An Exploratory Study of Risk Perception and Consumer Decision Making in Islamic Banking Products in UAE

By

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Abstract

In spite of the success and growth of Islamic banks, the importance of continually aligning products and services to consumers has been identified as a critical issue in the performance of Islamic banks. Globalisation, technology and liberalised market structures have contributed to a highly dynamic business environment generating significant competitive pressures on the fast-growing Islamic financial sector. Risk perception is acknowledged as an important determinant of risk attitude but few studies have researched the role of risk perception in Islamic banking (IB). This study addresses a limited understanding on how the dynamic and fragile financial context impacts on the risk perceptions of Islamic banking consumers and their decision-making. This research investigated the relationship between risk perceptions of IB products and investment decision-making in terms of switching likelihood and switching intention. A key objective was to determine the switching point and understand the degree to which external conditions influence risk attitudes of risk averse investors towards investments decisions and the decision to change from IB to an alternative banking system. A cross-sectional case study strategy was adopted employing survey and semi-structured interviews to gather quantitative and qualitative data and analysed using Structural Equation Modelling (SEM) and thematic analysis. The results pointed to significant differences in risk perceptions and switching likelihood under different conditions. Key findings indicate that risk perception is not a wholly objective financial cognitive assessment. Rather, the findings point to an interplay of a range of subjective factors that influence risk perceptions towards IB products and decision-making. On the basis of the empirical evidence, IB consumers perceive a higher level of risk associated with three of the four scenarios. Overall, external conditions impact on risk perceptions, which vary across different types of products based on subjective knowledge and information investors possess in relation to those products. In terms of the relation between attitudinal constructs, a key finding reveals that risk perception mediates the effect of risk tolerance and risk aversion on switching likelihood and switching intention. The study makes a key contribution in identifying risk perception as a distinct component of overall risk attitude and its relationship as a predictor and mediator of switching likelihood and switching intention. This contributes novel insight into the interplay between attitudinal constructs, personal and contextual factors in influencing investor decision-making in an Arabic context. A framework is advanced for risk practitioners for assessing risk culture based on understanding of risk perception as a factor amplified by internal and by external factors that affect consumer decision-making.

Declaration

I declare that this work has not previously been accepted in substance for any degree and is not being concurrently submitted for any other degree. I further declare that this thesis is the result of my own independent work and investigation, except where otherwise stated (a bibliography is appended).

I hereby give consent for my thesis, if accepted, to be available for photocopying and for inter-library loan, and for the title and abstract to be made available to outside organisations.

Reem Sabah Obaid Qambar (Candidate)

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Dedication

I dedicate this thesis to my beloved parents, brothers and sisters, who offered unconditional, love and support and have always been there for me. I wouldn't be what I am without you.

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Chapter 1 Introduction

1 Introduction

1.1 Introduction

This thesis reports the findings of an investigation in the Emirate of Abu Dhabi in the United Arab Emirates (UAE) into the relationship between risk perceptions of Islamic Banking (IB) products and investment decision-making. The primary focus centres on exploring the role of risk perception and the impact of external conditions on investment decisions and on switching behaviour to alternatives to the conventional banking system. This study adopts a positivistic approach to understanding consumer behaviour, by gathering empirical data and testing the relationship between variables. Survey questionnaires and semi-structured interview methods were employed to gather quantitative and qualitative data on risk attitudes, risk perceptions of risk averse investors in relation to IB products and switching intentions.

This chapter introduces the research topic and aims, and describes the rationale, motivation and significance of this study. It commences with a presentation of the background to the research which provides the foundation for this study including the growth of IB, the financial crisis, Islamic principles and the changing financial, economic and social context. The subsequent sections state the aims, research questions, and objectives underpinning the study. The thesis structure is outlined with a brief overview and summary of each chapter.

1.2 Background to Study

This study addresses a consensus in the literature over the lack of understanding in relation to consumer behaviour in IB. There is a particular emphasis on examining the role of risk attitude on consumer decision-making. The rapid growth of IB and the dynamic environmental contexts give rise to the issue of how Islamic consumers' risk perception affects their attitudes and investment decision-making. Scholars, including Amalia and Ionut (2009), Ganzach et al. (2008) and Sitkin and Pablo (1992) argue that the most relevant aspects that impact consumer behaviour in recessionary times are their risk perceptions and risk attitudes. Amalia and Ionut (2009) defined risk attitude as a customer's interpretation concerning risk content and the degree of dislike of the content of that risk. Meanwhile, risk perceptions relate to the consumer's interpretation of the possibility of being exposed to the risk content (Amalia and Ionut, 2009).

IB is a promising business in the financial services industry and has experienced tremendous growth over the three decades since its inception (Abduh and Omar, 2012). There are now over 300 Islamic financial institutions worldwide across 75 countries (Abduh and Omar, 2012). The number of Islamic banks has risen since 1971, as have their sizes (Iqbal and Molyneux, 2016). Over the years, IB has gained more recognition and is growing at a fairly rapid pace, gradually becoming one of the fastest-growing financial sectors worldwide (Iqbal and Molyneux, 2016). It is estimated that the value of global Islamic banks' assets will reach US $4 trillion by 2020 (AMEinfo.com, 2010).

IB has become more evident with the emergence of the global financial and economic crisis in 2007, which began when the financial system in the United States experienced a shortfall along with the collapse of the sub-prime mortgage market in the country (Mansoor and Jalal, 2011). This developed into global turmoil in which many banks and financial institutions saw a major decline with some left on the verge of ruin (Mansoor and Jalal, 2011). These events led to significant consequences, even in the strong economies of Europe and Asia, leading to a global recession (Mansoor and Jalal, 2011).

Worsening financial circumstances around the world caused changing patterns in consumer perceptions and attitudes towards assessing certain situations associated with particular financial risks (Nistorescu and Puiu, 2009). That said, the way consumers react to a particular economic situation can vary according to their personal interpretation of the circumstances (Amalia and Ionut, 2009). A study conducted by Flatters and Willmott (2009) indicated the changing trends among consumers. These include firstly rapidly-changing consumption habits as recession has led to consumer sensitivity to prices, in addition to rapidly changing loyalty from chosen brands, and the quality they signify, to similar products with lower prices (Flatters and Willmott, 2009). Further, there has been an adaptation to simpler needs. Flatters and Wilmott (2009) explain that during recessionary times, consumers generally receive limited offerings from companies and become accustomed to them. This pattern is likely to continue even post-recession and consumers may opt for simpler products, which are seen to offer better value (Flatters and Willmott, 2009).

It is argued that IB appeals to customers who are risk-averse by nature. Abedifar et al. (2013) and van Greuning and Iqbal (2008) point to a number of examples of how IB products are less risky when compared to conventional products. A key example is the profit and loss sharing finance called *"Musharaka"*. While the bank agrees with customers on a percentage of shared profits from the outcome of the venture capital invested proportionately by the bank and the customer, the same percentage is also lost by the bank in the case of the venture recording losses for the given period. This is one of the most important Islamic finance concepts demonstrating that IB products are generally less risky than conventional banking products (Khan and Bhatti, 2008). Another example relates to the mortgage facilities offered by Islamic banks, which are "lease-to-own" in nature. This means that the bank owns the property and rents it to the customer until the final rental payment under the contract is made, at which stage the ownership of the property is transferred to the customer. However, in case of damage on the building or the property arising from any reason, other than customer negligence, the customer will not have to pay any further rent to the bank, which aligns with the rationale that the customer never owned the property up to this stage and was a "tenant" as per the contract. This obviously significantly reduces the risk from the customer's perspective, when compared to typical mortgages offered by conventional banks (Chong and Liu, 2009).

Another example of risk reduction when using Islamic products can be observed when examining auto finance (car loans) in the form of *"Murabaha"*. The price and profit are set upfront by the bank and agreed in the contract. There is no risk of the bank re-setting the profit rate to cater for any increase in the cost of funding in response to moves in market funding rates. This is a flexibility that a conventional bank enjoys. On the other hand, conventional banks have the ability to set interest rates as a margin above a floating base rate (such as IBOR) (World Bank, 2009; Beenhakker, 2001), accordingly customers face uncertainty in the cash outflows required to meet the principal and interest components in the loan taken from a conventional bank as opposed to a fixed pre-agreed profit rate when using finance from an Islamic bank (Said, 2012).

Any Islamic financial trade products should have an underlying asset to avoid speculation in terms of risk and differentiate trade from *"Riba"*. Islamic financial principles extend to bank assets (loans) and liabilities (deposits) (Di Mauro et al. 2013). Mohd-Karim (2010, p.3) defined *"Riba"* as:

> *"Literally means an increase or addition. Technically it denotes any increase or advantage obtained and accrued by the lender in a loan transaction without giving an equivalent counter-value or recompense in return to the borrower. In a commodity exchange it denotes any disparity in the quantity or time of delivery".*

Prohibiting *"Riba"* in Islam is on the basis that *"Riba"* increases the fortunes of a small proportion of the community at the expense of a larger, less fortunate category of the community (Awan and Azhar, 2014). Islamic products also do not offer financial products that are entirely risk free. The probability of profit or loss should exist. On a different note, IB prohibits *"Gharar",* which is defined as uncertainty or excessive risk, in order to protect the customer. *"Gharar"* can be in the form of gambling or derivatives, such as futures and options that carry significant uncertainty, and can lead to losses not related to an underlying business activity (Awan and Azhar, 2014). Apart from risk-related factors, all activities that are categorised as forbidden by "*Shariah"* (Islamic Law), such as liquor, pork or any activity forbidden by Islam, are not part of the pool allowed to Islamic Banks for financing or accepted as sources of deposits or funds (Awan and Azhar, 2014).

Over the last few decades, the IB industry has grown rapidly not only in Islamic countries but also in Western countries, for example the United Kingdom (UK) and France (Abdul Rehman, 2012). It is believed that changes in risk perceptions and risk attitudes may affect banking behaviour while choosing a particular bank, as a consumer is interested not only in the services the bank offers but also in the security it is seen to provide (Abdul Rehman, 2012; Gerrard and Cunningham, 1997). This is because, as suggested by Gerrard and Cunningham (1997), consumers seek safeguards against any risks associated with banks, whether they are social, psychological or financial risks.

The most recent global financial and economic crisis in 2007 revealed limitations in the existing global financial systems, some of which were considered highly complicated and difficult to comprehend (Mansoor and Jalal, 2011). Despite the paralysing effect of the crisis on financial institutions, a recent study carried out by Awan and Bukhari (2011) showed that the downturn in the global economic environment had not affected IB in the same way as conventional financial institutions. In fact, the conventional banking system, which incorporated hedge funds, foreign exchange speculation and transfer of debt, was found to be the main cause of the mortgage crisis that hit the United States (Hardy, 2012). In contrast to interest-based banks, Islamic banks do not indulge in such speculative activities and are therefore not exposed to their associated dangers, whereby the adaptation of the interest-free banking system managed to survive the crisis with less damage (Hardy, 2012; Ozsoy and Yabanli, 2010). Scholars, such as Awan and Bukhari (2011) and Khan and Khanna (2010) argue that stringent adherence to Islamic law and prohibition on interests and speculative businesses were the main reasons. This has led to the possibility that interest-free IB is more secure than conventional banking (Awan and Bukhari, 2011). IB's resilience against the financial crisis (Hassan and Kayed, 2010) may support the perception of Islamic finance as safer and a more stable proposition than conventional banks. However, the prevailing economic context has the potential to influence consumer attitudes in this market.

1.3 Problem Statement

Globalisation, technology and liberalised market structures have contributed to a highly dynamic business environment generating significant competitive pressures on the fast-growing Islamic financial sector (Wahyudi et al. 2015; Thambiah et al. 2010). The resilience shown by Islamic banks in the financial crisis (Hassan and Kayed, 2010) may support a perception that IB is a safer and more stable option than investing in conventional banking. However, the prevailing economic environment has the potential to influence consumer attitudes in this market. Research indicates there is a likelihood that IBs will perform less well if investors were to perceive them as poor performers (Ahmed, 2003). This gives rise to the question of whether Islamic banks are more resilient than conventional ones, and influences the exploration of conditions that may affect the risk perceptions of Islamic finance consumers towards IB and whether such factors mediate their decision-making towards investments.

The uncertainty that Islamic consumers face regarding returns and the performance concerns of Islamic banks present factors that can potentially impact on risk attitudes and decision-making. Under profit sharing investment accounts (PSIA) returns are guaranteed (Hasan and Dridi, 2010). While in conventional banking returns for consumers are fixed (Ariff, 2014), in IB there is a degree of uncertainty over returns. The sharing of profit or losses under some instruments gives rise to a rate of return risk in IB (Kammer et al. 2015).

Further, it is uncertain what impact the financial crisis of 2008 and the current turbulent economic conditions have on the strength of IB investors' loyalty and on their willingness to remain loyal to their bank and indeed to IB in the face of low or zero returns. There is significant uncertainty over the degree of resilience to poor profits. In terms of the general performance of Islamic banks, there is evidence to suggest that under certain market conditions IB faces lower levels of return than conventional banking. Kamil et al. (2014) argue that fund managers have no incentive to maximise their performance, as their compensation is not based on returns performance.

A further issue relates to Shariah compliance and a fundamental tenet of IB is its adherence to the values of Shariah. It is strongly argued that Shariah principles are significantly compromised in IB operations, and according to Mansour et al. (2015) IB has failed to adhere to its ethical values. An examination of Islamic financial products found them comparable with conventional products and counter to Islamic ethical principles. Mansour et al. (2015, p. 71) state that:

> *"The contemporary trading of financial instruments, such as mura tawarruq, shows Islamic banks misuse. On balance, they neither enforce Shariah in practice according to the purposes of the Divine lawgiver, nor do they use qiya properly. This leads to a conspicuous violation of ethics in Islamic banking".*

The impact on the switching decision is emphasised by Kammer et al. (2015, p.17) who state that "*the requirement of Shariah governance and compliance on uses and sources of funds also poses risks: a determination of noncompliance could also trigger client flight*".

A further problematic factor that potentially impinges on risk perceptions and consumer decision-making relates to economic conditions. Hasan and Dridi (2010) note the credit risk Islamic banks are exposed to based on the investments in property, which have witnessed significant decline. Poor economic conditions can influence customer perceptions and force them to evaluate the financial factors associated with finance. For instance, a situation where income levels are stagnant and interest rates increase may make conventional funds more attractive. Metawa and Almossawi (1998) found that there was a significant relationship between customers' income and the relative importance of the rate of return. Perceptions of the poor image of IB associated with poor Shariah compliance may force Shariah conscious investors to rethink their commitment. These issues have relevance for consumer decision-making, when taking into account the profile of Islamic investors, and underline the importance of understanding the degree to which certain conditions relating to Shariah compliance and profit performance of IB influence risk attitudes towards investments and make consumers switch.

A specific issue within this context is the decision-making process of risk averse investors in the UAE that merits further investigation. Emiratis are overall more risk averse than nationals in other countries (Kramer and Pittinsky, 2012; Bohnet et al. 2006) and have the highest levels of risk aversion of all countries studied. Research into the impact of cultural values in the corporate banking industry in the UAE found that Emiratis are highly culturally homogenous and risk averse, extending trust in banking relationships based on familiarity and shared values (Houjeir and Brennan, 2014). UAE investors are overall risk averse, with risk aversion heightened by the events of the 2008 global financial crisis (Al-Hilu et al. 2017; Bin Byat and du Osman Sultan, 2014).

1.4 Research Aims and Research Questions

The primary aim is to investigate the relationship between risk perceptions of risk averse investors and IB products and investment decision-making. The secondary objective is to determine the degree to which conditions relating to Shariah compliance, profit performance of IB and economic conditions (interest rates and income) influence risk attitudes towards investments and impact on investor switching intentions. A related objective is to determine the switching point and understand the degree to which external conditions influence risk attitudes towards investment decisions and the decision to change from IB to an alternative banking system. In other words, how far are risk averse consumers from making the switch to an alternative form of investment based on certain factors? These aims are underpinned by the following research questions:

- How does risk perception influence IB consumer decision-making?
- What conditions influence the relationship between risk perception and IB consumer decision-making behaviour of risk averse investors?
- To what degree do external conditions affect switching intention and switching behaviour for risk averse IB consumers?
- What factors and determinants affect risk perceptions towards products and intention to switch of risk averse IB consumers?

1.5 Research Objectives

To address the research questions of this study, five research objectives have been formulated:

RO1: To undertake a literature review to investigate the relationship between consumers' risk perception and consumer decision-making in relation to switching behaviour.

RO2: To implement a survey and interviews to gather primary quantitative and qualitative data on IB consumer risk perceptions towards IB products, switching intentions and closeness to switching.

RO3: To apply the primary data to evaluate the relationship between external conditions (Shariah compliance, profit performance of IB and economic conditions), risk perceptions and switching behaviour of IB consumers.

RO4: To apply the primary data to evaluate the relationship between risk averse consumer characteristics (such as, age, sex, education, number of children) and risk perception.

RO5: To identify factors and determinants affecting risk perceptions towards IB products and intention to switch.

In addressing these objectives, the relationship between a range of environmental and social factors and risk attitudes can be evaluated to further the understanding of consumer behaviour post-crisis in a fast-growing industry. To assess these relationships six hypotheses have been developed for empirical testing in this study, and presented in Section 3.10.1 Conceptual Framework.

1.6 Motivation for Study

Several issues underpin the rationale for the choice of this topic. Risk perception is acknowledged as an important determinant of risk attitude but few studies have researched the role of risk perception in IB. There is a call in the literature for further knowledge on risk perception and its relationship with consumer decision-making in IB following the financial crisis. The context outlined raises the issue of IB consumers' sensitivity to the economic conditions and their overall risk perceptions and attitudes. In particular there is theoretical and practical basis for understanding the decision-making process surrounding risk averse investors and the potentially complex issues that affect this group of consumers. Investors are frequently classified in terms of their risk attitudes, predominantly risk aversion, risk seeking and risk neutral (Abdallah and Hilu, 2015). The literature demonstrates that risk aversion is not constant and varies across different countries and cultures (Schneider et al. 2017; Breuer et al. 2014; Gandelman and Hernandez-Murillo, 2014; Rieger et al. 2014; Hofstede et al. 2010).

IB consumers' sensitivity to economic conditions, the financial crisis, and the growth in IB has generated greater complexity in consumer needs. Understanding consumer behaviour and risk perceptions becomes an important factor to maximising retention. Abduh (2012) notes however that there has been limited research into Islamic consumer perceptions and the impact on banking performance. There is momentum in the view of IB changing from the initial perception as institutions essentially created to comply with the religious obligations of Muslim customers to business entities focused on the maximisation of customer value and the fulfilment of their financial needs (Henry and Wilson, 2004). Perceptions of the poor image of IB associated with weak Shariah compliance may force Shariah conscious investors to rethink their commitment. These issues have relevance for consumer decision-making, when taking into account the profile of Islamic investors, and underline the importance of understanding the degree to which certain conditions relating to Shariah compliance and profit performance of IB influence risk attitudes towards investments and make consumers switch. Further, the economic context factors lead us to question the resilience of Islamic banks compared to conventional ones in relation to customer retention. These factors relate to a number of issues associated with IB including the maturity of IB and its products, and unique risks associated with IB. This elevates the role of risk perceptions towards IB products and the conditions that may affect risk attitudes, as well as the impact on consumer decision-making towards investments and switching intention. The changing economic and financial context and the changing market structure of IB underline the importance of further knowledge in this area.

1.7 Significance of Research

This research acknowledges the impact of risk perceptions during financial crises on consumer decision-making and bank performance and the unique issues surrounding the decision-making process of risk averse investors. The study will contribute further knowledge on how different factors influence risk perceptions and investment decision-making of risk averse investors. It contributes an understanding of the influence of determinants of decision-making via risk perception. Few studies have been undertaken for Islamic banks and financial institutions addressing the issues outlined above. The studies that exist on this subject attempt to explore and investigate the viewpoints of both Muslim and non-Muslim consumers towards IB (Dusuki and Abdullah, 2007; Gerrard and Cunningham, 1997). Further research is needed in examining risk perceptions of this group of IB consumers.

The findings of this study are expected to make a number of contributions to theory and practice. Principally a contribution will be made towards addressing the gap in the literature relating to the lack of more comprehensive analysis of how attitudinal constructs of individuals interplay with internal and external conditions in influencing consumers' risk perceptions and behaviours, both in IB and geographically in terms of the Middle East and UAE. New insight will be contributed on the relative significance of different factors on an individual's decision-making process which interplay to influence switching behaviour. By widening the analysis of factors, risk perception will be studied for the first time to account for both internal and external conditions using a mixed methods approach. A contribution will also be made to existing interdisciplinary theory on risk perception to provide a multifaceted understanding of the effect of risk aversion and risk tolerance on risk perception and the mediating effect of risk perception on the relationship between attitudes and consumer decision-making and switching behaviours. Furthermore, the study is expected to contribute a practical contribution in proposing an exploratory model that practitioners can adopt to explore risk perception according to the different external contexts of their consumers.

1.8 Structure of Thesis

This thesis is structured around the key components of the research process adopted in this study as shown in Figure 1-1. This first chapter has introduced the subject and context of this research outlining the background, problem statement, aims and contribution. Chapter 2 presents an overview of the economic and financial industry in UAE that provides significant contextual perspective underpinning the study, while Chapter 3 discusses the theoretical basis of this project by exploring key debates and themes of consumer risk attitude in banking that contribute to the theoretical framework and guide the research process. This informs the research design presented in Chapter 4 that describes and justifies the methodological approach and procedures adopted. Chapter 5 presents the results gathered from the survey and interviews. The key findings and implications of the results are analysed and discussed in Chapter 6. The final chapter summarises the thesis and key conclusions arising from the research process and discusses the key contributions, recommendations, limitations and future research opportunities.

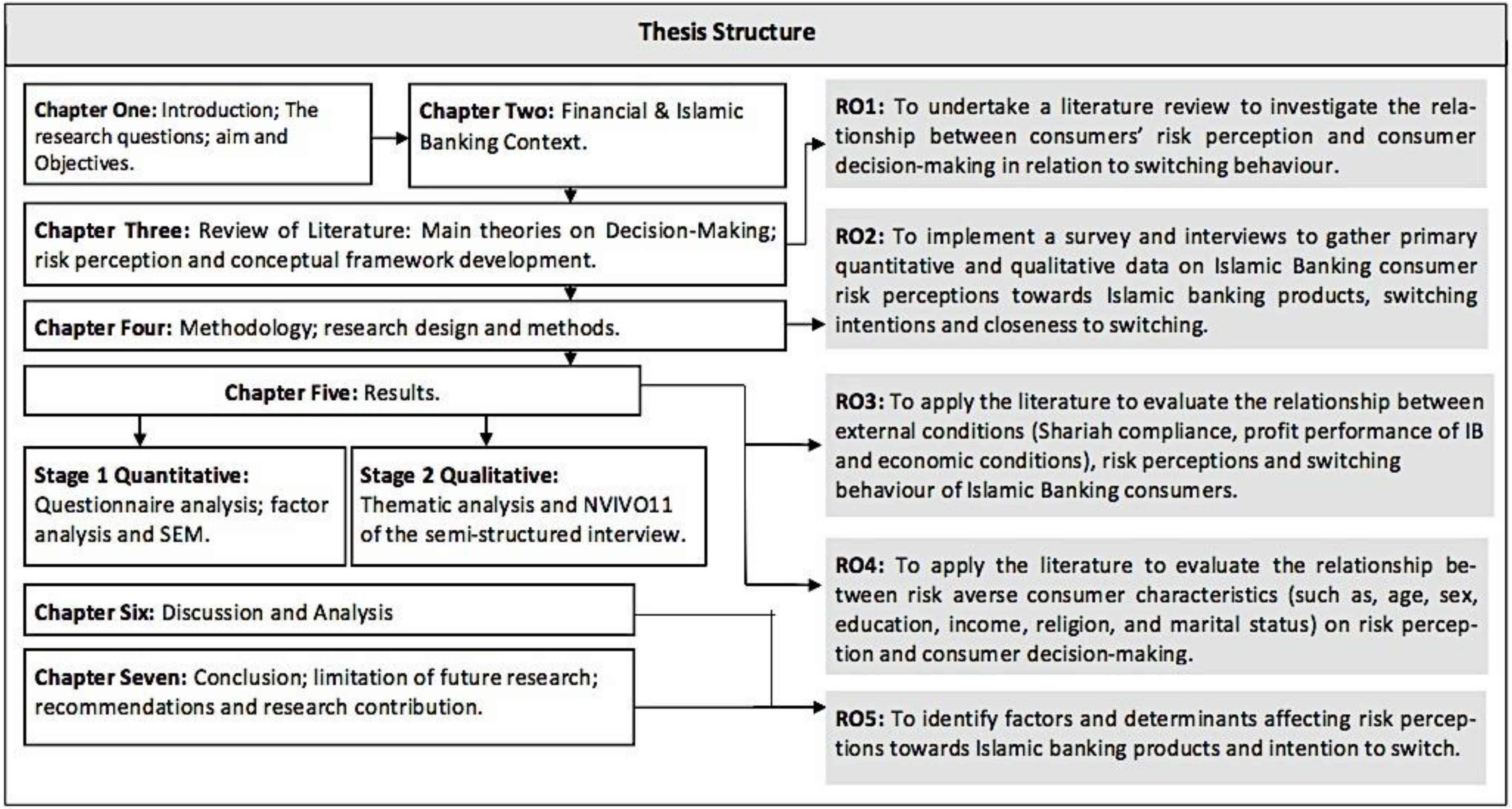

Figure 1-1 Thesis Structure

Chapter 2 Financial and Islamic Banking Context

2 Financial and Islamic Banking Context

2.1 Introduction

This chapter presents an overview of the economy and financial industry in the United Arab Emirates (UAE) that provides significant contextual perspective underpinning the study. From a risk perception perspective, the characteristics of the external environment both in terms of macro influences and micro industry factors can influence consumer decision-making. The discussion in this chapter points to a distinct financial context in the UAE and Islamic banking (IB) sector that has the potential to influence the risk context and risk attitudes of financial decision-makers in the UAE. An overview of the banking industry in the UAE is presented in the first sections while the final sections describe in detail IB and its practices and the challenges and opportunities.

2.2 Banking Industry in the UAE

The UAE possesses the second highest number of banks among Gulf Cooperation Council (GCC) nations (Global Investment House Research Report, 2007), comprising 23 domestic and 28 international banks. The country's banking industry is further the largest in the Arab region in terms of assets (UAE Central Bank, 2017). The banking sector in the UAE comprises 51 commercial banks composed of 23 locally-incorporated banks and 28 foreign-owned banks and a total of 1,006 bank branches across the seven Emirates (UAE Central Bank, 2017). The largest share of total domestic assets is held by banks incorporated in Abu Dhabi and Dubai. This points to a significant density of banks per capita in a country with a population of approximately 9 million (Sayani and Miniaoui, 2013). The nature of the sector is highly fragmented, operating in a strongly competitive environment that is divided between conventional banks and Islamic banks (Sayani and Miniaoui, 2013). It is characterised by a lack of differentiation between banking services offered (Walker et al. 2008); as a result Beerli et al. (2004) maintain that the only opportunity to gain competitive advantage in a fiercely competitive market lies in new customer acquisition and retention of existing customers by providing services that meet customer needs, while simultaneously improving the delivery process of comparatively undifferentiated banking services.

2.3 Islamic Banking in the UAE

The banking industry in the UAE is further characterised by the co-existence of both conventional and Islamic Banking (IB). IB was developed in accordance with the underlying tenets of Shariah law and offers products that are free of interest, or *"Riba"*. In this way, it offers an alternative to conventional banking systems. IB was established more recently than conventional banking and is continuing to evolve and become more streamlined in its offerings. As depositors in the IB system are seen as equity holders or partners in profit and loss sharing, it is viewed as a safe business (Karbani, 2015; Abdul-Rahman, 2014; Kureshi and Hayat, 2014). The UAE has been a leading pioneer of the IB sector with the first Islamic Bank (Dubai Islamic Bank) established in Dubai in 1975 (UAE Central Bank, 2017). The country ranks second in the Global Islamic Economy Indicator (GIFI) (Akoum, 2017).

The UAE financial sector has become the third-largest Shariah-compliant banking sector globally in terms of assets, after Saudi Arabia and Malaysia (Oxford Business Group, 2015). The UAE is home to 18 Islamic banks of which nine are fully dedicated Islamic banks while the remainder have IB windows (Akoum, 2017). Market share of Islamic banks within the UAE's overall banking sector stands at 21.6% (Ernst and Young, 2016), while assets reached AED (Arab Emirate Dirham) 464 billion in 2015, accounting for 19% of total bank assets as shown in Figure 2-1 (Akoum, 2017; UAE Banks Federation, 2015). Eight dedicated Islamic banks operate hundreds of branches across the Emirates, while a majority of the 23 licensed lenders in the UAE and multiple foreign banks have incorporated Shariah windows within branches and operations (Oxford Business Group, 2015). Abu Dhabi Islamic Bank (ADIB) and Al Hilal, headquartered in Abu Dhabi, compete with Dubai Islamic Bank, Emirates Islamic Bank, Noor Islamic Bank, headquartered in Dubai, and Sharjah Islamic Bank, Ajman Islamic Bank and National Bank of Fujairah, headquartered in other Emirates (Oxford Business Group, 2015).

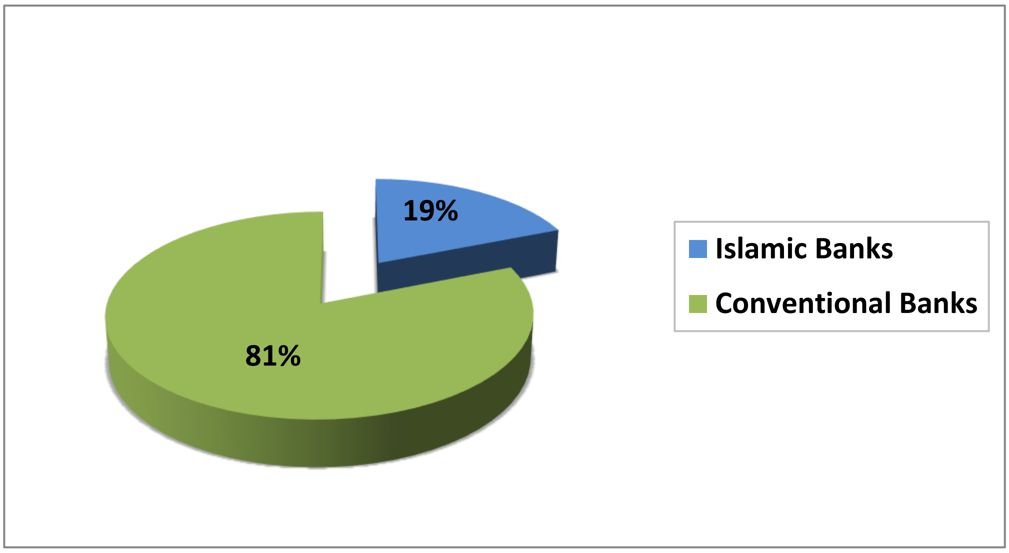

Figure 2-1 UAE Islamic Banking Assets

Source: Akoum (2017, p.14).

The rapid growth of IB has been a topic of major discussion in the financial literature. IB has experienced strong market growth in the UAE with a 7% average annual growth rate outpacing that of the conventional banking sector (EI, 2018). Funding grew by 15% to AED 306 billion from AED 266 billion in 2014 (UAE Banks Federation, 2015). New indices indicate that the popularity of IB products is significantly increasing among both Muslim and non-Muslim customers in the UAE, with 51% of consumers in 2016 retaining at least one Islamic product, a rise of 4% over the previous year (Arabian Business, 2016). The subsector has attracted growing interest from investors and institutions and there is significant government support for its development (Sayani and Miniaoui, 2013). In 2016 conventional banking outperformed the IB sector except in the area of deposits (UAE Central Bank, 2016).

Customers in the UAE have a choice between conventional and IB. Key aspects to consider are the existence of factors determining bank selection in a country in which clients have a choice whether to bank with an Islamic bank or a conventional bank, or both. Furrer et al. (2000) state that the religious and ethnic diversity characterising the UAE means it is paramount for banks to gain insight into client preferences and factors involved in the process of bank selection, which vary depending on cultural values and beliefs held.

2.3.1 Islamic Banking Industry

In 2016 the total volume of assets within the IB sector stood at US $1.5 trillion (IFSB, 2017). The market share of Islamic banking in terms of banking assets has been rising in many countries. In Iran and Sudan, Islamic banking has a 100% market share while the next highest domestic market shares are in Brunei (62%), Saudi Arabia (53%), Kuwait (39%), Qatar (26%), and Malaysia (25%) (IFSB, 2018). The GCC is the largest market for IB followed by the Middle East and North Africa (MENA) (excluding GCC) and Asia. Half of global IB assets are concentrated in two key markets of Iran (33%) and Saudi Arabia (21%) as shown in Figure 2-2. The UAE ranks fourth globally holding 9% of global IB assets (IFSB, 2017). The UAE also possesses two of the top five Islamic banks worldwide by assets (Gulf Business, 2017).

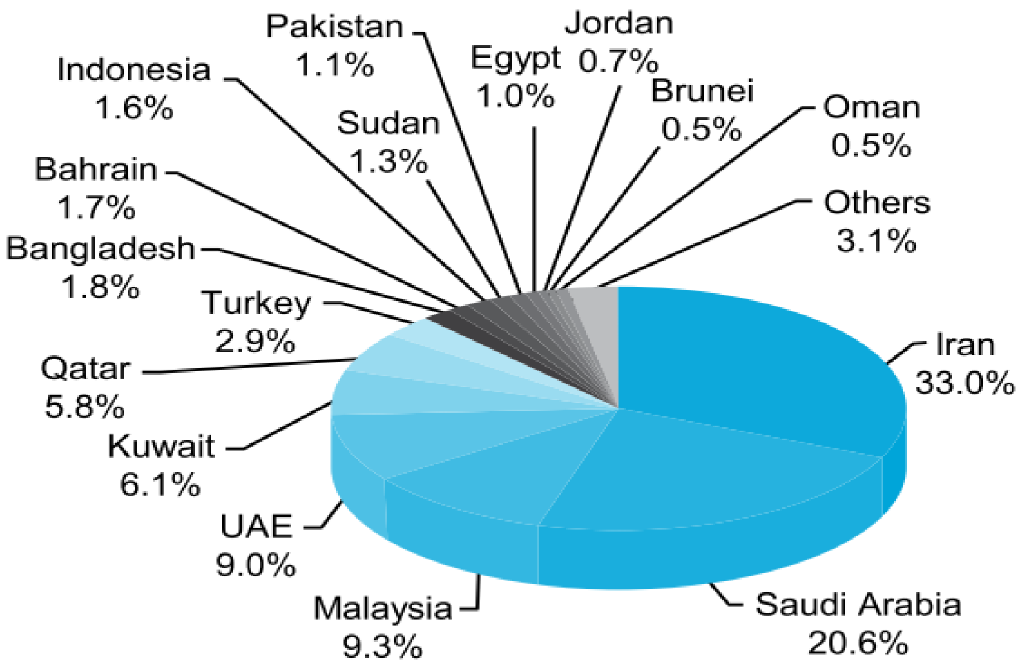

Figure 2-2 Shares of Global Islamic Assets 2016

Source: IFSB (2017, p. 9).

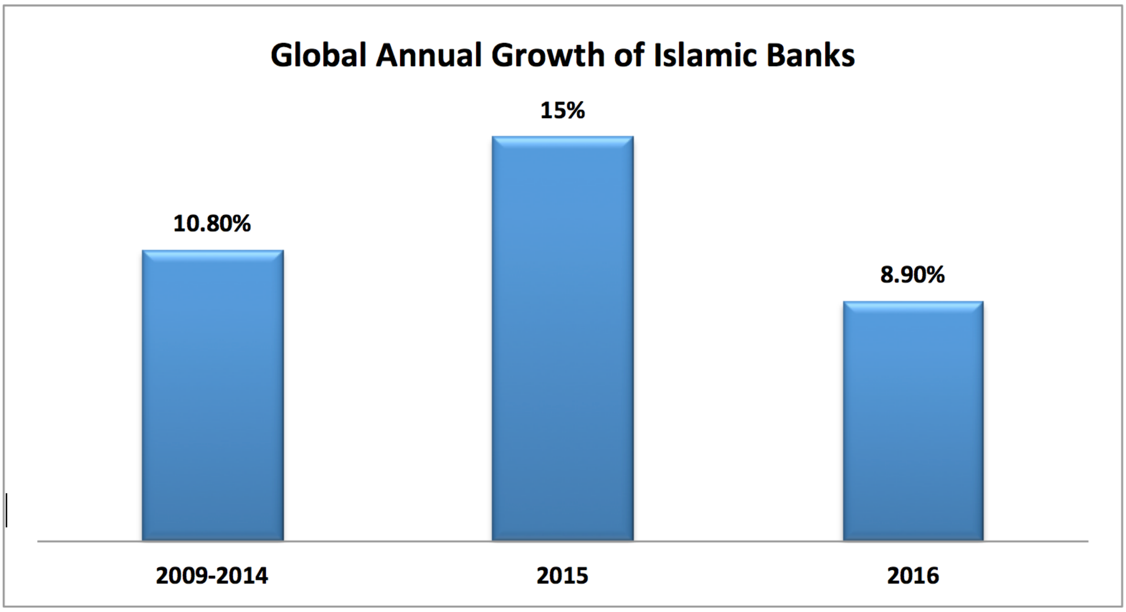

Figure 2-3 Global Islamic Banking Growth
Source: Akoum (2017, p12).

IB has experienced significant global growth over the past ten years. Figure 2-3 shows a strong pattern of expansion with annual growth peaking in 2015 at 15%; however, the sector experienced a reduction in the rate of gains in 2016 (Akoum, 2017).

2.3.2 Islamic Banking and the Financial Crisis

Prior to the financial crisis of 2008 the UAE enjoyed a strong and consistently growing economy and rapidly expanding banking sector (UAEGov, 2009; IMF, 2009). Gross domestic product (GDP) growth had steadily expanded by 84% over the previous four years (UAEGov, 2009) while growth in foreign direct investment, private investment and consumer spending followed a similar rapid upward trajectory (Tabash and Dhankar, 2014; UAEGov, 2009). The UAE banking sector witnessed double digit growth (Mehta, 2012) with loan books growing at a 5-year Compound Annual Growth Rate (CAGR) of 32% between 2005-2007 while deposits experienced 5-year CAGR of 27% to reach US $725 billion at the end of 2008 (Kapur, 2010). Banks were highly capitalised, reflected in high capital adequacy ratios well above regulatory minimums, and had significant liquidity as a result of high oil prices. The sector was also highly profitable, with both assets and profits rising rapidly in 2007 (IMF, 2009). Strong economic activity and performance in the country over the last decade had resulted in mounting consumer and investor confidence, significant liquidity, asset price increases and growth in credit (Khamis et al. 2010).

