billion) and the lowest in 2013 (USD95 billion). Overall, finance came second in M&As deals within the scope of this study. Notably, based on Table 2.2, it is shown that financial crises significantly impact M&As activity. In 2008 and 2009, the volume and values were significantly reduced. More specially, in 2008, the growth of M&As volume has reduced to 16% and values decreased to 60% for the technology sector. M&As in life science sectors show growth of volume and values reduce to 18%. In the finance sector, growth of volume reduced to 28% whereas value reduced to 43%. Finally, volume and values in telecommunication sectors reduces to 32% and 33% respectively. Accordingly, the growth of volume and values reduced in 2009. Mentionable, M&As in terms of volume and values have significantly reduced in the financial sector compared with other sectors, i.e., technology, life science and telecommunication sectors. The graphical presentation of sectors for M&As are reported in Figure 2.3, Figure 2.4, and Figure 2.5.

Table 2.2: M&As Based on the Industry from 2000 to 2016

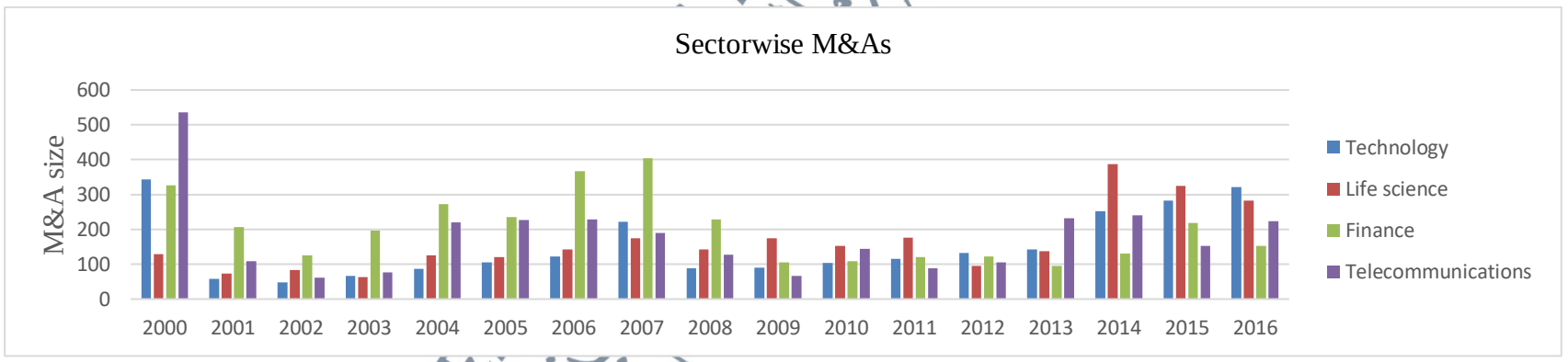
Year	Technology				Life Science				Finance				Telecommunications			
	Vol	Growth	Value (USD bill)	Growth	Vol	Growth	Value (USD bill)	Growth	Vol	Growth	Value (USD bill)	Growth	Vol	Growth	Value (USD bill)	Growth
2000	6573	0	343	0	771	0	129	0	1468	0	327	0	1852	0	535	0
2001	4148	-37%	58	-83%	796	3%	74	-43%	1355	-8%	206	-37%	1279	-31%	108	-42%
2002	3138	-24%	48	-17%	736	-8%	83	12%	1284	-5%	126	-39%	856	-33%	61	-16%
2003	3024	-4%	66	38%	845	15%	63	-24%	1460	14%	196	56%	866	1%	76	58%
2004	4043	34%	87	32%	1087	29%	126	100%	1705	17%	272	39%	1200	39%	220	91%
2005	4576	13%	106	22%	1143	5%	121	-4%	1862	9%	236	-13%	1192	-1%	227	9%
2006	4364	-5%	123	16%	1108	-3%	142	17%	1740	-7%	367	56%	1153	-3%	229	63%
2007	4317	-1%	221	80%	1169	6%	174	23%	1807	4%	404	10%	1121	-3%	189	15%
2008	3612	-16%	89	-60%	954	-18%	142	-18%	1309	-28%	229	-43%	758	-32%	127	-27%
2009	3105	-14%	90	1%	821	-14%	175	23%	1072	-18%	106	-54%	670	-12%	67	-21%
2010	3981	28%	104	16%	1065	30%	153	-13%	1458	36%	109	3%	833	24%	145	47%
2011	4235	6%	115	11%	1081	2%	176	15%	1468	1%	120	10%	771	-7%	88	13%
2012	4182	-1%	133	16%	1082	0%	96	-45%	1243	-15%	122	2%	724	-6%	105	-6%
2013	3977	-5%	142	7%	1138	5%	137	43%	1232	-1%	95	-22%	820	13%	232	-11%
2014	4865	22%	253	78%	1358	19%	387	182%	1461	19%	130	37%	823	0%	240	58%
2015	5348	10%	282	11%	1375	1%	325	-16%	1577	8%	218	68%	864	5%	153	50%
2016	4883	-9%	321	14%	1283	-7%	282	-13%	1511	-4%	152	-30%	865	0%	223	-14%
Total	**72,371**		**25,81**		**17,812**		**2,785**		**25,012**		**3,415**		**1,6647**		**3,025**	

Source: M&As Report (2017)



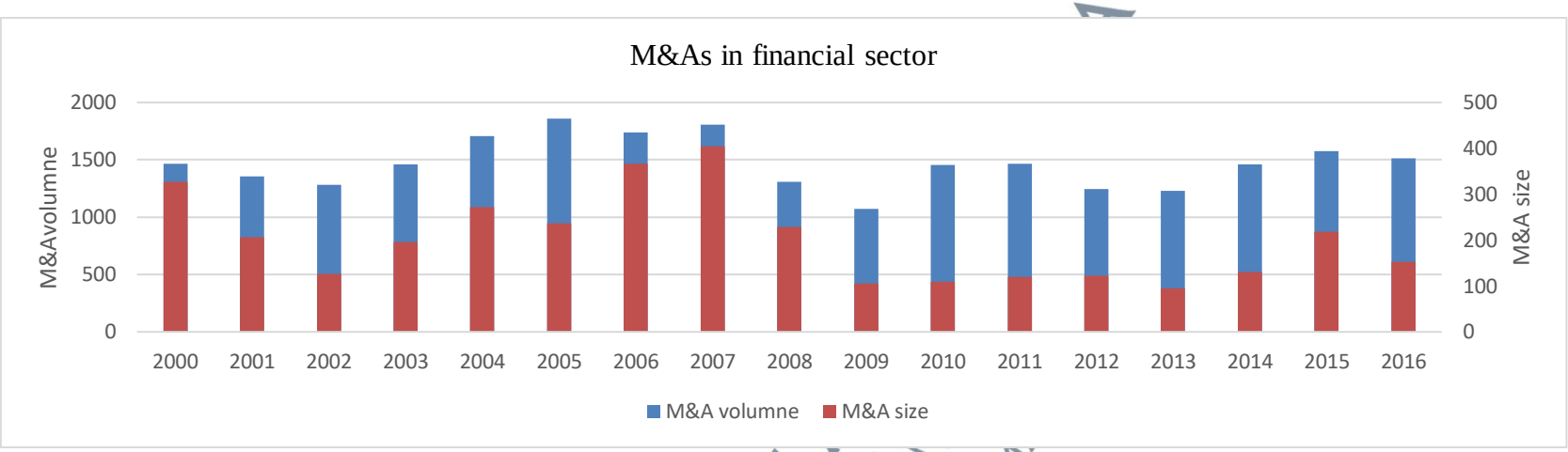
Source: Author's calculation

Figure 2.3: M&As Based on the Industry from 2000 to 2016 (Volume)



Source: Author's calculation

Figure 2.4: M&As Based on Industry from 2000 to 2016 (Size USD Billion)



Source: Author's calculation

Figure 2.5: M&As in the Financial Sector from 2000 to 2016 (Size & Volume)

Globalization and financial deregulation of the banking sectors have seen a lot of M&As in the 1990s. The financial world has experienced the downside of financial innovation and deregulation, especially during the global financial crisis, leading to massive bank failures in developed economies. Moreover, this effect has spread in developing countries as well. This chapter presents the literature on M&As from several aspects.

Mergers and Acquisitions (M&As) for this study are defined as a bank amalgamation of bidder and target banks. The terminological definition of the merger is the combination of two or more banks to form a new entity or a combination of both. Whereas acquisition implies the combination of two or more banks and the target banks cease to exist. M&As are also called as an external investments in which the ownership of banks is transferred or combined. M&As is part and parcel of corporate finance. The motive of M&As is to generate value rather than being on an individual stand. Nicholas et al. (2015) stated that mergers and acquisitions (M&As) refer to the aspect of corporate strategy with the buying, selling, or combining of companies that enable a company in a given industry to grow rapidly without having to create another business entity.

A merger occurs when two separate entities (usually companies of equal size) combine forces to create a new entity, new ownership, management structure, a joint organization in which theoretically both are equal partners. Moreover, it is euphemistically called "merger of equals". Whereas, in an acquisition or takeover, one business buys a second and generally smaller company that may be absorbed into the parent organization or ran as a subsidiary. Legally bigger banks acquire smaller banks. A bank can acquire another bank with cash, stock, or a combination of both. Due to the competitive business arena, financial enlargement, technological innovation, structural modification of the financial system, and demands for financial products, financial

institutions have to face numerous problems and change their business approach accordingly. Financial institutions need to espouse a strategy to survive in the competitive business world to keep pace with the changing trends.

Yudistira (2003) highlighted that the global financial crisis from 1998 to 1999 badly affected the performance of Islamic banks. Small and medium-sized Islamic banks faced diseconomies of scale and M&As in the Islamic banking sector are warranted. At the other end, other papers have voiced so-called "too big to fail" which implies that the presence of the larger banks makes the banking system vulnerable (Ibrahim, & Rizvi, 2017). Moutsianas & Kosmidou (2016) suggested that with the concern of too big to fail, there is a much-needed stringent requirement to split up into small entities. As Ibrahim & Rizvi (2017) said, risk can be reduced through diversification and this favourably affects the system's soundness.

The government and central bank policies also effect the M&As. For example, M&As contributes to the development of the economy and hance the government should take care M&As activities. Moreover, the author stated that shareholders also invite government to intervein M&As deal once manager do M&As deal for their personal benefits (McCarthy, 2017). The study of Bittlingmayer (1985) said that the government antitrust policy has an effect on aggregate merger and acquisition activity depending on the type of merger (Sapozhnikov, 2006). While government policy uncertainty could be an important source of risk to the M&As and hance the outcome would be the negative (Bonaime, Gulen, & Ion, 2018). Therefore, government policies and regulations related to business cultures, work ethics, etc. needs to be flexible and adaptable. As also reported by Straub (2007), inefficiencies or administrative problems are a very common occurrence in a merger which often nullifies the advantages of the mergers.

Furthermore, central bank policy also indicates significant impact on the M&As activity. As stated by Horn, & Fischer (2021), aggregate M&As activity decreases significantly following central bank policy shock. Contractionary monetary policy lowers aggregate M&As activity both in terms of the total number of deals and their total values.

2.3 Theoretical Framework of M&As

The theoretical framework of M&As is designed based on several underlying theories. Details of the discussions are as follows.

2.3.1 Underlying Theories of M&As

Theories of M&As are divided into two namely shareholder's value maximization (value creation strategy) and shareholder's non-value maximization (value reduction strategy) (Weitzel & McCarthy, 2011). Firstly, shareholder's value maximization theories required that mergers and acquisitions lead to increased profitability for the acquirer and the target for the mergers and acquisitions to be justified, either operational, financial or managerial. Many theories explained shareholder's value creation, for example, efficiency theory, diversification of risk theory, coinsurance effect theories, merger and debt capacity, tax benefit theory, agency theory, resource dependency theory, free cash flow hypothesis, and financial intermediation theory asymmetric information theory, perfectly competitive theory, acquisition market theory, market power theory, monopolistic theory of acquisition, raider theory, disturbance theory, process theory, valuation theory, (Daniya, Onotu, & Abdulrahaman, 2016; Weitzel & McCarthy, 2011; Mitchell & Mulherin, 1996; Polemis & Paleologos, 2014; Petmezas, 2009; Shleifer & Vishny, 2003;

Polemis & Paleologos, 2014; Scholtens, & Van Wensveen, 2000; Allen, & Santomero, 1997; Andrieş, 2009; Garland, 1985; Nurwati, Achsani, Hafidhuddin, & Nuryartono, 2014; Sahul Hamid, 2017 and Abdul Majid & Fadzlan, 2007b).

Secondly, shareholder's value reduction strategy implies that M&As does not always bring benefits rather have negative impact as well. This strategy is explained by managerial entrancement theory, managerial discretion theory, and empire-building theory (Shleifer & Vishny, 1989; Weitzel & McCarthy, 2011; Hayward & Hambrick, 1997; Malmendier & Roll, 1986; Tate, 2008; Shanmugam & Nair, 2004; Iankova, 2014; and Iddrisu, Ang, Lee., Loo, & Ong, 2017).

This study applies theories those are related to the value creation of the shareholders since this is one of the main motives of having M&A. Moreover, those selected theories are in according to the research objectives and questions. And hance the theories are selected over other theories. The theories are resource dependency theory, efficiency theory, the theory of financial intermediation, free cash flow hypothesis and relative market power hypothesis.

2.3.1.1 Resource Dependency Theory (RDT)

Resource dependency theory (RDT) is based on the principle that an organization, such as a business firm, must engage in transactions with other actors and organizations in its environment in order to acquire resources. It was developed in the 1970s by Jeffrey Pfeffer and Gerald R. Salancik. RDT is underpinned by the idea that resources are key to organizational success and that access and control over resources is a basis of power. The resource dependency theory (RDT) explains how resources like assets, deposits, operating income, skilled workers, money, technology, raw materials, etc. of an organization affect the behaviour of the said organization. Nicholson (2003) and Pfeffer,

& Salancik (2003) argued that internal & external resources can maximize a firm's performance. Enterprises use their own ability to transfer resources and capabilities inside the merged firms and their competitive advantages (Lu, 2018). Smirnova (2014) posited that the merger enabled to integrate banking experiences, however firms absorb and integrate resources by dint of merges (Haleblian, Devers, McNamara, Carpenter, & Davison, 2009). RTD posited that the organization's outcome is impacted by the resources through the effect of the environment in terms of mergers and acquisitions while they are interconnected (Narayana, 2012). Resource dependence theory suggests that the conditions in a bank's economic environment has an effect on its behavior (Morris, 2004). The organization may join forces with another similar or complementary organization, there are that many more resources are available to the new entity (Peters, 2014).

Resources of a firm consist of tangible assets, human capital, and other intangible assets that are put to productive use planned by the firm (Bhyrovabhotla, 2012). This study uses the level of bank sizes, namely large, medium, and small, based on total assets, total deposits, and the bank's operating income as a proxy for the resource dependency theory.

In addition, resources include physical assets purchased by firms, hire agreements, organizational expertise, and skilled personnel (Penrose, 1959), however and these resources can contribute to the productive operations of the firm (Penrose, 1959).

Lu (2018) emphasized that resource relatedness, i.e., human capital, market strategy, and functional departments have a positive impact on easing the M&As integration process and generate positive value creation. He also posited how enterprises can use their ability to transfer resources and capabilities inside the merged

firms and their competitive advantages. Organizations can establish relationships with others to obtain potential resources and maximize others' dependency on them (Robert, 2010). Therefore, it is shown that there is an interconnection between RDT and the study. Since M&As integrate several resources that impact the outcome of the banks, it is in line with the theme of RDT.

This theory has been selected according to the study's problem statement, research objective, and question. Bank sizes and the level of bank sizes are measured total assets, total deposits, and operating income are selected based on the resource dependency theory.

2.3.1.2 Efficiency Theory

Efficiency theory defines mergers are planned, undertaken to achieve and generate enough realizable performance to make the deal beneficial to both involved parties, namely bidder and target. Abdulazeez et al. (2016); Heffernan Wadhwa & Syamala (2015); Daniya, Onotu, Abdulrahman, & Muhammed (2016); and Weitzel & McCarthy (2011) mentioned that according to the efficiency theory, the main motive of M&As is to generate better operating and financial performance. The symmetric expectations of gains result in a 'friendly' merger being proposed and accepted. If the gain in value to the target is not positive, the target bank's owners may not sell or submit to the acquisition. Similarly, if the bidder owners expect negative gains, the bidder may not complete the deal.

This theory is selected based on the theorem of merger and acquisition that implies the benefits of having M&As, i.e., better performance. Better performance would be achieved by generating and exploiting economies of scale (minimization for

cost) and economies of scope (market expansion). Moreover, this is one of the core theories of M&As.

2.3.1.3 The Theory of Financial Intermediation

Financial intermediary defines by the fact that they mobilize funds from the money holders (savers), registering a debt (liability) towards them, and they issue their own assets towards fund users (Andrieş, 2009). It was introduced in 1960 by Gurley and Shaw based on information asymmetry theory and agency theory. This theory indicates the function (i.e., taking a deposit from the household agent and advancing loan to an economic agent) of financial intermediaries (i.e., bank) in the economy. Moreover, banks provide an essential service facilitating participation in the sector. A financial intermediary is an important institution that contributes to the optimal allocation of resources. The development of financial intermediaries means the development of the financial market.

Allen & Santomero (1997) stated that intermediation has increased although transaction costs and asymmetric information have declined. Moreover, they have stated that it is one of the observed behaviors of the institutions. They can easily overcome the problem of asymmetric information by acting as a delegated monitor. Risk management has become a key area of intermediary activity. In the traditional Arro-Debreu model of resource allocation, firms and households interact through markets and financial intermediaries play no role. As stated by Scholtens, & Van Wensveen (2000), financial intermediaries are agents between savers and investors.

Mat Nor, Shaharuddin, Nawai, Marzuki, & Abdullah (2018) suggested that conventional banks have more comparative advantages, especially in managerial

efficiency, as its intermediary role performances are not affected by bank size and not based on Shari'ah compliance.

It is known that a bank works as an intermediary (either financial or non-financial) between depositors and economics agents. Based on this theory, the study includes the following variables: the financial intermediary role proxied by economies of scale (cost to income) and economies of scope (loan to deposit). The non-financial intermediary role is proxied by non-interest cost to non-interest income. The study puts efficiency theory and the theory of financial intermediation together since the variables are the same (see Figure 2.6).

2.3.1.4 Free Cash Flow (FCF) Hypothesis

Free cash flow hypothesis (FCF) represents that manager has available cash to invest. It is a one kind source of financing for business expansion, however, there are agency costs associated with conflicts between managers and shareholders over the pay-out of free cash exist. The FCF hypothesis best explains the concept of M&As Abdulazeez, Suleiman, & Yahaya (2016). Chandera, & Atmaja (2014) mentioned that a bidder's free cash flow positively impacts the outcome. Similarly, Acquirer's gains are lower with high free cash flow (Dogru, Kizildag, Ozdemir, & Erdogan, 2020). Banks with negative free cash flow are more likely to be targets and therefore are taken over by acquirers of high free cash flow (Beccalli, & Frantz, 2010).

Managers are the agents of shareholders, and because both parties are self-interested, there are serious conflicts between them over the choice of the best corporate strategy (Jensen, 1987). The free cash flow hypothesis is likely to reduce the performance of M&As rather than to create value, it shows how takeovers are both evidence of the conflicts of interest between shareholders and managers, and a solution

to the problem. Lang, Stulz, & Walkling (1991) observed that the free cash flow hypothesis posits that cash flow increases the agency costs of firms with poor investment opportunities. It assumes that management values investments in operations more than investments in financial assets. Acquisitions are one-way managers can spend cash instead of paying it out to shareholders. Therefore, the theory implies that firms with unused borrowing power and large free cash flows are more likely to undertake low-benefit or even value-destroying mergers. Accordingly free cash flow has negative impact on the performance (Wang, 2010).

Dogru, Kizildag, Ozdemir, & Erdogan (2020) showed that firms with high-free cash flows gain lower returns than firms with low-free cash flows. This suggests that acquisitions can both reduce underinvestment problems and increase overinvestment problems. Since free cash flow is the main source of M&As financing, this hypothesis is selected because it suits the study.

2.3.1.5 Relative Market Power Hypothesis (RMP)

The relative-market-power (RMP) paradigm is where firms with large market share can exercise market power, being monopolistic in nature, have a well-differentiated product, and thus earning supernormal profits (Mirzaei, Moore, & Liu, 2013). Accordingly, market power hypothesis argues that large banks can influence profits (Sahul Hamid, 2017). As said by the RMP hypothesis, higher the market power through M&As, results in higher concentration and lower competitions as well as firms with well-differentiated products and higher profits. Furthermore, Ayadi & Ellouze (2013) explain that the RMP hypothesis states that banks with a large market share and diversified products might exercise their market power to determine prices and make profits. As a result, individual market shares accurately determine market power and

market imperfections. Furthermore, the RMP hypothesis states that the banks with relatively larger market share and a range of differentiated product lines are able to better exercise their market power to gain superior profit. The RMP emphasizes excess profit deriving from larger banks market share but not necessarily from collusive behaviours (Pradhan & Gajurel, 2011; Mensi & Zouari, 2010; and Kunwar, 2018).

The market structure in the banking industry is estimated using market share, CR and HHI (Shepherd, 1982 and Sahul Hamid, 2017). CR is measured as the percentage of total assets of the five largest banks in a country to total assets of all the commercial banks in a country. This measure only focuses on the market share of the top five banks in a country and does not account for the size distribution of remaining banks. On the other hand, HHI is estimated as the sum of the squares of the market shares of all the banks in a country, in which the market shares are denoted as fractions. The HHI measure accounts for the size distribution of all the banks in a country. It provides heavier weightage to larger banks, hence emphasizing their relative importance. Higher CR ratio and HHI reflect higher concentration (meaning lower competition) in the banking sector.

Market power significantly concurs with large relative target size, intra-industry mergers, and increasing market concentration, suggesting a substantial lessening of competition through M&A. The market power hypothesis is based on anticompetitive effects resulting from M&As activity. According to the market power hypothesis, all market participants profit from M&As because a lower number of players decreases competition and boosts future profits (Hankir, Rauch, & Umber, 2011).

Anginer, Demirguc-Kunt, & Zhu (2014) measure bank-market concentration as the fraction of bank assets held by the five largest banks in a country. The degree of concentration of a market is expected to exert a negative influence on competition,

hence it is likely to raise the banks' profits. In the MP paradigm, the direction of causality between concentration and profitability runs from the market structure of an industry to behaviour that affects its performance. A concentrated structure is conducive to using market power in ways that may enhance bank profitability (Mirzaei et al., 2013). Based on the theories and hypothesis, this study suggests the following theoretical framework in Figure 2.6.