Research has measured the impacts on the UAE banking sector since the crisis in 2008. Despite the strong position of UAE banks before the crisis began findings show that a number of effects are apparent (Hasan and Dridi, 2011). A change in profitability is considered a key variable for evaluating the impact of crisis on banks. In the UAE from 2007 to 2009, Islamic banks experienced a reduction in profitability of over 40%, counter to the trend for the global IB sector. Losses in profitability were further more significant than those for conventional banks in the UAE (Hasan and Dridi, 2011). Indicators point to greater resilience in other areas, with UAE's Islamic banks experiencing modest growth in both assets and credit in the two following years, though at substantially reduced levels over 2007 and lower in comparison with other similar markets. Among those countries with significant IB sectors the UAE was the only country to witness a fall in external credit ratings for Islamic banks (Hasan and Dridi, 2011).

2.3.3 Islamic Banking Principles

Within the framework of Islamic finance, a key principle holds that no reward should accrue in transactions in the absence of risk, whether this pertains to labour or capital (Al-Jarhi and Iqbal, 2009). There is an expectation that these principles will significantly impact the Muslim decision-making process and will also have a significant influence on Muslim perceptions of Islamic banks.

The essential aim of the Islamic finance system is to fulfil the teachings of the Holy Quran, rather than pursuing the objective of generating maximum returns on financial assets (Askari et al. 2014; Anas and Mounira, 2009). The fundamental principle of Shariah law or Islamic common law is the prohibition of contracts deemed exploitative on the grounds of interest (Riba) or usury, and unfair contracts involving risk or speculation, known as *"Gharar"*. Under Shariah law, such contracts are unenforceable (Kureshi and Hayat, 2014; Zaher and Hassan, 2001). *"Fiqh al-mu'amalat"* is a common law principle that forms the foundation of the Islamic financial system (Amanullah, 2015). This law is intended to consider issues of justice, equity and fairness with regards to all business transactions conducted under Islamic law with a view to promoting entrepreneurship, property rights protection and the transparency and sanctity of obligations under contract.

The axioms of the Islamic code referred to as Shariah dictates that an economic transaction is allowed if it is in relation to activities that are free of *"Riba"* (interest), *"Gharar"* (uncertainty), *"Masir"* (gambling) and Non-Halal (prohibited) elements (Karbani, 2015; Jonsson, 2006). Under Islamic law, interest on loans is prohibited. This applies regardless of the type of loan, whether personal or commercial, and regardless of the contracting parties and recipient, whether friends or acquaintances, companies, governments or other entities. This prohibition gave rise to the creation of interest-free Islamic banks (Kureshi and Hayat, 2014; Warde, 2000).

According to scholars in Islamic finance, the Quran does not condemn investments yielding fair or legitimate profits, or economic returns or social 'added value', if those investments are deemed morally acceptable (Karbani, 2015; Siddiqi, 1999). There are two more applicable principles that are essential to the development of insight into Islamic finance. The first is recognition of the fact that Islamic law reflects the absoluteness of the commands of Allah (as the equivalent of the Western God), which are deemed to govern all aspects of Muslim life (Kamla et al. 2006). The second principle is that Islamic finance has a direct connection to Islamic spiritual values and the concept of social justice (Askari et al. 2014; Dusuki, 2008). These conditions do not imply that Islam prevents Muslims from making money or requires that Muslims participate in an all-cash or barter system; however, it does mean that all parties involved in financial transactions under Islamic law carry an equal share of risk and profit pertaining to a given venture and that no single party to a financial contract is the recipient of a predetermined return on investment (Salehi et al. 2011).

Shariah law only permits interest free forms of finance connected with economic activity and prohibit any economic activity involving pork, alcohol, firearms and adult entertainment or gambling. Shariah law does not prohibit earning profits, or the receipt of payments associated with asset use, as long as the investment risk is split evenly between lender and borrower and profits made are in line with the principles of Shariah (Karbani, 2015; Askari et al. 2014). Hesse et al. (2008) point out that returns cannot be guaranteed *ex ante* and only accrue in the event investments return revenue.

Implementation of the fundamental aspects of the IB system has seen Islamic banks develop a number of innovative instruments that remain within the confines imposed by Islamic law (Warde, 2000). Even opponents of interest acknowledge the beneficial functions offered by modern banking. They thus advocate interest-free banking in which banks conduct their activities without paying or receiving interest. The code by which such interest-free banks operate is already in place and is continually adapted to align with the complex and evolving requirements of businesses (Abdul-Rahman, 2014; Warde, 2000). Interest-free banking revolves around profit and loss sharing. Risk is shared between the entity supplying capital and the entity undertaking the borrowing. Profitable outcomes, or returns, benefit both parties; losses are likewise shared. This is the foundation of interest-free banks (Abdul-Rahman, 2014; Warde, 2000).

Five IB principles are being implemented in practice in the UAE (Haron, 1998). Specifically, these are the principles of participatory financing, prohibition of usury, ethical investing and moral purchasing, acceptable transactions, and certainty. In respect of financing, the models used in the UAE include Musharaka, Mudharaba and Murabaha. Among these three, the Murabaha model is in place for 61% of financing ventures, making it the most common model for Islamic banks in the country. The UAE's Islamic banks do not offer foreign exchange contracts or bills for collection services. On the other hand, Islamic banks in the UAE do provide a number of conventional offerings, both in terms of deposits and loans. They include, for example, ijarah, istisna, mudharaba, and murabaha. Such products come with typical additional services, including Internet banking options, chequebooks, and credit cards that are compliant with Shariah. According to Islamic law, all Shariah structures are required to adhere to the laws of their particular jurisdiction. Consequently, some products are constrained by legal limitations. Structures such as trust arrangements or beneficial ownership over land, for instance, do not comply with UAE land laws and so cannot be offered in the country (Ahmed, 2013).

2.3.4 Difference between Islamic and Conventional Banks

Islamic banks and conventional banks differ from each other at a core level; consequently, direct comparison is highly problematic. They differ from conventional banking, in which interest is viewed as the cost of money or credit and the debtor-creditor relationship is considered pivotal (Karbani, 2015; Al-Jarhi and Iqbal, 2009). There is a requirement for Islamic business organisations to meet and fulfil the responsibilities and obligations imposed on them and to engage only in business activities considered legitimate and legal. Honesty, equity and justice are the cornerstones upon which it is expected all transactions are based (Askari et al. 2014; Sufian, 2007).

Variation between conventional and IB also exists in the area of financial intermediation. Debt generally constitutes the basis for conventional intermediation (Beck et al. 2010). Meanwhile, Islamic intermediation hinges largely on assets. The divergence between the conventional and IB systems in this regard exists from the standpoint of liabilities, or source of funds, as well as from the standpoint of assets, or the use of funds. When it comes to liability, Islamic banks have investment accounts with profit or loss deposits. These serve the function of shares. However, unlike a savings account, the face value of an investment account is not secured (Askari et al. 2014; Metwally, 1997). When it comes to assets, Islamic banks hold set sums of fixed assets in the form of cash, equity and reserves in various projects being financed rather than in the form of loans.

2.3.5 Differences in Islamic Banking Practices

Despite the fact that Islamic banks are based on identical Islamic business principles and are ruled by common laws, numerous disparities exist for banking processes in Islamic banks in different Muslim countries (Singh and Gupta, 2013). The disparity in IB practices between countries indicates a further factor that can influence specific risk contexts creating complexity in understanding products, evaluating risks and decision-making (Singh and Gupta, 2013).

Islamic banks usually provide three kinds of deposit features to their clients: savings accounts, current accounts and investment accounts, in which different methods of Islamic principles are exhibited such as free services, profit and loss sharing and ancillary principles. The exceedingly popular fundamentals drawn on by Islamic banks are Qard Hassan in respect of free services, Wadiah in regards to ancillary principles and Mudharaba relating to profit and loss sharing. Nevertheless, Turkey provides only two kinds of deposit features: PLS Mudharaba accounts and special current accounts (Karbani, 2015; Haron, 1998).

Additionally, there are a number of divergences in the way the savings accounts feature is treated in these banks. For example, BIMB of Malaysia, DIB of United Arab Emirates, El Gharb of Sudan and Islamic banks in Iran consider savings accounts as a tool by themselves. In contrast BEST of Tunisia, IBB of Bahrain, IBBL of Bangladesh, JIB of Jordan and KFH of Kuwait believe savings accounts to be one of the tools in the investment accounts category (Ashraf and Giashi, 2011). Moreover, there are disparities in investment accounts that have been split further into three divisions, specifically, (i) notice-based deposits, whereby customers should give notice prior to a withdrawal, (ii) time-based deposits, indicating whether it is for three months, six months, nine months, or more, and (iii) distinct project- or purpose-based deposits. Time-based investment account features are present at each and every Islamic bank in all the countries; although notice-based investment deposit features are only present at JIB of Jordan and IBBL of Bangladesh (Karbani, 2015; Haron, 1998).

In delivering deposit facilities, there is no regulated Shariah principle that is used by all Islamic banks. In current accounts, for instance, Bangladesh, Jordan, Bahrain and Turkey use the principle of Wadiah, while countries such as Iran and Kuwait adopt the principle of Qard Hassan. Similarly, in savings accounts, Kuwait uses both Qard Hassan and Mudharaba principles, while Iran only applies the Qard Hassan principle. For the part of funds that have not been invested in the savings accounts, the Qard Hassan principle is used, while for the part that has been invested, the Mudharaba principle is used. Savings accounts in Malaysia are governed by guaranteed custody, or the Al-Wadiah *"Yad Dhamanah"* principle. The Mudharaba principle is used by the Islamic banks in Bangladesh, Pakistan, Kuwait, Jordan and the UAE for their savings accounts feature.

Meanwhile, for the investment accounts feature, the "Mudharaba" principle is the one and only principle used by every Islamic bank present in all the countries (Haron, 1998).

2.3.6 UAE Banking Regulation and Market Framework

The banking industry in the UAE is strengthened by stability in fundamental services at a macro level including low interest, premium oil prices and a prosperous economic climate (Hasan et al. 2009). A notable factor relevant to risk environment is the government measures to support the banking sector and ensure stability and liquidity for the sector and the economy. The banking laws of the UAE set rules that not only control, oversee and monitor all financial institutions in the country but also impose certain restrictions on them to prevent the possibility of any transgression. All banks in the UAE (with the exception of Islamic banks) are required to follow the rules laid down under Federal Law 10 of 1980. This law is used for administration of investment banks, commercial banks, various financial institutions, financial and monetary intermediaries and representative offices (Ernst and Young, 2011). According to Article 78 (1) of the Law, commercial banks are organisations permitted to receive funds from the public either as demand, under notice or fixed time deposits. They are also allowed to place debt instruments and deposit certificates, either wholly or in part, in their account and risk and utilise them for loans and advances to other parties. Commercial banks, according to Paragraph (1) of Article 78 of the Law, also deal with cheque collection and issue, foreign exchange trading, trading in precious metals, bonds (both public, as well as private), along with the usual operations necessary for normal banking (Khan, 2012).

Islamic banks are covered by Federal Law No. 6 of 1985 (that validated IB in UAE) in keeping with the tenets of Islam. Under this law, Islamic banks are permitted to carry out all operations and services mentioned under Federal Law 10 of 1980 that are undertaken by conventional banks (Chapra and Khan, 2000). These can be commercial, investment, banking or financial services. Islamic banks, financial and investment companies are, under Federal Law 6, also allowed to offer loans and credit facilities to potential seekers apart from financing projects. They may also set up companies or financial projects that conform to Shariah principles of Islam. It is also acceptable for Islamic financial institutions to seek deposits from the public and invest them provided they follow Shariah principles. They may also invest in movable property (Khan, 2012).

2.4 Challenges in Islamic Banking

While the development of Islamic banking (IB) worldwide has brought advantages, it likewise faces obstacles and challenges. The growth and nature of IB influences the risk context for this sector. The rapid growth of IB has been a topic of major discussion in the financial literature. IB has experienced strong market growth in the UAE outpacing that of the conventional banking sector (EI, 2018). New indices indicate that the popularity of IB products is significantly increasing among both Muslim and non-Muslim customers in the country, with 51% of consumers in 2016 retaining at least one Islamic product, a rise of 4% over the previous year (Arabian Business, 2016).

IB practices are characterised as less risky compared to conventional sectors, while on the other hand its infancy and rapid growth creates a further risk dimension. IB operations are conducted in accordance with the principles of Islamic teachings. Given this definition, there is an expectation that Islamic banks do not follow the same philosophies and objectives as their Western and traditional counterparts and that they conduct themselves in accordance with the Islamic teachings (Askari et al. 2014; Sufian, 2007).

2.4.1 Differentiation

Nevertheless, the notion that IB is generally equivalent to its conventional counterpart is still commonplace. According to this view, IB's products and system of returns are basically the same as those utilised in conventional banking (Ariff, 2014; Hanif, 2014). Those who do not know about the principles of Islamic finance, in particular, are more easily swayed by voices countering such banking alternatives. Meanwhile, conventional banks can generally offer better rates compared to Islamic banks. This adds to the challenge of attracting business and expanding the deposit base (Iqbal and Molyneaux, 2016). Moreover, Islamic banks are typically more expensive than conventional banks in regards to pricing. Factors influencing this price difference include the higher cost of transaction and monitoring in IB. This translates to higher rates for IB patrons compared to those of conventional banks. Meanwhile, marketing expenditures are lower in IB, which depends on followers of Shariah law to embrace it as a permitted alternative to conventional banking (Karbhari et al. 2004).

The issue of whether *"Riba"*, or interest, is fully eliminated in the IB system is another area which can be problematic or a concern for some. Within the IB system, Riba is defined as a charge or fee in excess of the lending principal. The sum in excess of this principle amount is mainly charged as a penalty rate. Islamic banks justify charging a penalty rate by saying that if they fail to do so, consumers will exploit the weakness in the system, resulting in higher rates of default (Hanif, 2014; Karbhari et al. 2004). An additional problematic area in IB relates to the return rate accruing to holders of deposits. Depositors are considered partners in IB, whereby they are in effect equity holders alongside the bank itself, which lends advances to customers. Profits and losses constitute the basis of returns, and depositors are informed of the profit-sharing ratio each month. In view of the competition between Islamic and conventional banks, depositors' rates of return are generally equivalent to that offered through other banks. In other words, the returns received are not equivalent to the actual return earned through investment in funds. So, by way of example, a deposit holder may earn an actual return of 8% when the return based on the partnership-sharing ratio would be at 14% (Shah et al. 2012).

The underlying justification is based on the notion that if Islamic banks gave actual returns at the same percentage earned based on the partnership ratio, the jump in deposit influx due to the high return rate would ultimately lead to liquidity problems for the Islamic banks if funds were not properly managed. On the other hand, the IB system's practice of offering advances is considered safer than the practice of advances at conventional banks. This is because in conventional banks, advances come from deposits. Conversely, Islamic banks treat advances as a means of earning for the bank, as well as depositors. Consequently, monitoring credit is of utmost importance (Iqbal et al. 1998).

Human resource availability is yet another matter of continued concern in the IB domain. Typically, Islamic banks offer jobs to professionals with experience in the conventional banking industry. Obtaining additional training covering IB products and documentation can pose a real challenge. Although universities do offer such training in Islamic finance, they focus on the fundamentals and do not cover implementation of transactions and structures (Hashmi, 2012).

In the typical economy, transactions are premised on interest from the rate of return accrued by depositors, as well as returns on investments, the payment of principal and any mark-up on debt payments. Consideration of the global banking system in its entirety shows that IB constitutes a very small percentage of operations. Following the lead of conventional banks, Islamic banks match their pricing to remain competitive in the industry. This notwithstanding, Hashmi (2012) asserts that IB can only operate as intended within the context of an Islamised economy.

2.4.2 Profitability and Performance

The uncertainty that Islamic investors face regarding returns and the performance concerns of Islamic banks present factors that can potentially impact on risk attitudes and decision-making. Firstly, under profit sharing investment accounts (PSIAs), returns are not guaranteed (Hasan and Dridi, 2010). While in conventional banking returns for investors are fixed (Ariff, 2014), in IB there is a degree of uncertainty over returns. The sharing of profits or losses under some instruments gives rise to a rate of return risk in IB (Kammer et al. 2015). Metawa and Almossawi (1998) found that there was a significant relationship between customers' income and the relative importance of the "rate of return" (p. 309). Thus, profitability or the rate of return is a factor that can influence consumer decision-making.

There is however evidence of an underlining loyalty of IB investors even in times of financial distress. Ahmed et al. (2014) cite the example of the Kuwait stock market crisis (Souk al-Manakh) in 1982 that almost bankrupted the Kuwait Finance House. Mudharaba depositors received no profit shares for 2 years. However, the strength of this loyalty is untested and can vary across groups of investors and countries. Further, it is uncertain what impact the financial crisis of 2008 and the current turbulent economic conditions have on the strength of IB investors' loyalty and their willingness to remain loyal to their bank and indeed to IB in the face of low or zero returns.

Moreover, there is significant uncertainty over the degree of resilience to poor profits. In terms of the general performance of Islamic banks, there is evidence to suggest that under certain market conditions IB faces lower levels of return than conventional banking. A study by the International Monetary Fund (IMF) found that while Islamic banks were found to be more resilient during the financial crisis than conventional banks, when the effects of crisis impacted the real economy, they incurred larger losses than conventional banks (Hasan and Dridi, 2010). Furthermore, weaknesses in risk management were found to have negatively affected Islamic banks' profit levels in 2009, compared to 2008 (Hasan and Dridi, 2010). If these weaknesses exist, then future profit potential could continue to be impaired creating further pressure on investors to take flight to alternative forms of investment.

Several authors argue that IB is not as resilient and insulated from the financial issues faced by conventional banks due to the financial crisis as generally believed. Ibrahim (2015) argues that "*the preponderance of evidence tends to suggest that the Islamic stock markets have been increasingly integrated and thus are vulnerable to adverse shocks and "contagion" in similar ways as conventional banks*" (p. 188).

A study by Kamil et al. (2014) questioned the equitability of Islamic funds. Their findings found that fund managers had no incentive to maximise their performance, as their compensation was not based on returns performance. Results from this study showed that less than 2% of funds were based on skilled decision-making by Islamic fund managers. Arguably, Islamic investors may question the validity of levied fees, if finance managers fail to add value and justify fee levels. While this research addressed wakalah-based mutual funds, the point can be generalised to other products in relation to whether investors perceive value for the fees charged. PriceWaterhouseCoopers discuss the potential increase in fees due to the cost of effectively implementing Shariah governance (PWC, 2009). An increase in fees for depositors and investors influences overall satisfaction.

While Islamic investors may understand the nature of these Islamic instruments, the risk of low return may cause them to withdraw their funds (Kammer et al. 2015). There is significant evidence indicating that Islamic bank performance has been less profitable than conventional banks. This is associated with certain regulator, supervisory and management practices that constrain its ability to make profits.

> *“In addition, in the context of the crisis and given the loose monetary stance in most countries, this feature is likely to put IBs’ profitability at a disadvantage compared to CBs*” (Ariff, 2014, p. 71).

> *“Our empirical work provides some statistical evidence that the risk-adjusted performance of Shariah compliant equity funds in Malaysia does not exceed that of market benchmarks, for the most part.”* (Kamil et al. 2014, p. 19).

> *“However, Hayat and Kraeussl (2011) found that IEFs perform worst in either a bullish or a bearish economic market. They further suggest that managers of IEFs exhibit poor stock selection and market timing abilities. Nainggolan (2011) concurs that Shariah compliance results in a lower performance of IEFs.”* (Ashraf and Mohammad, 2014, p. 175).

> *“The findings that Islamic banks tend to be less cost effective (Beck et al. 2013) and have higher capital buffers (Daher et al. 2015) may raise doubt on whether Islamic banks can remain competitive in an ever increasingly integrated financial market. These later findings, moreover, tend to contradict the findings that Islamic banks are more profitable by Khediri et al. (2015) and Abedifar et al. (2013).”*

Ahmed (2011) emphasises that the enhanced credit risk is due to the nature of the profit and loss sharing (PLS) element in IB. He argues that there is greater scope for parties to manipulate revenue-earning figures under PLS, which can expose banks to greater risk. For specific types of Islamic contracts, such as Musharaka and Mudharaba contracts, this risk was found to be particularly significant due to the higher risk of negative selection, information imbalances and moral standing of parties (Latiff, 2010; Nagaoka, 2009). The concealment of information can undermine an accurate assessment of the contract and the credit worthiness of the parties (Elgari, 2003). Such risks have the potential to undermine investor confidence and influence risk attitudes towards IB products.

2.4.3 Shariah Compliance

A fundamental tenet of IB is its adherence to the values of Shariah. Arguably this is one of the attracting factors of IB for both Muslims and non-Muslims who value such principles. The above issues concerned with Shariah compliance and performance become highly relevant when considering the profile analysis of IB customers. Adherence to Shariah principles and the rate of return have been identified in numerous studies, conducted from 1998 until 2014, as the key factors that influence consumer decision-making in this market. This is supported by a study on UAE IB customers by Sayani (2015) that underlined the importance of the Shariah advisory board. The evidence showed that the Shariah advisory board had a statistically significant relation to customer satisfaction and loyalty, unlike cost and efficiency, and 10 other variables.

However, it is strongly argued that Shariah principles are significantly compromised in IB operations and, according to Mansour et al. (2015), IB has failed to adhere to its ethical values. This evaluation was based on the principle of Maqasid al-Shariah (objectives of Islamic law), which is concerned with promoting the well-being of mankind, and in the context of banking requires the impact of financial operations on society to be considered. Mansour et al.'s (2015) examination of Islamic financial products found them comparable with conventional products and counter to Islamic ethical principles. It additionally found that Islamic banks failed to uphold the principle of equality of justice, as their practices benefited only a small spectrum of society. This is a further issue which can potentially contribute a reputational risk by impairing IB's ethical standing. Mansour et al. (2015, p. 71) state that:

> *"The contemporary trading of financial instruments, such as Mura tawarruq, shows that Islamic banks misuse. On balance, they neither enforce shari'a in practice according to the purposes of the Divine lawgiver nor do they use qiya properly. This leads to a conspicuous violation of ethics in Islamic banking".*

Such misuse can fuel the perception that Islamic banks fail to adhere to fundamental ethical principles, and can be potentially damaging for the loyalty of customers. Bougatef (2015) points to the issue of corruption that he cites as endemic in many Muslim countries. He found that corruption affects the integrity and stability of Islamic banks, and argues that his evidence casts doubt over the ability of Shariah governance to effectively address issues of financial crimes, including money laundering. Consumer decision-making can be influenced if banks are increasingly perceived as unable to stem corruption practices or suffer from a negative image. To what degree will such issues affect customer loyalty or affect their risk attitudes and mediate their decision to switch or propensity to switch?

This issue is strongly associated with the wider issue of Shariah compliance that has been noted as a unique risk faced by Islamic banks. The lack of compliance to Shariah principles exposes Islamic banks to a reputational risk (Reyazat, 2012; Iqbal and Mirakhor, 2011). The impact on the switching decision is emphasised by Kammer et al. (2015, p.17) who state that "*the requirement of Shariah governance and compliance on uses and sources of funds also poses risks: a determination of noncompliance could also trigger client flight*".

According to Ariff (2014, p. 742): "*while the legitimacy of Shariah compliance itself may not be an issue, the cost of such compliance and its implications for the competitiveness of IB products remain a serious concern*". This is consistent with Azmat et al. (2014) who found that the future of IB hinges on the satisfaction of Shariah conscious ethical investors with a lower returns premium compared to conventional instruments due to the additional cost imposed by Shariah governance.

Kammer et al. (2015) state that the inconsistency in the application of standards can undermine transparency and combines with an ambiguous product approval process which can sometimes lead to products which have been rejected by one institution's Shariah board being approved by another regulator.

2.4.4 Economic Conditions

Hasan and Dridi (2010) note that the credit risk Islamic banks are exposed to is based on investments in property, which have witnessed a significant decline. Poor economic conditions can influence customers' perceptions and force them to evaluate the associated financial factors. For instance, a situation where income levels are stagnant and interest rates increase may make conventional funds more attractive. In such a situation, a poor reputation for IB, linked with poor Shariah compliance, may force Shariah conscious investors to rethink their commitment, and even more so less Shariah conscious Islamic investors, or investors who have little awareness and knowledge of financial products.

The financial context has the potential to create significant uncertainty and fear for financial consumers. The financial crisis of 2007-2009 had major effects on the financial industry and the wider global and national economic environment for the UAE. The effects of external financial conditions are largely understood in the literature yet undoubtedly, they have the potential to impact the risk context and financial consumer decision-making. Banking crises have occurred in the past, but they are evidently becoming more common now as international financial markets become more cohesive and interrelated. Analysts are now paying more attention to the crises in developing economies to study their impact on markets. A financial crisis in a developing economy hampers development in the country itself apart from impacting the international market. Inherently, banks are expected to have ample liquidity at any given time (Claessens et al. 2014). By the end of 2007, many economies around the world suffered from a collapse in international trade, reversals in capital flows, and sizable contractions in real output. As the crisis mounted, so did the policy responses, with many countries announcing bank recapitalisation packages and other support for the financial sector in late 2008 and early 2009 (Claessens et al. 2014; Laeven and Valencia, 2012).

Theoretically, IB is premised on a model considered less risky compared to other conventional alternatives. Two primary factors were behind the protracted worldwide economic crisis triggered by sub-prime mortgage debt write-downs. First, advanced economies, including the United States, witnessed a relaxation of mortgage credit requirements. This was based on the assumption that increased house prices would provide adequate collateral vis-a-vis the risk of lending. Second, securitisation was utilised as a way of repackaging mortgage-based obligations and creating financial products that could be traded, thereby undercutting the asset backing. As housing prices plateaued, such financial securities became a major source of downfall for banks. The instability and failure of banks then hurt confidence and banks became increasingly hesitant to lend to other banks. As a result, money markets fell short (Ahmed, 2010).

In theory, Islamic banks do not have the same exposure to the type of lending and financing practices that caused the global financial crisis. Given that *"Riba"* is prohibited, Islamic banks are not able to charge interest and so cannot borrow or lend in global money markets. They likewise retain a greater percentage of assets in central bank reserve accounts. Risk sharing between depositors and investors forms the underlying basis of Islamic finance and banking. The idea is that, as a result of this arrangement, customers exercise more oversight on Islamic banks' lending performance compared to conventional banks. According to Shariah law, securities in Islamic financing need to be based on assets. Traders must own the assets they trade, setting the system apart from those based on derivative products (which negatively affected conventional banks during the crisis). Most types of futures trading are consequently off limits, since goods not owned or delivered by the trader may not be part of an Islamic contract. Likewise, IB cannot utilise practices such as short selling (Iqbal and Molyneaux, 2016; Ahmed, 2010).

Even though Islamic finance prohibitions exclude a number of the practices that proved detrimental to conventional banks, the push to provide a wider array of Shariah-aligned products has spurred development of financial offerings similar to many conventional ones. These include, for example, Tawarruq and Sukuk. The result is an exposure to similar risks, according to Rossides and Dalziel (2012), even though the degree of risk is somewhat lower.

Multiple studies have indicated that Islamic banks were less affected than conventional banks amid the financial crisis that swept the globe (Beck et al. 2013; Çizakça, 2011; Hasan and Dridi, 2010; IMF, 2010). Aspects of the Islamic financing structure played a role in limiting the detrimental effects on the profitability of its banks in 2008. Specifically, keeping to Shariah principles, as well as the existence of smaller investment portfolios and lower leverage, meant that the Islamic banks did not use the type of instruments that hurt their conventional counterparts. The global crisis thus took less of a toll on Islamic banks (Awan and Bukhari, 2011). Islamic banks even helped to bolster stability at financial and economic levels amid the crisis, as the increase in their credit and assets was double that seen with conventional banking.

In response to shifts in economic conditions, consumers react by shifting their patterns of consumption. The reason for this is a shift in their perception of risk (Hoffman et al. 2015; Nistorescu and Puiu, 2009). Research by Amalia and Ionut (2009) demonstrates that people differ and do not all perceive an economic crisis and its implications in an identical manner. Faced with this type of scenario, factors influencing consumer conduct include risk attitude and risk perception. The first factor, risk attitude, pertains to the interpretation of the risk content, including the degree of dislike for that risk content. The second factor, risk perception, pertains to the consumer's mind-set regarding the possibility of being subjected to and threatened by the risk content.

When selecting a bank, factors beyond convenience and availability of sought-after financial services include the general feeling of safety and sense of protection in the face of potential social, financial and psychological risks that can be involved in bank transactions (Pangemanan, 2014; Gerrard and Cunningham, 1997). The lower impact of the financial crisis on Islamic banks compared to their conventional counterparts raises the question of whether IB, which prohibits charging interests, offers greater security compared to non-IB. In conventional banks, options include hedge funds, foreign exchange speculation and transfer of debts, all of which are considered to be behind the US mortgage crisis during the recession (Claessens et al. 2014; Hardy, 2012). Because Islamic banks do not engage in these speculative operations, they do not endure the consequent risks and thus avoided greater losses amidst the economic downturn sweeping the globe. Moreover, according to several scholars their assets and credits were regarded as superior to the assets and credits of their conventional banking counterparts (Iqbal and Molyneaux, 2016; Hanif, 2014; Ozsoy and Yabanli, 2010). Considering IB principles towards customers that establish ethicalness and social responsibility in financial transactions, IB may become appealing for both Muslim and non-Muslim customers.

2.5 Summary

This chapter discussed the financial and banking context in the UAE that is necessary for understanding the focus of this study. The unique nature of the banking sector in the UAE and Islamic banking relative to the conventional underscores the importance of studying consumer financial decision-making in this area. The first part of this chapter pointed to the significant size and importance of the banking sector and the growth of the banking sector in the UAE and globally. The IB sector is uniquely founded on Islamic religious principles and this chapter emphasised the assumption that these principles will significantly impact the Muslim decision-making process and Muslim perceptions of Islamic banks. This is founded on the essential aim of the Islamic finance system to fulfil the teachings of the Holy Quran, rather than pursuing the objective of generating maximum returns on financial assets (Askari et al. 2014; Anas and Mounira, 2009). A unique feature of IB is the variation in standards and practices and application of Shariah principles across banks in this sector. This chapter has outlined key challenges that the IB sector faces in terms of differentiation from conventional banking and other Islamic banks, Shariah compliance, and sustaining profitable performance. An examination of the economic conditions including the financial crisis emphasises the potential concerns and fears of IB consumers where, theoretically, IB is premised on a model considered less risky compared to other conventional alternatives. Given the competitive nature of the banking industry, drawing and retaining consumers represents a significant challenge. Islamic, as well as conventional banks thus require a firm grasp of the factors that affect choosing a bank. Specifically, they must determine preferences among their patrons and investigate customer perceptions regarding the relative advantages of available services and products. Indeed, understanding and adapting to the decision process that underpins consumer selection and purchasing behaviour is critical to a company's ability to survive. Few studies, however, examine aspects such as the changing requirements of customers in a financial crisis and the moral grounds taken by Islamic banks to encourage consumers to support the interest-free banking that they offer. On balance this context indicates that the young nature of IB and increased perceived risk associated with lack of government support for the banking sector and uncertain economic environment requires a deeper understanding of decision-making of IB consumers in the UAE.

Chapter 3 Literature Review

3 Literature Review

3.1 Introduction

This chapter aims to present the theoretical basis of this project by exploring key debates and themes of consumer risk attitude in banking. The central focus of this review is the notion of risk perception that forms the basis for this study. The themes explored focus on the relation of the determinants and on the role of risk perception, as well as its relationship with risk attitude constructs including risk aversion, risk appetite, and risk tolerance. Theory and findings are examined from the perspective of Islamic banking (IB) consumers, as well as the broader relevant contexts. In addition to risk perception, theoretical themes are discussed relating to consumer behaviour, bank selection and bank performance to provide the basis for evaluating the effect of such factors on risk appetite and risk tolerance.

The chapter commences with a discussion of consumer behaviour, including bank and product selection, and factors influencing consumer decision-making. This is followed by a discussion on the concept of risk and the importance of risk in today's global context. An overall review of the notion of risk attitude is undertaken which explores risk attitude and the definitions of and perspectives on risk attitude within the literature. Several key traits and dimensions of risk attitude are isolated and discussed. This reveals risk attitude as a highly complex concept with multiple, broad dimensions influencing its formation. Several main constructs of risk attitude are explored that demonstrate the interaction between different underlying traits. This discussion provides the basis for an examination of risk perception that is recognised as an influential and distinct component influencing risk attitude. The role of risk perception and its relationship with risk attitude constructs are further explored.

3.2 Consumer Decision-making

The focus of this research is on understanding the relationship between risk attitudes, risk perception and decision-making. Various models of consumer decision-making have been proposed over decades in the literature revealing its complexity and multifacetedness representing potentially different sources impacting consumer perceptions of risk. Specifically, a review of the literature identifies the consensus on key stages of decision-making and provides a basis for exploring how different types of perceived risk may impact on the stages and interactions in decision-making. This section firstly outlines these stages and the factors that impact on consumer decision-making.

Lamb et al. (2013) model consumer needs and wants within five elements defined as sequential steps in decision-making which emerge from individual, social, cultural and psychological factors. Meanwhile, Shiv and Fedorkhin (1999) emphasise cognitive and affective reactions evoked within decision-making and the deliberate reaction elicited by an alternative in a choice task. The model assumes that when faced with multiple options consumers may face two choices either affective or cognitive in character. A widely accepted model proposed by Nicosia (1966) emphasises the role of information in decision-making to influence consumer attitudes. This is consistent with phases of evaluation of alternatives and information search within Dewey’s (1910) five-stage model and Blackwell et al.’s (2006) five-stage model. Within the latter model the decision-making processes (need recognition followed by a search of information both internally and externally, the evaluation of alternatives, purchase, post purchase reflection and divestment) are subject to external variables in the form of either environmental influences as well as individual factors such as knowledge, attitudes and personality (Blackwell et al. 2006). This is consistent with a key insight of behavioural economics which asserts that human behaviour is driven not by rational cost-benefit assessments of actions, but by a sociable, emotional, and fallible brain (Dolan et al. 2012).

Notably, Milner and Rosenstreich (2013) question the sequential conceptualisation of decision-making of some models. More recent studies emphasise greater complexity of financial services which reveals a more compounded interplay of factors that influence consumer decision-making. A recent model of consumer characteristics by Milner and Rosenstreich (2013) combines inputs of psychological and social influences (McCarthy, 1997) with key demographic indicators to widen the consideration of impacts individually associated with the consumer. The purchase situation is identified as the external driver or impulse that can result in consumer comprehension of a difference between current and desired state. The inclusion of contextual and environmental variables in addition to the purpose for purchase means that purchase situation is an input to the system of decision-making (Milner and Rosenstreich, 2013).

Assael (1995) defines the environmental view in terms of culture, social interaction, and situational determinants. Culture is defined as a "*set of socially acquired values*" (Assael, 1995, p. 15) with social values argued to likely impact the consumption patterns and purchases of members. Situational determinants are defined as temporary contexts or conditions manifesting in the environment at a particular place and time (Assael, 1995). The literature suggests that risk perception is associated with social cognitive perspectives that emphasise social and cognitive factors in the decision process.

At an individual level the literature indicates that decision-making is influenced by a number of factors. Hunter and Goldsmith (2004) show that consumer understanding of financial risk is predicated on three key variables of personality, circumstances and financial expertise and experience. Hunter and Goldsmith (2004) demonstrated that personality influences personal perceptions towards risk, with differences in factors such as education levels, personal goals and ambitions resulting in differing attitudes towards risk-taking. Specifically, Pinjisakikool (2017) identified five key personality traits that explained individual differences in risk tolerance. Intellect, extraversion, emotional stability, conscientiousness and agreeableness strongly predicted financial risk tolerance. Financial decision-making was influenced by consumer demographics such as social class, financial situation and past experience and knowledge which affected risk attitudes (Hunter and Goldsmith, 2004). Findings by Loke (2015) demonstrate that financial education, profession type, and ethnicity have significant impacts on the level of financial knowledge in individuals.

Research has widely identified that personal sources of information in relation to services can have significant influence on consumer decision-making (King and Hill, 1997; Murray, 1991). The role of information utility addresses consumer requirements for externally and internally sourced information. External sources encompass interpersonal and marketing communications, while internal sources incorporate subjective knowledge, expertise and experience, and learning and memory. Information utility provides a broader perspective on consumers' search and utilisation processes (Milner and Rosenstreich, 2013).

3.3 Perceived Risk in Consumer Decision-Making

In the previous section on consumer decision making the literature suggests a number of stages in the consumer's thought process that are influenced by external and individual factors. In addition to the wide range of sources that may act on consumer decision making, perceived risk is shown to represent a powerful influence on consumer decision-making processes and behaviour (Mitchell, 1992). This provides some theoretical basis for the research focus of this study by integrating perceived risk with consumer decision-making. This suggests that research can be focused on understanding consumer risk perceptions at different stages of the decision-making process. The focus of the research is concerned with financial decision-making in the post-purchase phase and therefore perceived risk theory holds relevance for exploring how risk perceptions impact on consumers' evaluations of performance of IB products.

Bauer (1960) first introduced the concept of perceived risk as a new construct in marketing which then was applied to the specific discipline of consumer behaviour (Gronhaug and Stone, 1995). Traditional theories of decision-making conceptualise perceived risk in terms of a distribution reflecting probabilities, subjective values and possible outcomes of behaviour (Arrow, 1965; Pratt, 1964). The most widely employed models conceptualising decision-making under uncertainty have emerged from subjective expected utility theory (Currim and Sarin, 1984, 1983; Bonoma and Johnston, 1979). From this perspective, risk is modelled through representing the response of the decision maker to uncertain results identified as specific risk probabilities. This view was criticised by theorists such as Sjoberg (1980) arguing that this conceptualisation of perceived risk was too narrowly defined and inflexible to fully encompass the ambiguity inherent in the concept or to be viewed from an objective and economic perspective. This is consistent with a definition by Stone and Winter (1987) who viewed risk as an expectation of loss and whose empirical study found that subjective determination of risk based on expectations of loss showed a significantly larger negative correlation with behavioural intentions and attitude than probability-based measures.

Similarly, Mitchell's (1999) study explored the existence of objective 'real-world' risk and the relationship with the subjective or perceived risk of the consumer. Attention is drawn to a key assumption that consumers lack the information which can provide a truly accurate, objective assessment of risk therefore they are forced to rely on their subjective perceptions (Stone and Winter, 1985; Bauer, 1960). The literature suggests that different types of perceived risk can impact on consumer behaviour. Garner (1986) classified perceived risk into six types: social risk, physical risk, performance risk, time risk, financial risk, and psychological risk. Financial risk in particular can be used to frame analysis of consumers' risk perception in Islamic banking. It can be applied to measure the impact of whether the financial product attains best possible gains. Meanwhile, psychological risk can be integrated into this study to measure the risk that the performance of the producer impacts negatively on consumers' peace of mind or self-perception. In Islamic banking, the risk that financial products are Sharia compliant can have psychological impact on Muslims' beliefs and peace of mind. The perception of risk in consumer financial decision-making is associated with high monetary and psychological risks (Milner and Rosenstreich, 2013).