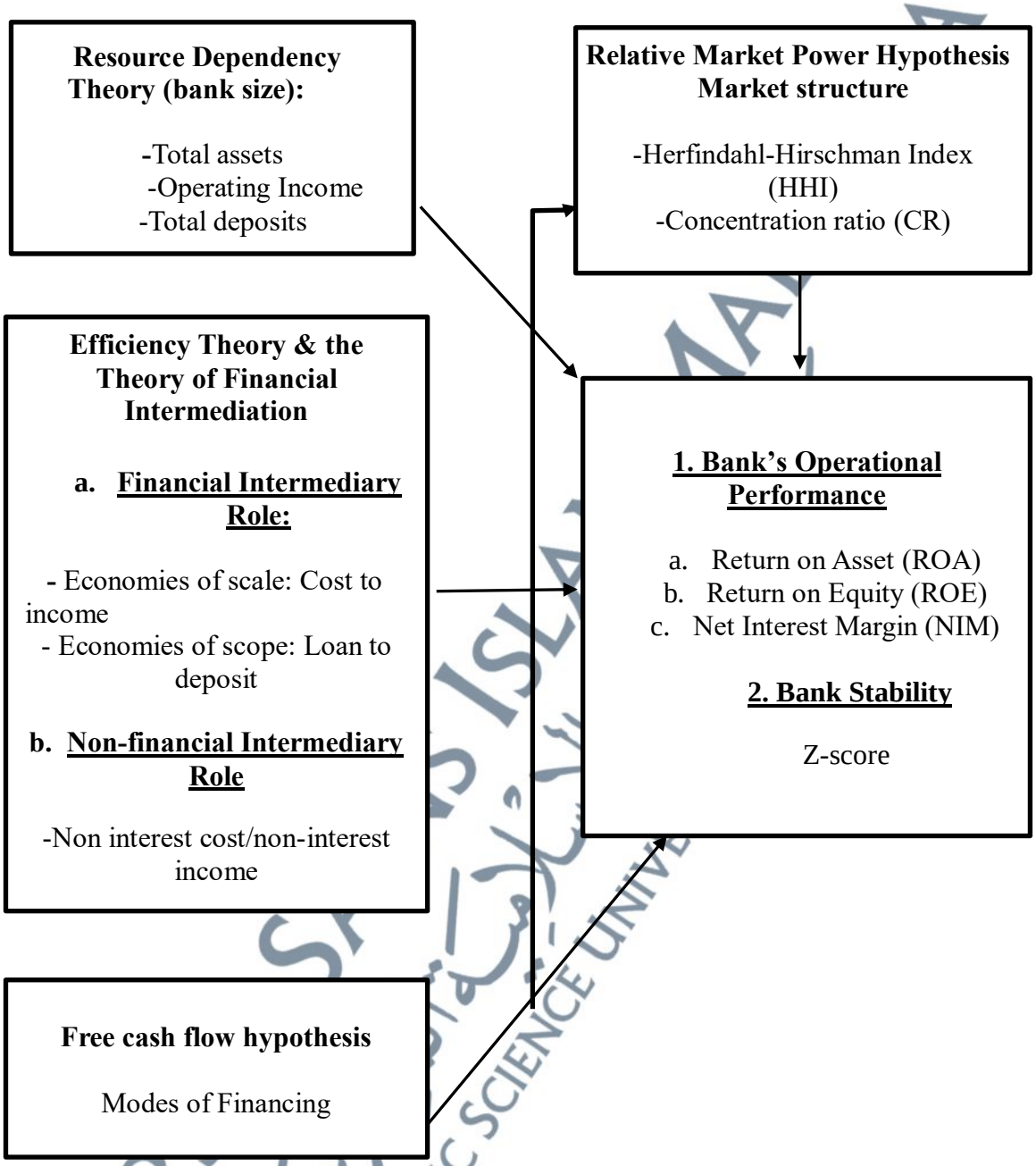


Figure 2.6: Theoretical Framework of M&A

2.4 Operational Framework of M&A

The operational framework is designed and developed based on previous studies. This section discusses the impact of M&As on bank performance and stability for Islamic and conventional banks. Several factors affecting M&As and the mediating role of market structure are reviewed and discussed below.

2.4.1 Impact of M&As on the Bank's Operational Performance

The main purpose of M&As is to generate better performance. It involves wealth creation, value maximization, and minimization of cost and risk-sharing strategy. This is also supported by the efficiency theory since M&As are geared to having better performance. However, the extensive literature covering the conventional banking sector in the following paragraphs reveals contradictory, inconsistencies and inconclusive results of the impact of M&As that go against the efficiency theory. Therefore, this study aims to re-examine this theory to discuss the impact of M&As on operational performance in the case of conventional and Islamic banks. The literature on the effects of M&As on the bank's operational performance is discussed.

Tan Sri Ali Abul Hassan Sulaiman (1999), the former-Governor of Bank Negara Malaysia (BNM) announced mergers program for domestic's banks and said that merger exercise would not, in any way, weaken the financial strength of the merged entities. Using data on Malaysian Banks, Sufian & Habibullah (2014) and Jatkar (2012) showed that the acquiring banks were relatively more productive than the target banks. M&As also generated increased positive abnormal returns for the target due to investor expectation for better utilization of their (target) resources (Antoniadis et al., 2014).

The reason for having M&As is to achieve economies of scope rather than economies of scale (Sufian, 2011), however, it (M&As) reduces earnings volatility

through economies of scale and scope (Piloff & Santomero, 1998), therefore, to have economies of scale and scope, bigger banks are needed through M&As (Ibrahim & Rizvi, 2017). Focarelli, & Pozzolo (2001) stated that acquisition could improve the quality of the portfolio of acquired banks. In addition, the banks can easily gain economies of scale and scope by reducing manpower, shrinking operations, having portfolio diversification, and reducing cash and securities (Linder & Crane, 1993). The role of diversification is the main motive for the bank merger (Banal-Estañol, & Ottaviani, 2007), when the value of diversification is strong, mergers generate better welfare for depositors and borrowers.

Abbas Hunjra, Azam, Ijaz, & Zahid (2014) found a positive relationship between M&As and bank performance. The study focused on the US banking sector and found a positive relationship between productivity, profitability, and shareholder value. Rani, Yadav, & Jain (2016), Rehan, Khan, & Khan (2018), Abdulazeez et al. (2016), and Al-Sharkas et al. (2008) observed improved and robust in financial performance and cost-efficiency owing to mergers and acquisitions, leading to an increase financial efficiency in Nigerian banks.

Other studies have examined and revealed that M&As have had less impact on the performance of the banking industry. Larasati, Agustina, Istanti, & Wijijayanti (2018), Jallow, Masazing, & Basit (2017), Kandil, & Chowdhury (2014), Gattoufi, Al-Muharrami, & Shamas (2014), Kouser, & Saba (2011) and Ismail et al. (2011) stated that M&As activity had no significant impact on the operational performance of the banks studied involved. Goyal & Joshi (2011) and Piloff & Santomero (1998) argued that acquisitions often negatively impacted employees' behaviour, resulting in counterproductive practices, absenteeism, low morale, and job dissatisfaction. It

appears that an essential factor affecting the successful outcome of acquisitions is the top management's ability to gain employee trust (Amihud, DeLong, & Saunders, 2002).

M&As also contribute to abnormal returns and have shown a negative impact on profitability, efficiency, liquidity, leverage, size, and employee behaviour in the banking industry (Banal-Estanol & Ottaviani, 2007). Malatesta (1983) early studies showed that shareholders of the acquiring firm suffered value reduction during the period of both announcement time and over the following years of the merger. Sufian & Habibullah (2014) revealed that banks' efficiency revenue showed little significant differences between post-merger and pre-merger periods.

R. Rao-Nicholson et al. (2016) used information from publicly listed companies in ASEAN countries and found the negative effect of M&As on bank performance. If banks integrate it can be quite costly to integrate banking institutions that are dissimilar in terms of their loan, earnings, and cost, deposit, and size strategies (Antoniadis et al., 2014).

Throughout the literature, it is shown that macro-economic conditions also play a significant role in the outcome of the banks. Macro-economic conditions affect the post-merger performance (Tse & Soufani, 2001). Erel, Jang, Minton, & Weisbach (2017) found that macroeconomic conditions positively affect the likelihood of making an M&As. Choi, & Jeon (2011) posited that macroeconomic variable (GDP) plays an essential role in aggregating M&As activity. An increase in growth of GDP reduces the probability of bankruptcy while it significantly increases the merger activity (Buehler, Kaiser, & Jaeger, 2006). Athanasoglou, Brissimis, & Delis (2008) noted that macroeconomic condition (inflation) on bank profitability depends on whether banks' wages and other operating expenses increase faster than inflation. In this vein, Perry (1992) stated that the effects of economic conditions depend on the power of the

management how they anticipate the economic conditions. If they could predict the economy correctly, the banks can appropriately adjust interest rates to increase their revenues faster than their costs and thus acquire higher economic profits. Table 2.3 provides a summary of the impact of M&As on performance.

Table 2.3: Summary of Studies Associated with the Impact of M&As on the Performance

Author(s)	Sample of the study	Variables	Methodology	Findings
Rao-Nicholson, Salaber, & Cao (2016)	ASEAN Countries, Firms, 2001-2012	Operating performance: ROA, Sales margin	Cross-sectional OLS model.	The industry-adjusted operating performance tends to decline in the 3 years following an M&As deal.
Abdulazeez, Suleiman, & Yahaya (2016)	Nigeria, Banks, 2002-2008	Financial performance: ROA & ROE	SPSS (Descriptive statistics)	Bank witnessed improved and robust financial performance.
Antoniadis, Alexandridis, & Sariannidis (2014)	Greek, banking sector 2014	Financial and corporate governance characteristics	Event study methodology	The share prices of the bank have risen for the period after the day the proposal took place. ATE bank, however, displayed negative returns and was not influenced by the proposal.
Gattoufi, Al-Muharrami, & Shamas (2014)	GCC countries, Banks 2003-3007	ROE, Capitalization ratios, net financial margin (NFM), Loan loss provision to total assets, Loan loss provision to net interest revenue, the cost to income ratio.	Average of Market merged without merged	No significant impact on operational performance.
Sufian & Habibullah (2014)	Malaysia, Banks 1995-2009 Pre-merger (1995-1996) Post-merger (2002-2009)	Labour, physical capital, and deposit Price of labor, price of physical capital, and price of deposit.	DEA	Banks' revenue efficiency has not significantly improved during the post-merger compared to the pre-merger period.
Al-Sharkas, Hassan, & Lawrence (2008).	US, Banks 1987-2000	Cost efficiency Profit efficiency (Pre and post-merger cost & profit efficiency)	SFA, DEA	The merger has improved the cost and profit efficiency of the banks.
Rani, Yadav, & Jain (2016)	India, Firms	Financial Performance: ROA, ROE, NPM, NIM	Paired T-test	Performance has increased after the M&As deal

Table 2.3, continued

Author(s)	Sample of the study	Variables	Methodology	Findings
Rehan, Khan, & Khan (2018)	Pakistan, banks	Profitability: ROA, ROE, NIM, OPM,	Paired T-test	The analysis suggests that all the banks in Pakistan should minimize their gross profit margin to improve financial performance and efficiency.
Kouser & Saba (2011)	Pakistan, banks 1999-2010	Financial performance: OPM, GPM, ROIC, NPM, etc.	Paired T-test.	No improvement in financial performance after M&A
Larasati, Agustina, Istanti, & Wijijayanti (2018)	Indonesia, companies 2010-2014	Financial performance: NIM, EPS,	Purposive sampling method	No significant differences before and after M&A
Jallow, Masazing, & Basit (2017)	UK, Companies 2011	Financial performance: ROA, ROE, EPS, NPM	Descriptive and explanatory design	Net profit margin is not affected by mergers while return on asset return on equity and earning per share are affected by mergers and acquisitions.
Kandil & Chowdhury (2014)	UK, Islamic Banks, 1999 to 2009	ROA, ROI, bank size (bank's revenue), Financial leverage.	Regression model	Differences in the performances of the Islamic banking sector between pre-post M&As.
Banal-Estañol & Ottaviani (2007)	UK, Banks 2006	Introduce frameworks for depositors and borrowers welfare	Mathematical series	When the value of diversification is sufficiently strong, bank mergers increase the welfare of borrowers and depositors. If depositors have more correlated shocks than borrowers, bank mergers are relatively worse for depositors than for borrowers.
Jatkar (2012)	India, banks,	NA	NA	The need for large investment banks is the primary factor for further consolidation in India's banking sector and other Asian economies.

Table 2.3, continued

Author(s)	Sample of the study	Variables	Methodology	Findings
Erel, Jang, Minton, & Weisbach (2017)	European Union (15 European countries), Merger Waves, 1997 to 2006	GDP growth rate, the Unemployment rate	Descriptive statistics	The regulatory body of the target firm is extremely forbidden foreign M&A but influences the local one.
Goyal & Joshi (2011)	India, Banks	Human Resources Management and Organization Behaviour	NA	Motives behind the MA deal.
Linder & Crane (1993)	Bank, New England, 1982-1987	ROA, operating income,	Matched pair approach	The bank that merged with the newly acquired institution, difficult to have performance. Intra-holding company was likely to yield an overall performance gain. It is difficult to reduce operating expenses in the first 2 years of the merger.
Sufian & Habibullah (2013)	331 bank year observations, Malaysia, 1996-2008	Factor productivity changes, efficiency, total loan/total assets, log pf total assets, loan loss provision/total loans, non-interest income/total assets, non-interest expenses/total assets,	OLS, FE, RE	The acquiring banks have been relatively more productive compared to the target banks and banks in the control group.
Sufian (2011)	Korian 31 Banks, 1992-2003	Efficiency, loa, investment, interest income, noninterest income, total deposit, capital, interest expense, non-interest expenses.	DEA	Inefficiency of the Korean banking sector was largely due to scale rather than pure technical under the operating approach, while scale inefficiency seems to outweighs pure technical inefficiency under the value-added approach. Under the intermediation approach, the Korean banking sector's inefficiency stems largely from pure technical, rather than scale
Ibrahim & Rizvi (2017)	45 Islamic banks from 13 countries.	Bank stability, total assets, gross loan to total assets, return on average assets, liquid assets to total assets, GDP, inflation	Panel techniques; static model and dynamic model	Larger Islamic banks are more stable

Table 2.3, continued

Author(s)	Sample of the study	Variables	Methodology	Findings
Focarelli & Pozzolo (2001)	2500 banks from 29 OECD countries	ROA, ROE, total assets, net interest income, non-interest income, GDP, population, bank credit, inflation,	NA	Efficiency is the main important than overall degree of economic integration, size is the kye determinants of to expand in abroad
Abbas, Hunjra, Azam, Ijaz, & Zahid (2014)	10 banks, Pakistan	Profitability & Efficiency, Leverage, and Liquidity	DEA	no positive improvement in the financial performance of the banks in Pakistan after Merger and Acquisition.
Ismail, Abdou, & Annis (2011)	Egyptian companies, 1996-2003	Performance, efficiency, liquidity, solvency, and cash flow position,	OLS	Performance does not improve in post M&A
Amihud, DeLong, & Saunders (2002)	General, Banks, 1985 to 1998	Total risk (variance of firms stock return)	Panel techniques.	Acquirers' risk neither increases nor decreases.
Tse & Soufani (2001)	124 cases in UK, 1990-1996	Wealth effects of shareholders	Event study	wealth effects to shareholders in the different transactions is related to the prevailing performance of the economy
Choi & Jeon (2011)	Firm merger, US, 1980-2004	GDP, currency in circulation, M1, M2, Producer Price Index (PPI), effective Fed funds rate, 3-month Treasury bill rate, 10-year Treasury bond rate and corporate net cash flow	Time series econometrics tools, Autoregressive Integrated Moving Average (ARIMA)	long-run equilibrium relationship between the set of macroeconomic variables and various alternative measures of aggregate merger activity
Buehler, Kaiser, & Jaeger (2006).	Firms, 1994 to December 2000	Life time of the firm, survival, failure, size, GDP, bankrupt,	NA	large firms tend to have lower hazard rates than small firms–is inappropriate for mergers. In fact, the opposite seems to be true: large firms are more likely to merge than small firms

Table 2.3, continued

Author(s)	Sample of the study	Variables	Methodology	Findings
Athanasoglou, Brissimis, & Delis (2008)	Greeks commercial banks, 1985-2001	bank-specific, industry-specific and macroeconomic determinants of bank profitability	GMM	profitability of Greek banks is shaped by bank-specific factors and macroeconomic, control variables that are not the direct result of a bank's managerial decisions. Profitability persists to a moderate extent, indicating that departures from perfectly competitive market structures may not be that large.

2.4.2 Impact of M&As on Bank Stability

Bank stability represents banks' soundness which signals that the bank is financially stronger and less prone to any systematic shocks. There is a strong connection between M&As and bank stability. For instance, being merged, banks can integrate several resources, e.g., human capital, technology, policies & strategies, assets etc. Efficient and expert personnel know-how eases financing decisions and deposit collection. Therefore, skilled personnel can manage the bank's core functions efficiently and effectively while positively impacting the performance. Ultimately, it helps the bank to be more financially stable and less fragile.

Being involved in M&As, the bank increases market power arising from diversification, leading to higher stability (Paroush, 1995). Therefore, based on the study of Paroush, it is concluded that M&As of banks lead to diversifications, more market share that generates more market power lowering the risk and then higher bank stability. Similarly, increase market power through M&As lead to higher financial stability (Benston, Hunter, & Wall, 1995). In line with the findings of Benston et al. (1995), and Tan, & Hooy (2004), the merger brings stability for banks. Merger policy encourages to takeovers of failed institutions that contribute to banking stability (Perotti, & Suarez, 2002).

Large banks are more stable (Ibrahim & Rizvi, 2018) with higher Z-score and lower earnings volatility (Moutsianas, & Kosmidou, 2016**;** De Haan, & Poghosyan, 2012) and large banks can easily change and are able to enhance diversification benefits and economies of scale in information production, monitoring and transaction cost (Nguyen, Skully, & Perera, 2012). Meanwhile, it would be able to achieve total gains (e.g., cost efficiency, risk sharing, revenue enhancement, performance, and diversification of resources along with increasing market power and bank stability)

(Piloff & Santomero, 1998). Bank Negara Malaysia (BNM) statement on 5 February 2020 supported having large banks to maintain financial stability and economic growth since the contributions of these banks know no bound. Therefore, BNM has announced that the country's three largest banks (in terms of capitalization) are domestic systematically important banks (D-SIBs). Meanwhile, Čihák, & Hesse (2010) found mixed results, small Islamic banks are more stable than small conventional banks while large Islamic banks are less stable than large conventional banks (Wahid, & Dar, 2016). Diaconu & Oanea (2015) found that the most important factors that affect both stability and profitability are internal determinants (e.g., capital ratio, efficiency ratio, liquidity, and lending activity) and external determinants (GDP). Bank stability also depends on interest and non-interest activities (Nguyen et al., 2012).

Bank stability is measured by Z-score (Čihák, & Hesse, 2010; Ibrahim & Rizvi, 2018; Nguyen et al., 2012; Wahid, & Dar, 2016; Diaconu, & Oanea, 2015; Khaddafi, Heikal, & Nandari, 2017; Li, X., Tripe, & Malone, 2017). This study uses Z-score as the proxy for bank stability. A higher value of Z-score indicates greater bank stability, reflecting the bank's distance from insolvency and vice-versa (Li et al., 2020).

The economy also impacts bank stability. Good economic conditions lead to smother economic functions and lead to support for financial stability. Karim, Al-Habshi, & Abduh (2016) stated that the stability (Z-score) of Islamic banks is not affected by macroeconomic variables. There is a trade-off between inflation and financial stability (Criste, & Lupu, 2014). Accordingly, there is a non-linear negative relationship between inflation and financial stability (Boyd, Levine, & Smith, 2001). Similarly, Diaconu, & Oanea (2014) stated that GDP has a significant impact on financial stability.

2.4.3 Factors Associated with M&As

Apart from the impact of M&As, this study is concerned with several factors related to M&As that influence the bank's performance and stability. Previous studies have yielded few, inconclusive, and mixed results on the impact of M&As on the banks' performance and stability. This study re-examines selected factors such as operational performance (motives), bank size, level of bank sizes (large, medium, and small) modes of financing, and time effect. Table 2.4 presents a summary of the literature review.

Factors associated with M&As can strongly influence the performance of M&As. George et al. (2012) stated that the factors include characteristics of the banking sectors and the size and activity of the financial markets. Kwenda, Oyetade, & Dobreva (2017) studied factors that impacted the cross-border mergers and acquisitions (CBM&As) performance in Brazil, Russia, India, China, and South Africa (BRICS). Five factors were analyzed: lagged profit, asset growth, asset size, leverage, and payment method. Based on previous studies, the following factors that are related to M&As are reviewed and discussed.

2.4.3.1 Bank Sizes and Level of Bank Sizes

Bank size is an important factor affecting banking sectors. Throughout the literature review, bank size continues to posit a dilemma to the sectors. Some studies declare "too big to fail" while others suggest that some banks are "too small to succeed". Therefore, this study looks bank size as a general for Islamic and conventional banks while level of bank size is seen as a whole for banking sectors. The rational is that latter on we can see effects of bank size on general basis for Islamic bank and conventional banks meanwhile by dint of level of bank sizes (large, medium and small) able to know which types of banks are the potential.

With regards to M&As, bank size is another essential explanatory factor. Concerning the announcement time of the size-adjusted combined performance of both the bidder and the target, Cybo-Ottone & Murgia (2000) found that this factor is essential in M&As and it is economically relevant. They argued that the combined value of domestic deals creates shareholder values. Studies argue that there is a negative relationship between size and post- merger performance (Ramaswamy and Waegelein, 2003). Meanwhile, other studies defend a positive relationship between size and post-M&As performance (Mantravadi & Reddy, 2007). The size of the target compared with the large bidder which impact on the costs structuring, bureaucratic reasons, agency cost, and other cost related to managing large banks. For this reason, a negative relationship between size and performance exists (De Matos, 2018; Al-Sharkas, Hassan, & Lawrence, 2008). Accordingly, Mitchell & Onvural 1996) suggests that bigger is only better up to a point, and beyond that point, additional scale is not associated with performance. Moreover, Naseri, Bacha, & Masih (2020) said that larger banks experience problem in processing soft information (i.e., qualitative information associated with providing financial services), relationship lending (principal-agent problem). It also due to the diversification by engaging more into market-based activities that lead to higher risk and volatility.

Kosmidou, Pasiouras, Doumpos, & Zopounidis (2006) suggested two types of bank sizes, i.e., big and small based on the total assets. The findings showed that small banks performed better compared to large banks. Furthermore, the results are supported by high regulatory capital ratios and the majority of small banks earn high assets quality.