When perceived risk is considered in terms of the traditional decision-making process outlined in the previous section, risk assumes a significant role in each stage: problem recognition, pre-purchase information search or evaluation of alternatives; purchase decision, or post-purchase behaviour. The latter stage is a key focus of this study as the research is concerned with existing Islamic banking consumers who are already committed to Islamic banking services and products. For instance, performance risk at this stage can be considered in terms of the expectations towards the product or service performance. The difference between the expectations and the actual performance is a measure of consumers' satisfaction (Mitchell, 1992). Given that financial products and services can be in constant flux post-purchase, it is reasonable to suggest that consumers are constantly evaluating the performance risk that the product will not perform according to their expectations. This may influence a decision to switch the product of the bank which can be measured in terms of switching intention or likelihood of switching. At the same time the consumer is attempting to minimise their psychological risk either in terms of their image or reputation with friends or family, or even religious or ethical beliefs. Thus it is possible to see that consumer perceived risk theory can provide important insights into how risk perceptions can impact on decision-making.

The literature provides an extensive body of research focused on the conceptualisation and measurement of perceived risk. Notably, Mitchell (1999) provides a useful synthesis on the concept based on a review of 30 years of research. His analysis revealed a large body of work showing a diverse range of perspectives on risk and complexity in measuring consumers' perceived risk. A review of different models led to criteria to support researchers in deciding the most applicable approach for their research. His analysis contrasts different models of perceived risk: basic, complex and multi-attribute. Cunningham (1967) is noted as unique in introducing a two-component model that measures uncertainty and dangerousness of consequence that evolved from a 3 point-scale to a nine-point risk scale. More complex models give attention to different antecedents of risk including the likelihood of failure that leads to negative consequences (Dowling and Staelin, 1994). Mitchell's (1999) analysis of multi-attribute models showed that product characteristics could be a source of consumers' perceived risk including interpersonal forms of performance-related risk (Zikmund and Scott, 1977), uncertainty about the true brand or uncertainty about the relative importance of various attributes (Pras and Summers, 1978). A more recent, complex scale by Dowling and Staelin (1994) similarly acknowledges other risk antecedents such as specific product attributes, consumer purchase goals, the potential for negative consequences from failure and other conditions such as purchase channel.

Thus the literature elevates the role of risk perception in consumer decision-making based on the need to understand the sources of uncertainty, and the inadequacy of consumers' knowledge. On balance, research shows that different types of perceived risk can be evaluated in each specific stage of the decision-making process and in terms of different types of perceived risk. Additionally, the literature emphasises the subjectivity of perceived risk in the consumer decision-making process, as well as the increasing imperative to consider perceived risk from a much wider environmental, individual and socio-technical position (Slovic, 2016; Fabozzi, 2008). The increasing volatility and change in society and rapidly changing social context creates significant uncertainty and ambiguity (Slovic, 2016). This perspective is reflected in the work of Kahn and Sarin (1988) who focused on examination of consumer decision-making under uncertainty conditions and ambiguity. Ambiguity was operationalised in terms of payoffs, likelihood of events affecting payoff and ambiguity of information such as amount of quality reliability. Their findings provide empirical evidence that attitudes to ambiguity in risk could vary between contexts and amplify consumer risk attitudes.

There is also significant theoretical basis for viewing perceived risk subjectively. This is consistent with scholars' emphasis on subjective risk over objective risk in stating that while the existence of objective risk cannot be denied, only subjective or perceived risk can be easily measured (Mitchell, 1999; Stone and Winter, 1987). Moreover, Mitchell (1999) argues that even if consumers could accurately calculate risk it is their subjective perceptions of it that motivates behaviour. Notably, he proposes that direct measurement of perceived risk can be aided by the use of statements that make the questions more understandable by avoiding the use of the word risk. For instance, "instead of asking "what are the social risks involved in the purchase?", several statements could be used to replace the overall concept of social risk, e.g. your superiors will be displeased, or, your relationship with colleagues may be adversely affected" (Mitchell, 1999, p182). Given the powerful influence of perceived risk on consumer behaviour and the role of consumer risk perceptions in directly impacting consumer's behaviour, Milner and Rosenstreich (2013) point to the dearth of literature on this topic in the financial services domain where there is a proliferation of financial products.

3.3.1 Factors Influencing Bank Selection

The banking business is first and foremost a service industry where financial services are characterised by intangibility, inseparability, heterogeneity and perishability (Zeithaml et al. 1985). The absence of standardisation in the delivery of certain services can create significant subjectivity particularly given the human component delivery entails. In other words, given individual differences on a human resource level, delivery is heterogeneous.

A growing body of research has focused on customer satisfaction in banking, in view of the high level of customer choice and array of customised service options in the industry. Research shows that loyalty to retail banks is influenced by a host of factors, including the bank's overall image, in addition to perceived service quality and customer satisfaction (Amin et al. 2013; Keisidou et al. 2013; Hafeez and Muhammad, 2012; Chu et al. 2012; Armstrong and Seng, 2000; Levesque and McDougall, 1996). The pre-purchase stage and the post-encounter processes underscore the significance of defining consumers' wants and needs, and how consumers weigh alternatives, react to perceived risks, select, utilise and experience a given service, and assess the service experience following usage (Narteh and Owusu-Frimpong, 2011; Pont and McQuilken, 2005).

The financial literature evidences a range of factors that determine clients' bank choice. These elements have garnered increased attention in the last decade. Research outlined in Table 3-1 shows that consumer bank selection hinges on multiple factors. Studies investigating client preferences and the factors that determine their bank selection have been undertaken in numerous countries utilising myriad tactics and methodologies.

A range of studies has identified bank credibility as a key determinant influencing the choice of bank selection for IB consumers (Rashid and Hassan, 2009; Avkiran, 1999; Kennington et al. 1996; Haron et al. 1994). According to Brunner (1983, p. 36), bank credibility depends "*on the history of policy making and the behaviour of the policy institution*". Credibility has been found to be an important determinant for Islamic bank selection in early research by Avkiran (1999). Bank credibility is also highly associated with and can significantly impact bank image and reputation. These aspects can be developed over time as performance is enhanced or may lessen for numerous reasons (Bordo and Siklos, 2015).

Table 3-1 Bank Selection Criteria

Selection Criteria	Conventional Banking	Islamic Banking
Credibility	Arora et al. (1985);	Avkiran (1999); Kennington et al. (1996); Haron et al. (1994)
Reputation/Image	Katircioglu et al. (2011); Almossawi, 2001;	Dusuki and Abdullah (2007); Hasan et al. 2012; Khattak and Rehman (2010); Haron et al. (1994); Masood et al. (2009)
Pricing, Financial benefits, Credit terms	Zineldin (1996)	Ahmad et al. (2008); Kennington et al. (1996).
Stability	Arora et al. (1985)	Kennington et al. (1996)
Staff Knowledge or Competence	Kaufman (1967); Laroche et al. (1986); Kaynak and Harcar (2005); Hedayatnia and Eshghi (2011); Blankson et.al. (2007)	Dusuki and Abdullah (2007); Awan and Bukhari (2011)
Customer Service and Friendliness of Staff	Laroche et al. (1986); Kaynak and Harcar (2005); Kaynak et al. (1991); Jahiruddin and Haque (2009); Mokhlis et al. (2009); Katircioglu et al. (2011);	Abdul Rehman (2012); Avkiran (1999); Kennington et al. (1996); Dusuki and Abdullah (2007); Metawa and Almossawi (1998); Hedayatnia and Eshghi (2011)
Transaction efficiency or effectiveness, Timeliness	Mason and Mayer (1974); Hedayatnia and Eshghi (2011)	Kennington et al. (1996); Rashid and Hassan (2009); Metawa and Almossawi (1998); Khattak (2010); Haron et al. (1994); Ahmad et al. (2008)
Convenience/Location	Kaufman (1967); Arora et al. (1985); Zineldin (1996); Jahiruddin and Haque (2009); Katircioglu et al. (2011); Mokhlis et al. (2009); Wel et al. (2012); Chigamba and Fatoki (2011)	Avkiran (1999)
Social (Friends and Relatives Social Connections)	Mason and Mayer (1974); Tan and Chua (1986)	NA
Service Quality	Katircioglu et al. (2011); Hedayatnia and Eshghi (2011); Rashid and Hassan (2009)	NA
Service Quality: Innovation	Hedayatnia and Eshghi (2011)	NA
Service Quality: Confidentiality &	Masood et al. (2009); Haron et al. (1994)	Khattak and Rehman (2010); Haron et al. (1994)

Privacy		
Other	Size of Banks Assets (Maiyaki and Mokhtar, 2011); Security (Mokhlis et al. 2008); Reliability and Responsiveness (Rao and Sharma, 2010)	Communication (Avkiran, 1999); Confidentiality (Khattak, 2010); Confidence (Rashid and Hassan, 2009); CSR (Metawa and Almossawi, 1998).
Less risky alternative to conventional banks	NA	Abdullah et al. (2012)
Religious values (Shariah)	NA	Hegazy (1995); Dusuki and Abdullah (2007); Metawa and Almossawi (1998); Bashir (1999); Naser et al. (1999); Rashid et al. (2009); Al-Tamimi et al. (2009)

Cross-country studies over time have consistently demonstrated the importance of bank reputation as a critical aspect in the selection of an Islamic bank. Conceptually similar to bank credibility in terms of perceptions of bank performance over time, a widely cited definition of corporate reputation identifies it as *"a relatively stable, issue specific aggregate perceptual representation of a company's past actions and future prospects compared against some standard"* (Walker 2010, p.370). A study by Haron et al. (1994) amongst 301 Muslim and conventional banks in Malaysia examined customer preferences and criteria used in an environment offering access to both Muslim and non-Muslim banks, finding that good bank reputation was a key determinant driving selection of Islamic banks. Masood et al. (2009) examined customer perception and levels of satisfaction with regards to IB with findings showing that customers take into account several aspects when making a decision, the most important of which include bank reputation. Research by Khattak and Rehman (2010) in Pakistan demonstrated that a key aspect for Pakistani customers in bank selection was bank reputation, while Rashid and Hassan (2009) demonstrate that confidence in the bank is one of the most significant aspects taken into account by customers in bank selection.

Research by Al-Tamimi et al. (2009) investigated a comparison between the image of Islamic banks and conventional banks in the UAE and the degree to which, if any, the perception of the bank had on customer banking behaviour. Findings suggested a preference for banking with Islamic banks amongst customers in the UAE. The research reached the conclusion that customers are not satisfied with the quality of service yet have positive images of both Islamic and conventional banks. Religious conviction and service quality were held to be correlated with the positive image of Islamic banks. Sharma et al. (2017) examined religiosity, generational cohorts and buying attitude on the purchase intention of Muslim consumers towards Islamic financial products. Findings showed that the relationship between Muslim religiosity, buying attitude and purchase intention was moderated by generational cohorts. Muslim buying behaviour and religiosity points to religious factors as the principal reason for selecting Islamic banks in Muslim-majority countries such as Kuwait, Saudi Arabia, Egypt and Indonesia (Dahari et al. 2015). A recent study by Safiullah and Shamsuddin (2018) on the differences in risk between Islamic and conventional banks focused on the role of Shariah Supervisory Board (SSB) composition in Islamic bank risk. Insolvency and operational risks were shown to decrease as SSB size and members' academic qualifications rose, however experienced an escalation when the number of reputed Shariah scholars on the SSB also increased.

Pricing, financial benefits and credit terms are factors underlined in numerous studies to influence Islamic consumer bank selection decisions. Some studies have pointed to a belief in the financial benefits of Islamic banks as influencing bank selection. Comparative analysis by Haron et al. (1994) found the belief that Islamic banks provide higher returns was prevalent amongst both Muslim and non-Muslim customers of Islamic banks. Erol and El-Bdour (1989) show that expected future profits from investments were a significant criterion in the selection decisions of an Islamic bank. According to Mokhlis et al.'s (2009) study focused on the perception of customers in Malaysia, additional aspects including financial benefits are influential factors in the selection decision process.

Research by Masood et al. (2009) examined customer perception and levels of satisfaction with regards to IB. Findings suggest that customers take into account several aspects when making a decision, the most important of which include profitability. A study by Rashid et al. (2009) in Bangladesh to establish customer preferences with regards to Islamic banks applied factor analysis and concluded that customers deemed increased cost benefits important in addition to religious considerations.

A number of studies have pointed to bank stability as a key factor in bank selection decision-making, referring to consistency and stability in aspects such as assets, profitability, and range of operation (Johnson, 2002). For example following bank reputation and product and service pricing, stability was the most significant selection criteria in research by Kennington et al. (1996).

Relational aspects involving staff behaviour and customer service are evidenced across a range of studies to be influential factors in the choice of Islamic banks. Research in the conventional banking context highlights a number of different relational aspects to be significant such as the duration of the client-bank relationship (Laroche et al. 1986; Kaufman, 1967). A key factor consistently identified in research is the importance of employee friendliness and the courtesy and professionalism of staff (Katircioglu et al. 2011; Jahiruddin and Haque. 2009; Mokhlis et al. 2008; Laroche et al. 1986; Mason and Mayer, 1974). Almossawi (2001) found that bank staff friendliness was one of the highest ranked of 30 bank selection factors**.**

These results are to some extent mirrored in the context of IB selection. According to Avkiran (1999), key criteria driving selection of banking services include behaviour of staff. Staff friendliness in particular is a critical factor underlined to impact selection. Haron et al. (1994) found that both Muslims and non-Muslims assigned an almost equal value to friendliness of staff as transactional speed and efficiency of services, and bank confidentiality. Kennington et al. (1996) highlight staff friendliness as important, while research by Dusuki and Abdullah (2007) underlines that branch staff friendliness holds significant influence in customer selection decisions. Okumus (2005) conducted research in Turkey examining the criteria used by 161 customers in selecting a bank and found Turkish clients place key importance on branch staff friendliness.

Another widely evidenced aspect is staff knowledge and competence in terms of efficient and satisfactory performance in addressing customers' needs (Hedayatnia and Eshghi, 2011; Blankson et. al. 2007; Kaynak and Harcar, 2005; Kaufman, 1967). Katircioglu et al. 2011 found that knowledge and skills of bank employees, provision of adequate explanations of services and products and knowledge of personal needs were some of the more important staff-related aspects influencing bank selection. Adequate explanation ranked the seventh highest factor overall of a total of 53 factors tested.

Staff knowledge and experience has been shown to be a key determinant in Islamic bank selection (Dusuki and Abdullah, 2007). Hedayatnia and Eshghi (2011) also show that bank employee qualities are critical factors in bank selection decisions. Research by Abdul Rehman (2012) identifies knowledgeable employees as key aspects in bank selection, part of wider quality principles including customer service quality shown to drive selection choice. Awan and Bukhari (2011) found that staff knowledge of religious compliance of IB services and product was a key factor influencing bank selection.

Empirical results point to efficiency and timeliness of bank services and transactions as a significant criterion within selection decisions of Islamic banks. Some studies have noted the speed of transaction processing as particular attributes influencing Islamic bank selection (Khattak and Rehman; 2010; Rashid et al. 2009; Dusuki and Abdullah, 2007). Haron et al. (1994) maintain that in Malaysia key determinants driving selection of Islamic banks include transactional and service speed, and efficiency. Okumus (2005) found importance placed on the rapidity of transaction. Corporate efficiency is a slightly wider notion of efficiency encompassing not only more rapid transaction and document processing, but also efficient managers and knowledge of customer's business, demonstrated by Rashid and Hassan (2009) as a key component considered by customers in selecting a bank.

Convenience and location have been evidenced in research to be underlying factors in the choice of Islamic bank. This is consistent with prior research in conventional banking. According to Kaufman (1967), important determinants in client bank selection include convenience of location relative to home or work, supported by other studies showing location as a key determinant (Zineldin, 1996; Kaynak et al. 1991; Martenson, 1985). Mason and Mayer (1974) highlight convenient location as the top-rated determinant.

In the IB context research findings have produced more detailed results on the aspects of convenience which influence consumers. Avkiran (1999) shows that key criteria driving selection of banking include ease of access to branch services such as tellers. According to

Mokhlis et al. (2009) additional aspects such as location of branches and ATM services are influential factors in the selection decision process.

Social aspects in terms of the influence of family and friends on the bank selection decision have been demonstrated in the IB literature. Prior research has underlined the importance of recommendations of friends or relatives in choosing a bank (Mason and Mayer, 1974). This was the express focus of Tan and Chua (1986) who looked at the impact of attitudes, intentions and socially relevant influences in relation to banking customers in Singapore. Significantly, they found friends and family to be pivotal components in the bank selection decision. A major study by Maiyaki and Mokhtar (2011) in the Nigerian retail banking sector emphasised social dimensions with findings from 417 banks evidencing the role of social influences as a crucial factor in the bank selection process. This encompasses advice and the influence of social connections with family members, friends or others.

Bank selection decisions have been shown to be influenced by perceptions of the level of service quality provided (Kaufman, 1967). This is reflected in evidence in the IB context. In Tehran, Hedayatnia and Eshghi (2011) analysed data gathered from 798 customers using factor analysis to determine the leading factors affecting bank choice. The study showed service quality and innovative banking services to be the key determinants. Findings by Rashid and Hassan (2009) further highlight core banking services as key.

Bank confidentiality in terms of customer privacy in transactions has been conceptualised as a key component of service quality (Abdullah et al. 2011). Masood et al. (2009) find that principles of confidentiality follow bank reputation and religious considerations in their importance for bank selection. Khattak and Rehman (2010) also point to information confidentiality as significant criteria in the selection of an Islamic bank, while Haron et al. (1994) highlight the importance of bank confidentiality for Muslims and non-Muslim banking customers alike.

More generally, evidence suggests a range of other factors as significant in the selection of Islamic banks including communication (Avkiran, 1999), corporate social responsibility (Metawa and Almossawi, 1998), and confidence (Rashid and Hassan, 2009). In the

Nigerian banking sector, the size of bank assets was found to be important (Maiyaki and Mokhtar, 2011). The size of assets relates to the demand for security and the need or desire to avoid uncertainty. According to Mokhlis et al. (2009), a sense of security is an influential factor in the selection decision process for customers in Malaysia.

Minimal research has been conducted on the impact of differences in risk perception between Islamic and conventional banks on the bank selection decision. Related evidence suggests a complex picture. Comparative analysis by Haron et al. (1994) found the belief that Islamic banks provide higher returns was prevalent amongst both Muslim and non-Muslim customers of Islamic banks. However in a survey of non-Muslim residents in Malaysia, Abdullah et al. (2012) found low perceptions of the ability of IB to enhance products and services as a result of lack of information. Findings by Ahmad and Haron (2002) show that in the Malaysian context most respondents perceived high levels of acceptance among customers. Further Erol and El-Bdour (1989) point to strong levels of awareness among UAE banking customers of the benefits of profit and loss-sharing investment modes and of the economic and social development role the IB system plays.

Numerous researchers have described religious conviction as influential in bank selection. A UK survey conducted by Omer (1992) found that UK banks include IB services in their portfolios, however the largest percentage of those making use of IB services were Muslims. Early research conducted in Kuwait by Bashir (1999) and Naser et al. (1999) examining customer preferences among clients of Islamic banks in Jordan supported the hypothesis that religious conviction is a key driver in the selection process.

A range of later evidence supports the view that religious considerations are critical selection factors for IB consumers (Khattak and Rehman, 2010; Rashid et al. 2009; Okumus, 2005). Masood et al. (2009) found that the most important factors in the selection decision included religious considerations followed by the principles of Shariah.

Research by Ahmad et al. (2008) focused on a selection of 27 criteria indicated by previous studies as potentially influential aspects in customer decisions with regards to selection of a bank in Malaysia. Several of the criteria selected were associated with religious faith, for example features characteristic of IB such as lack of *'Riba'* charges and level of confidence in the Shariah Board. The researchers developed an index to indicate the degree of religiousness of the banks. The index incorporates the essential aspects of Shariah, namely faith, the laws of Islam and Akhlaq (virtues or ethics).

There are two main reasons why the research conducted by Ahmad et al. (2008) is of significance. The first reason is associated with the extent of religiosity as an influential factor driving decisions regarding bank selection. Findings show that those customers deemed the most religious (i.e. those who have a high score in the degree of religiousness index) have an increased chance of choosing an Islamic bank to secure finance or as a repository for funds. The second reason is associated with the degree of religiosity and its impact on the factors that determine credit selection criteria. Results indicate that with the exception of favourable terms of credit for financing products on offer, the degree of efficiency of services is also a highly significant determinant in the selection of banking services, in particular with reference to after-hours services and services associated with 'less hassle' such as electronic banking.

Nevertheless, an opposing point of view was put forward by researchers such as Gerrard and Cunningham (1997) and Zaher and Hassan (2001). In this context Dusuki and Abdullah (2007, p. 145) state that "*irrespective of the fact that the majority of Muslim clients recognise Shariah compliant resolutions, there are nevertheless empirical studies indicating that religious conviction is not the only reason clients choose a bank that provides Islamic banking services*."

3.3.2 Religious Influence on Consumer Decision-Making

The growth in the acceptance of Islamic banks is a choice not only for those of Islamic faith but also for non-Muslims (Iqbal and Molyneux, 2016). The IB sector is experiencing significant growth in markets such as the Middle East and South East Asia, as well as emerging in other markets globally. Notably non-Muslim clients now constitute up to 40% of the customer base for some Islamic banks, partly as a result of growing public awareness and greater visibility of IB (Ariff, 2014). Abdullah et al. (2012) explained that the reasons behind the popularity of IB and services among non-Muslims are their wider product coverage and ability to mitigate the global economic meltdown.

Historically, there has been the perception that as far as Muslim customers are concerned, religious beliefs are the chief motivators when selecting a bank. A large section of the literature points to religious beliefs being the chief criterion for such choices by consumers (Dusuki and Abdullah, 2007; Hegazy, 1995). Evidence shows that in choosing to become a client, adherence to Islamic principles was indicated as the most important criterion for selection (Abdul Rehman, 2012; Dusuki and Abdullah, 2007; Ahmad and Haron, 2002; Bashir, 1999; Naser et al. 1999; Metawa and Almossawi, 1998). Souiden and Rani (2015) found that religiosity was an important factor with results indicating a relationship between degrees of fear of divine punishment and increased levels of favourable attitude towards Islamic banks.

Other research indicates that in the decision-making processes, religion is not the primary reason for opting for IB services (Rashid and Hassan, 2009; Dusuki and Abdullah, 2007; Zaher and Hassan, 2001). Some studies indicated that customers take religious considerations into account when selecting an Islamic bank, alongside other aspects deemed important such as efficiency, increased cost benefit, and convenience of transactions (Rashid et al. 2009), and bank reputation, confidentiality and profitability (Okumus, 2005). Evidence additionally points to a diverse range of economic and service quality factors impacting on Islamic consumer decision-making. The findings indicate that religiosity is not always the dominant factor and decision-making is influenced by a broad range of service quality factors and bank attributes, as well as ethical orientation. However, there is a lack of consensus on the relative importance of different selection criteria. Across a broad range of studies, the importance of criteria varied indicating a unique combination of factors influencing bank selection.

This pattern of findings provides an indication of a pragmatic perspective to consumer decision-making that is explored in other studies focusing on broad economic and financial contexts and economic interests of Islamic consumers. Their findings indicate sensitivity to economic incentives and practical inclinations, and potential propensity towards liberal systems. Work by Demiralp and Demiralp (2015) is significant in challenging the view of Islamic economic actors as potentially radical Islam's ideologues and financiers. The work of Awan and Bukhari (2011) lends support to this view. They stressed the need to understand the motivations of Islamic actors in the post-crisis period and find that they hold strong self-interests, and that ideological beliefs are subject to rational influences. Cost, in other words, can impact on decision-making and this, in turn, raises questions of risk appetite and risk tolerance. Thus, how investors balance economic interests and religious convictions is an area that requires further research. The strength of ideological position is being contested. The central aims of Islamic economic actors are often considered to be the financing of an Islamic society and the avoidance of un-Islamic, interest-based earnings (Henry and Wilson, 2004).

A recent study by Demiralp and Demiralp (2014) underlines the lack of understanding into the banking consumer decision and the strength of religious motivation versus pragmatic thinking. An investigation into IB decision-making can provide insight into consumer sensitivity. Consumer behaviours and investments by these actors indicate they are responsive to pragmatic incentives and interest rates (Demiralp and Demiralp, 2014). It is argued on the one hand that the notion of rational economic behaviour may be supported by the trend towards Islamic banks in response to the perceived heightened risk of conventional banks. At the same time, it is suggested that this trend, rather than reflecting a willingness to accept lower return for lower risk, may be explained by an increase in religious conviction (Demiralp and Demiralp, 2014).

Research into the influence of firm performance lends further support to the relationship between economic interests and Islamic consumer decision-making (Al-Ajmi et al. 2009; Erol and El-Bdour, 1989). Comparative analysis by Haron et al. (1994) found that the belief that Islamic banks provide higher returns was prevalent amongst both Muslim and non-Muslim customers of Islamic banks. Further, the profitability of investing in an Islamic bank is found to feature in consumer decision-making. IB attaches little importance to monetary rewards from savings as these are perceived to bring their own reward with little risk (Ariff, 2014). However, financial rewards are viewed as justified when they are subsequently invested in actual commercial or trade business activities. Return on investment or profits are allowed as rewards for risk-taking, with risks in Islamic finance principally relating to uncertainties in business and not to the risk of borrower default (Ariff, 2014).

Furthermore, Demiralp and Demiralp (2014) highlight that a significant majority of customers of Muslim banks do not perceive themselves as economically disadvantaged in financial dealings. Muslim customers of Islamic banks, as compared to non-Muslim customers, show confidence of higher returns from investing in Islamic banks (Awan and Bukhari, 2011). It is shown that profit rates are frequently convergent with interest rates in conventional banking, so that customers do not face difficult choices between economic and religious interests (Demiralp and Demiralp, 2014). An issue arises however when profit rates diverge, which underlines the importance of understanding the determinants of investor choice and their commitment to religious interests. A related issue is the relationship this has with risk appetite and risk tolerance and bank and product selection. However, on this issue there is a lack of research regarding the degree of influence on the importance of return on investment and the role of general risk attitudes and risk perceptions on decision-making that these studies imply.

This body of research on bank selection brings into focus the interplay between religiosity and rational pragmatic factors in influencing bank selection and consumer decision-making. This in turn underscores the significance of broader economic and financial contexts and the perceptions of risk emphasised. The perception of Islamic bank performance across a range of variables can potentially exert significant influence on bank selection and switching behaviour. Economic interests of IB consumers are influenced by broader economic and financial contexts. At the same time, there is uncertainty regarding the degree of the influence of religiosity on decision-making. Moreover, the findings by Al-Tamimi et al. (2009) suggested a resilient consumer preference for Islamic banks over conventional banks in spite of negative perception. A further insight into bank selection is contributed by a comparative evaluation between the image of Islamic banks and conventional banks in the UAE and the degree, if any, that the perception of the bank had on customer banking behaviour. The research found that customers are not satisfied with the quality of service, yet have positive images of Islamic banks. This may suggest the significance of religious conviction in terms of bank selection. Nevertheless, the importance of understanding risk perceptions of bank performance and consumer decision is underscored by Alsoud's (2013) assertion that IB can no longer be confined to the fulfilment of religious obligations, but is a competitively-based innovation in the financial sector. Therefore, Islamic financial institutions are impelled towards greater definition and understanding in relation to customer needs (Alsoud, 2013). It is evident that cultural beliefs, attitudes and values are important determinants of and significantly influence consumer behaviour and decision-making (Dash et al. 2009).

3.4 Risk in Finance

Consideration of external influences on the decision-making processes and the financial crisis as an example has brought into focus in the literature the significance of understanding risk and risk perceptions. From the economic point of view, the concept of risk can be defined as a circumstance where the consequence in the future is indefinite but there is a possibility of each probable consequence to occur. A risk might result in a positive or negative outcome in decision theory (Roeser et al. 2012; Keil et al. 2000). Thompson and Dean (1996) have provided two main concepts of risk, the contextualist and the positivist.

The concept of risk in the Islamic literature is significantly embedded in notions of Shariah rules and principles. This establishes the basis of risk in Islamic culture as a balanced-rational concept based on the belief of both destiny and commitment to manage and control unfavourable possibilities and at the very least counter negative impacts (Moahammed, 2013). This risk culture advocates contextual awareness and prevention of risk taking that emphasises rationality to appropriately estimate, calculate and assess the probability and degree of impacts. At the core of Islamic risk culture is the notion of fairness and sharing of risk between lenders and borrowers (Kayed and Mohammed, 2010).

The financial crisis had implications for Islamic risk culture in terms of how investors assess and perceive the new risk and how it influences their decision-making. Risk for Beck (2007) is not the catastrophe itself, but the anticipation of a coming catastrophe. For Beck (2007), global risks such as the financial crisis are characterised by four criteria: elimination of borders, uncontrollability, impossibility to compensate the losses, and lack of knowledge. The financial crisis has undoubtedly created significant complexity for investors. For Muslim investors, this presents a challenge from overestimation or underestimation of risks that Shariah principles profess to prevent. Over- or underestimation of risk is a practice that Shariah principles set out to prevent with the goal of establishing a balanced culture (Moahammed, 2013).

The problem with these new risks is that they are perceived to be as uncontrollable as a financial crisis. According to Beck (2007), this could lead to a risk society where some risks are perceived as more dangerous because they are more intensively discussed in the media, which could in return also lead to culture conflicts and even to what he calls a clash of risk cultures. This context, according to Beck (2007), has triggered a global anticipation of catastrophes that have placed the institutional and political fundamentals of our society at stake. In other terms, the financial crisis has generated a new set of dynamics that influence perceptions of risks and decision-making. The discussions on globalisation, modernisation and risk analysis by Ulrich Beck and Anthony Giddens since the 1980's, underscore the perspective that risks in today's world are often created by this world itself and therefore prove to be socially constructed (Zinn, 2009; Beck, 2007).

3.5 Risk Perception

The notion of consumer-perceived risk has been broadly covered in the marketing field and has been established to affect consumer behaviour in different ways and in different environments (Hillson and Murray-Webster, 2012a; Cunningham et al. 2005). Researchers of consumer behaviour mostly explain perceived risk with regard to a user's perceptions of the improbability and possible unfavourable results of purchasing a product or service (Beneke et al. 2013; Chen and Chang, 2012; Grabner-Krauter and Faullant, 2008; Littler and Melanthiou, 2006).

Numerous studies have emphasised the irrational view of the investor (Hon-Snir et al. 2012). Dolan et al.'s (2012) discussion on behavioural theory stresses the impact of evolving contexts on decision-making that undermine the rationality argument. Humans are subjected to social and emotional factors that influence behaviour. Risk perception has been explained to be the assessment of a decision maker of the risk integral to a condition (Sitkin and Pablo, 1992). Risk perception is defined as the assessments and conclusions a person makes about the possible risks they are presented with (Rohrmann, 2005). Often however, the related constructs of risk tolerance and risk perception are confused, although they can both independently influence a person's behaviour regarding risk-taking (Murray-Webster and Hillson, 2016; Roeser et al. 2012; Hunter, 2002). These two constructs can be defined and differentiated thus: risk tolerance is the level of risk a given person will consent to when acting towards a purpose, while risk perception is essentially the cognitive activity concerned with accurately assessing internal and external conditions (Hunter, 2002).

Risk perception is acknowledged as a critical component of risk attitude because it is susceptible to a wide range of factors. Since the financial crisis, risk perception is a key dimension that has changed. However, in spite of its significance as an area of study, risk perception has been largely under-researched (Shleifer, 2000) and greater emphasis on understanding its role in financial decision-making is needed. It is recognised as an influential and distinct component that influences risk attitude based on a body of research from risk psychology and behavioural economics, that addresses the influence of risk perception on decision choices under uncertainty (Friedman et al. 2014; Weber and Milliman, 1997; Sitkin and Weingart, 1995; Sitkin and Pablo, 1992; Tversky and Kahnemann, 1981; Kahnemann and Tversky, 1979). The last two decades have witnessed a rise in interest in the study of the effects of risk perceptions on behaviour, due to the novel developments in and increasing complexity of the economic environment confronting society from policy makers to consumers, and financial advisers to scholars of finance (Grable, 2016; 2008).

The relative significance of risk perception versus risk tolerance is emphasised by Roszkowski and Davey (2010) investigating the economic crisis of 2008. A comparison of pre- and post-crisis data indicated that while variation in risk tolerance was marginal, risk perception in investing behaviour increased more significantly. Earlier research by Abduh et al. (2011) stressed that not all people have the same perception of situations with negative effects, such as an economic crisis. This heightens the emphasis on risk management, risk attitude, and risk perception as significant to avoid negative impacts in relation to unfavourable economic conditions that can threaten the performance of banks, especially for Islamic banks facing other risks in terms of aligning with Shariah.

These findings underscore a broader perspective of investment decision-making beyond objective evaluations of probability (Capon et al. 1996) and point to consideration of other elements when decisions are made in conditions of uncertainty and more weight given to perceived rather than objective risk (Diacon and Ennew, 2001). Risk perception is argued to include an evaluation of the extent of uncertainty in the situation, how far that can be controlled and the level of confidence in this assessment (Sitkin and Weingart, 1995). Therefore, it is construed as an amalgamation of actual uncertainty, a gap in knowledge and the significance of the potential outcomes (Fischhoff et al. 2000).

Investor decision-making behaviour is argued to be influenced both by attitude in respect of risk in addition to the manner in which it is perceived. Various levels of risk perception may encourage investors to think differently in relation to an investment and also make different decisions (Hallahan et al. 2004). Many scholars underline the strong influence of risk perception over investment decision-making processes (Chen and Tsai, 2010; Weber and Hsee, 1998). A central question in the literature focuses on the influences and determinants of risk perception and the extent to which an individual's risk position is reliant predominantly upon stable factors and characteristics, or whether it is more situation-dependent.

3.5.1 Relationship between Attitudinal Constructs

Weber et al. (2002) define risk attitude as identifiable on a risk continuum, ranging from risk aversion to the other end of the spectrum of risk seeking. The extent of risk-taking is argued to be significantly domain-specific. While risk behaviour has been studied intensely, the interrelation between the facets discussed and between risk perception and attitudinal constructs has only been the subject of a small number of studies. Several studies have examined the role of risk perception in risk behaviour (Hoffman et al. 2015; Broihanne et al. 2014; Hoffman et al. 2013). These studies acknowledge that risk perception can be a determining factor for specific risk attitudes and action, and focus on the interrelation between risk perception and other attitudinal constructs: risk aversion, risk tolerance, risk propensity and risk appetite. The literature supports the conceptualisation of distinct attitudinal strands, which directly or indirectly influence consumer decision-making. However, risk perception is acted upon by a number of forces. Identifying these key factors and the extent to which they exert influence on consumer decision-making has further been studied from the perspective of external influences in terms of IB risks identified in the literature. This is the first study that examines both external and internal influences on risk perception.

The different facets of risk attitude have been researched individually, but increasingly further research has emerged that acknowledges the amalgamation and interrelation of the components of risk attitude. The concept of financial risk is underpinned by a range of interconnected facets of risk related to how humans think and feel about risks, which are discussed in this chapter to provide an overview of this risk in the context of this study, and position the conception of risk perception that forms the focus of this study. Recent literature on risk attitude indicates that this is increasingly investigated in terms of specific concepts, which characterise different elements of risk, including risk propensity, risk aversion, risk tolerance and risk appetite (Gerrans et al. 2015; Hamid et al. 2014; Larkin et al. 2013).

While risk behaviour has been studied intensely in both psychological and economic terms and a large number of risk perception studies exist, far less research has been conducted regarding people's risk attitudes. There is little knowledge of the relationship between risk perception and risk attitudes defined as intentions to evaluate a risk situation in a favourable or unfavourable way and to act accordingly (Grable and Carr, 2014; van Winsen et al. 2011; Rohrmann, 2005). Generally, risk attitude and risk perception have been regarded as discrete and separate behavioural determinants. An overview of the literature on these two concepts suggests the relevance of combining these notions to improve risk behaviour understanding.

3.5.1.1 Risk Appetite

In regards to risk appetite there is, on the one hand, research providing support for the proposition that risk appetite may be a constant inclination irrespective of situation. The influence of socio-demographic characteristics on financial risk appetite is a case in point (Berlinger and Varadi, 2015). Varga and Ulbert (2005) have summarised the general trend of results in which a principal finding is that men are generally more risk-taking than women. Younger generations were also found to have greater risk appetite than older ones shown by the level of risk-taking. Notably, those with higher incomes were found to have greater tendencies towards risk-taking than lower income individuals, while more educated individuals were found to be more prone to risk taking than individuals with limited or no education (Varga and Ulbert, 2005). These findings suggest that risk appetite can be linked with relatively stable characteristics such as socio-demographic attributes. However the evidence is not consistent, and no clear consensus is obtained on the impact of socio-demographic characteristics on risk appetite as a result of varying factors in differing environments (Alanko, 2009). A recent study in Iran by Hoseini et al. (2014) shows that socio-demographic characteristics such as age, gender, education, marital status and income had no statistically significant effect over Islamic investors' risk appetite.

On balance from the evidence, it appears that risk appetite may be an underlying stable tendency also influenced by situational elements. Hillson and Murray-Webster (2012b) support this proposition describing the appetite for risk in a given situation as influenced not just by the particular aspects of the situation but by the general tendency of an individual to take risk in any circumstances. This is denoted as risk propensity and is asserted to be driven in turn by a range of risk-related personality traits and intrinsic motivations described as risk preferences.

3.5.1.2 Risk Aversion

Risk perception is asserted to be manageable if investors have awareness of their level of risk perception (Singh and Bhowal, 2008). Investors are suggested to make appropriate trade-offs between risks and returns when making investment decisions (Fischer and Jordan, 2006). Risk-seeking individuals pursuing high returns are argued to be more likely to have low risk perceptions in specific situations, while contrastingly risk-averse individuals have a greater likelihood of high-risk perceptions in specific situations with impacts on investment behaviour (Rana et al. 2011).

The economic perspective is that generally individuals are risk-averse (Nicholson and Snyder, 2011). Risk aversion can be defined in financial terms as relating to an investor who, when faced with lower returns with known risks or higher returns with unknown risks will prefer the former (Erdem and Iqbal, 2014). Risk tolerance has frequently been defined as the inversion of risk aversion whereby individuals who are more risk averse will have a lower tolerance for financial risk-taking and greater caution (Baker and Ricciardi, 2014; Hoffman et al. 2013; Cristian, 2012; Gron and Winton, 2001; Barsky et al. 1995). Strydom et al. (2009) state that few studies have attempted to measure risk aversion and there are minimal existing measures or instruments. Many studies have chosen to focus on risk tolerance rather than risk aversion to assess risk attitudes (Awais et al. 2016; Cooper et al. 2014; Naim, 2005; Yao et al. 2005).

Risk aversion is a concept that has been elaborated in highly specific terms in relation to financial risk and investment behaviour. According to Portfolio theory, which identifies optimal investment portfolios, there are three levels of risk aversion in individuals: risk-averse, risk-lover and risk-neutral (El Massah and Al-Sayed, 2013; Cristian, 2012; Reilly and Brown, 2011). The risk-averse investor is argued to choose assets with lower levels of risk, while the risk-seeking investor will select higher risk assets with the hope of higher returns. A risk-averse person is one that responds conservatively when facing risk (LeRoy and Werner, 2014). Weber and Milliman (1997) exemplify this by arguing that the choice of selecting a definite amount of money over a lottery or gamble with equal expected value reveals an individual as risk-averse. It is the opposite for a risk-seeker who may decide to accept an uncertain outcome for the highest possible gain. Indifference for either option reveals a risk-neutral individual (Perloff, 2012). Thus, a person classified as a risk-seeker will choose the lottery over a guaranteed amount, given equal expected values (Weber and Milliman, 1997).