Aladwan (2015) showed that profitability increases as asset size decreases. Meaning that small banks are better for having good performances. Small banks benefit from fewer liquidity problems, less bureaucratic costs, less research and development

costs and fewer political costs. Furthermore, bank size had an inverse relationship with profitability. Meanwhile, Micco et al. (2007) showed that bank size does not matter in determining bank profitability.

It is said that Islamic banks gain economies of scale and scope through M&As. Ibrahim & Rizvi (2017) and Iqbal (2008) emphasized that in order to be a megabank, there is no alternative except through M&As and problems of economies of scale and scope operation can be resolved and managed. Economies of scale can be achieved if banks with similar operations find it beneficial to eliminate overlapping branches and consolidate back-office operations including systems and technology, administration and marketing functions. They concluded that Islamic banks are "too small to succeed". In this study, the impact of bank size is examined based on three dimensions, i.e., total assets, total deposits, and total operating income. In line with the previous studies, this study divided bank size into three-levels namely large, medium, and small based on bank sizes in terms of total assets, total deposits, and operating income.

Ibrahim & Rizvi (2017) pointed out that large banks are needed to ensure consistent financial growth and solvency. Higher liquidity, greater diversifications, equipment of new technology, lower systematic risk help to boost financial growth and solvency. Greater size is required for better diversification while large institutions have substantial scale economies linked to diversifications (Gamra, & Plihon, 2011). Similarly, large banks performed better due to economies of scale and scope (Fithria, & Sholihin, 2018; Beck, Demirgüç-Kunt, & Merrouche, 2010; Amene, & Alemu, 2019). Meanwhile, other studies showed that medium-sized banks are more efficient than large banks (Katib & Mathews, 2000). Kosmidou, Pasiouras, Doumpos, & Zopounidis (2006) and Aladwan (2015) found that small banks can outperform larger ones since they do

not have high start-up costs, lower bureaucratic cost, and lower cost of operations along with the research and development.

2.4.3.2 Intermediary Role of The Banks (Financial and Non-Financial)

Since the study is on M&As of banks, the study includes the intermediary role of banks. It is known that banks works as an intermediary (either financial or non-financial) between depositors and economic agents. Based on this theory, the study includes the following variables: the financial intermediary role that is proxied by economies of scale (cost to income) and economies of scope (loan to deposit). And the non-financial intermediary role is proxied by non-interest cost to non-interest income.

Allen & Santomero (1997) stated that intermediation has increased although transaction costs and asymmetric information have declined. Moreover, they have stated that it is one of the observed behaviours of the institutions. They can easily overcome the problem of asymmetric information by acting as a delegated monitor. Risk management has become a key area of intermediary activity. In the traditional Arro-Debreu model of resource allocation, firms and households interact through markets and financial intermediaries play no role.

Nor, Shaharuddin, Nawai, Marzuki, & Abdullah (2018) said that bank margin of conventional and Islamic banks is sensitive to the efficiency of the bank management as the results show management efficiency increases, the bank margin also increases. Furthermore, the paper concludes that the non-interest income to total assets ratio has significant positive relationship on bank margin of conventional bank while Islamic banks are relatively very low to have relationship and give an impact on bank margin. On the contrary, higher the non-interest income lowers the profit of the banks (Lepetit, Nys, Rous, & Tarazi, 2008).

2.4.3.3 Modes of Financing

Modes of financing are one of the important issues of M&As deals. M&As deal is either financed by cash or stock. Works of literature are reviewed and discussed. Modes of financing, i.e., cash, stock, or a combination of both, significantly impact performance (Kwenda, Oyetade, & Dobreva, 2017). According to the findings of Healy, Palepu, & Ruback (1992), the post-M&As performance of acquirers is influenced by the modes of financing. Iankova (2014) stated that using cash, stock, or both of them depends on the value of the stock of the acquirer. If the stock of the acquirer is overestimated in the market, then it is better to offer stock otherwise in cash. André & L'Her (2004) investigated the relationship between post-M&As performance and modes of financing. Generally, M&As financed by stocks performed poorer in the long run. Some studies that examine the type of payment argue that cash-financed transactions outperform stock-financed ones (Rau & Vermaelen, 1998; Andre et al., 2004; Megginson et al., 2004), while, other studies found no evidence that the method of payment influences the reported performance (Choi & Russell, 2004; Yook, 2004; Heron & Lie, 2002 and King et al., 2004).

In most cases, the use of cash had a positive impact on the performance of the target and acquirer compared to stock. Inversely, Nor & Ismail (2006) found that Malaysian investors appeared to not favour bidding companies using cash to acquire target companies. This is demonstrated by significant negative results on the bidder's average residuals after the announcement date. An acquirer may not want to use cash to finance a M&As deal if the acquirer is uncertain about the target firm's value. When the acquirer is uncertain about the value of the target firm and the target firm accepts a cash offer greater than its true value, the acquirer would have overpaid (Fuller, Netter, &

Stegemoller, 2002). Cash payments may signal market participants to interpret a cash offer as good news, that is, the acquiring firm's management expects an increase in firm value over the post-acquisition period, and to interpret a common stock offer as bad news (Ramaswamy & Waegelein, 2003; Tuch & O'Sullivan, 2007).

2.4.3.4 Time Effect

Most literature reviews analyzed the time effect by taking three-time horizons such as an average of five years, three years, and two before and after M&A. Few have looked into combining all three-time horizons into the study. It is expected that these three-time horizons can significantly affect performance and stability. This study tries to identify the period that affects performance differently. Hence, the analysis considers all the three three-time horizons in this study.

A study showed that in five years before and after M&As, there was no improvement after M&As for the publicly listed companies in Malaysia **(**Mat Nor & Ramlee, 1995). Meanwhile, another study reported inverse results, pointing to a significant relationship between M&As and bank performance (Al-Sharkas, Hassan, & Lawrence, 2008). Srivastava (2018) also observed a longer period in better performance.

Said, Mat Nor, Low & Rahman (2008) looked into the period of three years before and three years after the M&As. Their estimation results showed similar results before and after M&As, meaning that M&As did not improve performance. However, Sufian & Habibullah (2009) showed that post-merger performance was better than pre-merger performances for the same period.

Meanwhile, Yener & Ibáñez (2004) showed that two years is sufficient to avoid alteration and inaccurate results. They explained that longer periods might negatively

affect the accuracy of outcomes due to the effects of other external economic factors. This is supported by Achtmeyer (1994) who argued that the benefits of M&As do not take more than two years to materialize. Abbas et al. (2014) looked into the period of two years before and two years after M&As. Their results showed an improvement in the financial performance after M&As.

Therefore, consistent with previous studies, this study divides the sample into five years before and after the M&As and expects a positive result that is consistent with the efficiency theory namely that M&As yield better performance. Table 2.4 presents the summary of previous studies of factors associated with M&As.

Table 2.4: Summary of Studies Associated with the Impact of Factors of M&As on the Performance of Banks

Author(s)	Sample of study	Variables	Methodology	Findings
Aladwan (2015)	Jordan, bank, 2007-2012	ROE, bank sizes, bank specific variables	Simple Regression	Profitability tends to increase with the decrease of bank size.
Sufian & Habibullah (2009)	Malaysia, Bank, technical efficiency, 1997-2003	Total deposits, Capital, Personnel Expenses, Loans, Investments, Non-Interest Income	DEA	Economic reasons drove the merger program among the Malaysian domestic commercial banks.
Iqbal (2008)	General, Islamic Financial Institutions (IFIs)	General discussion.	NA	IFIs must expand the scope of their products and services to meet the challenges of domestic and international markets. Due to the small size of the economy, larger banks are unable to efficiently use resources and minimize the cost.
Micco, Panizza, & Yanez (2007)	Developing and industrial countries, banks, 179 countries around the world, 1995-2002	ROA, interest margin, overhead cost, employment, politics	Regression analysis	State own bank in developing countries tends to be lower profitability and higher cost than their private counterparties. Moreover, there is no strong correlation between ownership and the performance of the bank located in the industrial area.
Kosmidou, Pasiouras, Doumpos, & Zopounidis (2006)	UK, Banks 1998-2002	Loan loss reserves/Gross loans, Equity/Total assets, Capital funds/Liabilities, Net interest margin Return on average assets (ROAA)on average assets	PAIRCLAS Multicriteria methodology	Small banks exhibit higher overall performance compared to large ones.
Amihud, DeLong, & Saunders (2002)	General, Banks, 1985 to 1998	Total risk (variance of firms stock return)	Panel techniques.	Acquirers' risk neither increases nor decreases.
Abbas, Hunjra, Azam, Ijaz, & Zahid (2014)	Pakistan, Islamic Financial Institutions (IFIs), 1984-2014	Total accrual, Total accounts receivable, Total inventories, Total taxes payable, and, Total other current liabilities.	Regression analysis	The target firm manager significantly manages earnings upward by cutting discretionary expenses during earn-out periods.

Table 2.4, continued

Author(s)	Sample of study	Variables	Methodology	Findings
Al-Sharkas, Hassan, & Lawrence (2008)	US, Banks 1987-2000	Cost efficiency Profit efficiency (Pre and post-merger cost & profit efficiency)	SFA, DEA	The merger has improved the cost and profit efficiency of the banks.
Ibrahim & Rizvi (2018)	25 Islamic banks, 114 conventional banks, 10 dual banking countries, 2000-2014	Growth rate of gross loan/financing, growth rate of deposits, bank specific, macroeconomics, regulatory variables,	Dynamic panel techniques; system GMM and differenced GMM	Financing growth of Islamic banks is higher than the lending growth of conventional banks
Moutsianas & Kosmidou (2016)	Bank UK, 2000-2012	Volatility, size, cost to income, leverage, diversification, concentration,	Dynamic panel models; GMM	Size negative affects to earning volatility,
De Haan & Poghosyan (2012)	Non-investment banks, US, 2004Q1 – 2009Q4	ROA, ROE, Bank size, market structure, cost to income, leverage, diversification	Penal techniques; static model	Negative impact of size on the earning volatility
Nguyen, Skully, & Perera (2012)	South Asian markets; Bangladesh, India, Pakistan & Sri Lanka), 1998-2008	NIM, Market power, concentration ratio, non-interest income, bank size, cost efficiency, capitalization,	GMM	Greater market power focus more on traditional interest income generating activities.
Kwenda, Oyetade, & Dobreva (2017)	listed firms from Brazil, Russia, India, China and South Africa (BRICS) that engage in cross-border mergers and acquisitions, 2000-2012	Performance, size, leverage, growth,	GMM	acquirers continue to make profits as they engage in CBM&As.
Wahid & Dar (2016)	Islamic & conventional Banks, Malaysia,	z-score, ROA, market structure (Panser Rose H-statistics, Marco economic variables, total assets, equity to total assets, credit risk, cost to income,	POLS	large Islamic banks are less stable than large conventional banks small Islamic banks are found to be more stable than small conventional banks

Table 2.4, continued

Author(s)	Sample of study	Variables	Methodology	Findings
Karim, Al-Habshi, & Abduh (2016)	5 Islamic and 58 conventional banks, Indonesia,	Bank stability, GDP, INF, CPI,	ARDL	long run relationship between the stability of commercial banks and macroeconomic factors. no evidence of long run relationship between the stability of Islamic banks and macroeconomics factors
Boyd, Levine, & Smith (2001)	64 countries over the period 1960-1995	Inflation rate, bank size, liquidity, private credit, inflation, GDP, liability,	Dynamic GMM	Negative implication for the long run economic performance
Cybo-Ottone, & Murgia (2000)	European banks from 14 markets, 1988-1997	Performance, domestic vs cross-border, size types of deal	OLS	positive and significant increase in value for the average merger at the time of the deal's announcement.
Mitchell & Onvural (1996)	Banks, 1986-1990	Cost efficiency, loan to deposits, deposits, price of labour, price of capital, price of deposits, price of purchased funds	OLS	Bank becomes cost efficient
Naseri, Bacha, & Masih (2020)	12 emerging countries of dual banking	Bank efficiency, profitability, sizes,	Two steps dynamic system GMM	Size is really matter for bank efficiency Size produces same impact for the both types of banks
Fithria & Sholihin (2018)	Indonesian Islamic rural banks from Q12011 to Q42016 with total 3,222 observations	ROA, Bank size, financing ratio, capital ratio, nonperforming financing, GDP growth rate and inflation rate as control variables.	Panel techniques; Static model	Small size has positive impact on the performance
Allen & Santomero (1997)	General	Intermediation theory, assets pricing theory,	NA	trading in financial markets asset pricing theories and intermediation theories need to become better integrated.

Table 2.4, continued

Author(s)	Sample of study	Variables	Methodology	Findings
Healy, Palepu, & Ruback (1992)	50 large firm, US, 1979-1084	Operating characteristics (Cash flow margin on sales, Asset turnover, Employee growth rate, Pension expense /employee) and investment characteristics (capital expenditure rate, assets sales rate; cash & book value, R&D rate)	Sensitives analysis	Asset productivity has improved relative to their industries, leading to higher operating cash flow returns.
Rau & Vermaelen (1998)	3169 mergers and 348 tender offers, firms, 1980-1991	EPS, modes of payment, size,	Standard long-horizon event study	Long-term underperformance of acquiring firms in mergers is predominantly caused by the poor post-acquisition performance of low book-to-market. Since market and the management over extrapolate the bidder's past performance when they assess the desirability of an acquisition
Said, Nor, Low, & Rahman (2008)	10 Banks Malaysia, -3, +3, 1998-2004	CAMEL types variables	DEA	Mergers did not seem to enhance the productive efficiency. The banks are becoming more focussed on their intermediation activities to generate high net interest income.

2.4.4 Mediating Role of Market Structure

The term 'mediation' is a hypothesized causal chain in which one variable affects a second variable that, in turn, affects the third variable. Market structure is defined as level of competition that simultaneously influences corporate activities. The mediating role of market structure in the present study looks into how market structure mediates the relationship between M&As and banks' operational performance and stability. The banking sectors act as the lifeblood of modern trade and commerce to provide them with a major source of finance, however, its activities are also affected by market structure. A change and significant impact in the market structure due to M&As (Goetz, 2018; Mahesar, Kalhoro, & Jariko, 2016). It can be a highly concentrated market or a low competitive market and vice-versa. Al-Muharrami & Matthews (2009) posited that firms with greater market power may take advantage of the gains from non-competitive pricing in a more relaxed environment in which less effort is put into the rigors of minimizing cost. High concentration in the banking sectors in a particular country posits that it is difficult for foreign banks to obtain licenses to operate in that country. The previous study showed that there is a higher degree of concentration in the GCC banking sectors, which suggests foreign banks are subject to strict licensing rules and restrictions.

Abdul Majid & Fadzlan (2007a), and Sufian & Habibullah (2013) observed that concentration increased in the post-merger period. In line with that Abdul Majid & Fadzlan (2007b) stated that a merger has increased concentration in the conventional banking sector with the application of oligopoly theory.

Section 2.4.4.1 and 2.4.4.2 show the mediating role of market structure on operational performance and bank stability while Section 2.4.4.3 measures the market structure.

2.4.4.1 Mediating Role of Market Structure on Operational Performance

Wang, Huang, & Lin, studied the mediation effects involving 50 commercial banks in Taiwan. The research examined internationalization, performance, and the mediating role of operational efficiency. The findings indicated that internationalization (independent variable) did not enhance financial performance (dependent variable) directly without improvements in operating efficiency (mediating variable). Yulia (2017) conducted a study of Jordanian commercial banks and found that financing and investment decisions partially mediate the significant and positive effects on the relationship between capital structure the corporate performance in these banks. Ramli (2014) used firm leverage as a mediating variable while capital structure as an independent variable and firm performance as a dependent variable from the sample of Malaysia and Indonesia. She found that leverage had a mediating role for Malaysian firms but was not significant for Indonesian firms. Khan, Ahmad, & Chan (2018) demonstrated that bank conduct partially mediated the relationship between market structure and bank performance. They further argued that banks in concentrated markets earn higher profits partially through anticompetitive behaviour. Therefore, consolidation activities must be monitored/scrutinized to prevent banks from creating market power. Ibrahim, & Shariff (2016) studied the mediation role of access to finance to the firm performance, the study showed that the strategic orientations (i.e., market orientation; learning orientation; and technology orientation) indirectly explained firms' performance.

Sahul Hamid (2017) showed that market power theory explains the relationship between market structure and performance. He explained the market power theory in terms of the structure conduct hypothesis and relative market power hypothesis by

measuring these hypotheses using concentration ratio (CR) and Herfindahl-Hirschman Index (HHI).

Guan, Tian, & Tian (2019) analyzed the listed companies in China and found that CSR played a mediating role in the relationship between government structure and investment efficiency. Ruslan, Pahlevi., Alam, & Nohong (2019) examined the mediating role of bank efficiency on the relationship between bank size and bank profitability. Their findings posited that bank efficiency had an indirect impact on explaining the relationship between bank size and bank profitability. Bank size affected bank profitability through the mediating effect of bank efficiency. If the bank owns a huge amount of assets and is managed properly and efficiently, the bank becomes more profitable. Ganiyy, Ahmad, & Zainol (2015) studied the role of mediation of profitability on the relationship between liquidity risk and cost efficiency in 28 Islamic banks from 10 countries. Their findings indicated that liquidity risk had an indirect effect on cost efficiency through the mediating role of profitability. Ramada & Chen (2012), Wahba & Khaled (2015), and Ramli & Gilbert (2016) have also explored the working of selected mediating variables. They concluded that the mediating role had partial and weak effects relating to financial performance.

Bank efficiency mediates the relationship between bank size and bank profitability (Ruslan, Pahlevi., Alam, & Nohong, 2019). Inversely Shehu, Ibrahim, Mat, Nasiru, Popoola, Muhammad, & Kura (2013) stated that firm size does not fulfil the condition of mediating effects on the performance. Similarly, Akinyi (2019) found that financial leverage negatively mediates the relationship between firm size and financial performance. Diantimala (2018) indicated that there is no indirect relationship between firm size and liquidity on the firm values

Mergers and acquisitions of banks help them to integrate potential resources (i.e., financial and non-financial resources). It helps the bank to expand its operation on a large scale to increase market share. Increased market share generates more market power. Ultimately, more market power has a significant impact on M&As contributing to the performance and stability of Islamic and conventional banks.

Various studies have yielded conflicting results using structure conduct performance (SCP) hypothesis and efficiency hypothesis (EH), such as Khan, Ahmad, & Chan (2018); Katib (2004); and Molyneux, & Forbes (1995), who argued that structure conduct performance (SCP) hypothesis predicts that banks in concentrated markets collude to charge higher loan rates, pay lower deposit rates and earn higher profits. Similarly, Abdul Kadir, Habibullah, Siong Hook, & Mohamed (2014) posited that banking concentration influences the cost of intermediation, such as the rate of financing and cost of deposits. Meanwhile, Goldberg & Rai (1996), Samad (2008), and Seelanatha (2010) suggested that bank performance depends on the level of efficiency but neither market concentration not market power.

Studies also showed that mergers in concentrated industries are primarily motivated to achieve productive efficiency gains. In fragmented industries, productive efficiency and monopolistic collusion can both be motives for firm mergers (Geiger, & Schiereck, 2014). They found that merger motives depend on industry concentration.

Market structure can be used to measure competitive performance is used in the banking sectors (Bikker, & Haaf, 2002). They found that 72% or above concentration level was directly correlated with less bank failure in sectors. There are three benefits of high concentration, such as large banks can easily diversify. This allows them to focus on other sectors of the market when one sector takes a turn for the worse, high

concentration levels increase profits for the dominant banks within the industry. Larger banks are also easier to monitor than many small banks.

Abdul Majid & Fadzlan (2007a) and Hakim, & Chkir (2014) found that the conventional banking industry is more concentrated than the Islamic banking industry. Meanwhile, Majid, Zulkhibri, & Sufian (2007) demonstrated that Islamic banks in Malaysia operate in a monopolistic competition. Abdul Kadir et al. (2014) mentioned that Asian banks moving from a high concentration to a moderate concentration. Al-Muharrami, Matthews, & Khabari (2006) noted that Kuwait, UAE, and Saudi Arabia are moving from concentrated to less concentrated.

2.4.4.2 Mediating Role of Market Structure on Bank Stability

Mirzaei (2011) analyzed a total of 175 banks comprising 32 Islamic banks and 143 conventional banks from 12 Middle Eastern countries. The analysis found that market concentration had a negative impact on bank stability and did not contribute to the profitability of Islamic banks. Hence, he suggested that M&As are discouraging amongst Islamic banks. Uhde & Heimeshoff (2009) argued that large banks can increase stability in five ways: capital buffer, charter value, easy control of small banks, diversification of loan portfolio risk, and credit monitoring.

González, Razia., Búa, & Sestayo (2017) observed the negative linear relationship between Z-Score and H-statistics in Gulf countries and concluded that increased competition led to reduced financial stability. This implies that M&As reduce the level of competition. Sahul Hamid (2017) stated that concentration stabilizes the banking sectors. Meanwhile, González, Razia, Búa, & Sestayo (2019) observed that the banking sectors in MENA can perform under competitive conditions rather than being highly concentrated. Schaeck, Cihak, & Wolfe (2006), Fuetal (2014), Kasman & Kasman

(2015), and DeNicolo, Bartholomew, Zaman, & Zephirin (2004) observed that less competition and/or more concentration decreases stability.

Meanwhile, Albaity, Mallek, & Noman (2019) demonstrated that increased competition can be associated with low bank stability and profitability and higher insolvency risk. Their findings imply that stable banks in MENA countries operate in less competitive markets.

Repon & Islam (2016); Bod' a (2014); and Gajurel (2010) argued that the banking industry has become less concentrated. If one subscribes to the concentration-stability point of view, a concentrated banking system with a few large institutions seems to be more stable. Here, banks may be more profitable, better diversified and easier to monitor and therefore more resilient to shocks (Rinkeviciute & Martinkute Kauliene, 2014).

2.4.4.3 Measurement of the Market Structure

There are several measurement techniques to measure the market structure namely, the Herfindahl-Hirschman Index (HHI), Concentration ratio, Gini coefficient (GI), Rosenbluth index (ROS), Entropy index (ENT), Linda index, Lorenz curve, Lerner index, Horwath Index (HOR), Hannah Keys Index (HKI), Industrial Concentration Index (CCI), (Barra & Zotti, 2019; Galetić, & Obradović, 2018; Ginevičius, & Čirba, 2007; Bikker, & Haaf, 2002; Lloyd-Williams, Molyneux, & Thornton, 1994) (see for example Table 2.5). Mohammed, Ismail, & Muhammad (2016) applied two types of measure, i.e., relative measure and absolute measure. For instance, an absolute measure of concentration emphasized on the number of firms and the market share that the firms have in a particular market that is called an absolute

measure. Meanwhile, relative concentration measures focus on the disparities in the sizes of the firms operating in the industry. HHI is the most widely used for market concentration (Rinkevičiūtė, & Martinkute-Kauliene, 2014).