Apart from the behavioural classifications of risk-averse and risk seeking, a person can be described as risk-neutral. The risk-neutral investor is characterised as indifferent to choices between assets based on assessment of risks (El Massah and Al-Sayed, 2013; Reilly and Brown, 2011). A risk-neutral individual is unconcerned about selecting a sure amount or a lottery (Perloff, 2012). However, it is expected that a risk-neutral person will select the option with the highest expected value, in order to be able to maximise utility (Perloff, 2012).

Income level affects investment decision-making (Aren and Aydemir, 2015). In terms of risk aversion, an investor's increasing wealth level is measured by applying utility functions (Cristian, 2012). From this perspective, theory states that risk aversion can be viewed in terms of absolute risk aversion and relative risk aversion. Absolute risk aversion relates to the absolute amount of income an investor is willing to invest in a risky alternative. Increases in wealth will result in either a decreasing absolute risk aversion in which the investor will increase investment amounts or an increasing risk aversion in which the invested amount lowers following an income increase. Relative risk aversion is analogous and reflects the comparative amount of money relative to their overall wealth that an individual is willing to invest in risky assets (Cristian, 2012).

3.5.1.3 Risk Tolerance

In respect of risk tolerance Rohrmann (2005) notes the link between risk perception and risk tolerance stating that decisions about the tolerability of risk are guided by risk perception and have a fundamental effect on behaviour, although actual behaviour is distinct from risk perception and risk attitude. A person's rating of a risk's intensity and of the level of acceptability of a risk is determined by risk typology, by the individual's beliefs, experiences and opinions, and by a variety of social pressures (Rohrmann, 2005).

Financial risk tolerance can also be viewed from the perspective of financial planners as a blend of risk attitude and risk capacity, in terms of willingness to take risks and the amount of risk an individual can afford (Cordell, 2002). Nevertheless, Lucarelli and Brighetti (2011) point to essential differences between the two concepts, with risk attitude perceived as a psychological trait (Weber et al. 2002), while risk capacity is mainly viewed as a financial attribute (Grable et al. 2009).

A further perspective relates to the importance of understanding the psychology of IB customers. Tolerance for financial risk is asserted by Lucarelli and Brighetti (2011) to ultimately rely on diverse risk dimensions. Importantly, risk tolerance scores were positively correlated with the riskiness of respondents' actual investment portfolios, meaning that investors with high risk-tolerance scores tended to have higher-risk portfolios. Respondents with relatively more investment experience had more risk-tolerant responses and higher-risk portfolios than less experienced investors (Corter and Chen, 2006). Only recently studies have begun to examine the relationship between attitudinal constructs and decision-making. Research into the Iranian stock exchange by Baghani and Sedaghat (2016) found that both risk perception and risk tolerance influenced investors' decision-making and are limited in providing insight into the dynamic between risk perception and risk tolerance.

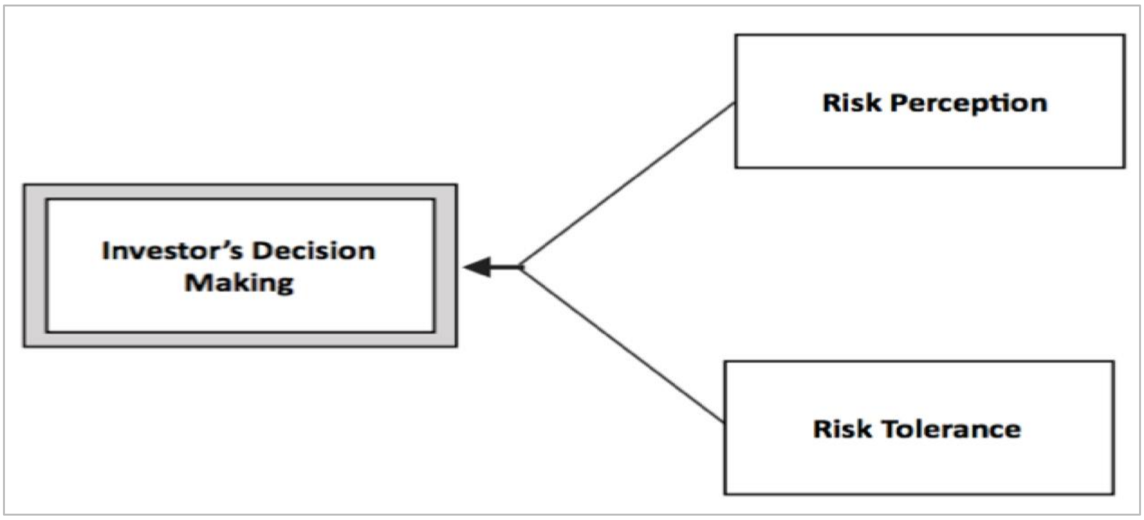

Figure 3-1 Risk Perception on Consumer Decision-Making
Source: Baghani and Sedaghat (2016, p.49).

3.6 Risk Aversion in the UAE

Investors are frequently classified in terms of their risk attitudes characterised predominantly in terms of risk averse, risk seeking and risk neutral (Abdallah and Hilu, 2015). The literature demonstrates that risk aversion is not constant and varies across different countries and cultures (Schneider et al. 2017; Gandelman and Hernandez-Murillo, 2014; Breuer et al. 2014; Rieger et al. 2014; Hofstede et al. 2010). Research by Gandelman and Hernandez-Murillo (2014) compared the level of relative risk aversion across 75 countries, indicating strong variances across different nationalities. Other studies have reinforced the proposition that risk aversion tendencies are influenced by national culture. Breuer et al. (2014) show that individualistic societies display greater tendencies towards financial risk taking than collectivist societies. Other research has shown that collectivist cultures emphasise conformity influencing more extreme probability judgements than individualistic cultures (Yates and Shinotsuka, 1996; Wright and Phillips, 1980). This suggests that investors in collectivistic cultures may perceive risk in more extreme terms than other cultural groups of investors encouraging risk aversion. Recent research by Schneider et al. (2017) concludes that lower levels of uncertainty avoidance explain the willingness to take greater financial risks in some cultures in comparison with lower willingness in more uncertainty avoiding countries. Demographic factors such as gender have also been shown to impact risk aversion with women evidenced to be more risk averse than men (Borghans et al. 2009).

Given that the UAE has relatively high uncertainty avoidance and collectivist orientations (Hofstede, 2017a,b), these findings suggest that investors from a society such as the UAE's may retain higher levels of risk aversion than investors in other countries and cultures. Arab cultures are argued to hold risk aversion and caution as a virtue (Azzam, 2002). León and Pfeifer (2013) show that Muslims are less risk-taking than non-religious people, while Bartke and Schwarze (2008) indicate that Muslims are less risk-tolerant than Christians. Wilson and Liu (2011) further highlight that Muslim consumers show strong tendencies towards risk aversion. Islamic banks are traditionally risk averse as a result of the potential over-demand for interest-free loans and the risk of default (Kureshi and Hayat, 2014). Evidence also points to the risk aversion of IB customers and depositors (Erdem and Iqbal, 2014), a key factor in the overall risk aversion of Islamic banks (van Greuning and Iqbal, 2008) and in the need for capital adequacy requirements (Muljawan et al. 2007). Evidence on the risk-taking attitudes of developing countries is also relevant. One extensive global study including 52 developing countries showed that developing countries had higher levels of risk aversion than developed nations (Gandelman and Hernandez-Murillo, 2014).

Research shows that Emiratis are overall more risk averse than nationals in other countries (Kramer and Pittinsky, 2012; Bohnet et al. 2006). In a cross-country study of the UAE, the US, Brazil, and Switzerland, the UAE was found to have the highest levels of risk aversion of all countries studied. Research into the impact of cultural values in the corporate banking industry in the UAE found that Emiratis are highly culturally homogenous and risk averse, extending to trust in banking relationships based on familiarity and shared values (Houjeir and Brennan, 2014). Al-Hilu et al. (2017) further provide empirical evidence that UAE investors are overall risk averse, with risk aversion heightened by the events of the 2008 global financial crisis. An indication of the risk aversion of UAE investors is suggested in the strong preference towards short-term investments (Tolchard, 2011), as well as the acknowledged risk aversion of UAE venture capital firms (Bin Byat and du Osman Sultan, 2014). Evidence from the Organisation for Economic Co-operation and Development (OECD) further underlines the overall tendency towards risk aversion within the UAE. Risk aversion is reported to be a significant barrier to entrepreneurialism and new business ventures within the country, partly reinforced by the strong social stigma attached to business failure, which encourages a more conservative approach. Further most Emiratis have access to well-paid government jobs, which discourages a more risk-taking approach where a secure source of income may be forfeited (OECD, 2016).

3.7 Risk Perception Paradigms

Realist approaches assume that actual risk can be objectively assessed, while individuals' risk perceptions vary from one to another. This difference is considered to be inexplicable solely on the basis of the differences in knowledge of the actual risk being evaluated (Proske, 2008). Further, perceptions of reality are held to vary among individuals resulting in differing interpretations. Perceptions are known to be subject to brain processes which filter arriving information based on the social, cultural and personal background of the individual (Proske, 2008). According to van Winsen et al. (2011), individual differences in perception of the same objective risk imply further that an individual can evaluate the same risk differently in different circumstances or at different times. This emphasises the value of insight into the manner in which risk is perceived to inform inferences on risk decision-making.

Three main approaches to risk perception exist within the field: the psychological approach mainly represented by the psychometric paradigm, the cultural theory approach, and the social amplification approach (Glendon et al. 2016; Breakwell, 2014; van Winsen et al. 2011). Combined, these perspectives reflect the wide array of determinants of risk perception.

3.7.1 Psychological Approach

The psychological and social influence on consumer decision-making in finance has received significant attention in the literature (Musse and Echchabi, 2015). Research with the psychometric paradigm has attracted the most attention within the field of psychology. The psychometric paradigm derives from decision theory and psychology (Sjöberg, 2012; Rippl, 2002), and revolves around the methods to measure perceptions of risk. The psychometric paradigm assumes that risk only exists within human cognition and is a form of ignorance, thus its measurement cannot be dissociated from our cultures and minds (Breakwell, 2014; Sjöberg, 2012; Slovic, 1987). The psychometric approach focuses on the measurement of emotion and stigma influencing risk perception (Sjöberg, 2000a).

Loewenstein et al. (2001) highlight that risk perception is predominantly a cognitive evaluation; however, influences such as regret, optimism and fear are acknowledged to have an underlying impact. Supporting this, Slovic (2013, 1987) shows that risk perception can be influenced by numerous biases. In the financial sphere, evidence shows that a particular bias expressed in many different ways is overconfidence (Glaser and Weber, 2007). Individual cognitive processes create significant subjectivity in the perception of risk (Sjöberg, 2000b). Risk perception can be described as the estimations and conclusions people make about the risks they, their environments or establishments, are or might be confronted with (Roeser et al. 2012; Rohrmann, 2005). Perceptions of risk form the basis of people's decisions about how acceptable a risk is, and are also fundamental to people's behaviours in the event of a catastrophe. Risk appraisals arise from a complex combination of personal viewpoints and a risk's characteristics (Slovic, 2013; Rohrmann, 2008).

Studies have demonstrated that similarities can be identified in terms of the way people perceive risk that resulted in cognitive mapping across a range of risk topics. Moreover, this research was significant in indicating the way ordinary people, in contrast to experts, perceived risk. A range of risk characteristics are assumed to influence risk perception such as knowledge, correlation of voluntariness and controllability, and immediacy with novelty (Fischhoff et al. 2000; Slovic, 1987). Risk perception where risk is adopted voluntarily or where risk is to some degree controllable is lessened.

Such studies indicate the potential to measure and predict risk perception, while risk perception research has often been based upon this paradigm, resulting in the recurrence of analogous factors satisfactorily explaining perceptions of risk (Sjöberg, 2001). However, the individuals' differences in risk perception, and the underlying reasons, are not explained by the psychometric paradigm (van Winsen et al. 2011).

Research into heuristics indicates a further dimension of complexity that generates greater subjectivity. Risk perceptions vary with each individual, and explaining this variation cannot solely be based upon a flawed knowledge of the observed objective risk (van Winsen et al. 2011). Indeed, differences in perception are the result of variations in interpretations of reality, as the brain filters all incoming data in a process highly influenced by the individual's past experience, cultural background and social circumstances (Proske, 2008). Moreover, if the perception of a single objective risk varies with different individuals, it is possible to envisage variations in an individual's perception of that same risk depending on context and time. It is therefore critical to further understand perceptions of risk before speculating on the process of making risky decisions. Constructs, opinions, and beliefs are fundamental to risk perception (Trautman and Vieider, 2012; Sjöberg, 2001). As objectively calculating risk is exceedingly complex and risk pertains to uncertainty, to estimate a risk human beings have a tendency to use heuristics (Helgeson et al. 2012). Heuristics shows that both gains and losses can be increased from a small risk (Kahnemann and Tversky, 1979).

Islamic investors may not sufficiently comprehend the different risks of IB compared to conventional banking. This would suggest imperfect knowledge about the risks associated with their investments. Van Winsen et al. (2011) argue that in a heuristic process a range of personal factors such as experience, culture, and beliefs contribute to risk perception. For instance, strongly held beliefs in the Shariah principle of *"Riba"* that prohibits earning interest may influence the perception of risk from interest-related factors.

Earlier research has shown that perceptions are influenced by the extent of risk linked to a situation. This would indicate that a person's risk perception in a certain event will be a perception of the probability of a loss happening along with the potential extent of the kind of loss if it happens (Mellers and Chang, 1994). According to Roszkowski et al. (2005), assessing the level of risk in a situation entails perceiving and interpreting its objective reality; and it has been shown that risk perception depends more on intuitive concepts of risk, such as the probability of loss, rather than on technical measures of risk.

3.7.2 Cultural Paradigm

Cultural theory is the origin of the second main approach to risk perception research, which takes into consideration social and cultural factors in its explanations (Boholm, 2015; Rippl, 2002). This cultural perspective to risk regards risk perception as governed by the social group the individual is part of, and argues that the level of risk ascribed by an individual to a given hazard can only be estimated on the basis of their socio-cultural environment. Accordingly, risk is not dictated by an individual's cognitive processes, but rather is founded on a viewpoint culturally partaken (Boholm, 2015; Kahan, 2012; Oltedal et al. 2004). Schmidt (2004) explains that this acts as a significant source of social knowledge for members of a group and that it influences individuals' actions in accordance with their cultural context and with differences within specific sub-groups.

Perceptions of risk originate in the person's opinions and life experience, and are constructions about the world embedded in a culture's peculiarities, value system, and social norms (Slovic, 2016; Slovic, 2013; Trautmann and Vieider, 2012; Zinn, 2009; Finucane and Holup 2006; Rohrmann, 2005; Rohrmann, 1995). Rohrmann (2005) finds that risk perception is an almost constant feature in human life, from environmental anxieties to daily activities, and regardless of personal exposure, the majority of people hold opinions about all risks.

There is a body of risk perception literature indicating that the evaluation of risk is highly affected by socio-psychological and cultural aspects (Boholm, 2015; Breakwell, 2014; Breuer et al. 2014; Renn and Rohrmann, 2000; Rohrmann, 1995). How the mathematical data is interpreted is highly influenced by a person's culture, life experiences, personality, and beliefs (Roszkowski and Davey, 2010). Attitude has many determinants and ramifications and cognitive limitations play a minor role here. There is significant consensus in the literature that risk perception should hence be more closely related to social than to cognitive psychology and cannot be understood by the demonstration of faulty intuitions in probability calculus (Kahan, 2012; Roszkowski and Davey, 2010). Slovic (2013, 1987) stresses the intrinsic subjectivity of risk perception. Risk perception is based on a person's experiences, emotions and knowledge and is a distinctive process attaching meaning to objective circumstances.

There are further theoretical bases for research into consumer behaviour of IB customers. Ajzen and Fishbein (1980) contend that individual behavioural intentions are a result of attitudes in relation to the individual's behaviour and subjective norms. Thus behavioural attitudes are determined by an individual´s normative beliefs. In their studies, Ouellette and Wood (1998) discussed the relevance of intentions on the actual behaviour of individuals. According to their research, past behaviours are linked to future ones, and if behaviours are performed in an unstable context, then decision-making is likely to be necessary to initiate and carry out the behaviour. Therefore, changes in customer risk perceptions may alter their intentions and thus their attitudes in favour of Islamic banks (Masood et al. 2012). Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA) framework has been utilised often to study the influence of consumer attitudes towards non-Islamic commercial banks. TRA was developed to forecast the behavioural intention of an individual based on their personal perceptions of existing behaviour and subjective norms. According to TRA, behavioural intentions translate into actual behaviour, and thus decisions formulated by individuals have a basis in their personal values, beliefs and motives (Xiao, 2015; Abduh et al. 2011; Ajzen and Fishbein, 1980).

3.7.3 Interdisciplinary Paradigm

The social amplification or interdisciplinary paradigm is the third main approach to risk perception. This perspective argues that risk perception is lowered or heightened by the interaction of a risk event with cultural, social and psychological aspects (Kasperson et al. 1988). The social amplification approach illustrates how disparate people and channels communicate risk, increasing or decreasing it on the basis of broad psychological, sociological, cultural, and communication factors (Shakeela and Becken, 2015; Raupp, 2014; Binder et al. 2014).

From a communication perspective, the nature of communications on risk events from senders to the individuals can amplify or lessen risk perceptions. This suggests that the manner in which the financial crisis and risks in relation to both conventional and IB systems are communicated can influence perceptions of risk (van Winsen et al. 2011). In the financial context, the role of the media and the role of regulators and governments can act as major influences whereby messages along the chain of communication are subject to filters that shape their interpretation. Within social amplification, risk perceptions are subject to a combination of individual psychological, social and other cultural factors that interplay and either minimise or heighten risk perception. In the field of environmental psychology, the work of Helgeson et al. (2012) demonstrates the significance of adopting a holistic and comprehensive approach to risk perception beyond the traditional factors. Van der Linden (2015) produced a five-factor model emphasising a multi-dimensional understanding of risk perception which integrates: cognitive, emotional, subconscious, socio-cultural and individual factors. This implies the significance of understanding the specific factors and the relative interplay between different factors in influencing risk perceptions across different domains.

3.8 Influences on Risk Perception

The different perspectives on risk perception underscore the significance of understanding the specific factors that influence it. The effect of risk perception on user behaviour and attitudes might be different in circumstances that are ruled by various kinds of risks, e.g. either by high financial risk or high social risk (Mandrik and Bao, 2005). The literature on risk perception points to a number of influences on risk perception: religiosity, type of financial products, knowledge, trust and environmental conditions.

3.8.1 Religiosity

While the relationship between religiosity and bank selection has received significant attention, there is a dearth of studies focusing on risk perception in financial decision-making or IB. In a recent study on IB consumers, Bazeem (2015) examined the interrelation between psychological risk and religiosity and social risk. Consumer religiosity was conceptualised in terms of intrinsic religiosity, social extrinsic religiosity and personal extrinsic religiosity**.** The findings from a SEM path analysis showed a positive relationship between intrinsic religiosity and both psychological and social risk perception. While psychological risk perception is the risk that the selection of a particular product or service will have negative influences on the consumer's peace of mind or self-perception, social risk perception is the risk that the selection of a particular product or service will have a social effect. The impact of intrinsic religiosity on perceived psychological risk was stronger than its impact on perceived social risk. In terms of social extrinsic religiosity, a negative association was identified with perceived psychological risk, whereas it was positively associated with perceived social risk. Personal extrinsic religiosity was not found to have a relationship with either perceived psychological or social risk (Bazeem, 2015).

3.8.2 Financial Products

Research into the relationship between risk perception and financial products indicates that different product types can be associated with different levels of risk perceptions. Financial products have varied attributes with different abilities to provide benefits that potential consumers look for while investing (Kotler, 2003). Consumers opt for certain products based on the attributes that are pertinent to them which, they feel, will be of greater benefit. They may employ diverse processes to examine and appraise these products according to their preferences; however, their final decision will be based on reason and well thought out logically. One of the major factors while making a choice from a set of financial products offered to the consumer is the risk perception for each of them. The lower the risk perception of the product in the mind of the consumer, the higher is the likelihood of the product being chosen. Risky decisions are not always logical and could rather be irrational, as suggested by behavioural finance scholars (Slovic, 1987; Kahneman and Tversky, 1979).

Amin et al. (2014) examined risk perception towards specific IB instruments in the insurance sector in Malaysia. They revealed that usage of specific insurance types influenced risk perceptions and future decision-making. The result pointed to an interplay between attitude and subjective norms concerning Musharakah mutanaqisah instruments.

When the choice of financial products is rather complex, consumers take decisions using heuristics (rules of thumb) that may make the process less intricate. However, this process is also likely to introduce predispositions and bias in their final selection (Singh, 2012). Among the various biases and heuristics are factors such as representativeness (Onsomu, 2014; Boussaidi, 2013; Agrawal, 2012; Jordan and Kaas, 2002; Kahneman and Tversky, 1979); availability (Onsomu, 2014; Harvey, 1998; Kahneman and Tversky, 1979); anchoring (Jordan and Kaas, 2002); overconfidence (Onsomu, 2014; Sahi and Arora, 2012; Camerer and Lovallo, 1999); loss aversion (Harvey, 1998); status quo bias (Riella and Teper, 2014; Eidelman and Crandall, 2012; Kahneman et al. 1991); hindsight bias (Fischhoff et al. 2000), confirmation bias (Onsomu, 2014; Harvey, 1998); and mental accounting (Thaler and Johnson, 1990).

3.8.3 Knowledge and Experience

Greater experience and familiarity in decision making is argued to lead to an increasing emphasis by decision makers on their own individual successes and abilities in place of situational aspects. Greater dependence on habits and past judgements is evidenced, and as a result when decisions are required not all the relevant information might be included in the assessments. Overconfidence is acknowledged to result in underestimation of risk and overestimation of abilities to solve unexpected problems (March and Shapira, 1987; Jemison and Sitkin, 1986). Meanwhile, lack of awareness can undermine the perception of risk (Hillson, 2012) which can influence inadequate risk action (van Winsen et al. 2011).

Risk perception has been explored in relation to the role of knowledge and experience on financial product appraisal by consumers. Understandably, the level of knowledge can impact on information search behaviour and decision-making (Moorman et al. 2004). Evidence points to diverging search for and application of knowledge by consumers with different levels of experience. Two types of knowledge have been mentioned in the existing literature: objective and subjective knowledge. The former is the “accurate stored information”, while the latter refers to a subjective “belief about that state of one’s knowledge” (Moorman et al. 2004). Past experience shows that experts in the field are likely to use schema-based information processing, while newcomers to the field are likely to pay more attention to external information (Alba and Hutchinson, 2000). Novices are more affected by contextual information and the mode of information presentation (Mandel and Johnson, 2002), while experts prefer attribute-based information searches (Brucks, 1985) and product assessments (Cordell, 2002). For experts, objective knowledge plays an important role in information processing (Mandel and Johnson, 2002).

Subjective knowledge shows the assurance the investor has in their personal knowledge, which creates a bias when taking a decision (O'Cass and Pecotich, 2005). Such investors depend not on attribute-based appraisals but more on the personal advice of a referent. Subjective knowledge enlarges the scope of an external information search, according to Srinivasan and Ratchford (1991). Investors with a high subjective knowledge tend to depend more on external information within a context and, as such, are likely to be impacted more by a reference point. For example, individuals can assume a higher level of accuracy in their knowledge than actually exists (Fischhoff et al. 1982), be inclined to believe they have above average abilities (Svenson, 1981), hold unwarranted optimism about the future (Weinstein, 1980) or suffer from an illusion of control (Langer, 1975).

Financial consumers that lack knowledge and experience may be less confident. Broihanne et al. (2014) found that investor confidence and risk perception influence the decision-making process, with risk perception negatively affecting confidence and the level of risk they were willing to assume. This is further evidence that investors' risk position or inherent attitude can be influenced by psychological and social factors. Islam's (2012) analysis of categories of investors (high profile investors, moderate profile investors and low-profile investors) concluded that psychological factors exerted the greatest influence on the decision-making process. Diacon and Ennew (2001) argue that risk perception assumes greater significance in circumstances where investors have limited information. According to Mandrik and Bao (2005), different aspects of risk such as financial, performance, security, and social risk might be perceived individually, independent of one another, as they can occur from various types of sources.

3.8.4 Trust

It is not surprising that limited information or knowledge elevates the significance of trust as a factor in decision-making and risk perception. Consensus within the literature emphasises three key trust attributes: affective, behavioural and cognitive (Cummings and Bromiley, 1996). Cognitive trust represents a rational aspect of trust established on the basis of knowledge of the other party and their capacities, and depends on learning over time (Castaldo, 2007). Hence, if complete knowledge is held by the trusting party then trust is no longer necessary (Johnson and Grayson, 2005).

Several studies have pointed to the significance of risk to comprehend trust (Breakwell, 2014; Cvetkovich and Lofstedt, 2013; Yousafzai et al. 2003), nonetheless simultaneously they have also highlighted that the connection between trust and risk is complex. Throughout disciplines, there is a consensus that if there is an uncertain and risky environment there is a need for trust. According to Mayer et al. (1995), only in a risky situation the requirement for trust arises. If actions could be made with full confidence and having no risk, then trust would not be necessary. The one who trusts potentially lacks knowledge about the characteristics or behaviour of the trusted body or object of trust (i.e. uncertainty) and there will potentially be something they (the trustor) could lose if the trust is dishonoured (i.e. risk). Nevertheless, the connection between trust and risk is mutual: risk gives an occasion to trust, which decreases the perceived risk and contributes to risk taking (Breakwell, 2014; Grabner-Krauter and Faullant, 2008).

Trust includes qualities such as benevolence, integrity, honesty, ability, credibility, dependability, and predictability (Grabner-Krauter and Faullant, 2008; Selnes, 1998). It is acknowledged as central in the banking customer relationship as the combined attributes of intangibility, complexity and long-term scope of many products mean that customers face significant risks in decision-making and challenges in adequately evaluating product performance. Financial service institutions (FSIs) therefore have to be trusted by consumers to provide appropriate quality and type of products (Ennew, 2012). However, levels of trust can differ across consumers resulting from diverse personality attributes and experiences despite the fact that trustworthiness perceptions may be comparable (Ennew, 2012).

Social capital is another dimension about which it is argued that the more tightly-knit and religious a community is the more an individual will conform with religious norms and tolerate higher risk in investment returns through adopting IB products (Yap, 2011). Yap (2011) also argues that knowledge of IB precepts has an influence on risk tolerance, as customers who lack understanding may not be motivated to accept the uncertainty inherent in Islamic profit and loss sharing; this further links to the perceived benefits of the arrangements. The final two dimensions relate to the banking institution concerned and consumer perceptions of its trustworthiness and alignment with Islamic values (Yap, 2011). Notably, many of these dimensions relate to themes in the general literature.

This implies the significance of contextual factors that influence trust, as well as a relationship between trust and risk perception. While trust is beyond the scope of this thesis, it provides insights into the decision-making process and implies a broad range of factors that may affect risk perception. It is logical to assume lower levels of trust may induce higher levels of perceived risk. The relationship with knowledge influences this dynamic. Despite their expressed need for more information and potentially lower levels of trust and confidence in Islamic banks, customers are shown to have strong attachment towards religious practices, which attracts them to patronising Islamic banks (Ashraf et al. 2015). This adds further complexity to the debate regarding the role of risk perception. Religiosity conveys trust and confidence; however, at what point does risk perception of contextual factors erode trust, particularly where trust in Shariah compliance is undermined by poor compliance to Islamic principles? Research by Ali et al. (2014) examined the effect of attitude, perceived behavioural control and social influence on the intention of investors to invest in the Malaysian Islamic unit trust sector. The findings showed that attitude and perceived behavioural control were strongly positively correlated with the investor intention to participate in Islamic unit trusts.

3.8.5 Rate of Return

As a direct consequence of the reality that products that are riskier can usually fetch higher returns, the process of evaluation of financial products often demands a trade-off between riskiness and rates of return on investment (Kwon and Lee, 2009). As an example, higher returns usually require longer commitments in terms of time and could be offered in scenarios affording limited access to funds (Kwon and Lee, 2009). In the arena of financial products, monetary earnings, for example interest, are assessed from the point of view of the criteria of uncertainty (Xiao, 2015; Luce et al. 2001). Thus, the attraction of locking in to a higher interest rate in a savings account can somewhat adversely strain the investor's portfolio by limiting access to funds and exposing them to uncertainty. Regardless of whether a common reference point is provided for comparison or not, normative assessment would provide a steady ongoing evaluation of risk and return for a financial product. There may be different results especially when specific attributes are being traded off. In such a situation, a different focal point can give a different assessment of the specific product as the decision-maker may face cognitive problems when the attribute trade-off occurs (Luce et al. 2001).

3.8.6 Environmental Influences

The research on environmental influences is consistent with social amplification theory with different studies demonstrating the role of external conditions on risk perception. A person's actions are based on their perception of the risk, rather than on the objective risk. Moreover, research clearly shows that the type of risk, physical as opposed to monetary for instance, has a bearing on the amount of risk an individual accepts. Dolan et al. (2012) found evidence to suggest automatic processes are at play in response to environmental factors, in contrast to deliberate decision-making processes. Rather than assessing information or offers, investors may subconsciously be responding to a changing context and changing their behaviour in line with this context. Managing risk perception may, under this approach, be more concerned with understanding and changing behaviours without directly "*changing minds*" (p. 127).

An individual's environmental context can be influenced by a diverse range of contexts including the national context, culture, social group values and situational factors. It is acknowledged that the perception of risk can be influenced by a range of environmental factors: social; cultural; trust; fairness, and values. The national context provides a broad influence on attitudes that are deeply related to the wider cultural and political contexts, with evidence suggesting that national and social groups can differ significantly in risk acceptance. Research has shown that changing economic, political and social contexts affect attitudes, risk perception and the evaluation of risk acceptance in regards to other risks (Schmidt, 2004; Renn, 1998; Vaughan 1993). Research by Rohrmann (1995) found attitudes appeared to be deeply related to the broad cultural and political context with evidence suggesting that national and social groups can differ significantly in risk acceptance. A study examined the responses of participants from four different countries (China, USA, Poland and Germany). Participants were asked to indicate the level of risk of bets presented with identical mathematical probabilities, the same expected outcome amounts, and standard deviations from the likely values. Risk perception differed with each nationality, with the most risks being perceived by the American respondents and the least by the Chinese participants (Weber and Hsee, 1998).

Instability in financial environments may also act on risk perception in different ways. Research by Abdeldayem (2015) found evidence of external influences on decision-making in IB for consumers in Bahrain. Concern and anxiety, bank liquidity, confidence in the economy and the financial market performance emerged as the main areas of perceived risk. Mansoor and Jalal (2011) found that the misfortunes of the financial crisis increased panic and negatively affected consumer attitudes and behaviour, especially the fear that was developed in regard to their financial and material safety.

Given the recent emergence and interest in IB, research has begun to focus on the differences in risk appetite between Islamic and conventional investors. Research by Erdem and Iqbal (2014) found potential differences between the two classes of investor in response to the risk context. The study statistically examined stock market trading behaviours of Islamic and conventional investors between 2008 and 2013 and found that in less risky periods of investment Islamic and conventional investors behaved similarly.

However, in more risky markets such as during the Eurozone debt crisis from 2011 significant deviations were observed. Findings showed that the risk appetite of Islamic investors decreased during the risky period in relation to that of conventional counterparts. This suggests that Islamic investors act in more risk-averse ways during turbulent and riskier periods than conventional investors suggesting a lower risk appetite in these times. This evidence lends credence to behavioural perspectives that emphasise the subjectivity of risk perception and the importance of studying cognitive and affective factors towards risk. This subjectivity has the potential to negatively affect risk perception and shows that inaccurate or misleading contextual factors can undermine the quality of decision-making (Vlaev et al. 2010).

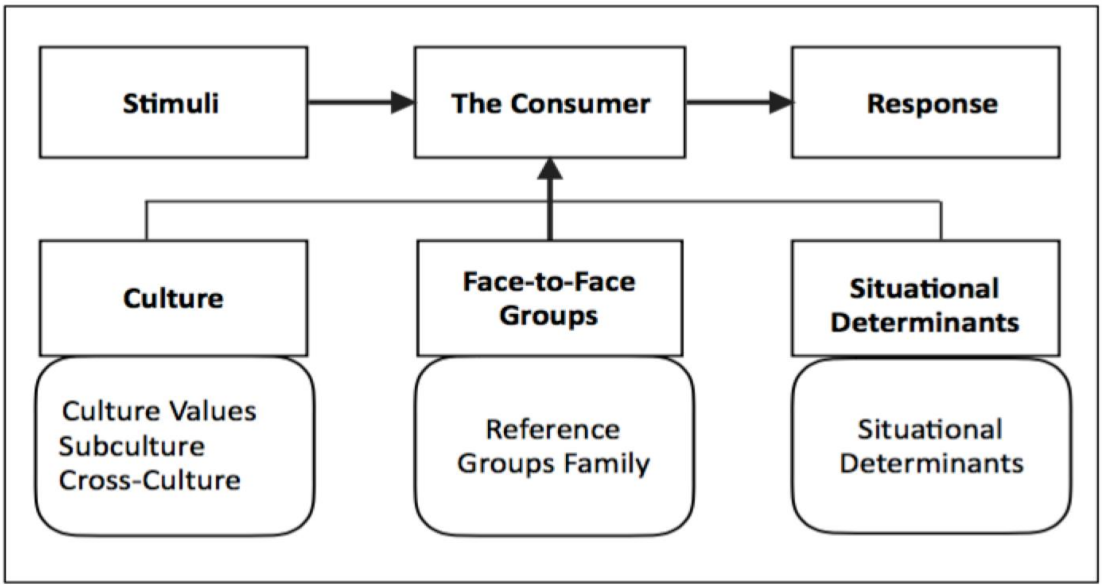

Figure 3-2 Environmental Influences

Sources: Assael (1995, p.22).

A key issue relates to understanding the relative influence of external forces on consumer decision-making. The interplay between consumers, their specific context and product decision-making has been evidenced (Assael, 1995). This is reflected in Assael's model of external environmental influences on decision-making shown in Figure 3-2. Assael's model emphasises the individual and the group dynamics underpinning judgements (Ricardo, 2007). Consumer response is triggered by stimuli and the interface between cultural group and situational determinants. Hunter's and Goldsmith's (2004) discussion of financial risk points to three key variables that reflect investors' internal influence: personality, circumstances and level of financial knowledge/experience.

Jobber and Fahy's (2002) model shown in Figure 3-3 is significant in integrating both internal and external factors addressing a broad range of influences. The model was developed for credit card decision-making that recognised the role of personal influences and social influences. According to Reynolds and Olson (2001), the combination of these influences can affect risk perception based on the anticipation of results and on previous positive or negative experiences.

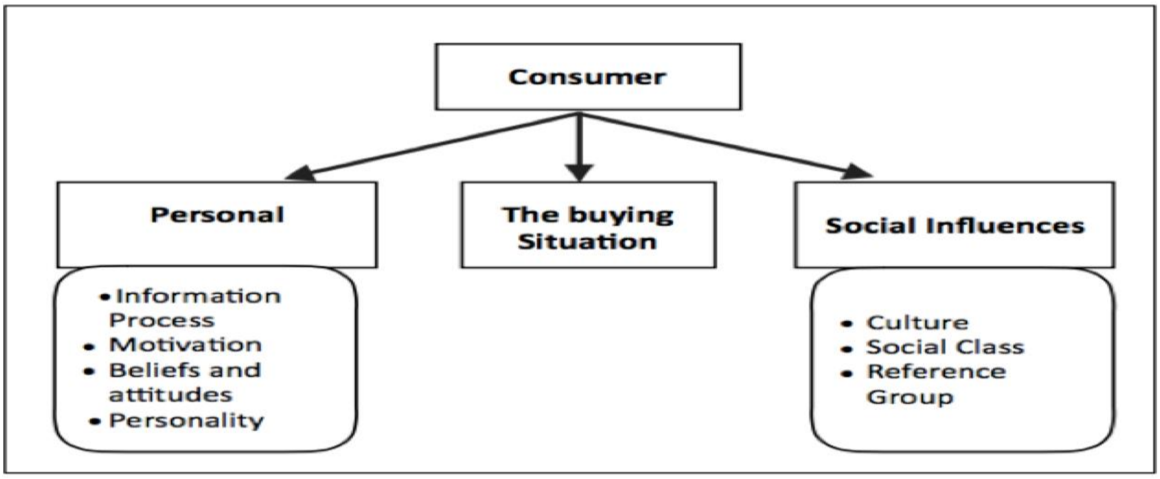

Figure 3-3 Influences on Consumer Behaviour Model
Source: Jobber and Fahy (2002, p.159).

3.9 Modelling Risk Perception

Individual approaches to risk are driven on a fundamental level by risk attitude, therefore the inclination for risk taking is rooted in a person's personality. However, individual subjective perceptions of a risk situation will also play a part in decision-making. This is because it is considered impossible for any individual to achieve perfect rationality in which they solely aim to optimise their personal utility based on access to all the required information (Simon, 1955). A lack of complete information and the cognitive limitations of the decision-maker to process all the information are two key reasons why perfect rationality is unobtainable (Vasvari, 2015). Consequently individuals are acknowledged to rely on mental operations termed in the literature as heuristics which aim to simplify a problem and depend on rules of thumb, subjective feelings and biases rather than rational analysis (Hamori, 2003). Availability heuristics and biases emerging as a result of retrievability can influence individual decision-making such that they continuously overestimate unusual, remarkable, or previously experienced events (Vasvari, 2015). Anomalies in decision-making can extend to persisting in overestimating the importance of maintaining the status quo and commitment to already owned objects (Hamori, 2003).

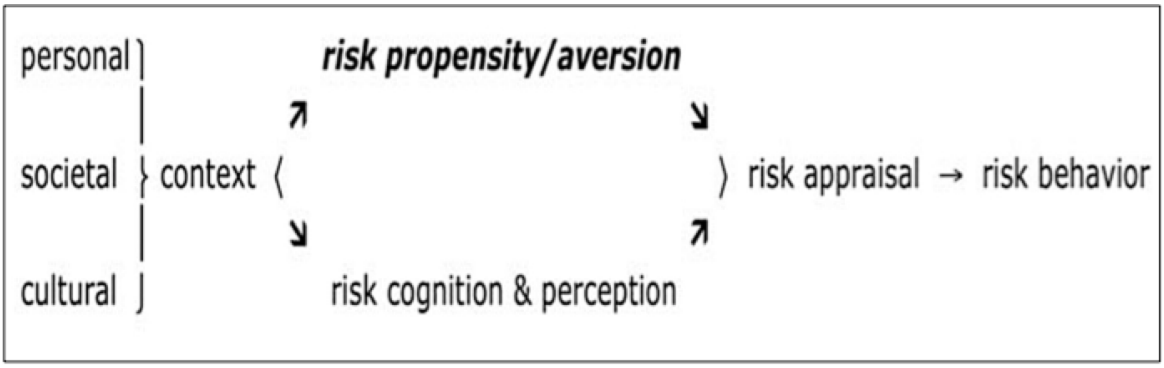

Figure 3-4 A Model of the Role of Risk Attitudes
Source: Rohrmann (2008, p. 7).