The U.S. Department of Justice considers a market with an HHI of equal to or less than 1,500 to be a competitive marketplace, an HHI from 1,500 to 2,500 to be considered a moderately concentrated marketplace, and an HHI of 2,500 or greater to be a highly concentrated marketplace.

Furthermore, the U. S. Justice Department also uses the HHI to decide whether a merger is good for competition in the marketplace or not. A market with an HHI under 1,000 is considered competitive. The Justice Department is likely to scrutinize a merger in an industry with a post-merger HHI of between 1,000 and 1,800, and it is almost certain to decline mergers that result in a post-merger HHI exceeding 1,800.

Market structure can also be measured based on total assets, total deposits, and total loans. Galetić, & Obradović (2018) measured market concentration based on total assets, Al-Muharrami, & Matthews (2009) measured MC based on total deposits while Khan, Ahmad, & Chan (2018); Mohammed, Ismail, & Muhammad (2016); Hakim & Chikr (2014); Abdul Kadir et al. (2014); Sufian & Habibullah (2013); Gajurel (2010); Turk-Ariss (2010); Abdul Majid & Fadzlan (2007); and Pawlowska (2005) measured market concentration based on total assets, total deposits and gross loan. All these studies found consistent results for market concentration. Turk Ariss (2010) implied that banking in MENA countries is highly concentrated. According to Katib (2004), the relationship between market structure and performance is based on several variables such as concentration measure; CR & HHI, market share; total assets & total deposits, performance measure; net interest margin to total assets, control variable; operating

expenditure to total assets, total loan to total assets, total loan to total deposits, the log of total assets.

Throughout the literature, market structure is discussed by three competing hypotheses: structure conduct performance (SCP), relative market power hypothesis, and efficiency hypothesis (EH). Figure 2.7 shows the operational framework of M&As based on the above discussion.

Table 2.5: Summary of Studies on Market Structure

Author(s)	Countries	Measurement	Results
Repon & Zahidul Islam (2016)	Bangladesh	CR and HHI	a) Low concentration
Bod' a (2014)	Slovakia	CR HHI, HTI, CCI, and CV for Loan and TD	a) Lower concentration
Rinkeviciute & Martinkute Kauliene (2014)	Lithuania	CR and HHI for TA	a) Higher concentration
Bikker & Haaf (2002b)	23 industrialized countries	CR and HHI for TA	a) Higher concentration associated with large banks. b) Low concentration associated with small banks.
Gajurel (2010)	Nepal	CR and HHI for TA, TD, and TL	a) Lower concentration; growing competition
Hakim & Chikr (2014).	Arab GCC countries	CR, HHI, and Entropy for TA, TL, and TL	a) IBs is less concentrated compared to CBs
Turk-Ariss (2010)	13 countries operate the dual banking system	CR and HHI for TA, TD, and loan	a) Concentration higher in the IBs Vs. CBs
Abdul Majid & Fadzlan (2007a)	Malaysia	CR and HHI for TA and TL	a) A decreasing trend of concentration in the Islamic banking market
Abdul Kadir, Habibullah, Siong Hook, & Mohamed (2014)	Malaysia	CR and HHI for TA, TD, and TL	a) Malaysian banks are operating under perfect competition.
Sufian & Habibullah (2013)	Malaysia	CR and HHI for TA, TD, and TL.	a) greater competition in the overall market segment, which comprises operating income from fee and commission-based products than the traditional interest-based market.
Abdul Majid & Fadzlan (2007b)	Malaysia	CR and HHI for TA, TD, and TL	a) Concentration has increased for CBs

2.5 Hypothesis Development

The following research hypotheses are designed and developed based on the extensive theoretical and empirical literature review.

H1: there is a significant impact of bank size on operational performance and stability for Islamic and conventional banks

H2: there is a significant impact of the intermediary role of the bank (financial and non-financial intermediary role) on operational performance and stability for Islamic and conventional banks

H3: there is a significant impact of modes of financing on operational performance and stability for Islamic and conventional banks

H4: there is a significant impact of bank-specific variables (i.e., credit risk, capitalization, and liquidity) on operational performance and stability for Islamic and conventional banks

H5: there is a significant impact of macro-economic variables (i.e., GDP & inflation) on operational performance and stability for Islamic and conventional bank

H6: there is a significant impact of the level of bank sizes (large, medium and small) on operational performance and stability for banking sectors

H7: the mediating role of market structure (LHHI & CR3) has a significant impact on the relationship between M&As and operational performance and stability for Islamic and conventional banks

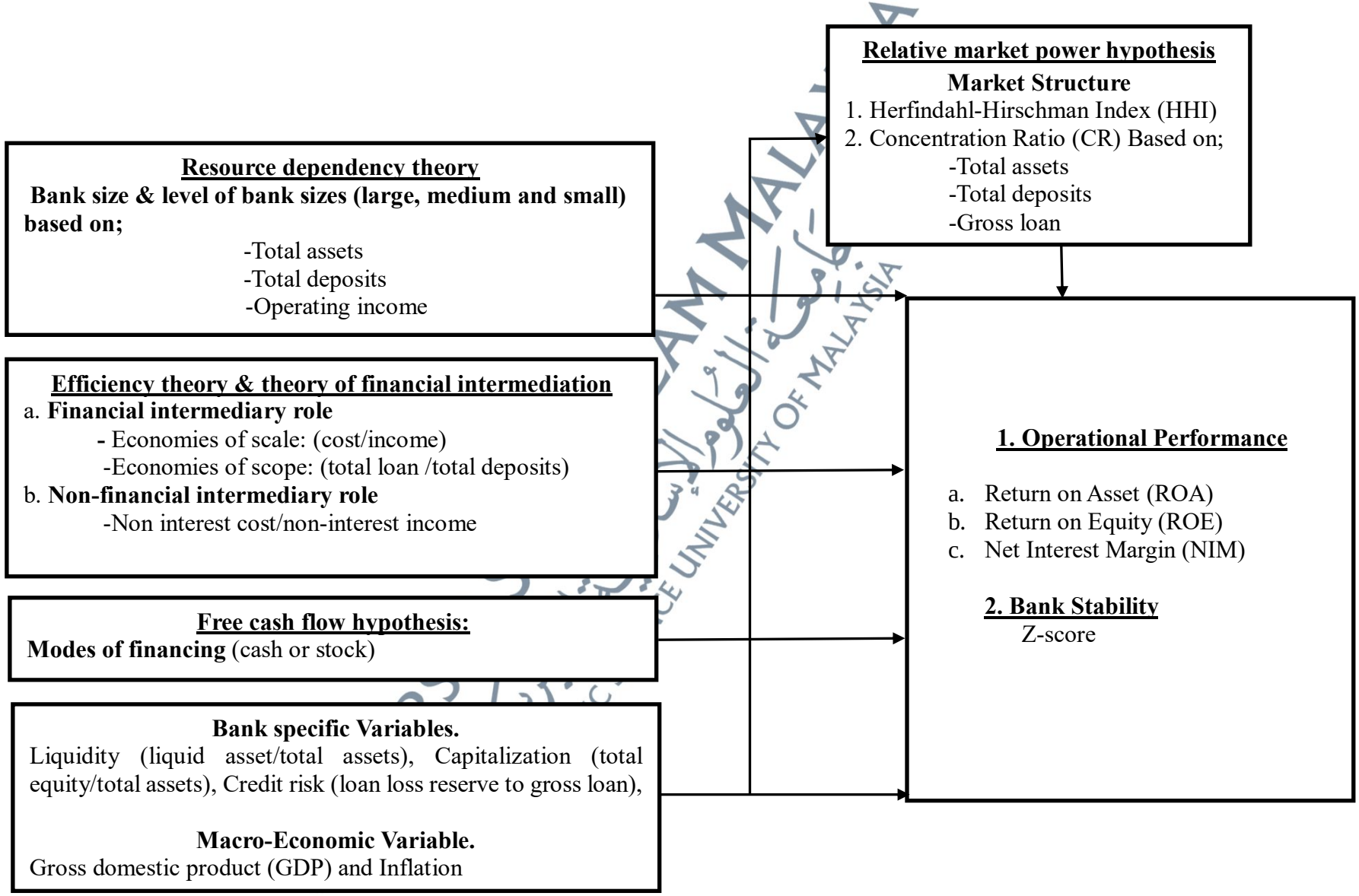


Figure 2.7: Operational Framework of M&As

2.6 M&As in the Islamic Banking Sector

The following number of studies shows the motives for Islamic banks to engage in M&As. Dar (2004) stated that demand for Islamic banking services and products has increased in the UK such as of loan and mortgage or house financing, income, occupation, and education. Kahf (1999) stated that merger and expansion are compulsory for the survival of Islamic banks in an era of high competition.

Shari'ah-based products and services have drawn mass attention from both Muslims and non-Muslims. Kaakeh, Hassan & Van Hemmen Amazon (2018) observed that norms, religious motivation, and awareness are important factors that affect the intention to use Islamic banking products and services. In terms of awareness, some findings showed that highly educated people are reluctant to use Islamic banking products and services, however, Dar (2004) found that educated people have shown positive reactions to Islamic banking products and services. The demand for Islamic banking services is due to both religious beliefs and economic factors. Religious belief does not limit preferences to only Muslim (¾ Muslim in UK are indifferent about having Islamic banking services). Rather non-Muslims also preferred Islamic banks like in Malaysia as a significant number of both Chinese and Indians use Islamic banking products and services.

The Deputy Governor of Bahrain suggested that Islamic banks are expected to achieve both economies of scale and scope through M&As activities. Jatkar (2012) argued that M&As resulting in larger banks should not affect agility. The aim should be to create a nimble giant rather than a clumsy dinosaur.

Diseconomies of scale is another catalyst to promote M&As in the Islamic banking sector. Islamic banks suffer from diseconomies of scale due to the size of smaller assets being lower compared to conventional peers. Piloff & Santomero (1998)

pointed out that when the bank becomes larger, they reach the level of scale economy and offer more products and services to the market. Furthermore, it is worthwhile to study M&As in the Islamic banking sector since the percentage of M&As in the Muslim majority, countries have increased significantly compared to non-Muslim countries (Table 2.6).

Table 2.6: M&As Activity in Islamic and Non-Islamic Countries

	Panel A. M&As deals in Islamic and non-Islamic countries							
	Islam is 1st				Islam is 1st or 2nd			
	All		CBO		All		CBO	
	Islamic	Non-Islamic	Islamic	Non-Islamic	Islamic	Non-Islamic	Islamic	Non-Islamic
1980-1991	823(2)	32,367(98)	412(3)	12,250(97)	27,808(84)	5,382(16)	11,092(88)	1,570(12)
1992-2003	13,448(6)	209,843(94)	5,278(8)	64,999(92)	154,583(69)	68,708(31)	54,537(78)	15,740(22)
2004-2015	26,387(7)	369,969(93)	11,676(11)	97,084(89)	229,656(58)	166,700(42)	78,522(72)	30,238(28)
Total M&As deals	**40,658(6)**	**612,179(94)**	**17,366(9)**	**174,333(91)**	**41,2047(63)**	**240,790(37)**	**144,151(75)**	**47,548(25)**

	Panel B. Total values of M&As deals							
	All		CBO		All		CBO	
	Islamic	Non-Islamic	Islamic	Non-Islamic	Islamic	Non-Islamic	Islamic	Non-Islamic
1980-1991	21.3	799.3	7.6	246.9	658.7	161.8	219.5	35.1
1992-2003	249.5	4,118	89.7	1,206	2,990	1,377	1,048	247.1
2004-2015	626.1	8,725	342.1	2,478	4,939	4,412	2,037	783.2
Total deals value (USD bill)	**896.9**	**13,642**	**439.5**	**3,931**	**8,588**	**5,951**	**3,305**	**1,065**

Notes: This table describes M&As activity in Islamic majority countries. Two approaches to define Islamic country. Islam is 1st is a more restrictive definition at which a country is defined as Islamic only if more than 50% of its population are adherent to Islam. Islam is 1st or 2nd is a less restrictive definition at which a country is defined as Islamic if Islam is either its first or second religion. All is all M&As activity (domestic as well as cross-border). CBO is a cross-border deal only.

Source: Elnahas, Hassan and Ismail (2017, p. 227)

Elnahas, Hassan & Ismail (2017) state that M&As are intuitive enough to study M&As in the Islamic banking sector. They found that the growth of M&As in Muslim countries has increased with the opposite happening in non-Muslim countries. Table 2.7 shows the details.

Table 2.7 shows the calculation of the growth of M&As in Muslim and non-Muslim countries. The calculations are under two headings: the number of the deals and the total value of the deals. The total number of deals was 652837, 40658 (6%) deals were in Muslim countries and the remaining 94% in non-Muslim countries from 1980 to 2015. The rate of M&As growth in Muslim countries was higher than that of non-Muslim countries, although the percentage of M&As in the non-Muslim countries exceeded the percentage of M&As in Muslim countries on years 1992-2003 and 2004-2015. Hence it is worthwhile to study M&As in the Islamic banking sector.

Table 2.7: Growth of M&As in Muslim and Non-Muslim Country from 1980 to 2015

Year	Number of M&As deal					Total M&As deal value (USD bil)				
	Total no. of deal	**Islamic country**	**Growth**[1]	**Non-Islamic country**	**Growth**	**Total Value**	**Islamic country**	**Growth**	**Non-Islamic country**	**Growth**
	652837	**40658**		**612179**		**145339**	**896.9**		**13642**	
1980-2015		**(6%)**	-	**(94%)**	-		**(0.62%)**	-	**(9.38%)**	-
		823		32367			21.3		799.3	
1980-1991		(2%)	-	(5.3%)	-		(2.4%)	-	(9.86%)	-
		13448		209843			249.5		4118	
1992-2003		(33%)	15.34	(34%)	5.48		(28%)	10.71	(30%)	4.15
		26387		369969			626.1		8725	
2004-2015		(65%)	0.96	(60%)	0.76		(70%)	1.51	(64%)	1.12

[1] Growth is calculated as = (value of current year – value of previous year / value of previous year) * 100

Source: Author's calculation following Table 2.6

2.6.1 The Benefit of Having M&As in the Islamic Banking Sector

M&As have great potentiality in the Islamic banking sector. As discussed by practitioners and academicians, the size of the Islamic banking sector is small compared to its peers. Thus, Islamic banks are commercially hampered due to its size and M&As a solution to resolve the problems. Islamic banks are too small to have economies of scale and scope, meaning that diseconomious compared to conventional peers (Ibrahim & Rizvi, 2017; Garbois, Gourp, Von Pock, Bhatnagar, 2012). While The Deputy Governor of Bahrain suggested that Islamic banks should engage in M&As to achieve both economies of scale and scope (Maraj, 2016). At the same time, Fitch Ratings (2019) suggested that M&As can benefit the Islamic banking sector by creating larger, stronger, and more efficient Islamic banks.

Samat (2017) highlighted that the creation of mega Islamic banks through amalgamation could reveal the other Islamic banks and the "Giants" from the conventional side. Larger Islamic banks survive in competitive markets, boost industry growth, have huge potential to cross the border, and can be a global hub for the Islamic banking sector. With the motives of having large size, Qatar Central Bank (2018) has planned to merge three local banks, namely Masraf Al Rayan, Barwa Bank, and the International Bank of Qatar. With the same purpose, the Central Bank of Iraq (2018) has also planned to merge 17 financial transfer companies to form six (6) Islamic banks.

Iqbal (2008) emphasized that incentives are necessary to increase size through consolidation to lower the cost of funding and increase the value of shares. It is important to distinguish how M&As activities in the Islamic finance sector. This study suggests that two elements should be considered regarding the consolidation of Islamic financial institutions. Firstly, benefits that arise out of economies of scope and scale, secondly, benefits from enhanced risk management or risk-sharing strategy through

diversification. These two factors are possibly the main driver for consolidation in the Islamic financial industry. A well-diversified bank has better-expected return-risk trade-offs resulting in lower variability of profits and higher security for depositors.

As stated by Kandil & Chowdhury (2014), there are two main reasons for M&As. Firstly, in terms of increased operational efficiency due to increasing the better performance of the IBs. Secondly, IBs can also potentially generate higher profits from increased market power. Sufian & Habibullah (2009) mentioned that the central bank of Malaysia has always encouraged domestic banking institutions to merge. An efficient bank is assumed to be well organized and has more capable management. Since less efficient banks have room for improvement a takeover by more efficient banks can bring better management quality into the inefficient banks. This will, in turn, lead to a more efficient and better performing merged unit. Table 2.8 shows a summary of studies on M&As in the Islamic banking sector.

Table 2.8: Summary of Conceptual Studies on M&As in the Islamic Banking Sector

Author(s)	Sample of the study	Variables	Methodology	Findings
Ibrahim & Rizvi (2017)	Bangladesh, Egypt, Indonesia, Jordan, Malaysia, Pakistan, Tunisia, Turkey along with GCC countries, Banks, 1993 to 2004.	Z-score (a measure of stability), bank size (total bank asset), regulations, Control variable lending activity, bank profitability, bank liquidity, economic growth, and inflation.	GMM, cross country (dynamic panel)	Larger Islamic banks are more stable, at least when they surpass a certain threshold size. Benefits of having bigger Islamic banks or mega Islamic banks. Improving regulations.
Kandil & Chowdhury (2014)	UK, Islamic Banks, 1999 to 2009	ROA, ROI, bank size (bank's revenue), Financial leverage.	Regression model	differences in the performances of the Islamic banking sector between pre-post M&As.
Iqbal (2008)	General, Islamic Financial Institutions (IFIs)	General discussion.	NA	IFIs must expand the scope of their products and services to meet the challenges of domestic and international markets. Due to the small size of the economy, larger banks are unable to efficiently use resources and minimize the cost.
Pinter (2011)	Banking and insurance companies	General discussion	General discussion (theoretical)	Banks need to broaden their activity to be competitive, but success depends on several factors, on aligning the people, organizational, cultural, and financial assets

2.7 Research Gap

Extensive studies have conducted to analyse the operational performances of M&As (Yeh, & Hoshino, 2002; Liargovas, & Repousis, 2011); Rao-Nicholson, Salaber, & Cao, 2016; Cabanda, & Pajara-Pascual, 2007) On the other hand, there are studies of M&As on the bank stability (Tan, & Hooy, 2004; Leary, 2002; Paroush,1995).

Being relatively new and niche, there is no concern about too big to fail contracts to being too small to succeed for Islamic banks (Naseri, Bacha, & Masih, 2020). This small size then causes these banks to becomes diseconomies of scale and scope (Yudistira, 2003). Larger Islamic banks are required due to their better performance and sustainable financial growth (Fithria, & Houlihan, 2018; Ibrahim & Rizvi 2017; and Barth et al., 2006). Therefore, M&As are warranted for Islamic banks (Yudistira, 2003). Inversely, there is no concern for too small to succeed rather too big to fail for conventional banks (Kaufman, 2014; and Daley, Matthews, & Whitfield, 2008). Studies argue that there is a negative relationship between size and post- merger performance (Ramaswamy & Waegelein, 2003; Micco et al. 2007). Whereas other studies supports a positive relationship between size and post-M&As performance (Mantravadi & Reddy, 2008; Cybo-Ottone & Murgia, 2000). Therefore, size is a dilemma for Islamic and conventional banks.

In extension to bank size (general), this study uses levels of bank sizes namely large, medium and small. Ibrahim & Rizvi (2017) pointed out that large banks are needed to ensure consistent financial growth and solvency. Similarly, large banks performed better performance because of economies of scale and scope (Fithria, & Sholihin, 2018; Beck, Demirgüç-Kunt, & Merrouche, 2010; Amene, & Alemu, 2019). Meanwhile, other studies showed that medium-sized banks are more efficient than large banks (Katib & Mathews, 2000). Kosmidou, Pasiouras, Doumpos, & Zopounidis (2006)

and Aladwan (2015) found that small banks can outperform larger ones since they don't have high start-up costs, lower bureaucratic cost, and lower cost of operations along with the research and development. Based on the mixed findings of the previous studies, this study takes into consideration of the re-examining the levels of bank sizes.

Several other factors associated with M&As of banks are concerned as well. For instance, intermediary roles (financial and non-financial), modes of financing, time effects, and control variables, namely bank-specific variables and macroeconomics variables. Although a number studies conducted M&As in the banking sectors, none of the studies include the function of intermediary role of banks in the analysis. Therefore, this study also considers the intermediary roles (i.e., financial and non-financial intermediary role) of the banks towards the impact of M&As.

Modes of financing (e.g., cash or stock) also impact M&As. Various literature have studied modes of financing, whether to pay by cash or stock, or both. For example, some studies that examine the type of payment argue that cash-financed transactions outperform stock-financed ones (Rau & Vermaelen, 1998; Andre et al., 2004; Megginson et al., 2004), while, other studies found no evidence that the method of payment influences the reported performance (Choi & Russell, 2004; Yook, 2004; Heron & Lie, 2002; King et al., 2004). Healy, Palepu, & Ruback (1992), the post-M&As performance of acquirers is influenced by the modes of financing but payment of M&As is dependent on the stock value of the acquirer (Iankova, 2014). The use of cash had a positive impact on the performance of M&As compared to stock (Liargovas & Repousis, 2011). Inversely, Nor & Ismail (2006) found that Malaysian investors did not favour bidding companies through cash to acquire target companies. Therefore, this study gives further efforts to re-examine modes of financing.

M&As periods may significantly influence performance and stability. Based on the studies, there are contradictory findings among them. For example, timing of the transaction does not affect post-merger performance (Choi & Russell, 2004; Megginson et al., 2004). There is a significant relationship between M&As and bank performance in long periods (Al-Sharkas, Hassan, & Lawrence, 2008 and Srivastava, 2018). A study showed that in five years before and after M&As, there was no improvement after M&As for the public listed companies in Malaysia **(**Mat Nor & Ramlee, 1995). Meanwhile, another study reported inverse results, pointing to a significant relationship between M&As and bank performance (Al-Sharkas, Hassan, & Lawrence, 2008). Srivastava (2018) also observed and suggested that a longer period is better to have expected performance of M&s. Therefore, in line with the previous studies, this study considers five years before and after M&As.

Extensive studies have conducted M&As all sectors except M&As of banks (Ramli, 2014; Ganiyy, Ahmad, & Zainol, 2015; Khan, Ahmad, & Chan, 2018; Garland, 1985; and Garland, & Adkinson, 1987). While the study of mediation effects of M&As of banks is lacking. Hence, the mediation effect of market structure on the event of M&As of bank is concerned as well

2.8 Chapter Summary

In conclusion, an extensive literature review (i.e., theoretical and empirical) has been conducted on the issue of M&As in the banking sectors. Based on previous studies, the theoretical framework has been identified and an operational framework has been developed to address research objectives and questions.