The role of risk perception in influencing risk attitude and behaviour is noted by Rohrmann (2008) who argues that "*risk perceptions steer decisions about the acceptability of risks and are a core influence on behaviours*" (pp. 3-4). Rohrmann's (2008) study of risk perception in the disaster field reveals the influence of multiple personal and socio-cultural factors. This research separates risk attitude and risk perception arguing that it can positively or negatively impact on the risk behaviour undertaken. The Model on the Role of Risk Attitudes in Figure 3-4 depicts the individual factors which influence risk attitudes (Rohrmann, 2008). Based on examination of the motivations of individuals in taking or avoiding risk, factors which contribute to these attitudes are asserted to include financial gain or social pressure, physical enjoyment or experience-seeking. Other factors encompass seeking prestige, pleasure from being at risk, self-enhancement, under-estimation of the risk, or lack of means or time. These factors are argued to be rooted in the cultural background of an individual linked to their professional, ideological and national attachments (Rohrmann, 2008).

Van Winsen et al. (2011) argue that risk perception and risk attitude research has examined these concepts in isolation. The authors posit the importance of distinguishing between risk attitude and risk perception in constructing an individual risk behaviour model. The model is influenced by main approaches to risk perception and the view that perception of risk is impacted by a multitude of factors in addition to an objective assessment of uncertainties (van Winsen et al. 2011). The model is predicated on risk perception as a significant determinant of risk attitude, which in turn is viewed as context-specific and manageable. This is held to imply that different risk attitudes will result in different behaviours. Risk attitude is also perceived as arising from the same Mental Model as risk perception thus supplying the context from which the risk attitude emerges (van Winsen et al. 2011).

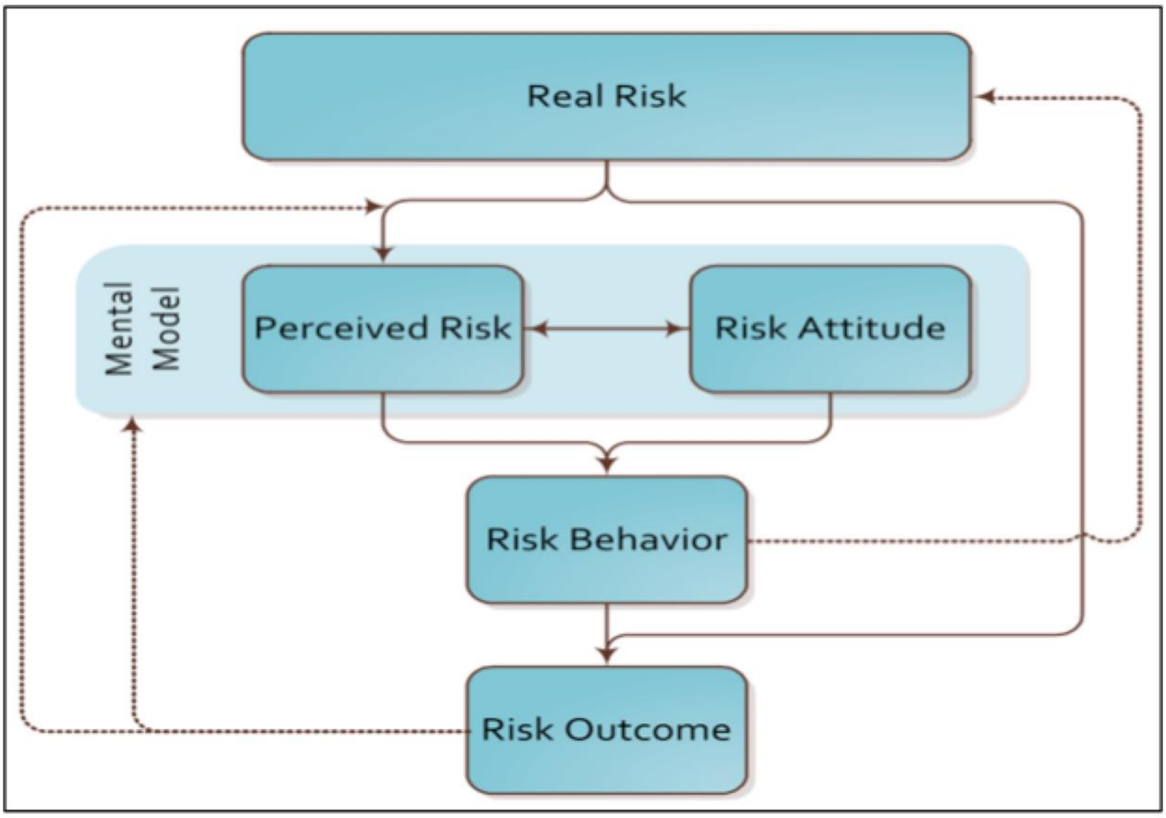

Figure 3-5 Individual Risk Behaviour Model

Source: van Winsen et al. (2011, p. 8).

The model further integrates the acknowledged relevance of both perception and attitude in forming risk behaviour, as a change in either is argued to impact behaviour (van

Winsen et al. 2011). Risk management behaviour, aiming at reducing risk, is indicated to alter the real risk and thus the risk event outcome. Moreover, the risk outcome is shown to modify the Mental Model thus impacting risk attitudes and perceptions in the future. Newly acquired information on the risk is held to narrow the gap between real risk and risk perception.

The distinct role of risk perception received attention from Hillson (2012). His model of risk attitude provides a theoretical insight into the relationships between risk attitude concepts in an attempt to explain the complexity of measuring risk appetite. It presents interrelated concepts of risk that are underpinned by situational factors and a process of evaluation in terms of risk capacity and thresholds as indicated by Figure 3-6. While Hillson's (2012) investigation focuses on the relationship between risk appetite and risk attitude, it explains the relationship with other risk constructs including risk perception and depicts the situational relationship on risk exposure and risk perception. In this model, risk perception influences risk attitude and determines risk behaviour (Hillson, 2012).

Risk appetite can be determined by a person's risk propensity that is influenced by diverse sets of personality traits that characterise their risk preference. Risk culture is a further dimension that may project shared values and beliefs, and influence individuals' perceptions and attitudes (Hillson, 2012). In Hillson's (2012) model, risk thresholds reflect tolerance levels that can be defined in terms of specific objectives.

The model theorises that an individual's response to risk is influenced by perceptions of risk. Risk attitude is formed and modified according to the situation and risk exposure. Risk perception is therefore an input for risk attitude as depicted in Figure 3-6. This relationship is reflected in a definition of risk attitude as a chosen response to risk, influenced by perception (Murray-Webster and Hillson, 2008). Hillson (2012) argues that the extent of risk that is perceived is underpinned by three types of situational factors: conscious, subconscious and affective.

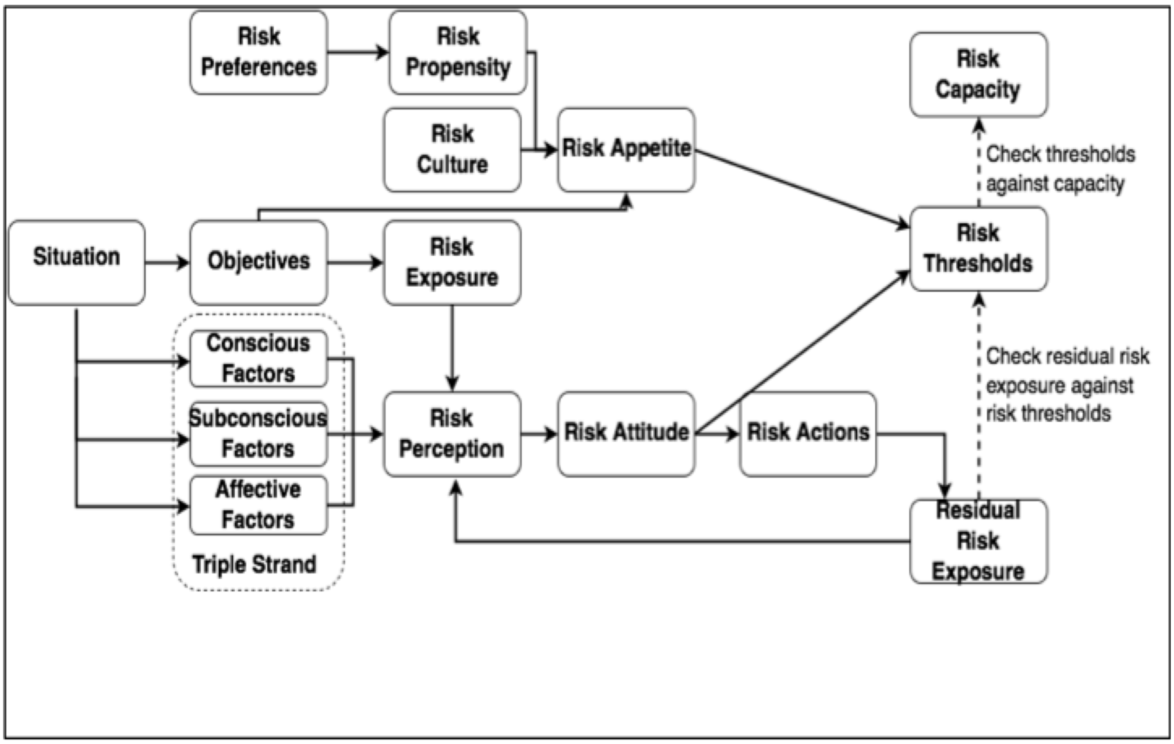

Figure 3-6 Risk Appetite to Risk Attitude Model
Source: (Hillson, 2012, p. 6).

Furthermore, Hillson (2012) argues that while generally risk attitudes are defined in terms of risk-averse, risk-seeking, risk-tolerant or risk-neutral, an individual in the face of a risk situation can adopt a risk attitude on a risk continuum with myriad possibilities between risk averse and risk-seeking. Risk perception is dynamic and influenced by risk behaviour whereby, in the face of risk, situations are evaluated based on risk exposure. In IB, the range of risks unique to this sector may cause investors to continually evaluate their exposure to risk based on their actions, and accordingly modify their perceptions which in turn influence their risk attitude. Based on the definition of risk appetite as a "*tendency of an individual or group to take risk in a given situation*" (Hillson, 2012, p.4), it is expressed in terms of measurable risk thresholds. Intervention is possible by selecting an appropriate risk attitude that allows individuals to adapt initial risk thresholds, moderating the effect of unmanaged risk appetite, where an individual's risk thresholds may exceed risk capacity.

3.10 Research Gaps

This review reveals a number of research gaps in this area of study geographically, theoretically and methodologically. Geographically, the pattern of research into risk attitudes in financial consumer decision-making, as indicated in Table 3-2 is concentrated in Europe, America and Asia. There is a dearth of research in the Middle East into risk attitude, while for the UAE no research has been undertaken in terms of risk perception, risk aversion and risk tolerance. Theoretically, while the literature has pointed to the growing significance of understanding the relationship of key constructs, only two studies have investigated this theme. Methodologically, the majority of these studies have adopted a quantitative approach, with a small number of studies employing either a qualitative or mixed method approach.

Table 3-2 Summary of Research Gaps

Theme	Global	Europe/America	Asia	Middle East	Africa	UAE
Bank Selection	Blankson et al. (2007)	Kaufman (1967); Mason and Mayer, (1974); Martenson (1985); Arora et al. (1985); Laroche et al. (1986); Zineldin (1996); Gounaris et al. (2005); Katircioglu et al. (2011); Devlin (2001); Devlin and Gerrard (2004)	Okumus (2005); Kaynak et al. (1991); Amin et al. (2014); Jahiruddin and Haque (2009); Tan and Chua (1986); Wel et al. (2012); Mokhlis et al. (2009); Rao and Sharma (2010); Dusuki and Abdullah (2007); Ahmad and Haron (2002); Awan and Bukhari (2011); Amin et al. (2011); Abduh and Omar (2012); Awan and Azhar (2014); Pangemanan (2014)	Hedayatnia and Eshghi (2011); Metawa and Almossawi (1998); Bashir (1999); Naser et al. (1999); Erol and El-Bdour (1989); Erol et al. (1990); Alsoud (2013); Al-Ajmi et al. (2009); Hegazy (1995)	Maiyaki and Mokhtar (2011); Chigamba and Fatoki (2011)	Al-Tamimi et al. (2009); Sayani and Miniaoui (2013)
Risk Attitude	**Research Gap**	Smidts (1997); Weber and Milliman (1997); Vlaev et al. (2010); Hunter and Goldsmith (2004); Bonsang and Dohmen (2015); Dohmen et al. (2011); Filippin and Crosetto (2016)	Rulindo et al. (2008); Sindhu and Kumar (2013)	**Research Gap**		
Relationship between Attitudinal Constructs	Rohrmann (2008); van Winsen et al. (2011);	Faff et al. (2008) **Research Gap**	Hamid et al. (2014) **Research Gap**	**Research Gap**		

	Hillson (2012); Hillson and Murray-Webster (2012b)					
Risk Perception	Roszkowski and Davey (2010); Weber and Hsee (1998); Ganzach et al. (2008)	Weber and Milliman (1997); Fischhoff et al. (2000); Weber et al. (2002); Littler and Melanthiou (2006); Broihanne et al. (2014); Hoffman et al. (2015); Hoffman et al. (2013); Munene et al. (2002); Diacon and Ennew (2001); Vlaev et al. (2010)	Chen and Chang (2012); Sindhu and Kumar (2014)	Bazeem (2015); Ansari (2012); Abdeldayem (2015); Baghani and Sedaghat (2016)	Risk Perception	**Research Gap**
Risk Aversion	Breuer et al. (2014)	Cristian (2012); Mandrik and Bao (2005); Bartke and Schwarze (2008); Paravisini et al. (2016); Schubert et al. (1999)	**Research Gap**	El Massah and Al-Sayed (2013); Aren and Aydemir (2015)	**Research Gap**	
Risk Tolerance	Roszkowski and Davey (2010); Grable and Rabbani (2014); Fan and Xiao (2006);	Hallahan et al. (2004); Gerrans et al. (2015); Larkin et al. (2013); Barsky et al. (1995); Hoffman et al. (2015); Hoffman et al. (2013); Xiao et al. (2000); Bartke and Schwarze (2008); Cooper et al. (2014); Chaulk et al. (2003); Corter (2010); Corter and Chen (2006); Grable and Rabbani (2014); Grable et al. (2009); Lemaster and Strough (2014); Yao and Hanna (2005); Yao et al. (2005)	Ayuub et al. (2015); Kannadhasan (2015); Sulaiman (2012); Duasa and Yusof (2013); Parashar (2012)	Al-Ajmi (2011); Baghani and Sedaghat (2016)	Strydom et al. (2009)	**Research Gap**
Risk Perception	**Research Gap**					

Table 3-2 is not based on an exhaustive review of the literature, but reflects rather the pattern of research based on the studies reviewed and included in this literature review. The research objectives of this study therefore have relevance in addressing key research gaps identified, specifically in relation to the relationship between risk attitude constructs and risk perception and the effect of external conditions on risk perception and financial consumer behaviour.

3.10.1 Conceptual Framework

The preceding discussion leads us to development of the conceptual framework within the context of the financial services domain and Islamic banking consumers and risk perception post-purchase context. The literature review outlines key themes underpinning consumer decision-making towards Islamic banking (IB) products. A review of risk perception and attitudes guides the development of this research and points to the importance of the relationship between consumer characteristics and attitudes to financial behaviour. Whether Islamic banks are more resilient than conventional banks is a key question of this thesis influencing the exploration of conditions that may affect risk attitudes of Islamic investors towards IB and whether such factors mediate their decision-making towards investments. Specifically, this study explores two central questions:

- How does risk perception influence the IB investment decision-making in terms of switching intention?
- What conditions influence the relationship between risk perception towards IB products and investment decision-making?

The conceptual framework in Figure 3-7 represents the research model to investigate risk perception and investment decision-making. Risk perception and risk attitude constructs, including risk tolerance, aversion, and perception, can be underpinned by a number of socio-demographic and psychological factors (Berlinger and Varadi, 2015; Sjoberg, 2012; Varga and Ulbert, 2005; Slovic, 1987). Risk perception is modelled as an integral component of the risk assessment and behaviour processes of individuals. In the proposed framework, risk attitude is conceptualised in terms of risk tolerance and risk aversion (Rohrmann, 2005). Risk aversion describes attitudes towards avoiding risks, while risk tolerance indicates the willingness to take risks and the amount of risk an individual can afford (Faff et al. 2008). Key consumer socio-demographics and characteristics identified in the literature in influencing risk perception are incorporated. Consumer behaviour is represented in term of switching intention and switching likelihood. The relationship between risk perception and switching intention and behaviour are represented with risk perception being related to consumer risk attitude and decision context.

The literature on IB suggests a number of factors that may potentially influence consumer decision-making (Khattak and Rehman, 2010; Masood et al. 2009; Dusuki and Abdullah, 2007). These reflect elements from the purchase or decision context identified in consumer decision-making theory (Lamb et al. 2013; Dolan et al. 2012; Blackwell et al. 2006). While the focus of this framework is founded on the role of risk perception, it is acknowledged that the dynamic relationship identified in the literature between risk perception and risk attitude (Friedman et al. 2014; Abduh et al. 2011; Roszkowski and Davey, 2010; Hallahan et al. 2004) is a further dimension of the research. The theoretical basis for this model is now discussed in the development of six hypotheses to reflect the complex interactions in this context.

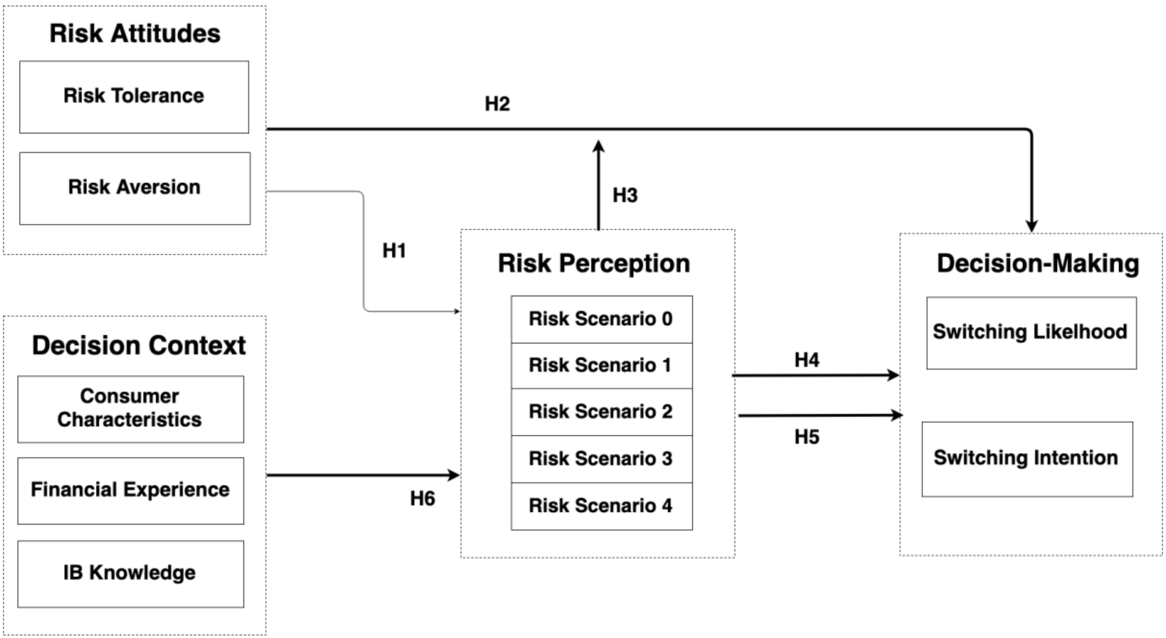

Figure 3-7 Conceptual Framework

The literature suggests a relationship between risk tolerance and risk perception. Findings by Bashir et al. (2013) show that risk tolerance has strong positive relation with risk perception. Rana et al. (2011) note a relationship between risk aversion and risk perception finding that risk aversion has a strong positive association with risk perception. Thus the first hypotheses are stated as:

H1a Risk tolerance positively influences risk perception.

H1b Risk aversion positively influences risk perception.

The literature points to the influence of risk tolerance and risk aversion on decision-making. Based on Mak and Ip (2017) it is expected that risk tolerance is a significant antecedent of investment behaviour. Studies have shown that risk tolerance has strong positive effect on investment decision-making (Aini and Lufti, 2019; Prabhakaran and Karthika, 2011). More specifically, risk tolerance was significantly associated both with investment decisions in terms of amount of funds contributed (Yuh and DeVaney, 1996) and asset allocation (Nguyen, 2015). Similarly, risk aversion is identified as a significant antecedent of investment behaviour (Mak and Ip, 2017). Rana et al. (2011) further support the notion that risk aversion impacts investment decision-making. Findings by Mak and Ip (2017) show that risk aversion was negatively associated with investment intentions. On this basis, it is stated:

H2a Risk tolerance positively influences a) switching likelihood and b) switching intention.

H2b Risk aversion positively influences a) switching likelihood and b) switching intention.

Several authors state that behaviour risk is influenced by both attitude towards risk and risk perceptions (Sitkin and Weingart, 1995; Sitkin and Pablo, 1992). More specifically, the literature suggests that risk perception can have a mediating effect in the relationship between risk attitudes such as risk tolerance and risk aversion and consumer decision-making behaviour (Nguyen, 2019, 2015; Hamid et al. 2014). Rohrmann (2005) points to risk perception as a mediator of the relation between risk tolerance and decision-making. Research has also shown that risk perception mediated the specific relationship between risk tolerance and asset allocation (Nguyen, 2015). In addition, Rana et al. (2011) suggest that risk perception mediates the relationship between risk aversion and investment decision-making. This leads to the proposal of the following hypotheses:

> H3a Risk perception mediates the relationship between risk tolerance and a) switching likelihood and b) switching intention.
>
> H3b Risk perception mediates the relationship between risk aversion and a) switching likelihood and b) switching intention.

Some scholars underline the strong influence of risk perception over investment decision-making processes (Chen and Tsai, 2010; Weber and Hsee, 1998). The literature suggests that this influence is inversely related and risk perception has a significant negative effect on investment decision-making (Aini and Lufti, 2019; Deb and Singh, 2018; Cho and Lee, 2006) and impacts investment behaviour (Shafi et al. 2011; Cho and Lee, 2006; Weber and Milliman, 1997). Risk perception has been identified as a key factor in consumer decision-making related to IB adoption (Mariadas and Murthy, 2017). Therefore it is reasonable to suggest that risk perception will be positively related to consumers' switching intention and switching likelihood. This leads to suggestion of the fourth hypotheses:

> H4a Risk perception positively influences switching intention.
>
> H4b Risk perception positively influences switching likelihood.

The model tests for risk perceptions and switching behaviour in relation to different risk scenarios in addition to extant perceived risk. These risk scenarios relate to external conditions: Shariah compliance, profit performance, economic conditions, and interest rates that have emerged as key factors that potentially influence risk perceptions and consumer decision-making towards IB. These concepts are integrated into the conceptual model as the basis for investigating the relationship between risk perception and investment decisions, and specifically the intention to select an alternative system. Consumer decision-making models in terms of the evaluative phase relating to intention and likelihood to switch represent the key variables examined in this study. Risk perception is modelled as the perceived performance or product risk in relation to different types of banking products in Islamic banks.

There is strong suggestion in the literature that the risk perception of consumers towards IB products may differ under different conditions. Kahn and Sarin (1988) focus on examination of consumer decision-making under uncertainty conditions and ambiguity showing that attitudes to ambiguity in risk could vary between contexts and amplify consumer risk attitudes. Weber and Milliman (1997) showed that risk perceptions changed significantly under different economic conditions. Hoffmann et al. (2013) further found that risk perception exerted a major influence on decision-making under different economic conditions. However the impact of financial crises and current volatile economic conditions on consumer loyalty and resilience to poor profits and low returns is uncertain in the IB context. The literature suggests that under certain market conditions IB delivers lower returns in comparison to conventional banking (Kamil et al. 2014). Weber and Milliman (1997) observe that under different conditions participants change not only their choices but also their perceptions of alternative options. They assert that when participants choose different choices, there is also a simultaneous change in their perceptions of the relative risks of alternatives.

Risk scenario 0 represents the baseline or existing risk perceptions based on the prevailing conditions. The literature evidences the potential for external conditions to impact the risk perceptions of consumers. Influential environmental conditions are revealed to be numerous and diverse and include such factors as financial shocks and crises (Hoffmann et al. 2013; Mansour and Jalal, 2011; Roszkowski and Davey, 2010) and banking service quality (Chen and Chang, 2005).

Risk scenario 1 relates to risk perception in relation to deterioration in Shariah Compliance which measures risk perception in the event that the bank's operations and products have become less compliant with Shariah principles. Adherence to Islamic principles is one of the most important criteria for selection of Islamic banks among IB customers (Abdul Rehman, 2012; Dusuki and Abdullah, 2007; Ahmad and Haron, 2002). The literature suggests that Shariah compliance can negatively influence risk evaluations.

The greater the risk perception the greater the likelihood of switching and flight (Kammer et al. 2015). Moreover Muslim customers of Islamic banks are confident of higher returns and lower risk in their investments (Awan and Bukhari, 2011). Therefore it is reasonable to propose that any deterioration in Shariah compliance will raise consumers' risk perceptions in relation to IB products.

Risk scenario 2 relates to deterioration in Profit Performance which measures risk perception in the event that the bank's profit performance is forecast to be static at zero over the next 2 years. The influence of a reducing bank profit performance is important when investigating consumers' risk perceptions, motivated by the uncertainty that IB consumers face in regard to IB returns and performance through the sharing of profit and loss (Kammer et al. 2015; Mansour et al. 2015).

Risk scenario 3 relates to deterioration in the economy and measures risk perception in the event that long-lasting high inflation and a low economic growth period is forecast. Economic conditions can affect risk perceptions and consumer decision-making. Evidence suggests that Islamic banks are more exposed to credit risks as a result of the emphasis on property investments which have experienced some recent declines (Hasan and Dridi, 2010). Poor economic conditions could impact consumer perceptions and evaluations of external financial factors that influence the rate of returns and that could in certain circumstances make conventional funds more attractive.

Risk scenario 4 relates to high interest rates and measures risk perception in the event that a long-lasting increasing trend in interest rates is forecast. It is reasonable to suggest that interest rates will affect risk perceptions and impact investors' switching intention.

To explore the differences in risk attitudes, risk perception and switching behaviour the following hypothesis is suggested:

> H5a The influence of risk perception on switching likelihood is significantly different under alternative risk scenarios (Shariah Compliance, Profit Performance, Economic Conditions, Interest Rates).

H5b The influence of risk perception on switching intention is significantly different under alternative risk scenarios (Shariah Compliance, Profit Performance, Economic Conditions, Interest Rates).

The literature shows that a range of demographic factors can influence risk perception in the financial context. Investigations of risk perception have revealed that financial expertise can play a major role in consumer evaluations of financial products (Moorman et al. 2004). It is expected that greater financial knowledge and experience of the investor will result in lower risk perceptions. Research has shown that investors with a high subjective knowledge can assume a higher level of accuracy in their knowledge than actually exists (Fischhoff et al. 1982), be inclined to believe they have above average abilities (Svenson, 1981), hold unwarranted optimism about the future (Weinstein, 1980) or suffer from an illusion of control (Langer, 1975). This leads to the proposed hypothesis that:

H6a Financial expertise has a positive influence on risk perception.

Knowledge of IB is another factor likely to have a relationship with risk perception. Lack of IB knowledge has been linked to higher risk perceptions of the IB system (Kaabachi and Obeid, 2016; Ergun and Djedovic, 2011). Therefore the following hypothesis is suggested:

H6b IB knowledge has a positive influence on risk perception.

The literature suggests that having offspring and family responsibilities are likely to impact risk perception through its effects on economic resources and household-level preferences (Christiansen et al. 2015; Bertocchi et al. 2011). The presence of children has been widely identified as one of the strongest family structures influencing risk attitudes and risk perceptions (Chaulk et al. 2013; Van de Venter et al. 2012; West and Worthington, 2012). Consequently the following hypothesis is proposed:

H6c Number of children has a positive influence on risk perception.

Research points to a relationship between age and risk perception. Bashir et al. (2014) show that age has significant positive relationship with risk perception and a strong negative association with investment portfolio decision-making. Other research points to lower risk aversion among the young (Bashir et al. 2013). Based on this, the following hypothesis is advanced:

H6d There is a statistically significant difference in risk perception between age groups (young consumers, older consumers).

A relationship is suggested in literature between education and risk perception. Findings by Bashir et al. (2014) show a strong negative association between education and investment portfolio decision-making. Therefore it can reasonably be proposed that:

H6e There is a statistically significant difference in risk perception between education levels.

Gender is revealed in the literature to have an influence over risk perception indicating differences (Sitkin and Pablo, 1992). Bashir et al. (2014) show that gender has positive and significant relationship with investment decision-making. Some findings suggest that women are more risk averse than men (Bashir et al. 2013). Therefore the following hypothesis is proposed:

H6f There is a statistically significant difference in risk perception between male and female consumers.

3.11 Summary

This chapter has reviewed the relevant studies and theories in relation to risk behaviour, concepts and determinants of risk, and consumer decision-making. The various facets of risk attitudes including risk perception are defined and contrasted. The literature reveals risk attitudes as an amalgamation of several constructs that interplay to influence risk perception and risk actions of individual investors. Risk perception is discussed as an integral component of the risk assessment and behaviour processes of individuals. While considerable studies have attempted to explore risk attitudes from an economic-centric approach, there is an increasing body of literature that recognises a complex interplay of socio-cultural factors. This aligns risk perception more closely to social factors than to cognitive psychology and to probability-based algorithms to measure and understand behaviour. A review of consumer decision-making reveals the theoretical significance of religious and pragmatic factors that influence investor choices.

The literature has increasingly focused on the specific components of risk attitude and the relationship between its different facets. It underlines the theoretical value of understanding the role of risk perception; however, it reveals a gap in relation to understanding the relationship and role of different aspects of risk attitude, including risk perception, on investor decision-making. The literature points to the relationship between risk perception and financial decision-making that forms the basis for a theoretical model emphasising the distinct effect that risk perception can have on consumers' choice to switch or increasing their likelihood to switch. Risk perception is presented as a highly subjective factor that is influenced by external conditions to varying degrees. Combined with the dynamic and risk context outlined, this chapter proposed a conceptual model that investigates risk perception and its impact on risk behaviour conceptualised as switching intention and closeness to switching.

Chapter 4 Research Methodology

4 Research Methodology

4.1 Introduction

The aim of this chapter is to discuss the research perspective and approach underpinning the research process aimed towards answering the research questions and research objectives stated in Chapter 1. An understanding of risk perception research is contingent on considerations of ontological and epistemological assumptions for the development of a robust and consistent theoretical framework. The research design across all phases of the research process is presented with discussion of the research issues and rationale adopted. This commences with a restatement of the research approach and the research design process to be adopted. The research design process commences with a reflection of the theoretical foundation and relevant research paradigm for this study that influences the research design strategy and methods. This subsequently informs the research position and the discussion of a mixed method approach that incorporates the use of both qualitative and quantitative data. From this position the implications for the research strategy and method are discussed in the subsequent sections, detailing the data collection methods and procedures and analytical processes. The final sections of this chapter address key considerations to maximise the reliability, validity and ethical dimensions of this research.

4.2 Research Position

This study adopts the pragmatist approach. Firstly, the appropriateness of this approach is based on an awareness of the contrasting approaches in the risk attitude literature. Within this domain significant emphasis has been placed on positivistic methods focused on objective, empirically based research (Sindhu and Kumar, 2014; Cohen, 2008; Weber and Milliman, 1997). However, increasingly the significance of an interpretivist approach lies in the acknowledgement of the importance of the subjective realities of consumers in risk attitude and risk perception research. This paradigm allows researchers to understand the social world by interpreting, clarifying and constructing meaning from social phenomena (Bryman and Bell, 2007). A number of theorists emphasise the subjective socio-cultural dimensions to risk perception (Proske, 2008; Rippl, 2002; Sjöberg, 2000b; Douglas and

Wildavsky, 1983). While the positivist approach influences an objective measurement of risk perceptions used in psychometric paradigms, it is limited in understanding subjective and individual perspectives of risk perception (van Winsen et al. 2011). An interpretative perspective implies an interpretation of diverse social realities. Sjöberg (2000a) argues that risk perception is grounded in beliefs and constructs that are complex to objectively measure. This is underlined by Kasperson et al. (1988) who posit an interdisciplinary perspective on the basis that the perception of risk is grounded in the interaction between psychological, social and cultural dimensions. However, while the criticism of positivism in relation to risk perception is one of simplicity (Sjöberg, 2000a), interpretivism carries with it a risk of information overload. Sjöberg (2000a) argues that individual perspectives on risk scenarios can become largely unwieldy and difficult to summarise. While interpretivism has the potential to generate in-depth socially constructed realities, positivism facilitates the isolation and measurement of specific themes of knowledge.

Creswell (2003) and Tashakkori and Teddlie (1998) show that pragmatist approaches help researchers become aware of the different methods they can use to better explain their findings in an adequate manner. Therefore, it is considered to be one of the appropriate research paradigms to investigate beliefs and attitudes through the use of mixed methods (quantitative and qualitative) (Creswell, 2003). This position is consistent with the research focus as the beliefs and assumptions revealed by a pragmatist approach are aligned with the research aim and objectives. As the current study aims to investigate consumers' perception of risk towards IB products both perspectives can be integrated. A psychometric approach based on the positivist paradigm enables an objective measurement of risk perceptions and risk scenarios based on providing a baseline. Integration with an interpretivist approach can help to explore and clarify how consumers perceive risks through exploring their ideas and beliefs. In interacting with them within their context, insights can be generated about their behaviour and knowledge about the factors of risks.

This principle is reflected in Figure 4-1 that outlines the research process based on a pragmatist approach employing mixed methods. The key elements of this research design are discussed in the following sections.

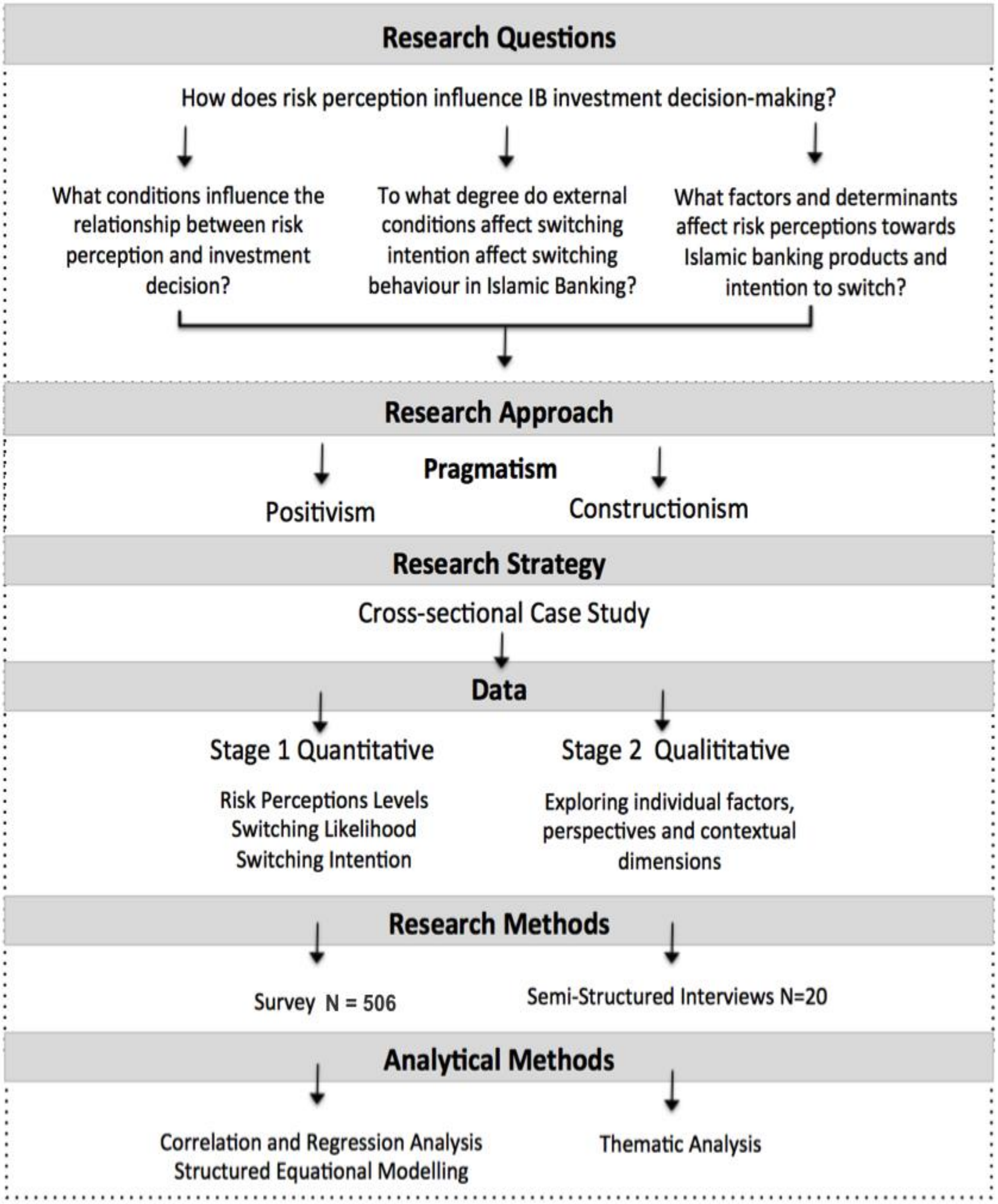

Figure 4-1 Overview of Research Design

4.3 The Research Approach

The research design for this project is based on a structured and planned approach grounded in an understanding of the key stages of planning, research philosophies, strategies and methods. Choosing any particular research design involves different related stages. One of the stages to have stimulated the most scholarly debate is the social research design where different scholars define the stages for implementing the research design differently. One school of thought emphasises that social sciences are an introduction to social research, therefore are related to the study of social behaviour. As such any research design is argued to entail clear steps and procedures while adapting it (Creswell, 2014; May, 2011; Marshall, 1997). On the other hand, other scholars have provided different models that demonstrate the research overview and the theoretical and practical approaches (Sarantakos, 2012; Saunders et al. 2011; Crotty, 1998). From their perspective, social research can be taught with regards to theoretical and practical approaches. Nevertheless, their explanation of these elements differs from each other and generates further debate and complex understanding of the terminologies used.

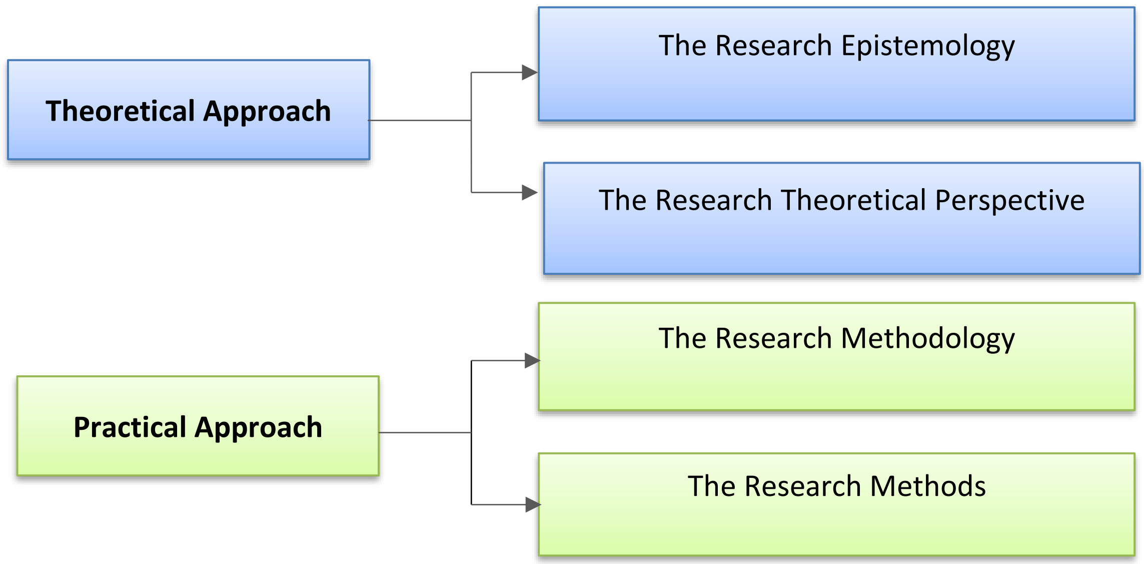

Figure 4-2 Research Process "Four Elements"
Adapted from Crotty (1998, p.4).

This research however will draw on the approach of Crotty (1998) as it highlights more the research design implemented for this study. Crotty's (1998) model is divided into two categories that are classified as the theoretical approach and the practical approach. For the theoretical approach, the research epistemology and the research theoretical perspective are considered.

As for the second category, the practical approach, it highlights the last two stages of the model: they are the research methodology and the research methods, which includes both data collection and data analysis methods as shown in Figure 4-2.

4.4 The Theoretical Approach

4.4.1 Epistemology

Epistemology deals with *"How we know"* (Tennis, 2008). It is considered as a way of *"understanding the relationship between the knower and what there is to know"* (Guba and Lincoln, 1994, p.201). Crotty (1998, p.8) explains that epistemology "*deals with the nature of knowledge, its possibility, scope and general basis".* In other words, epistemology deals with providing a philosophical grounding for choosing what type of knowledge is possible and how to ensure its adequacy and legitimacy (Maynard, 1994, as cited in Crotty, 1998).

There are three different epistemologies in any research paradigm according to Crotty (1998): objectivism, constructionism, and subjectivism. Tashakkori and Teddlie (1998) note that the establishment of the research paradigm arises from different perspectives and epistemological evidence in regards to certain realities, where the overlapping of the origins of the realities and beliefs can cause variation of the evaluations provided by different researchers. They explain that there are four key paradigms that exist in social and behavioural sciences: Positivism, Post-positivism, Pragmatism, and Constructivism as shown in Table 4-1.

4.4.2 Research Epistemology: Pragmatism

As this research adopts a mixed method approach, researchers have suggested that the pragmatist paradigm is the best and most appropriate (Goldkuhl, 2012; Johnson et al. 2007). Pragmatism is an alternative perspective that appeals to the practical nature of reality, finding truth in the solutions of problems and the consequences of events and actions (Shaw et al. 2010). Several authors stress the value of a pragmatist perspective in addressing empirical and practical consequences and in understanding its impact on the study population (Tashakkori and Teddlie, 1998; Hughes and Sharrock, 1997; Creswell, 1994).

Table 4-1 Comparison of Research Paradigms

Paradigm	Positivism	Post-Positivism	Pragmatism	Constructivism
Methods	Quantitative	Primarily quantitative	Quantitative + Qualitative	Qualitative
Logic	Deductive	Primarily deductive	Deductive + Inductive	Inductive
Epistemology	Objective point of view. Knowers and known are dualism.	Modified dualism. Findings probably objectively "true".	Both objects and subjective points of view.	Subjective point of view. Knower and Known are inseparable.
Axiology	Inquiry is value free	Inquiry involves values, but they may be controlled.	Values play a large role in interpreting results.	Inquiry is value bound.
Ontology	Naive realism	Critical or transcendental realism.	Accept external reality. Choose explanation that best produces desired outcomes.	Relativism
Casual Linkages	Real causes temporarily precedent or simultaneous with effects.	There are some lawful reasonable relationships among social phenomena. These may be known imperfectly. Causes are identifiable in probabilistic sense that changes over time.	There may be casual relationships, but we will never be able to pin them down.	All entities simultaneously shaping each other. It is impossible to distinguish causes from effects.

Source: Tashakkori and Teddlie (1998, p. 23).

A pragmatist approach is considered to be unique because it allows researchers to use the methods that are best appropriate to the research problem, thus avoiding philosophical debates in which the researcher has to explain which technique is the best (Alzheimer Europe, 2009). This implies the freedom to adopt any approach either quantitative or qualitative within their limitations and belief in their mutually supportive value (Alzheimer Europe, 2009). Tashakkori and Creswell (2007) explain that researchers tend to use pragmatist approaches when concluding that neither quantitative nor qualitative approaches alone can provide adequate results for the research problem. The pragmatist approach diverges with the approaches used by constructivism and positivism, as it suggests a philosophical system that does not force the need to choose one method over the other in regards to epistemology, logic and methods (Maxcy, 2003). Yet, it offers a more apparent choice of approach where it is considered that research questions are more worthy of the method that is used (Maxcy, 2003). Pragmatism is held to offer a better intermediate explanation to the outcomes associated with the research problem and its consequences (Johnson and Onwuegbuzie, 2004; Miller and Brewer, 2003). Johnson and Onwuegbuzie (2004, p.17) point out that: *"Pragmatism offers an immediate and useful middle position philosophically and methodologically; it offers a practical and outcome-oriented method of inquiry that is based on action and leads, iteratively, to further action and the elimination of doubt; and it offers a method for selecting methodological mixes that can help researchers better answer their research questions".*

4.4.3 Theoretical Perspective: Positivism and Constructivism

Positivist research was viewed as the main epistemological paradigm in social sciences. Its main premise holds that *"the social world exists externally to the researcher, and that its' properties can be measured directly through observation"* (Gray, 2009, p.18).

Positivists believe that there is one single reality in the world and it can be explained through collecting observed facts and establishing cause and effect relationships (Oakley, 2000). Sale et al. (2002) explains that positivism helps to identify the facts about the subject being researched, and is mainly associated with quantitative research. Positivists assume that research is measured quantitatively through gathering independent facts about an understandable reality that exists separately from the human mind (Healy and Perry, 2000; Crotty, 1998). Therefore, the data and its analysis do not change because they are being observed as a *"one way mirror"* (Healy and Perry, 2000).

On the other hand, the constructivist approach is considered one of the major anti-positivist approaches whereby it *"rejects the view of human knowledge; meaning is not discovered, but constructed"* (Crotty, 1998, p. 8). Constructionism rejects the assumption that there are objective facts waiting to be revealed, suggesting that objects can come to existence through interaction with the world's realities (Crotty, 1998). Constructionist researchers argue that the main purpose of social science research is to try to recognise or interpret, not to offer causal explanations (Seale, 2004; Crotty, 1998). Different debates and arguments have been discussed in terms of both models (Aliyu et al. 2014). According to Guba and Lincoln (1994, p.106) using positivist models can be misleading and considered a poor approach to be used when conducting research as it includes *"context stripping, exclusion of meaning and purpose, disjunction of grand theories with local contexts, inapplicability of general data to individual cases and exclusion of the discovery"*. Wu (2011, p.174) states: *"Social science studies involve so many uncontrollable variables that scientific methods resembling natural sciences are unable to capture the complexity of human behaviour in social systems"*.

Thus, Guba (1990) illustrated that there is another paradigm that combines both subjectivist qualitative models and objectivist quantitative models termed pragmatism, which allows interaction between objectivity and subjectivity in research. Scholars such as Creswell and Clark (2007) and Tashakkori and Teddlie (1998) have supported the approach and additionally defined the paradigm that combines mixed method approaches as pragmatism.

4.5 Practical Approach

4.5.1 The Research Methodology: Case Study

The first category of the practical approach by Crotty (1998) in his social research design model is the research methodology. Crotty (1998, p.3) defined the stage of research methodology as: *"The strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes"*. Adding to that definition, Miller and Brewer (2003) define the research methodology as how a researcher hypothesises, theorises, and forms perceptions using different techniques or methods to gather and analyse information. There are different types of research methodology that researchers can select from to achieve the aim and objectives of the study (Crotty, 1998). The adoption of a pragmatist paradigm is consistent with a case study research strategy within a mixed approach that facilitates in-depth understanding of specific phenomena.

The philosophical assumptions of pragmatism provide a suitable foundation for adopting a case study methodology for this research. It is argued that as case studies utilise a large amount of qualitative data, the philosophical assumptions of interpretivism or constructivism appear to be the most appropriate theoretical foundation (Marguerite et al. 2010). It is also underlined that case studies are founded on a constructivist and interpretivist epistemology as their purpose is to obtain phenomenological knowledge on the basis of the meanings people allocate to their experiences (Myers, 2009). Case study methodologies are effective at supplying rich qualitative data for wide-ranging investigations on topics such as people's attitudes and perspectives about phenomena and their experience.

Marguerite et al. (2010) argue that pragmatism is the most appropriate paradigm for case study research due to their inconsistent use of qualitative or quantitative instruments. Pragmatism enables case studies to acquire a better understanding of their subject as it allows the use of any type of data source. While case study methodologies have been criticised for being non-representative and non-generalisable (Saunders et al. 2011), it has been countered that generalisation need not be statistical, but can also be analytical (Johansson, 2003), and that it can be undertaken on the basis of rich insights, concepts, specific ramifications or theories (Walsham, 2006). It has also been asserted that the generalisability of case studies stems from their investigation of numerous actors in a variety of contexts (Denzin and Lincoln, 2000). This assertion is reinforced by Yin (2009) who contends that while it is not possible to generalise case studies to entire populations, their specific results can be analytically generalised and utilised to formulate broader theoretical propositions. Blumberg et al. (2005) also contend that well-designed case studies have the potential to significantly underline theories. Although the results offered by studying a phenomenon in a variety of settings are more robust compared to outcomes based on single setting research, the value of case studies lies in providing new insights from accessing hard to reach information (Yin, 2009).

Studies may be classified according to their purpose, as well as by their research methodology (Gray, 2009). Robson (2002) identifies three categories of study consistent with purpose cited as explanatory, exploratory and descriptive. A descriptive study is acknowledged as particularly suitable in the case of research subjects which are novel or under-researched (Punch, 2005), with the aim explained as drawing a picture of the natural occurrence of a research phenomenon, describing events, people and situations, and the relationships between them (Gray, 2009; Punch, 2005). Nevertheless, descriptive studies have been highlighted for their lack of explanatory power (Blumberg et al. 2005). Explanatory studies aim to explicate descriptive information, noted to examine "why" and "how" questions in contrast to the "what" questions examined by descriptive studies (Gray, 2009). Finally, exploratory studies seek to explore "*what is happening and to ask questions about it*" (Gray, 2009, p.36). Punch (2005) underlines their suitability in cases where limited information on a phenomenon is available or further for research areas where inadequate descriptive information exists. The latter reflects the purpose of this thesis.

The exploratory research strategy is considered to be particularly suitable to achieve the research goals of this study, offering as it does an effective approach to examine the current status of the phenomenon of risk perception in IB. The existence of limited knowledge on the specific factors, which influence risk perception and consumer behaviour, suggests that the current research is exploratory in terms of uncovering the key factors that influence risk perception in this field.

Approaching this research from the perspective of an exploratory study is proposed as a valuable means to examine what is occurring, and ask questions, appraise phenomena in new ways and achieve new insight (Robson, 2002). According to Yin (2009), case studies essentially attempt to enlarge understanding in relation to decisions made, seeking to apprehend why decisions were taken, the manner in which they were implemented, and their outcomes. "Why" and "how" research questions are acknowledged as largely exploratory in nature leading to the frequent utilisation of exploratory case studies to answer these questions. Moreover, the suitability of case studies is noted in situations where knowledge of the key factors and how they can be assessed is limited.

Case studies allow a range of research methods to be used to investigate the research question, accommodating both positivist and interpretivist research paradigms and lending themselves to data collection from an extensive range of different sources. These include interviews, questionnaires, documentary data and observation, artefacts and visual sources (Buchanan, 2012; Yin, 2009), supporting the provision of a more complete and in-depth view of research phenomena (Gummesson, 2000). Flexibility also extends to the purposes of the research, as case-based strategies can be utilised for exploratory, descriptive or explanatory research and are acknowledged as highly suited to developing and testing theory (Yin, 2009). Darke et al. (1998) explain that case study research is beneficial for generating hypotheses and exploring areas where limited knowledge thus far exists. A case-based approach further has the advantage of the capacity to develop strong internal validity through in-depth description of multiple factors allowing for triangulation of data through the use of multiple sources (Yin, 2009). Nevertheless, case studies have been criticised for lacking statistical validity and further for limited generalisability resulting from the small sample sizes involved (Gummesson, 2000). Buchanan (2012) however suggests that a case cannot be perceived as a single iteration of a specific variable but consolidates multiple factors in combination with contextual information.

Consistent with this research, case study research allows scholars to explore relatively understudied topics (Darke et al. 1998). They are valuable research approaches when the investigation aims to answer 'how and why' questions, and to develop theories (Yin, 2009). It is because of this methodological flexibility, that case studies are viewed as appropriate for the investigation of risk perception at the Abu Dhabi Police and to facilitate the best possible research approach for in-depth investigation (Feagin et al. 1991). Gummesson (2000) underlines how they enable researchers to take a holistic view of the phenomenon studied. Moreover, case studies can incorporate both interpretivist and positivist research paradigms; they can be used for exploratory, explanatory or descriptive research, as well as to test theories or develop hypotheses (Yin, 2009; Buchanan, 2012).

The nature of this study is primarily exploratory and while there is emphasis on establishing an objective assessment of risk perceptions of IB consumers, a key objective is to explore underpinning individual perspectives that influence risk perceptions and behaviour. Consequently, an exploratory study is viewed as appropriate to investigate and assess the problem using different approaches (Robson, 2002). Richey and Klein (2007) stated that exploratory studies are often driven to gather data and facts in order to explain certain situations. This approach is most used when researchers are seeking to investigate certain phenomena on which there is limited knowledge (Richey and Klein, 2007; Denscombe, 2002). This focus provides the basis for assessing the overall research philosophy and approach to address the research goal for this study.

4.5.2 The Research Methods: Mixed Methods Approach

4.5.2.1 Qualitative and Quantitative Approaches

The implication of a pragmatic research position is the utilisation of different types of data and methods. Linked to the adoption of a theoretical basis for the study is the selection of a quantitative or qualitative research approach. Numerous researchers have explained the difference between qualitative and quantitative research (Cooper and Schindler, 2008; Bryman and Bell, 2007; Denzin and Lincoln, 2005; Bruce and Berg, 2001; Strauss and Corbin, 1998). Bruce and Berg (2001) explain both qualitative and quantitative methods differently by referring to qualitative research as based on meanings, concepts, definitions and description of things, whereas quantitative research is based upon measuring and counting of things. Qualitative and quantitative research approaches are different in some major areas including: analytical objectives; types of questions presented; types of data collection methods used; types of data produced, and the degree of flexibility in the study design (Mack et al. 2005). Bryman and Bell (2007) explain that qualitative methods focus on words rather than quantification in collecting and analysing data. Qualitative methods subjectively differ from quantitative methods in their methods, purpose, focus and the reasons established to analyse the truth about the research problem (McNabb, 2004).

A mixed methodology approach into risk perception has been utilised in the literature including by different reasrechers who similar to this research conducted a quantitative analysis that was subsequently enhanced by an extensive qualitative analysis. This research used a combination of both qualitative and quantitative methods. Creswell (2014, p.2) explains mixed research method as: *"An approach to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems"*.

According to Florczak (2014), the benefits of using mixed methods are that they help to achieve a more comprehensive understanding of the problem by combining both types of analysis into interpreting the research problem. However, Creswell (2014) notes that the challenges in using mixed methods involve the time needed to conduct the two phases of the design and the decisions made in regards to the interpretation and analysis of both the quantitative and qualitative methods. Furthermore, when using mixed methods, researchers must take into consideration that they are collecting similar data using both qualitative and quantitative measures while undertaking a parallel comparison through analysing their data (Florczak, 2014). Miller and Brewer (2003) support the use of mixed methods and note that using this approach decreases the weaknesses and limitations of the research. Furthermore, Hossain (2012) argued that both methods have their own advantages, and if the advantages were combined, then disadvantages can be eliminated. Creswell (2003) outlines and contrasts the key differences between qualitative, quantitative and mixed methods as shown in Table 4-2.

Table 4-2 Comparison of Quantitative, Qualitative and Mixed Methods

Tend to or Typically	Qualitative Approaches	Quantitative Approaches	Mixed Methods Approaches
• **Use these philosophical assumptions.** • **Employ these strategies of inquiry.**	• Constructivist/ Advocacy/ Participatory knowledge claims. • Phenomenology, grounded theory, ethnography, case study and narrative.	• Post-positivist knowledge claims. • Surveys and Experiments.	• Pragmatic knowledge claims. • Sequential, concurrent and transformative.
Employ these methods	Open-ended questions, emerging approaches, text or image data.	Closed-ended questions, predetermined approaches, numeric data.	Both open and closed ended questions, both emerging and predetermined approaches, and both qualitative data and analysis.
Use these practices of research as the researcher	• Position himself or herself collects participant meanings. • Focuses on a single concept or phenomenon. • Bring personal values into the study. • Studies the context or setting of participants. • Validates the accuracy of findings. • Makes interpretations of data. • Creates an agenda for change or reform. • Collaborates with participants.	• Tests or verifies theories or explanations. • Identifies variables to study. • Relates variables in questions or hypotheses. • Use standards of validity and reliability. • Observes and measures information numerically. • Use unbiased approaches. • Employs statistical procedures.	• Collects both quantitative and qualitative data. • Develops a rationale for mixing. • Integrates the data at different stages of inquiry. • Presents visual pictures of the procedures in the study. • employs the practices of both qualitative and quantitative research.

Source: Creswell (2003, p. 19).

Mixed methods research designs in the social sciences are dominated by three key models. In a convergent parallel mixed method design the quantitative and qualitative data is collected at the same time and integrated in the interpretation of results to offer a comprehensive analysis (Creswell, 2014). Using an exploratory sequential mixed methods design implies that the research is initiated with a qualitative phase, the data from which is analysed to inform a consecutive quantitative phase. Data can be used to create or identify appropriate instruments or variables for the succeeding stage. An explanatory sequential mixed methods design has the reverse sequence with a quantitative phase forming the first part of the research. The results from this phase are analysed followed by a qualitative phase which builds on the results to explain them in greater depth (Creswell, 2014).

The majority of mixed methods designs adopt time orientation as the key factor. Sampling designs can be categorised in accordance with the time orientation adopted for the different study components. These can be concurrent and therefore independent, in addition to sequential qualitative and quantitative phases in which the results from the first method can inform the second (Onwuegbuzie and Collins, 2007). The latter approach was adopted for this study. Studies based around progression and development may adopt a sequential design as appropriate as development involves using the methods in sequence. A nested relationship between the phases of the study identifies a sampling process in which sample participants chosen in the later phase of research are a subsample of participants selected for the prior phase (Onwuegbuzie and Collins, 2007) as in this study.

Typically, procedures in this model may involve the gathering of survey data followed by statistical analysis of survey responses and qualitative interviews. The research design of this study adopted similar procedures, first implementing a survey method to explore the relationship between variables following which the data was analysed and used to inform qualitative interviews to explain in greater detail the variable interactions. The ability to explore these relationships further through the use of a qualitative follow-up phase is considered a key strength of this design (Creswell, 2014). In adopting this approach qualitative data can be complementary to support more detailed explanation of the initial quantitative findings. Quantitative results that can be explored include outlier cases, significant relationships between variables, significant predictors, demographics and non-significant results (Creswell, 2014).

4.5.3 Research Design: Sequential Quantitative to Qualitative

Based on the mixed method approach a two-phase sequential research design is adopted for this study. Figure 4-3 provides an overview of the research design: Phase 1 is the quantitative data collection and analysis, and Phase 2 qualitative data collection and analysis. In Phase 1 the quantitative analysis is conducted in two stages. In stage 1 analysis is conducted of participants' existing risk perceptions and decision-making behaviour. This provides the baseline results. In stage 2 the data of risk perceptions and decision-making behaviour (switching likelihood, switching intention) under the four different hypothetical risk scenarios is analysed. Figure 4-4 shows the four separate analyses conducted for each risk scenario. The results for each scenario are then compared against the baseline results to investigate differences.

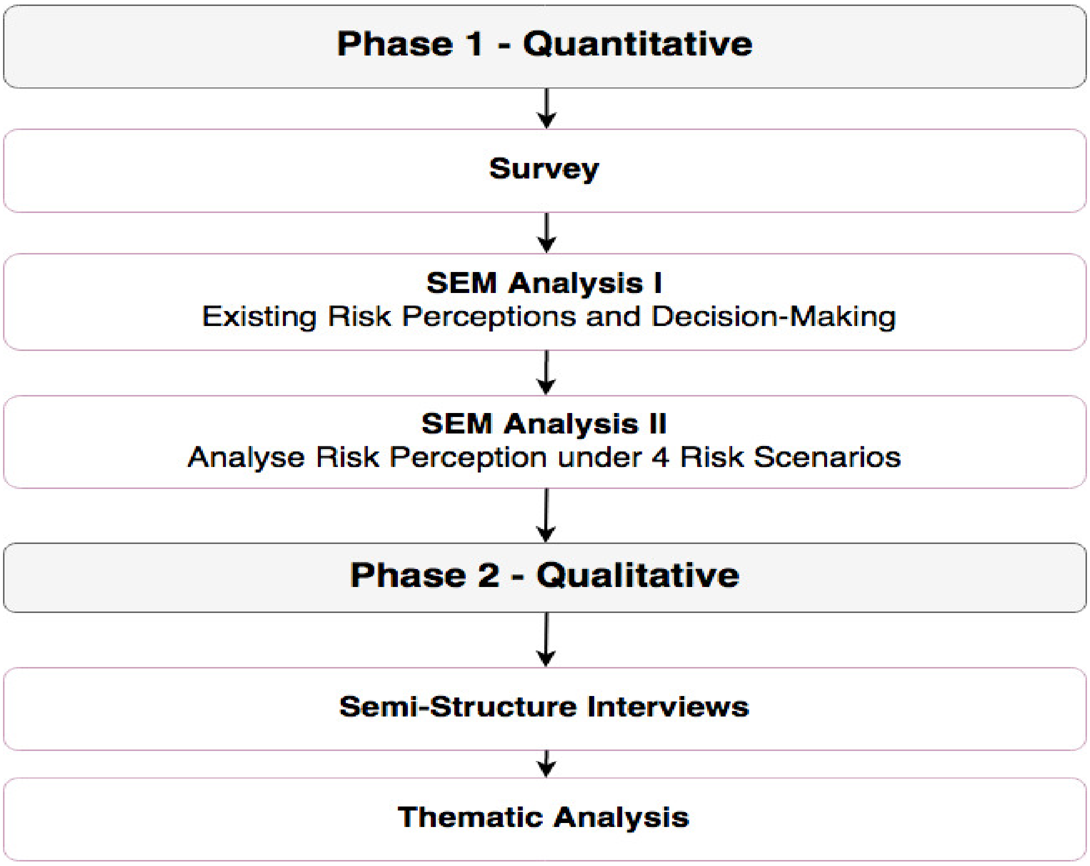

Figure 4-3 Research Design

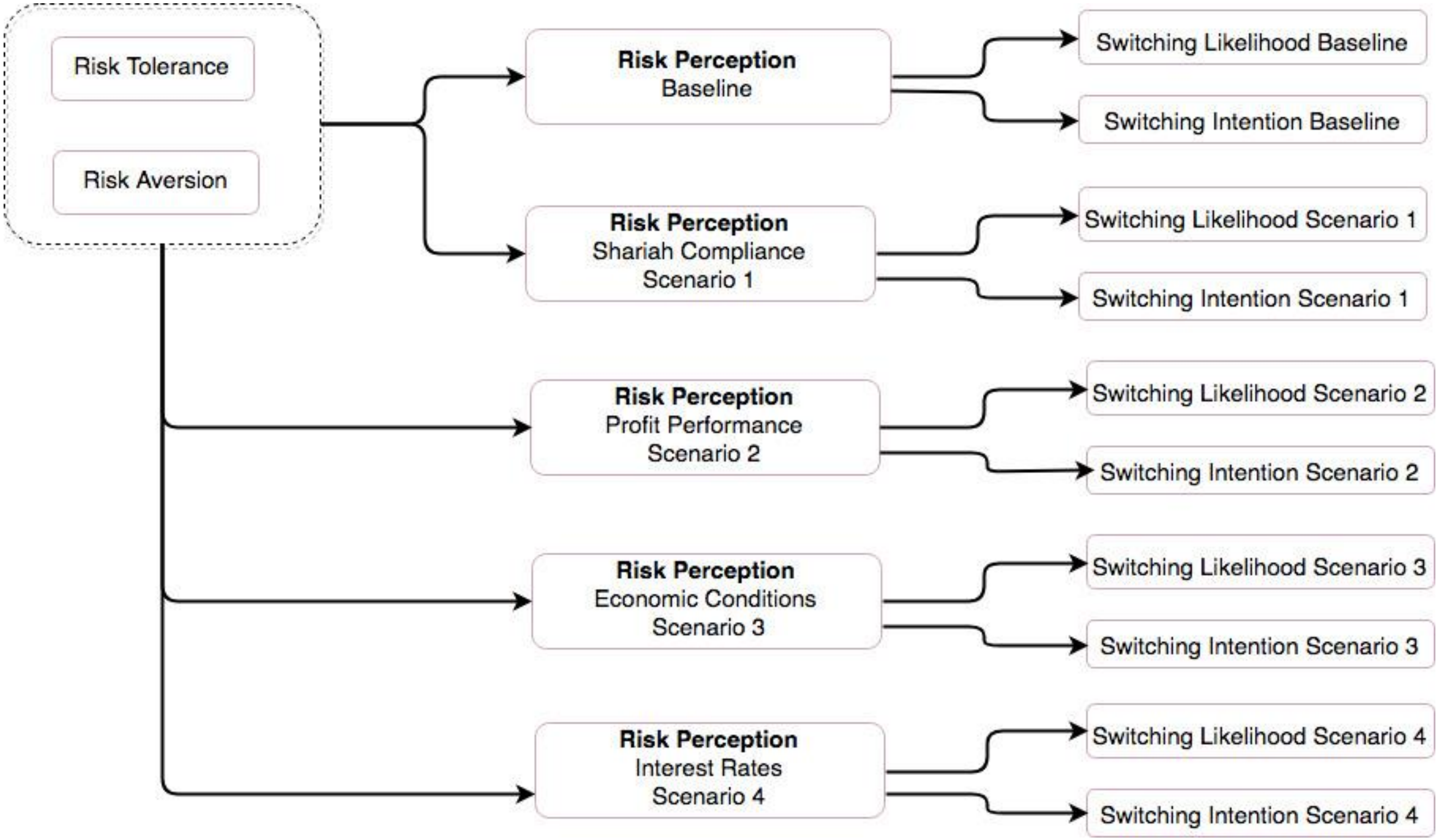

Figure 4-4 Quantitative Analysis for Risk Scenarios

4.5.3.1 Methods

Crotty (1998; p.5) explained research methods as: *"The techniques or procedures used to gather and analyze data related to some research question or hypothesis or as the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes".*

According to Dawson (2009), research methods are a fundamental part of the research design. He defines research methods as *"the tool to gather data"*, which uses different techniques in the data collection and data analysis stage according to the nature of the research (Dawson, 2009, p.23). Therefore, the research method has two phases: one is data collection and the second is data analysis (Saunders et al. 2011). For this study, quantitative and qualitative approaches have been used; therefore, different research methods have been employed. Two key research methods were selected for this study:

A) Survey Questionnaire (quantitative)
B) Interviews (qualitative)

4.5.3.1.1 Questionnaire Survey

The survey questionnaire will be employed in the first phase of data collection to collect data on risk perceptions and attitudes of IB customers towards IB banking products (see Appendix A**).** The questionnaire survey of the study was designed to generate insight on consumer perceptions of risk in relation to the products and services offered by IBs in the UAE. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents (Bryman and Bell, 2007).

Chisnall (1992, p.109) defined a questionnaire as *"Methods of obtaining specific information about a defined problem that the data, after analysis and interpretation, results in a better appreciation of the problem"*. Chisnall (1992) argued that questionnaires are considered an important tool used in the research design. Fink (1995, p.1) explains a questionnaire survey as: *"a system for collecting information to describe, compare, or explain knowledge, attitudes, and behaviour. Survey involves setting objectives for* *information collection, designing research, preparing a reliable and valid data collection instrument, administering and scoring the instrument, analyzing data, and reporting the results".*

As this study is an exploratory study, conducting a questionnaire plays a vital role in achieving the aim and objectives of the research. According to Robson (2002) questionnaire surveys are frequently used for exploratory study purposes. Often employed within business and management and exploratory research (Saunders et al. 2011), a survey strategy is question-based designed to elicit a large volume of quantitative information in a structured, efficient and reliable manner (Bryman and Bell, 2007). Quantitative data on customer attitudes and behaviour for the variables of this study can be gathered through direct questioning in an easy to understand format (Bryman and Bell, 2007). Cost and time-efficient for gathering data, the practical convenience and rapidity of this method helped to maximise both the number of respondents sampled and response rates (Bryman and Bell, 2007).

The results from the survey can be analysed statistically to identify and explore potential relationships between the variables and determine their significance. While it is acknowledged that this approach is limited in providing an understanding of underlying causes and interactions, the results from this strategy can provide empirical support for broad insights and generalisations on risk attitudes of IB consumers (Saunders et al. 2011). It presents baseline data that can be explored in-depth within the interviews.

4.5.3.1.1.1 Instrument Design

The first step of questionnaire design involved a critical review of the literature to identify and assess the items employed to examine the research phenomenon. Consequently, the items adopted for the study arose from the existing literature on risk and risk perception specifically. Particular focus was given to selecting well-established and validated items where possible or where strong theoretical support was established (Saunders et al. 2011).

With a view to maximising the validity of the research survey questionnaire, items were drawn from academic and risk consultancy research into different elements of risk attitudes. The design of the questions was structured in accordance with the key variables required to address the primary goal of this study: to investigate the relationship between risk perception of risk averse investors and Islamic Banking (IB) products and investment decision-making. The secondary objective is to determine the degree to which certain conditions relating to Shariah compliance, profit performance of IB and economic conditions (interest rates and income) influence risk attitudes towards investments and impact investors' switching intention. A related objective was to determine the switching point and understand the degree to which external conditions influence risk attitudes towards investment decisions and the decision to change from IB to an alternative banking system. In other words, how far are consumers from making the switch to an alternative form of investment based on certain factors? Consequently, the questionnaire design incorporated measures to capture data on these aspects in addition to consumer characteristics.

The survey instrument consisted of closed-ended questions that offered participants a list of answers from which they were required to select their most preferred response, mainly involving ticking a box (Babbie, 2010). This type of question can be presented in multiple forms including rating, ranking, list, category and quantity, and can be processed and analysed easily as a result of the data it provides (Saunders et al. 2011).

The measures and the question items for the survey instrument were generated from a pool of items identified in the literature from previous studies. Items were selected based on their appropriateness in terms of the research question and practical considerations during data collection. Given the number of variables being measured ensuring a simple and easy to administer survey to maximise response and survey completion was a primary factor. The survey instrument needed to accommodate consumer characteristics, financial knowledge and experience, general risk attitude in terms of risk aversion and risk tolerance, baseline perceptions of risks towards IB products and perceptions of risks of IB under four scenarios.

Survey respondents were required to evaluate their own attitudes in conceptual terms and then identify the rating scale point most closely reflecting this (Ostrom and Gannon, 1996). Therefore, accurate understanding of the meaning that each scale point conveys is critical for data quality and if lacking may undermine measurement reliability and validity (Krosnick and Presser, 2009). Scale length is likely to influence the mapping of individuals' attitudes onto the response alternatives provided and longer scales are reliant on the quality of respondents' mental conceptualisations of the construct. Meaning is considered easier to enumerate in rating scales up to seven points while longer scales can generate significantly less clarity. Long scales can increase the complexity of interpreting scale points and subsequent mapping (Krosnick and Presser, 2009). A five-point scale may be sufficient, however individuals are acknowledged to frequently engage in more refined distinctions (Krosnick and Presser, 2009) suggesting that greater information can be obtained as the quantity of scale points increases (Alwin and Krosnick, 1991). Useful evidence points to the optimal number of scale points offered within a rating scale. In one study both cross-sectional and test-retest reliability showed incremental increases between 2, 3, and 5-point scales however 7, 9 and 14-point scales indicated equivalent reliability (Lissitz and Green, 1975). Bendig (1954) found equivalent reliability in ratings adopting either 2, 3, 5, 7 or 9-point scales. Validity is shown to increase as scales extend beyond 2 points however according to simulation studies as scales lengthen validity gains are conversely reduced (Lehmann and Hulbert, 1972; Green and Rao, 1970).

The utility of using rating scales to measure risk attitudes and perception has been emphasised, with psychometric and multiple-item scales commonly employed and advocated (Mitchell, 1999; Nunnally and Bernstein 1994; Ekman and Sjöberg, 1965). These guidelines were applied to maximise the validity and reliability of the scales for the constructs in the study.

4.5.3.1.1.2 Questionnaire Structure

The structure of the questionnaire is outlined in Table 4-3. ***Section One: About You*** of the questionnaire has 13 demographic question items on variables that have appeared in a number of similar studies on risk attitudes and determinants of needs incorporating marital status, age, gender, children, religion, and investment expertise (Grable, 2016; Beworks, 2014). Collecting data on these variables was important to achieve the research aims to understand the influence of different demographic aspects on risk perceptions and consumer behaviour. Nevertheless where these items are placed in the questionnaire is a research decision with implications for participant completion (Teclaw, 2012). The design of this questionnaire is influenced by evidence that the inclusion of demographic questions at the beginning can improve item response rate for demographic questions and does not affect the response rate for non-demographic items (Teclaw, 2012; Drummond et al. 2008).

Section Two: Islamic Banking Principles. Measures of awareness of IB products and services and Shariah principles were based on general Shariah principles. Two question items were employed that investigated level of awareness and level of understanding of two key Shariah principles and eight financial products. *"Riba"* is the prohibition against the charging of interest, while *"Gharar"* protects against excessive uncertainty or risk in banking operations and products and services (Visser, 2013). The financial products selected for assessment were based on Visser (2013) who describes 8 distinct financial products and services consistently measured in a number of studies evaluating awareness of IB products and services and Shariah principles (Cheteni, 2014; Alsoud, 2013; Naser, 2011; Khattak and Rehman, 2010). These are:

- Mudharaba describes a profit-sharing arrangement between two parties such as an investor and entrepreneur.
- Bai' Bithaman Ajil refers to the sale of goods where the seller is paid by the buyer post-sale in combination with an agreed profit margin.
- Murabaha is similar however the buyer must know in advance the cost for the asset and the profit margin at the time of the sale agreement.
- Ijarah Thumma Bai' is frequently used to finance consumer goods especially cars involving two separate contracts of Ijarah (leasing/renting) and Bai' contract (purchase), charging commission rather than interest.
- Wakalah describes a contract in which one party acts on the behalf of another for a specific task and will be paid a fee for their services.

- Under Qard arrangements, a loan is received for a fixed period and with repayment involving only the original amount. However, an extra unpromised amount may be paid as a thank you to the lender.
- Hibah refers to a willing payment such as a bank may pay to depositors in return for the benefit of their deposits.
- Musharaka means a partnership or joint business for profit shared by the partners on an agreed ratio. Although proportionately this may not be the same as the amount of investment made by the partners, any losses will be shared based on proportional investment amounts (Visser, 2013).

The extent of awareness among the respondents was measured using a 4-point Likert-type scale, which has been used in many similar studies examining awareness of Shariah banking and products (Cheteni, 2014; Alsoud, 2013; Khattak and Rehman, 2010). The scale for awareness has been adopted from Vagias (2006) who provides a Likert-type scale for measuring this construct. The implications for this study of using a four-part Likert scale are discussed further below.

Implications are further acknowledged in the use of a self-rating scale to measure awareness and understanding of Shariah products and principles. This is not an objective measure and it is possible that participants may rate their awareness higher than would be justified by a more objective measure of understanding (Lavrakas, 2008).

Section Three: Risk Aversion and Section Four: Risk Tolerance. These sections are designed to measure the risk attitude constructs of risk aversion and risk tolerance. Many studies use scenario-based questions to measure risk attitude constructs including risk aversion and risk preferences. Participants are asked the degree to which they agree or disagree with a range of statements (Shapira, 1995; Nunnally and Bernstein, 1994; MacCrimmon and Wehrung, 1986). In the majority of studies risk attitude scales that have been developed in relation to risk aversion and risk tolerance utilise gambling scenarios (Blais and Weber, 2006; Elliott and Archibald, 1989; Kahneman and Tversky 1979). Validated instruments that have been widely adopted include the DOSPERT risk-taking scale developed by Blais and Weber (2006) and Weber et al (2002) to measure risk attitudes and perceived risk attitudes in five domains including financial decisions. However, the use of measures related to lottery or gambles to determine risk aversion was viewed as problematic for a Muslim-based study population where the notion of gambling in Islam is referred to as *"Ithm al-kabir"*, the fourteenth Greater Sin. In addition to ethical considerations there is potentially bias in presenting a gambling scenario, which may be viewed from a negative perspective.

Table 4-3 Structure of Questionnaire

Construct	No Items	Number	Source
Demographics Marital status; age; gender; children; education; religion; nationality; and investment expertise	13	Q1-Q13	Grable (2016); Beworks (2014).
Awareness of IB Products and Services	2	Q14-Q15	Vagias (2006); Visser (2009); Khattak and Rehman (2010); Kayed and Mohammed (2010); Naser (2011); Alsoud (2013); Visser (2013); Cheteni (2014)
Risk Aversion	4	Q16-Q19	Mandrik and Bao (2005); Oxford Risk (2010)
Risk Tolerance	3	Q20-Q22	Grable (2008); Droms and Strauss (2003); Grable and Lytton (1999a,b)
Risk Attitude toward Islamic Banking Products	2	Q23 -Q24;	Author's own; Ahmed (2003); Ismal (2011)
Risk Perception	4	Q27; Q30, Q33, Q36	Darbyshire and McDonald (2004); Ahmed (2003); Gilliam et al. (2010); Ismal (2011); Abduh (2014); (Iqbal and Mirakhor, 2011)
Switching Likelihood	5	Q26, Q29, Q32, Q35, Q38	Darbyshire and McDonald (2004); Ahmed (2003); Gilliam et al. (2010); Ismal (2011); Abduh (2014); (Iqbal and Mirakhor, 2011)
Switching Intention	5	Q25, Q28, Q31, Q34. Q37	

Two sources provide scales for obtaining a general measure of risk attitude in terms of risk aversion. A general risk aversion scale was adapted from Mandrik and Bao (2005, p. 539) consisting of 6 questions. Mandrik and Bao's (2005) GRA scale is based on the results of their study indicating that it was possible to measure risk aversion using a simple self-report scale. In terms of its validity the scale demonstrated sufficient psychometric properties and was shown to correlate well with specific risky activities. While the scale is based on a small exploratory empirical study, no other scale provides a shorter and easier to administer approach to measuring risk aversion. The scale was found to be applicable to a diverse range of contexts as Mandrik and Bao's (2005) results indicated significant correlation with risk-related constructs and behaviours when compared with measures of risk aversion. However, in order to minimise the length of the overall survey questionnaire a shorter version based on four questions measuring risk aversion was adopted. While this has implication by potentially undermining the reliability and validity of the scale, the question items adopted were from an instrument formulated by Oxford Risk, an independent team of leading psychology academics originating from Oxford University (Oxford Risk, 2010) and phrased as follows:

1. My friends would say that I am cautious.
2. I prefer my money to be safe from risk.
3. Being financially cautious is not important to me.
4. I do not mind investing my money in something that might decline in value if I also had the potential of a high return.

The wording used is similar to Mandrik and Bao (2005) for risk aversion, and it has been adopted for this study to minimise the overall size of the survey questionnaire.

To obtain a scale for risk tolerance several studies were examined that provided three options. A 13-item, multidimensional measure developed by Grable and Lytton (1999a) is cited as one of the most reliable and widely used instruments for measuring risk tolerance. However, similar to risk aversion scales, this measure incorporates gambling problem questions. This limited the use of the scale for the same reasons. An alternative is a single question item that has been widely adopted within the consumer finance field (Grable, 2008). A study by Gilliam et al (2010) comparing the 13-item measure and the single item measure for risk tolerance determined that the Survey of Consume Finance (SCF) item did indicate a person's investment risk tolerance sufficiently well. This question was found to be popular among researchers because it is one of the only risk tolerance assessments asked in national surveys of consumers most closely related to investment choice attitudes (Grable, 2008). A three-question item measure was preferred over the single-item however to provide a multidimensional measure and at the same time address the practical needs to limit the overall size of the questionnaire. Droms and Struss (2003, p.75) developed a six - item scientifically validated question set to measure risk tolerance. Three questions have been adopted that have been used in several studies (Byrne and Blake, 2007; Grable and Lytton, 1999a). Similar to above, it is acknowledged that choosing to exclude some question items could influence the validity and reliability of the scale for risk tolerance and undermine the quality of the data obtained.

Both Section Three and Section Four of the questionnaire employed a four-part Likert response scale to measure risk attitudes. A four-point scale was adopted on the basis that it provided clarity and an easier means to enumerate risk attitudes (Krosnick and Presser, 2009). However there are implications to this decision as there is acknowledged risk that too few categories incurs the risk of failure to discriminate between participants with different underlying opinions and more refined and nuanced data on individuals' risk attitudes is not captured (Krosnick and Presser, 2009; Schaeffer and Presser, 2003). On the other hand Alwin (2007) shows that scale polarity is an important factor in ensuring reliability and the use of 4-point scales can enhance the reliability of unipolar scales such as those used in these sections of the questionnaire.

Section Five: Risk Attitude Towards IB Products: The next part of the questionnaire measures investors' risk perception towards IB products and investments. Studies have also measured risk perceptions based on a psychometric approach to gather subjective data on risk perception based on a quantitative scale (Grable, 2008; Rohrmann, 2003). While in essence the data is subjective focused on the personal perception and intuition of the consumer, a quantitative scale provides a basis for describing these perceptions. Four question items are used that collect information on primary bank, risk perceptions of IB products, and current or future switching intention.

A single question item is formulated to measure the level of risk that consumers associate with different investment products. Three different types of IB products are selected for this evaluation: current accounts, saving accounts and investment accounts. Each type is associated with different Islamic financing principles and represents broad investment decision-making. Current accounts are based on the principles of Wadia (safe-keeping) or Ammanah (trust) and the deposits are interest-free (Iqbal and Mirakhor, 2011). This type of interest-free product is relevant to this study in determining whether external conditions that undermine purchasing power impact on risk attitudes and investment decision-making. Investment deposits and saving deposits are based on the principle of Mudharaba and represent a profit-sharing arrangement (Iqbal and Mirakhor, 2011). Measuring attitudes towards investment accounts would indicate the relationship between external factors and profit performance. At the same time, investment products for deposits are invested in Shariah-compliant businesses and these products therefore provide a measure in relation to Shariah compliance and performance of banks and impact on risk attitudes and decision-making.

The response scale for risk perception and switching intention was expanded from the standard 5-point scale used in a wide range of risk attitudes scale to a 9 point to provide increased reliability and precision of responses. This measure was adopted by Visser et al. (2014) to enhance the quality of psychometric scale. The measure therefore provides participants' assessment of the level of risk perceived in their existing context and under each of the four different scenarios. The rationale for a nine-point scale is drawn from literature and analysis by Darbyshire and McDonald (2004) whose findings indicated that higher range scales had a higher level of reliability than the lower range scales such as a 5-point scale. According to Alwin (1997; p. 325), there is a *"relationship between the number of bits of information conveyed by a set of response categories and the reliability of attitude measurement".* This is consistent with a later study by Andrews (1984) who found that increases in the response level beyond 4-point improved the reliability of the scale. A 9-point and 11-point balanced and labelled scales were found to be most effective both for reliability and for enhancing the precision of statistical analysis. In this study a 9-point scale was chosen to simplify the response for participants but still remain large enough, based on the evidence from the literature, to be both reliable and provide precise data to support empirical analysis. Further, the pilot study indicated that respondents understood the meaning of the 9-point scale sufficiently. The researcher is aware of the potential implications of this decision in terms of increased cognitive effort by participants as they must decide which direction of extreme they fall under and then the degree to which they tend towards that extreme (Schaeffer and Presser, 2003).

Section Six: Attitudes and Decision-making under Different Scenarios: The questionnaire design includes elements relating to external conditions to determine their effect on risk attitudes to IB. A nine-point response scale is employed for similar reasons outlined above. Four scenarios are presented: negative Shariah compliance scenario; poor profit performance scenario; poor economic scenario and high interest rates. Three question items for each scenario measure risk perception towards IB products and switching intention and likelihood based on each scenario. A binary variable (Yes/No) measures switch decision. The switching intention variable is included using a 9-point scale from 'definitely switching' to 'definitely not switching'. The wording is based on withdrawal behaviour (Likelihood to switch) cited in a number of studies (Abduh, 2014; Ismal, 2011; Gilliam et al. 2010; Ahmed, 2003).

4.5.3.1.1.3 Pilot Study

Before distributing the interview questions and the questionnaire to potential respondents, a pilot study was conducted to achieve a high level of validity and reliability through testing the interview questions and questionnaire questions. According to Wilson (2006, p.103), a pilot study is *"a small-scale trial before the main investigation, intended to assess the adequacy of the research design and of the instruments to be used for data collection"*.

The test of this study was conducted in two stages. The first stage lasted from January 2015 to February 2015 in consultation with academic supervisors to ensure that all questions were suitable and fitted the main objectives of the study. The second stage took place in March 2015 where the questions were sent to two departments in Abu Dhabi Police to ensure the questions were understandable and appropriate (no corrections were suggested). Further, in March 2015, the survey questionnaire was sent to 50 respondents divided equally between departments of Abu Dhabi Police. All feedback and comments were taken into consideration to modify and enhance the final structure of the questionnaire. Researchers highlight the importance of using a pilot study to improve the questionnaire by enabling: improvements in question wording; checking of consistency through the validity of variables used in the instruments; testing the language and time used to complete the questionnaire; as well as testing the implemented research design (Saunders et al. 2011; Wilson, 2006; Oppenheim, 2000). This process helped to identify unnecessary questions, in addition to improving the clarity and ease of understanding (Dillman, 2000). The pilot study critically confirmed the appropriateness of employing a large 9-point scale, which the literature found is optimal for statistical analysis. Respondents were able to understand the meaning of the scales and complete them without difficulty.

4.5.3.2 Qualitative Semi-Structured Interviews

The case study employed an in-depth qualitative interview method in the second phase of the research process to gather in-depth data. Semi-structured interviews were conducted with employees of Abu Dhabi Police, GHQ who showed their interest in participating further in the interview process. Semi-structured interviews provide the opportunity to undertake a flexible and less structured means to obtain comprehensive and information-rich data to explore in greater detail the issues and underlying motivations related to customer decision-making (Saunders et al. 2011).

Semi-structured interviews are based on a set of themes and questions to be examined during the interview; however, flexibility is acknowledged for elements to be varied from interview to interview (Saunders et al. 2011). This implies the potential for researchers to downgrade or ignore certain questions or adjust the question order in accordance with the interview flow. The method is cited to provide opportunities to probe responses and ask additional questions during the interview, thus enabling in-depth exploration of the research questions and helping to achieve a more comprehensive understanding of the research phenomenon (Easterby-Smith et al. 2012). Denscombe (2007) highlights the possibility for semi-structured interviews to provide in-depth insight of a research phenomenon through permitting detailed exploration of the attitudes, views, emotions, beliefs and values of those involved in it.

The choice of this method for this study is underpinned by a number of reasons. This method enables exploratory investigation that can assist in identifying the factors that may potentially influence consumers' perception of risk, in which interviews help facilitate the understanding of meanings that participants assign to a specific phenomenon. According to Saunders et al. (2011), this can support a more nuanced and thorough understanding of the social world of bank customers through discovering their experiences and perspectives. A pre-determined set of questions provides the overall structure building on the themes in the survey questions. At the same time a developmental and interactive approach can also be facilitated allowing questions and the direction of the interview to be adjusted as issues in relation to attitudes and perceptions emerge (Bryman and Bell, 2007).

The method's reliance on close contact between subject and researcher can further encourage participants to talk openly and honestly about their beliefs and attitudes and how they explain and contextualise them (Moriarty, 2011). The use of semi-structured interviews within exploratory studies are emphasised as valuable enabling understanding of the meaning ascribed by participants to a specific phenomenon. It is further argued that participants may employ particular words or terms in a manner which enlarges the significance and value of the data collected (Cooper and Schindler, 2008). The semi-structured interview results will provide the researcher the opportunity to expand and extend the topic area with interviewees as appropriate, and according to Saunders et al. (2011) can lead to greater validity and insight.

Through this process semi-structured interviews have the capacity to uncover meanings and strive for new understandings of perspectives, feelings and experiences in relation to financial crisis and risk perception (Denscombe, 2007). The production of rich qualitative data on financial consumers is a key advantage conferred by semi-structured interviews

(Saunders et al. 2011). The findings of the interviews were thus utilised to expand on the quantitative responses from the questionnaire. Given the important role of semi-structured interviews in this study, a critical literature review is acknowledged as key to generating an effective interview design fulfilling the study objectives.

4.5.3.3 Interview Instrument Design

The interview questions utilised for this study are based on the theoretical framework drawn from the literature. Lee (1989) underlines the replicability of case study findings in terms of confirming or disconfirming a theory, while acknowledging the non-replicability of observations in a specific case study. Key studies have provided relevant and suitably explorative questions considered appropriate and adopted for the purposes of this study (Holden, 2010; Ajzen, 2002). Moreover, question selection has been a matter for significant discussion with research supervisors and refined to ensure alignment with study objectives. Primarily, the question items were drafted consistently with the themes in the literature and focused on exploring the responses from the quantitative survey. The interview guide in Appendix B comprises a total of 14 interview questions: six questions explored participants' risk attitudes and views of the financial crisis; two questions addressed baseline/extant risk perceptions and switching behaviour towards financial products; and six questions explored risk perceptions and responses for the different risk scenarios.

4.6 Data Collection Procedures

4.6.1 Questionnaire

For this study, a self-administered questionnaire has been conducted to ensure a high response rate and to maximise convenience (Saunders et al. 2011; Kvale, 1983). Access was negotiated with key personnel at the sampled organisation. Permission was obtained to publicise the survey on the organisation's intranet. A link for the survey was published directing participants to SurveyMonkey, a secure online survey system utilised by academic and professional researchers. Participants had the opportunity to read information about the project and confirm their consent following which they could proceed to complete the survey.

4.6.2 Qualitative Semi-Structured Interviews

The second phase of case study data collection employed a semi-structured method as shown in Figure 4-5 to gather in-depth qualitative data from subjects on their perspectives and the underlying factors influencing their perceptions and decision-making. Interviews are widely acknowledged as a significant source of information for the qualitative researcher (Kvale, 1983) and can be described as an unstructured, direct and personal method in which single participants are interrogated (Malhotra and Birks, 2007). Kvale (1983) outlines the purpose of interviews in terms of obtaining a description of the life-world of interviewees in regard to interpretation of the meaning of described phenomena. Mainly utilised to reveal underlying attitudes, motivations, emotions and beliefs in relation to a specific topic (Malhotra and Birks, 2007), the method is therefore acknowledged to lend itself to engagement with the social world of participants through the gathering of rich and in-depth data. This permits a more complete understanding of perceptions and experiences in relation to research phenomena including in-depth insights into the contextual influences within situations not available to researchers utilising larger sample sizes (Saunders et al. 2011). Moreover, interviews provide flexibility and the opportunity to allow issues and problems emerging in the interview to be pursued and explored more fully. Yin (2009) highlights that interviews with key actors can provide short cuts to the prior history of situations and support the identification of other relevant sources of evidence. However, a number of shortcomings are acknowledged with this method in relation to reliance on the skill of the interviewer to maintain data quality and the potential for researcher bias to not only influence the course of the interview but extend to the interpretation of interview evidence (Saunders et al. 2011).

Qualitative data was collected from a sample of bank customers from Abu Dhabi Police who participated in the questionnaire survey. A small subset of interviewees was selected from the sample of participants who completed the survey questionnaire. On completion of the questionnaire, respondents were asked whether it would be acceptable to contact them

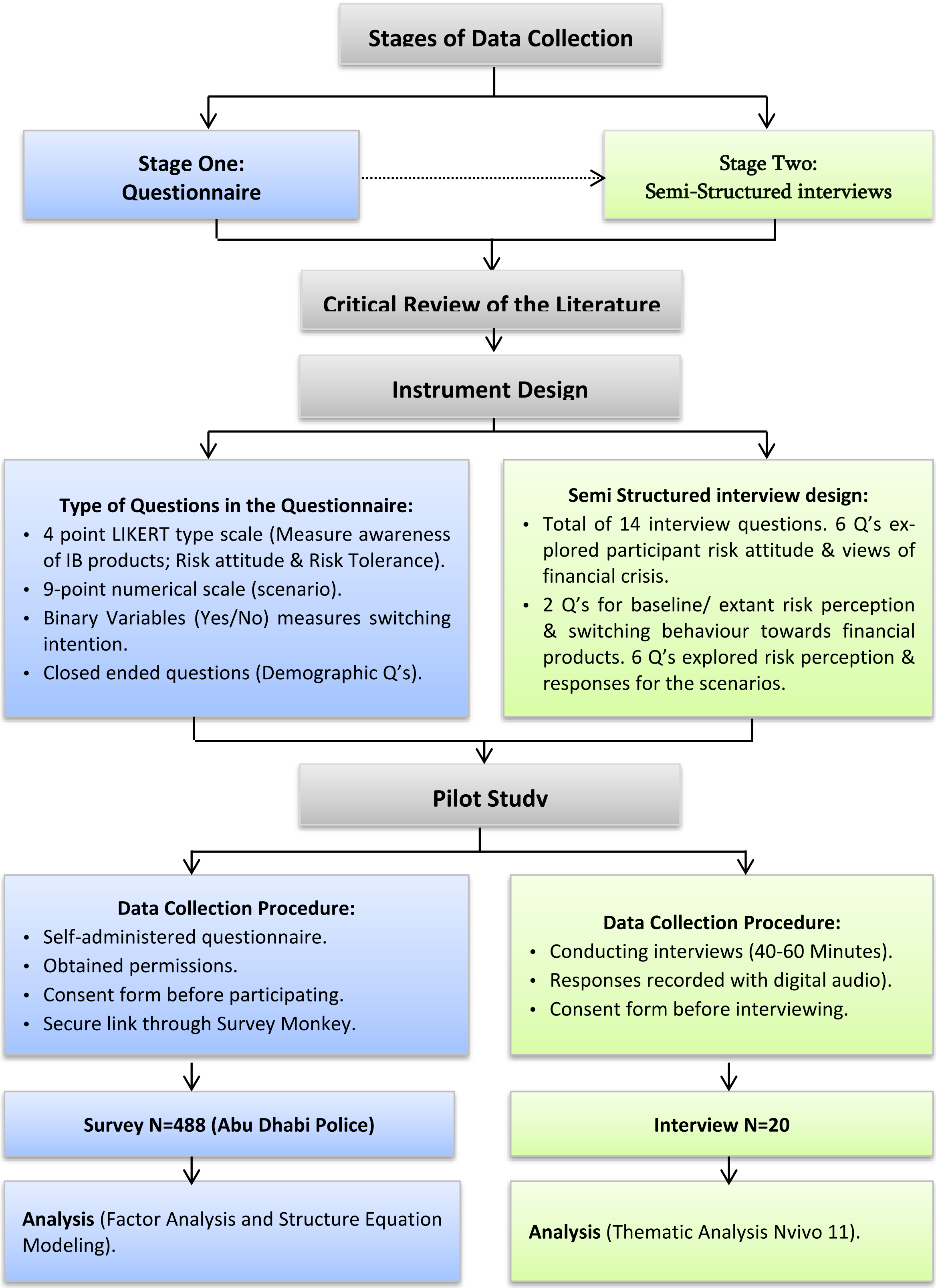

Figure 4-5 Stages of Data Collection

for a short interview and if so to supply their email address and telephone number for further contact. The interviews were scheduled at a convenient location and interviewees were informed about the purpose of the project and interview. The interview used a predefined list of questions to present to all interviewees. Responses were recorded with digital audio equipment facilitating later transcription and to maximise reliability. The interviews were conducted individually and lasted between 40-60 minutes each. Individual interviews were adopted due to the ability to better manage the interview and the challenges of police officer schedules. Arabic was the predominant language used with occasional usage of English terms.

The interviews were initiated by introducing the researcher and explaining the study background, aims and objectives. The participants were also informed of interview confidentiality and their sole use for the purposes of the study. All participants consented to interview transcription and to recording of the interview. During the course of the interview, participants' responses were relied upon to prompt further questions with the aim of gathering further and more detailed information.

4.7 Sampling

Sampling is "*the process of selecting the right individuals, objects or events for study"* (Sekaran, 2000, p.264). As it is unlikely for a researcher to test an entire population when surveying due to time and cost constraints, researchers frequently prefer the use of sampling (McDonnell et al. 2007). A number of different methods are acknowledged for selection of a sample, and the tools used are held to depend on the area of the research, the methodology and the researcher preference (Vanderstoep and Johnston, 2009). According to Cooper and Schindler (2008), the most important element in sampling is that by selecting some of the factors in a population a conclusion can be drawn about the whole population.

There are two main kinds of sampling, random sampling and non-random sampling; however, it is stressed that with either method the chosen sample must be relevant, complete, precise and up-to date (Denscombe, 2007). Random sampling suggests that each member of the population has an equal opportunity to be selected in the sample (Corbetta, 2003). In contrast, a non-random sampling approach implies that the chances for each person to be included in the sample are not as equal as with random sampling; thus participants are selected because they meet the sampling objectives (Ritchie et al. 2013). According to Saunders et al. (2011), non-random sampling can be more precise and achievable than random sampling when a small sample size is aimed for. Some of the common non-random sampling methods include: availability sampling; quota sampling; purposive sampling; and snowball sampling. These types of sampling methods are significantly useful when the research question of the study involves an in-depth exploration of a small population or when the researcher is performing primary exploratory research (Schutt, 2014).

4.7.1 Sampling Strategy

This study adopted a random probability sampling strategy to select participants. This widely accepted approach is based on the equal chance of selection of any member of the focal population, offering the potential for generalisability of results based on the generation of a representative sample of the population (Saunders et al. 2011). This suggests that potentially the findings may have some generalisability to the rest of the Abu Dhabi emirate and possibly wider generalisation to other Emirates across the UAE. Nevertheless some caution should be applied as different Emirates will vary across diverse factors such as population demographics, socio-economic conditions, and population access to IB branches and services. Probability sampling further has the benefit of minimising sampling bias in comparison with non-probability sampling (Saunders et al. 2011). A cluster random sampling approach was employed which is commonly used when the size of the population is too large to enable simple random sampling. In this case a simple one-stage cluster method involved listing all the department clusters in the population, from which clusters were chosen based on simple random sampling. All elements in the sampled clusters were chosen to participate in the survey. The method is cost effective and provides economy and feasibility. Nevertheless, the method may fail to reflect population diversity and the potential for standard errors in sample estimates is high (Saunders et al. 2011).

For the interviews in the next phase of research the criteria for recruitment was simply to draw from the same pool of participants as the quantitative phase. A single question at the end of the survey allowed respondents to indicate their willingness to participate in interviews. Of the total of 45 survey participants who agreed to continue participation, 20 participants were then selected using a stratified random sampling strategy employing a lottery technique (Alvi, 2016). This is a straightforward technique in which each participant was assigned a number from 1 to 45 which was then written on a piece of paper and mixed with the other participants' numbers in a receptacle. From this numbers were randomly retrieved by the researcher until 20 participants had been selected that represented a gender balance within the sample. This number of interviewees was considered sufficient to achieve saturation, although more interviewees could have been randomly selected if required. The qualitative phase of research based on 20 semi-structured interviews presents limits in terms of generalisation; however, despite this the phase is conducted sequentially following the quantitative phase based on random sampling. Thus, it can be argued that there is some effect in terms of triangulation, which supports greater compatibility and overall generalisation.

Risk averse Islamic finance consumers exhibit a high degree of loyalty to Islamic banks. Their loyalty is underpinned significantly by what they are familiar with and the assumption is that risk averse consumers are significantly influenced by their attitudinal position in terms of their risk tolerance and risk aversion. Under this assumption risk perception and contextual factors or conditions would not affect their behaviour in terms of switching likelihood or switching intention. Focusing on this group provides a more stringent test of the effect of risk perception on consumer decision-making and evidence in support of this would have implications for consumer decision-making for less risk averse groups.

Nevertheless, some key limitations have been cited with this sampling approach including issues of generalisation and researcher bias (Bryman and Bell, 2007). Saunders et al. (2011) acknowledged that generalisability issues can emerge in semi-structured interviews impacting data quality particularly where an unrepresentative sample quantity of a population is utilised. Alvi (2016) further contends that the potential exists for systematic error if selected clusters do not embody the characteristic diversity of the target population, and thus the representativeness of the sample of the target population can be undermined.

4.7.2 Population and Sample Frame

The population from which the primary data was collected are the employees of the Abu Dhabi Police, GHQ. Whilst this may seem initially a limited sample size that may yield limited results, it is not considered to be the case for several reasons. As the research is exploring the determinants affecting consumers' perception of risk in relation to risk perception and attitude, it is essential that the interviews be administered to people who have a good understanding of the concept of IB. The survey that is undertaken with participants from Abu Dhabi Police offers a good cross-section of Abu Dhabi society (ethnicity, gender, class) and as such represents the wider population of Abu Dhabi as a whole. These participants possess a good understanding of IB products and many also use conventional banking products in addition. This therefore gives a good sample by which to undertake cross-comparison work.

Furthermore, in order to lower the risks for the project and provide a focus to the research, access to the population is convenient since the researcher is employed by the Force and as such can gain invaluable access to the participants. In order to eliminate bias and undue influence over the participants, the researcher chose four departments within the Force that the researcher has no direct contact with, and it was thus considered that all respondents were free to provide whatever responses they felt appropriate. This connection ensured a strong response from the population, which could not be guaranteed if a wider, non-police population had been sampled, as response rates in using a wider population are likely to be much lower.

The total population of the Ministry of Interior in UAE is 83,000 employees, which represents 4% of the total population of Abu Dhabi. For this study, Abu Dhabi Police, GHQ was considered which has 7 main administrative departments with a total of 34,077 employees and represents 41% of the total population of the Ministry of Interior in UAE, which is considered a high percentage compared with any other organisation in Abu Dhabi.

Due to this reason, the researcher has some confidence that the sample drawn from this overall population is highly representative of the feelings, attitudes and views of IB customers. For each administrative department, there are 6 sub-departments. For this study, four administrative departments were selected to gather the questionnaire data. The total population of these two administrative departments are 16,000 in which 500 respondents were expected to answer the questionnaire questions. According to Saunders et al. (2011), in business management and social sciences research, the confidence level is usually set at 95% with a plus or minus confidence interval of 3% to 5% when choosing a sample size, in accordance the recommended sample size for the current study would be 380. In order to ensure that the sample is large enough to undertake the intended analysis (Structural Equation Modelling) a sample size of more than 150 is required (Hair et al. 2006) therefore the researcher chose to sample 488 from the total population considering all aspects of choosing a sample size.

A total of 20 respondents were interviewed in order to gather qualitative data in relation to risk attitudes and decision-making. Interview participants were selected from the wider pool of survey participants available based on their willingness to participate further. From those a random sampling technique was again adopted that enabled the selection of participants (Saunders et al. 2011).

4.8 Data Analysis

Consistent with the mixed method approach adopted in this study, data analysis was based on techniques that are appropriate to the research method employed. As discussed in Section 4.5, both qualitative and quantitative methods were used to support the main objectives of the study. According to Cavana et al. (2001) and Sekaran (2000), multiple steps must be taken into consideration when analysing data involving preparation of data, statistical analysis, accuracy of data and testing the hypotheses to achieve accurate information and results. The next sections explain in detail the different methods used to analyse the data for this study.

4.8.1 Quantitative Data Analysis

Descriptive and inferential statistical analysis techniques were employed to determine the distribution of responses across variables and to examine relationships between variables. The structure of the questionnaire instrument and the response was designed to provide basis for statistical analysis and offer clear and unambiguous representation of the data (Saunders et al. 2011). To analyse the data from the questionnaire two software packages were employed: Statistical Package for the Social Sciences (SPSS 24) and Analysis of a Moment Structures (AMOS) for Structural Equation Modelling (SEM). Analysis proceeded through four key phases. The first phase summarised the data gathered resulting in descriptive statistics such as percentages, frequencies, mean, median and cross-tabulation.

The second exploratory stage aimed to assess the measurement scales of the latent variables in the proposed model. This involved implementing several different tests including Cronbach's alpha, corrected item-total correlation (CITC), and exploratory factor for the whole items. It is stated that the CITC test is applicable to all constructs to make certain that correlation exists between all items included within a set measuring the same construct. The objective is to ascertain whether an item belonging to a particular set correlates at an acceptable level with the combined score of all items within that same set. Any items that show inconsistency with set average scores can then be removed, as this implies that the item is not measuring the same construct measured by the remaining items in the same set (Lu et al. 2007). Consensus in the literature suggests a minimum CITC value of ≥ 0.5 (Lu et al. 2007; Patton, 2002; Koufteros et al. 2001).

Alternatively, factor analysis is conducted to investigate convergent validity among the items used to measure each construct. Construct validity is stated to refer to the extent to which the scale utilised is representative of the concept to be generalised (Davies, 1989). Premkumar and Ramamurthy (1995) emphasise that factor analysis is useful for identifying whether items used to measure a construct are convergent on the same construct. Factor analysis for the entire set can also determine the number of latent variables present across the complete set of items by assessing whether construct items relate to other constructs or items within them. Hair et al. (2006) propose that item loadings within a construct should be equal to, or greater than, 0.5. The concluding test for this stage relates to reliability, in terms of utilising calculation of the Cronbach's alpha coefficient to measure the internal consistency of the items used to assess each construct. An acceptable value for Cronbach's alpha coefficient should present above 0.7, according to Nunnally (1967), although values equivalent to or slightly lower than 0.7 can be admitted. Given that the core aim is exploration the tests combined are acknowledged to provide significant benefits for the initial stages of analysis (Koufteros, 1999).

The third phase of the analysis process involved a confirmatory study with the objective of verifying item unidimensionality and their underlying constructs. It is acknowledged that traditional tests such as CITC and exploratory factor analysis provide a preliminary analysis particularly where a sufficient theoretical base is unavailable and as such are inadequate for testing unidimensionality. Therefore, exploratory tests are useful for the progression of hypothesised measurement models, which can then be tested using confirmatory factor analysis (Koufteros et al. 2001). Consequently, confirmatory factor analysis was performed on the complete set of items. Following this, reliability tests were enacted by assessing individual item reliability and the composite reliability of the construct (Kwong and Wong, 2013). The reliability of individual items was assessed utilising the significance of the item's loadings. The literature suggests that the loading for every individual item on its underlying construct should present at ≥ 0.7 (Koufteros, 1999). Following this, validity tests were also performed to identify convergent and discriminant validity. The basic test for convergent validity is calculating the average variance extracted (AVE) (Hair et al. 2011). Lu et al. (2007) assert that convergent validity exists when the AVE values of each construct are ≥ 0.5. Discriminant validity is assessed by comparison of the AVE with the squared correlation existing between constructs where AVE values should be greater than the squared correlation of any of the constructs in the model (Koufteros et al. 2001). A concluding test is that of multicollinearity conducted to ascertain that no significant correlation exists between independent variables (Kraha et al. 2012). Multicollinearity is evaluated on the basis of two key statistics of the variance inflation factor VIF (<5) values and tolerance (>0.2) (Pivac, 2010).

The concluding phase of the analysis involved testing of the structural model. The principal objective of this study is to generate a model of risk perception that best describes the relationship between risk perception and investor decision-making. To formulate a statistically appropriate and meaningful model Structural Equation Modelling (SEM) was adopted in this study. This technique is utilised to determine the final model constructs and moderators by testing the different relationships between them, employing multiple regression analysis, path analysis, and multi-group analysis (Hair et al. 2006).

4.8.2 Qualitative Data Analysis

Content analysis is the principal technique cited for analysing semi-structured interviews (Jankowicz, 2005). The technique is defined in terms of its ability to generate "*replicable and valid inferences from texts or other meaningful matter to the contexts of their use*" (Krippendorf, 2004, p.18). Saunders et al. (2011) highlight the generation of valuable data and meanings from multi-faceted and complex data and transcripts enabling conclusions to be drawn. This study adopted a pattern-matching content analysis technique to link multiple items of data with theoretical propositions (Yin, 2009).

Data analysis began with interview transcription, following which the transcripts were coded according to the proposed study constructs. This enabled data to be compared and contrasted and linked to the constructs. The process was facilitated by NVIVO 11 software, supporting the organisation, classification and allocation of the data through utilisation of features such as codes and nodes. Saunders et al. (2011) emphasise that data categorisation depends on category development and linking categories to meaningful pieces of data. The technique enabled quantitative data analysis and the uncovering of relationships in the data gathered, allowing the researcher to draw valid conclusions.

In particular, the form of content analysis selected was thematic analysis adopted to analyse the qualitative data in relation to risk perceptions of IB products and investment decision-making. This method allowed for a systematic and structured approach to be implemented resulting in the maximisation of validity and reliability in the findings (Saunders et al. 2011). The technique involved the identification and analysis of patterns in the data generating themes and sub-themes, which represented meaningful aspects in relation to investor attitudes and decision-making. The patterns were analysed through comparing concepts with those that appeared connected by similar phenomena arranged together under a thematic label (Strauss and Corbin, 1998). An inductive process was adopted based on a prior set of codes with the cumulative result outlined.

Relevant themes were allowed to emerge inductively from the data through the application of an open coding procedure (Ryan and Bernard, 2003). A code can be described as a word or short phrase assigned to symbolically represent relevant content and text sections to convey core meaning (Ryan and Bernard, 2003). Using an iterative process, the first round of coding comprised ascribing codes to either single words or larger sections generating themes significant to the research. A second round of coding followed during which certain codes were reconstructed and then applied to most of the same content in addition to larger portions of data (Ryan and Bernard, 2003). A final round of coding allowed codes to be further refined and themes reconstructed. This assisted the identification of sub-themes and progression towards the conceptual generation of meaning (Ryan and Bernard, 2003).

4.9 Reliability, Validity and Triangulation

Reliability and validity are essential in any social research, and are subject to scrutiny in all research (Bryman, 2004). Reliability and validity are considered interrelated topics that impact any research where research without reliability cannot be acknowledged as valid (Malhotra and Birks, 2007; Bryman, 2004). Section 4.9.1 and Section 4.9.2 explain in detail the steps used to assess the reliability and validity of the research instruments.

4.9.1 Reliability

Reliability is defined as *"the quality of measurement method that suggests that the same data would have been collected each time in repeated observation of the same phenomenon"* (Babbie, 2010, p.143). Burns (2000) identified reliability as consisting of the dependability, stability, consistency, predictability and accuracy of the research. There are different techniques used to assess reliability including pilot testing the entire interview and questionnaire questions as discussed previously.

According to Sekaran (2000), Cronbach's alpha is a sufficient test of reliability. The variables used in the questionnaire were tested through Cronbach's alpha statistical test in SPSS program to determine the reliability of the responses. The value of the Cronbach's alpha ranged from 0 to 1, where the higher values of Cronbach's alpha indicates higher reliability (Cavana et al. 2001; Kline, 2000). The Cronbach's alpha for this study exceeded the critical value of 0.6 (Malhotra and Birks, 2007). As Table 5-6 in Section 5.3.3.3 shows, for all constructs Cronbach's alpha coefficients were above the minimum value of 0.7. The results signify that the items comprising each construct are internally consistent and have high levels of correlation amongst each other (Sekaran, 2000).

Questionnaire design in this study also incorporated a number of suggestions by Oppenheim (2000). Short, clear questions were formulated to facilitate easy understanding, while complex, ambiguous questions were avoided. Moreover, technical language or jargon was eliminated unless explained to participants. To avoid bias, questions considered suggestive or leading were not included. Alternative reliability relates to the concept of internal consistency within scales and constructs identifying the extent to which a set of items assesses the same construct (Tavakol and Dennick, 2011). Reliability is acknowledged to refer to measuring consistency, repeatability and the likelihood of achieving similar results if the measure was duplicated (Oppenheim, 2000). Kumar and Phrommathed (2005) emphasise predictability, consistency, stability and accuracy as key aspects of reliability in relation to research instruments and reliable instrument measurements. Reliability in measurement is considered critical for both theoretical and applied research as it represents a key step towards construct validity (Aiken, 2002). Reliability is also acknowledged as fundamental both in the case of utilisation of established scales as well as the formulation of new scales (Lacobucci and Duhachek, 2003). A range of reliability tests were undertaken in the analysis stage including inter-item correlations, corrected item-total correlations, assessment of scale internal consistency, and reliability including Cronbach's alpha.

For Structural Equation Modelling (SEM) exploratory factor analysis was conducted to examine and test the underlying relationships between measured variables. A measurement model analysis was performed before the full structural model was assessed (Cheng, 2001;

Anderson and Gerbing, 1988). This evaluation involved confirmatory factor analysis, which tests all measures simultaneously with the aim of enhancing the psychometric attributes of the measures. Individual item and construct reliability were first adopted to assess measurement reliability (Martinez-Canas et al. 2012).

4.9.2 Validity

Validity indicates the extent to which a measurement instrument is precise in measuring what it aims to measure (Proctor, 2005; Mason, 2002). According to Saunders et al. (2011), validity is concerned with ensuring that the findings of the research reflect what they should be about. Validity can be applied to two key aspects of the study namely the instruments adopted and the research design. Testing the validity of the instruments utilised involves assessing the degree to which the instrument measures what it is designed to measure (Bryman and Hardy, 2004). Kumar and Phrommathed (2005) emphasise that validity reflects the extent of precision and accuracy in the measurements resulting from study instruments. The second aspect of validity relating to research design involves assessing the degree to which the design sustains the intended conclusions based on the findings. The literature does not provide a specific indicator for instrument validity, although Churchill and Lacobucci (2009) highlight that validity can be categorised in two key ways of content and construct validity.

There are different methods of validity a researcher may utilise according to Litwin (1995) and Coolican (1990). These methods include face validity, construct validity, content validity and criterion validity. To ensure the validity of the research, the following methods were taken into consideration:

A) **Face validity** was used to ensure the validation of the data collection instruments through matching the interview questions and the questionnaire questions with the aims and objectives of this study; thus answering the research questions. Face validity identifies whether the questionnaire is appropriate for achieving the purposes of the study (Parsian and Dunning, 2009). Acknowledged as the easiest form of validation to perform, it is also considered the weakest. Face validity is concerned with questionnaire appearance in terms of clarity and consistency, readability and feasibility (DeVon et al. 2007; Trochim, 2001). For all stages of questionnaire development, face validity was considered and emphasised to ensure clarity and understandability for participants.

B) **Content validity** was taken into consideration through reviewing the existing literature to identify the gaps in the literature and therefore enhancing the model framework of the study. Content validity can be assessed effectively based on the perspectives of individuals sufficiently experienced in different aspects of the research and their suggestions and comments on wording of question items (Hair et al. 2006). Content validity within the data collection methods for this study has been supported by a comprehensive literature review and undergoing a critical process of item selection and refinement during the stages of questionnaire and interview development. Thus the items utilised to measure the constructs originated in previous empirical research adapted for the study context.

C) Questionnaires were distributed in Arabic and English; to validate the Arabic scripts an authorised translator was used.

D) A self-completion method was utilised using an online survey.

E) Participants in the survey and the interview were notified that their personal details will remain anonymous and would be used only for the purpose of the research.

For the SEM the model was tested for convergent and discriminant validity. Convergent validity is the extent to which a trait is well measured by its indicators. Examination of convergent validity was conducted evaluating the standard loading for each item on its construct. Assessment of discriminant validity was adopted with the intention of confirming that constructs measure discrete concepts and therefore that the items of each construct do not clearly correlate with other items measuring that construct (Koufteros, 1999). Based on Lu et al. (2007, p.861) discriminant validity was held to exist if the analysis showed that the items for each construct *"share more common variances with their representative constructs than any variance that construct shares with other constructs"*.

Model Specification identified the stage of final statement of the conceptual model. A range of measures were used to test for model fit: CMIN/DF, P-value, CFI, RMSEA, PCLOSE, GFI, AGFI and RMSR (Hair et al. 2010; Hu and Bentler, 1999).

4.9.3 Triangulation

Many researchers use triangulation as a multi method approach to achieve better results. Fontana and Frey (2005) argue that using triangulation in research helps researchers to gain improved understanding of human behaviour through using different methods in different combinations. According to Creswell and Miller (2000, p.126) triangulation is *"a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study"*. Robson (2002, p.553) explains the importance of triangulation noting that: *"A research approach employing more than one perspective, theory, participant, method or analysis. The notion is that this helps in getting a better 'fix' on the object of study"*.

Golafshani (2003) further explains the importance of triangulation in improving the validity and reliability of the research and support for exploring the issues during the study.

Patton (2002) identified four elements key to achieving research triangulation which were incorporated and used within this study as shown in Figure 4-6. This is explained in the following points:

- **A) Data triangulation:** research data was collected from different sources using different research methods such as documentation, semi-structured interviews and survey/questionnaire.
- **B) Investigator triangulation:** the researcher worked closely with three supervisors who helped in checking and evaluating the research work.
- **C) Theory triangulation:** the research conceptual framework was developed from previous studies and the literature review conducted in previous chapters.
- **D) Methodological triangulation:** to help achieve the aim and objectives of the study, mixed methods (quantitative and qualitative) data gathering and triangulation were used.

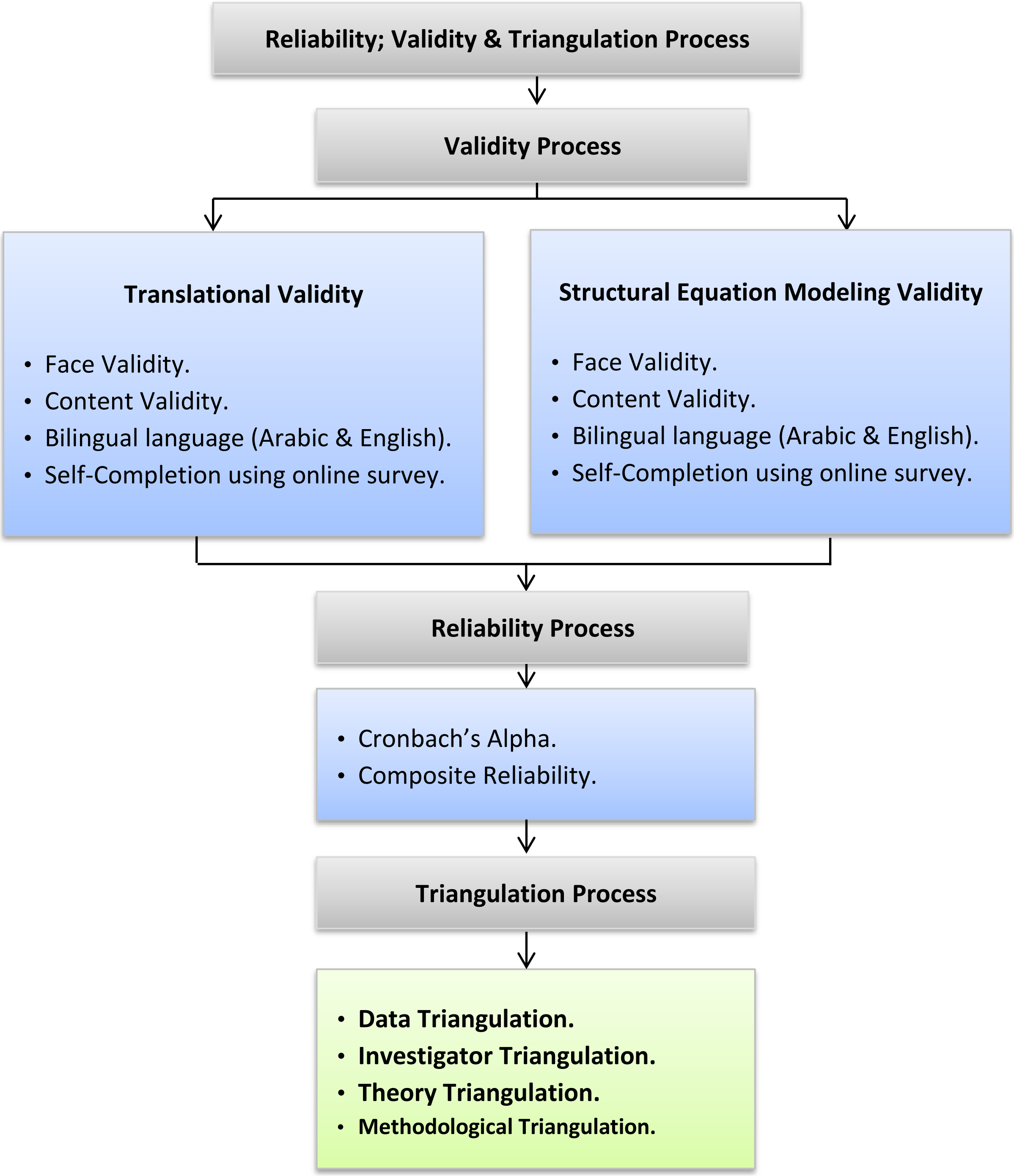

Figure 4-6 Reliability, Validity and Triangulation Process

4.10 Ethical Considerations

Ethics are referred to as the moral code and regulations that researchers abide by while conducting their research (Dawson, 2009). According to Sieber (2009), researchers should respect participants' interests when conducting their research and neglect of this factor will most likely limit the use of findings from the research. Furthermore, social research involves exploring people's experiences and motivations. This is acknowledged to depend on a successful relationship between the researcher and the participant, which occurs through respecting ethical considerations (Miller and Brewer, 2003). Researchers should be aware of how to interact with different types of respondents and keep anonymity and confidentiality in consideration at all times (Davies and Hughes, 2014).

For this research, implementation of the ethics guidelines and approval procedures at Cardiff Metropolitan University (UWIC) were followed to ensure that the research used the appropriate tools to protect the participants of this study. Furthermore, before interacting with participants the researcher provided accurate information on the aim and objectives of the study to all participants beforehand. Participation in the study was voluntary to respondents. All the personal information given was considered confidential and anonymous, and was used for the purpose of this research only as discussed with the participants. Participants were informed that they could willingly withdraw from the study at any time during the interview or while answering the questionnaire, as well as refuse to answer any questions that they did not want to. No harm or any risk impacted participants during the conduct of the research. Finally, copyright issues of data ownership and intellectual property rights were taken into consideration and fully observed in this study.

4.11 Summary

This chapter discussed potential research approaches and identified the pragmatist approach adopted as the most suitable for achieving the aim and objectives of this study combining mixed methods (quantitative and qualitative) approaches. The research practical approach is classified into research methodology and methods. The research methodology of this study was developed to determine and assess consumer perceptions of risk in relation to the products and services offered by IBs in the UAE. Two key methods were described and justified of quantitative survey questionnaire and qualitative interviews and the data collection procedures used were identified. Next, research procedures in relation to the population and sampling identification were discussed followed by a description of the techniques and methods used to analyse the quantitative and qualitative data. Reliability and validity were next outlined followed by a discussion of the ethical considerations and procedures adopted to fulfil ethical obligations. In summary, this chapter describes a robust and systematic research design to effectively examine investor risk in order to provide an overall insight of the different factors that influence consumer risk perception and decision making to risk taking and investment in banking products.

Chapter 5 Data Analysis: Results

5 Data Analysis Results

5.1 Introduction

This chapter presents the results of data gathered from the quantitative and qualitative research process. The data forms the basis for addressing the primary aim of this study: to investigate the relationship between risk perceptions of Islamic Banking (IB) products and investment decision-making. The results in this chapter address six main hypotheses:

H1a Risk tolerance positively influences risk perception.

H1b Risk aversion positively influences risk perception.

H2a Risk tolerance positively influences a) switching likelihood and b) switching intention.

H2b Risk aversion positively influences a) switching likelihood and b) switching intention.

H3a Risk perception mediates the relationship between risk tolerance and a) switching likelihood and b) switching intention.

H3b. Risk perception mediates the relationship between risk aversion and a) switching likelihood and b) switching intention.

H4a Risk perception positively influences switching intention.

H4b Risk perception positively influences switching likelihood.

H5a The influence of Risk perception on switching likelihood is significantly different under alternative risk scenarios (Shariah Compliance, Profit Performance, Economic Conditions, Interest Rates).

H5b The influence of Risk perception on switching intention is significantly different under alternative risk scenarios (Shariah Compliance, Profit Performance, Economic Conditions, Interest Rates).

H6a Financial expertise has a positive influence on risk perception.

H6b IB knowledge has a positive influence on risk perception.

H6c Number of children has a positive influence on risk perception.

H6d There is a statistically significant difference in risk perception between age groups.

H6e There is a statistically significant difference in risk perception between education levels.

H6f There is a statistically significant difference in risk perception between male and female consumers.

The chapter is divided into four sections: descriptive analysis, exploratory analysis, confirmatory factor analysis and thematic analysis. The descriptive analysis presents the findings from the survey respondents' demographic and other responses using frequencies and data. The second section presents the exploratory analysis for key measurement scales that are explored with tests evaluating reliability and validity including collinearity and normality tests. The third section addresses the confirmatory factor analysis including testing and evaluation of the measurement models and structural models developed using SEM in AMOS VR26. The aim was to identify the final model, the shape of the relationships amongst the structural models and to examine the effects of moderators on the model and its relationships. The last stage includes a series of tests such as path analysis, predictive power, predictive relevance, effect size, mediation and moderation.

5.2 Descriptive Analysis

Two sets of participants were sampled for this study for the two stages of research: quantitative survey and semi-structured interviews. In the first stage, a quantitative survey was administered to a sample of 488 employees at Abu Dhabi Police (ADP), GHQ. The survey was promoted through internal information news channels and the portal system with access to a potential sample frame of 34,077 staff. Within the organisation, communication was directed to a sub-sample frame of 16,000 personnel that represented staff from across 4 departments where direct communication could be confirmed both through emails and through forum postings. The response rate from this sample was 488 giving a response rate of 45%, of which 15 were incomplete. The descriptives of the key characteristics are presented in Table 5-1. The survey represents a balanced number of men and women; women respondents were in the majority at 54% and men at 46%.

The respondents were predominantly UAE citizens with a small representation from a broad number of other nationalities (15%) as shown in Table 5-1. Nearly all participants were Muslims and the remainder non-Muslims (2%). In terms of age, the sample was dominated by two age groups: 30-40 (53%) and 40-50 (32%) age groups. This pattern is representative of the general population at ADP. A large majority (85%) were married, with singles representing 13% of the sample and the remainder either divorced or widowed. Of the sample 62% had between 1 and 3 children; 12% had more than 4 children; and 26% were without children. A major part of the sample had higher-level education, with 50% possessing graduate level education and 34% having post-graduate education.

Table 5-1 Descriptives of Participant Characteristics

Demographic Variables	Category	Research Sample (N=488)	
		Frequency	Percent
Gender	Male	222	46
	Female	266	54
Nationalities	UAE	419	86
	Others	69	14
Religion	Muslim	480	98
	Non-Muslim	8	2
Age	20-30	50	10
	30-40	259	53
	40-50	157	32
	50-60	22	5
Education	(1) high school	76	16
	(2) degree	245	50
	(3) higher	167	34
Marital Status	Divorced	11	2
	Married	414	85
	Single	63	13
No. Children	None	127	26
	1-3 child	302	62
	>4	59	12
Years Invest	0	112	23
	1-2	276	57
	3-6	69	14
	>7	31	6
Awareness of Risk Mitigation Plan	Yes	417	85
	No	71	15

In relation to investor knowledge and experience, more than three quarters of participants had engaged in investment activity. The level of investment experience in terms of years varied, but predominantly was between 1 and 2 years, specifically: 0 (23%);

1 – 2 years (57%); 3-6 years (14%), and more than 7 years (6%). Awareness of risk mitigation plan (RMP) of the UAE Central Bank was also investigated with the majority (85%) reporting their awareness of the plan.

5.2.1 External Analysis of Socio-Demographic Results

A comparison of the socio-demographic data from this study with external studies was conducted using data sources ranging between 1960 and 2014. A comparison of this data indicates a degree of consistency between this study's sample set and other large-scale surveys in the case of specific variables. In relation to age and risk perceptions and risk attitudes, the findings from this research were consistent with demographic data across other studies in indicating a relationship (Outreville, 2014; Lin, 2009). Research findings in other studies indicate a non-linear relationship between age and risk aversion (Lin, 2009), and data by Harrison et al. (2007) finds a decrease in risk aversion in early years followed by an increase with age up to 65 years. This pattern is consistent with the findings in this research.

In terms of education, the data from this study was not borne out in other research which did find a statistically significant relationship, and did not support the premise that higher educated consumers are less averse to risk or have lower risk perceptions than less educated consumers (Outreville, 2013). In regards to family responsibilities and risk perception, the findings from this study are consistent with the data from other studies which show that having offspring and family responsibilities have an impact on risk perception (Christiansen et al. 2015; Bertocchi et al. 2011). Data shows that the presence of children is one of the strongest family variables influencing risk attitudes and risk perceptions (Chaulk et al. 2013; Van de Venter et al. 2012; West and Worthington, 2012). Data from Grable (2016) for the risk tolerance construct provides a further basis for a socio-demographic comparison with this study. Demographics showed a number of characteristics were associated with high levels of risk tolerance including male individuals, younger individuals' higher education, income level (either income sources as business owner or stable income), religiosity and financial knowledge. These characteristics were captured in this study and the results were consistent to varying degrees with results from Grable's (2016) demographic analysis. In relation to gender and risk aversion, the lack of statistically significant results in this study is inconsistent with a number of surveys that show gender differences and found women to be more risk averse and less confident decision-makers than men (Outreville, 2014; Croson and Gneezy, 2009; Eckel and Grossman, 2008). However these findings further support the relationship between gender and risk attitudes in relation to risk perception, with females recording a higher level of risk perception than men towards IB products.

5.2.2 Gender Cross-Tabulation

Cross tabulation is proposed to entail a bivariate (two-variable) distribution where *"the distribution of one variable is presented for each category of another variable"* while permitting the elaboration of three or more variables (Chambliss and Schutt, 2012, p.169). This method has the advantage of providing a clear and simple explanation of the data that can support the identification of any relationship between two variables (Chambliss and Schutt, 2012). Figure 5-1 shows the distribution of participants by gender and age, showing clearly that women outnumber men in the sample in the 30-40 and 40-50 age-range.

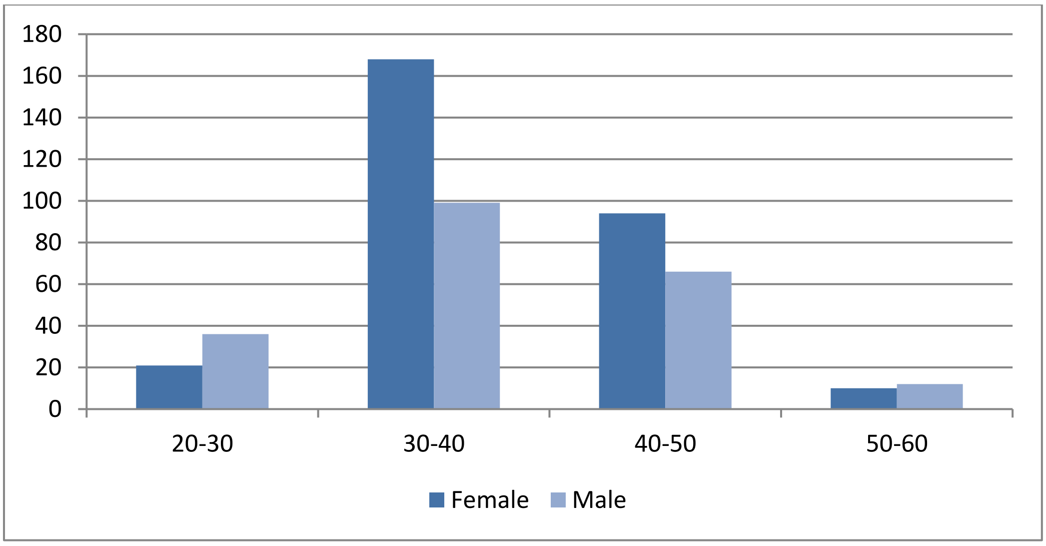

Figure 5-1 Distribution of Participants by Gender and Age

Figure 5-2, showing the cross-tabulation of Confidence by Gender, indicates the most dominant category for both males and females, forming 65% of the overall sample, was disagreement with the statement that they are fairly confident in their ability to make investment decisions. Over a third of women (37%) disagreed in slight contrast to just under a third of men (28%). Of those that agreed with the statement, women outnumbered men at 16% and 12% respectively. The smallest category was strong agreement which was low at less than 3% overall, although a higher number of women (2%) than men (0.6%) reported this level of agreement. On balance, women were more likely to disagree than men, yet those that agreed were more numerous than men and dominated the small number of cases where higher levels of confidence were cited.

Figure 5-3 shows the cross-tabulation of data that was collected on investment knowledge in terms of the degree to which participants had in-depth knowledge of how the stock and bond financial markets operate. Confidence in participants' ability to make financial decisions was measured. In both cases, a 4-point scale was utilised and the average score for the population was 2.8 for knowledge and 2.1 for confidence from a maximum score of 4.

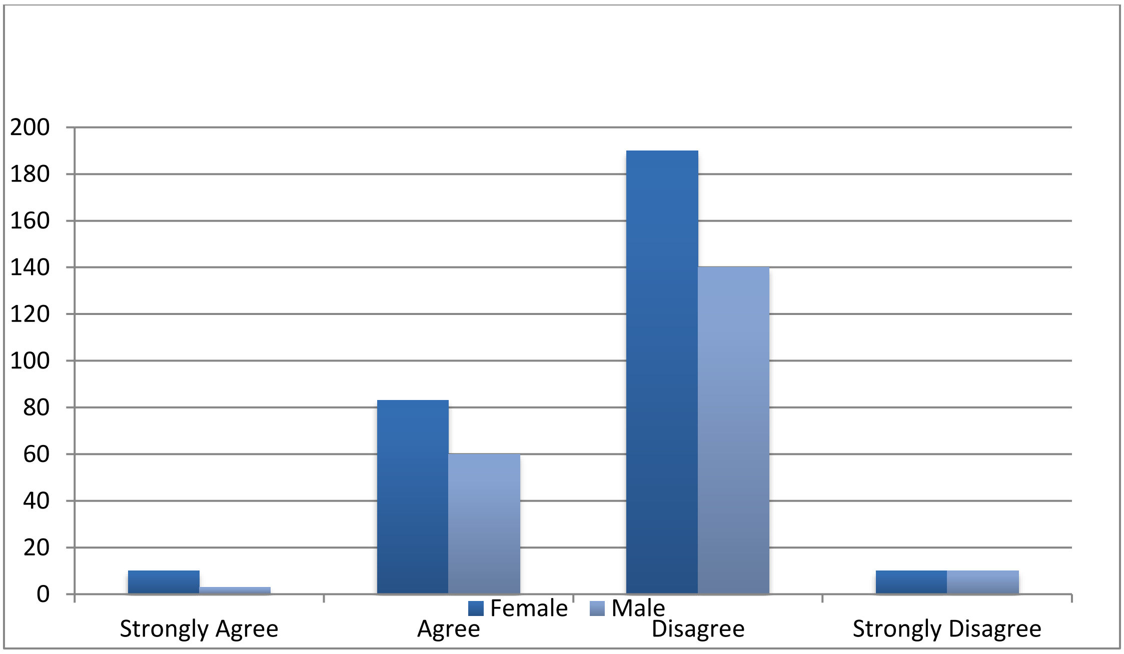

Figure 5-2 Distribution of Respondents' Confidence by Gender

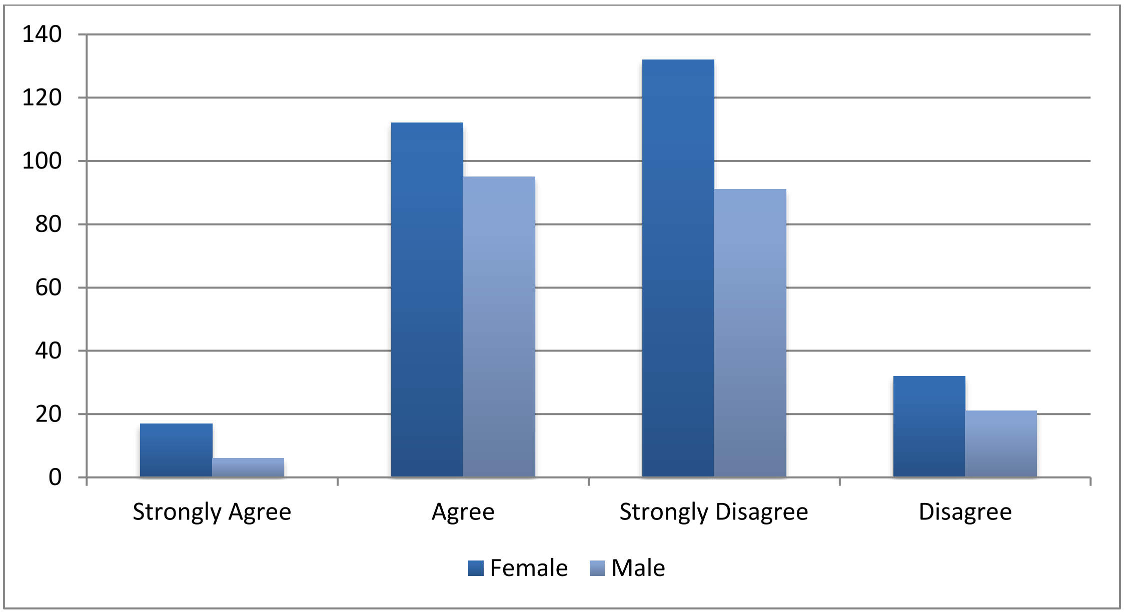

Figure 5-3 Frequency Distribution Knowledge by Gender

5.2.3 Cross-Tabulations: Switching Likelihood and Account Types

The average score for the sample (*n*=488) computed for the likelihood for switching based on the scale of 1 to 9 was compared across the products under each scenario. The average likelihood for switching for all products was compared with the baseline scale to indicate the degree to which scores deviated from the baseline scenario. Appendix C presents the pattern of results under the Shariah compliance scenario (Scenario 1). For Current Account (CA), Saving Accounts (SAV) and Investment accounts (INV) there is significant change in the average compared to the baseline average score. Presented with the Shariah compliance scenario, the sample on average is up to 60% more likely to switch to an alternative banking system. Saving deposits and current account deposits recorded the highest percentage compared to investment accounts. However, this difference is influenced by the higher baseline likelihood. The likelihood for switching may be influenced by a ceiling affect, in that respondents may register small changes in the scale for high baseline scores. This result is consistent with the scenario 2 and scenario 3 in Appendix C. Faced with either a deterioration in profit performance (scenario 2) or deterioration in economic conditions, the sample on average was more likely to switch. However, under scenario 4 (interest rates) perceived switching behaviour is significantly different. Across all financial products, the difference with the baseline is smaller than other scenarios with a difference of 8% for Current accounts, 10% for Saving accounts and 7% for Investment accounts. The results indicate significantly lower likelihood to switch for interest rates compared to other conditions.

5.3 Exploratory Factor Analysis

The exploratory study encompasses an exploratory factor analysis involving the complete data set. Factor analysis is a multivariate statistical process utilised to investigate dimensionality within a collection of variables (Williams et al. 2010; Muthén and Muthén, 2008). Latent variables in factor analysis are held to signify unobserved factors, constructs or dimensions. According to Thompson (2004), many reasons exist for the utilisation of factor analysis by researchers including the identification of dimensions or factors in the data and whether these can be theoretically interpreted. Lu et al. (2007, p.885) further underline that factor analysis supports the detection of the existence of *"meaningful patterns among original variables and for extracting the main service factors"*.

Factor analysis is also acknowledged to assist researchers in the identification of the character and quantity of latent variables or factors underlying a collection of items. The process assesses if the items employed to measure a construct are both unidimensional and homogenous (Thompson, 2004). The evaluation of construct validity is also considered possible through examination of the correlations existing between all the variables and consequently lessening the quantity of variables to a smaller collection of factors or dimensions (Muthén and Muthén, 2008).

Two principal modes of factor analysis are acknowledged of confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) (Williams et al. 2010). CFA is perceived as clearly confirmatory in character and used mainly to test models and theories (Thompson, 2004). In CFA analysis, assumptions are made from the beginning on the number of factors present derived from the model or theory under study. This contrasts with EFA analysis which is exploratory in character and does not assume a pre-determined number or types of variables present (Muthén and Muthén, 2008). As a result, EFA is acknowledged to permit the exploration of key factors or dimensions for the generation of a theory or model based on a marginally greater quantity of latent variables represented in a collection of items (Thompson, 2004). EFA is emphasised to enable the exploration of the *"dimensionality of a measurement instrument by finding the smallest number of interpretable factors needed to explain the correlations among a set of variables"* (Muthén and Muthén, 2008, p.48).

EFA was utilised to examine the unidimensionality of the scales used in the study and to explore opportunities to reduce the number of variables in the final analysis across the 4 scenarios to a more manageable collection of underlying factors (Lu et al. 2007). EFA is helpful in detecting the amount of meaningful patterns that occur in original variables. To extract factors, two key methods are used of principal components analysis (PCA) and principal axis factoring (PAF). PCA is generally perceived to engage in diminishing the number of items into smaller sets of components through identifying those factors accounting for common variance in a collection of variables (Lu et al. 2007).

PAF in contrast is principally utilised to determine the key factors necessary for the development of theory by identifying the minimum number of factors that account for correlations or common variance between a variable set (Worthington and Whittaker, 2006). PAF is also considered beneficial for revealing items that measure several factors concurrently or fail to measure the target factor (Lu et al. 2007). Thus this study adopts PAF techniques to extract the factors.

The study employed SPSS (24) to conduct the EFA. Factor analysis was applied to dimensions in the survey and in each case the analysis comprised three key stages to assess the suitability of the current dataset for factor analysis, factor extraction and factor rotation and interpretation.

5.3.1 Variables for Analysis

Of the initial 38 items, 19 items and sub-items relating to 3 dimensions were factor analysed across their separate factor analyses: Knowledge and Awareness of Islamic principles dimension; risk tolerance; risk aversion, risk perception and switching likelihood. In the latter case, separate factor analysis was performed on the risk perceptions and the switching of three product types under each scenario. The original data for risk perception and switching likelihood was based on measurements for the three product types: Current Account Deposits; Savings Deposits; and Investment Deposits. Participants provided a risk rating between 1 and 9, where 1 = Low Risk and 9 = High Risk, for each product type. Switching likelihood based on a 9-point scale, where 9 is definitely switching and 1 is definitely not switching, was also measured under existing circumstances and for the following four scenarios:

Scenario 1 - Deterioration in Shariah Compliance - The bank's operations and products have become less compliant with Shariah principles. Based on this scenario please indicate the level of risk you would now associate with the following products at this bank.

Scenario 2 - Deterioration in Profit Performance - The bank's profit performance is forecast to be static at zero over the next 2 years.

Scenario 3 - Deterioration in Economy - A long lasting high inflation and low economic growth period is forecast

Scenario 4 - High Interest Rates - a long lasting increasing trend in interest rates is forecast.

Factor analysis was conducted at each level to determine whether the product variables could be reduced or whether they indeed reflected distinct patterns of responses that could be further analysed.

5.3.2 Assessment of Data

Assessment of the suitability of the data is based on a number of issues: sample size and strength of relationships among the variables (Pallant, 2010). The sample size of 488 cases exceeded the minimum threshold of 150 and the satisfactory level of 300 noted by Tabachnick and Fidell (2007). Two tests were performed to assess multicollinearity of variance inflation factor (VIF) and tolerance. The threshold for multicollinearity is ± 3 for VIF. In all cases, the VIF value was within the acceptable range.

5.3.2.1 KMO and Bartlett's Test

Kaiser-Meyer-Olkin (KMO) was performed to test for sampling adequacy. The results in Table 5-2 indicate that the KMO's results are within the acceptable range. The Chi-square is statistically significant at the 0% level. Bartlett's test was performed which confirmed that the inter-item correlations matrix for each dimension were not identity matrices and the current dataset is suitable for factor analysis. The results were statistically significant at $p < 0.05$ for the factor analysis to be appropriate, while the KMO should range between 0 and 1 with a minimum threshold of 0.6 for good factor analysis (Pallant, 2010).

Table 5-2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.797
Bartlett's Test of Sphericity	Approx. Chi-Square	1966.349
	Df.	66
	Sig.	.000

Table 5-3 Communalities

	Initial	Extraction
RT1	0.444	0.547
RT2	0.521	0.672
RT3	0.466	0.573
KN_AW1	0.447	0.522
KN_AW2	0.468	0.58
KN_AW3	0.426	0.486
KN_AW4	0.413	0.49
KN_AW5	0.363	0.434
RAV1	0.562	0.637
RAV2	0.594	0.686
RAV3	0.53	0.585
RAV4	0.561	0.645
Risk_CurrentAcc	0.584	0.638
Risk_SavingsAcc	0.675	0.853
Risk_InvestmentAcc	0.459	0.5
Switch_CurrentAcc	0.742	0.863
Switch__SavingsAcc	0.714	0.785
Switch_InvestmentAcc	0.648	0.705

Extraction Method: Maximum Likelihood

The data was also assessed for communality which is the degree to which an item correlates with all other items.

Table 5-3 shows that the communalities were adequate after factor extraction with items either above moderate threshold of 0.5 or above moderate threshold (0.4) for Knowledge and Awareness items (KN_AW1-5) (Field, 2009).

5.3.3 Exploratory Factor Analysis

Once these factors have been determined, the analysis was rotated based on the number of factors revealed by the scree plots. The subsequent phase is concerned with factor rotation and interpretation. Both PAF analysis and pattern matrix techniques were employed to reveal the number of factors or constructs present in the original variables.

5.3.3.1 Factor Structure

The factor analysis resulted in the extraction of 5 factors. Under Kaiser's criterion or the Eigenvalue rule, Eigenvalues greater than 1 can be retained for interpretation (Fabrigar et al. 1999). Appendix D shows that the five factors explained 62% of variance. Hair et al. (2006) note that the lowest acceptable value of explained variance within social science research is 60%. The pattern matrix in Table 5-4 shows that the variables grouped in five factors. This was after removal of cross-loading variables related to the Knowledge and Awareness Scale that was reduced to five items. For all factors the pattern matrix shows that all items loaded precisely onto one factor.

5.3.3.2 Convergent and Discriminant Validity

The factor loadings in Table 5-4 confirm that convergent and discriminant validity for the factor structure has been established. The variables in each factor have high correlation confirmed by factor loadings above the 0.5 threshold for all factors while the average across all factors exceeded 0.7 (Hair et al. 2006). The results show that the factors are distinct and uncorrelated establishing discriminant validity. This pattern matrix shows no cross-loadings and that all factors load significantly on one factor. This is confirmed by examination of the factor correlation matrix in Appendix E which shows that the correlation between factors did not exceed 0.7 and therefore are not significantly correlated. Appendix F indicates the pattern matrices for factor loadings.

Table 5-4 Pattern Matrix

	Factor				
	1	2	3	4	5
RT1				.748	
RT2				.807	
RT3				.737	
KN_AW2		.767			
KN_AW1		.719			
KN_AW3		.692			
KN_AW4		.692			
KN_AW5		.657			
RAV1	.766				
RAV2	.853				
RAV3	.728				
RAV4	.805				
Risk_CurrentAccountDeposits					.730
Risk_SavingsDeposits					.898
Risk_InvestmentDeposits					.736
Switch_CurrentAccountDeposits			.930		
Switch_SavingsDeposits			.895		
Switch_InvestmentDeposits			.763		

5.3.3.3 Reliability

Scale reliability was assessed using inter-item correlations and corrected item-total correlations to assess scale internal consistency and reliability including Cronbach's alpha as shown in Table 5-6 (De Vaus, 2002). The widely used cut-off value of 0.5 for analysing CITC shows that items higher than this value for each construct correlate well as shown in Table 5-5. Ferketich (1991) recommended that corrected item-total correlations should range between 0.30 and 0.70 for a good scale. Examination of the inter-item correlations for correlations between items within one block was also undertaken. It was found that all inter-item correlation values between construct items were above the cut-off value of 0.3 (De Vaus, 2002). The inter-items correlation coefficient does not exceed the maximum threshold (0.8) which would be a sign of multicollinearity. Corrected inter-item correlations fall marginally outside the satisfactory range of 0.2 and 0.7. As all of the inter-item correlations are approximately 0.75 this indicates that they are falling just outside the upper acceptable level.

Table 5-5 Corrected Inter-Item Correlations

Construct	No. of Items	Inter-item Correlation			Item	CITC
		Min	Max	Mean		
Risk Tolerance	3	0.579	0.615	0.60	RT1	0.659
					RT2	0.687
					RT3	0.667
Risk Aversion	4	0.593	0.654	0.627	RAV1	0.697
					RAV2	0.710
					RAV3	0.700
					RAV4	0.729
Knowledge and Awareness IB	5	0.422	0.538	0.483	KN_AW2	0.670
					KN_AW1	0.625
					KN_AW3	0.591
					KN_AW4	0.622
					KN_AW5	0.574
Risk Perception	3	0.580	0.699	0.660	Risk_CurrentAcc	0.726
					Risk_SavingsAcc	0.734
					Risk_InvestmentAcc	0.698
Switching Likelihood	3	0.662	0.71	0.670	Switch_CurrentAcc	0.724
					Switch__SavingsAcc	0.698
					Switch_InvestmentAcc	0.693

Table 5-6 Cronbach's Alphas

Scale	No. of Items	Cronbach's Alpha
Risk Tolerance	3	0.818
Risk Aversion	4	0.870
IB Knowledge and Awareness	5	0.821
Risk Perception	3	0.854
Switching Likelihood	3	0.886

Further assessment for scale internal consistency and reliability was conducted using Cronbach's alpha. According to Nunnally and Bernstein (1994) 0.70 is a satisfactory minimum for a newly proposed scale although basic research should essentially rely on scales with minimum reliability scores of 0.80. The Cronbach's alpha coefficients values calculated for the 5 construct scales shown in

Table 5-6 are all above minimum value of 0.7 indicating that items for each construct are internally consistent and have high levels of correlation between each other (Sekaran, 2000).

5.4 Confirmatory Factor Analysis: Measurements Model

5.4.1 Model Overview

Covariance based Structural Equation Modelling (CB-SEM) was undertaken using AMOS in SPSS to estimate, assess and identify potentially significant relationships among variables. The statistical software Analysis of a Moment Structures (AMOS) is an additional SPSS module that can be utilised to perform SEM, confirmatory factor analysis and path analysis (Hair et al. 2010). AMOS employs maximum likelihood (ML) results and standardised coefficients that are utilised in this study.

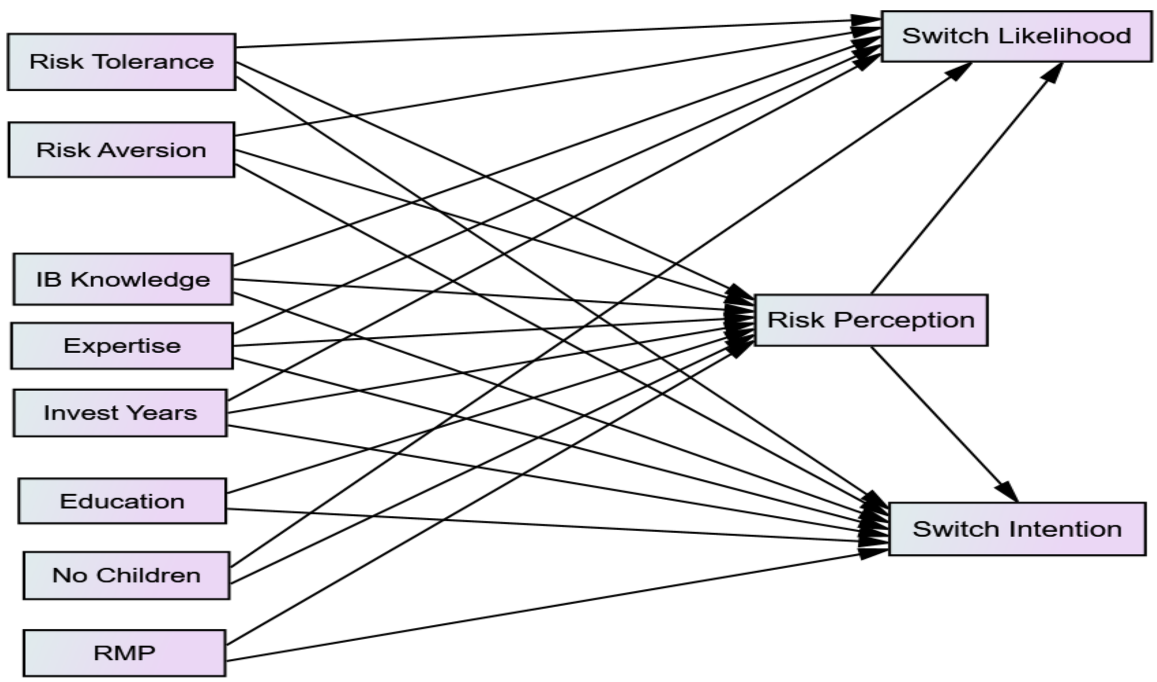

Figure 5-4 Structural Model Overview

Two main kinds of measurement scales existing within SEM were utilised. The first form is a formative measurement scale in which indicators cause the latent variable and resist interchangeability. Formative indicators can have either negative or positive relationships or further no correlation between them (Petter et al. 2007). As a result, it was not considered necessary to describe indicator reliability, discriminant validity or internal consistency as reporting these measures is acknowledged as inapplicable in cases where no relationship exists between indicators (Haenlein and Kaplan, 2004). The second form is a reflective measurement scale showing instances of highly correlated and interchangeable indicators of latent variables (Hair et al. 2013), thus the importance of reporting the validity and reliability of these indicators was considered.

Based on the above discussion, Figure 5-4 shows the structural framework for this research identifying each construct type comprising the structural model. As the constructs within the model are all reflective, the reliability of constructs and individual items, and the convergent and discriminant validity were examined in line with recommendations by Vinzi et al. (2010).

The structural model includes nine independent and three dependent variables. Risk tolerance and risk aversion represent the primary independent variables. Seven further independent variables represent demographic and control variables for evaluation. Risk perception, switching likelihood and switching intention are modelled as dependent variables. Nevertheless, the lack of arrows pointing to the independent variables suggests that, based on Kwong and Wong's (2013) theory, risk perception, switching likelihood and intention remain dependent variables.

5.4.1.1 Measurements Reliability

A measurement model analysis was performed before the full structural model was assessed (Cheng, 2001; Anderson and Gerbing, 1988). This evaluation involved confirmatory factor analysis to confirm the factor structure. Individual item and construct reliability were first adopted to assess measurement reliability (Martinez-Canas et al. 2012). In the case of individual item reliability, assessment of the standard loading of each item on its underlying construct was implemented (Hulland, 1999). Item loadings are the correlation between an item and its underlying construct and identified by loading values.

The measurement model in Figure 5-5 shows that for all factors the loadings exceed 0.7 and items load adequately on each construct. One item in the IB Knowledge construct was marginally below threshold but this was retained as the average of all the items exceeded 0.70.

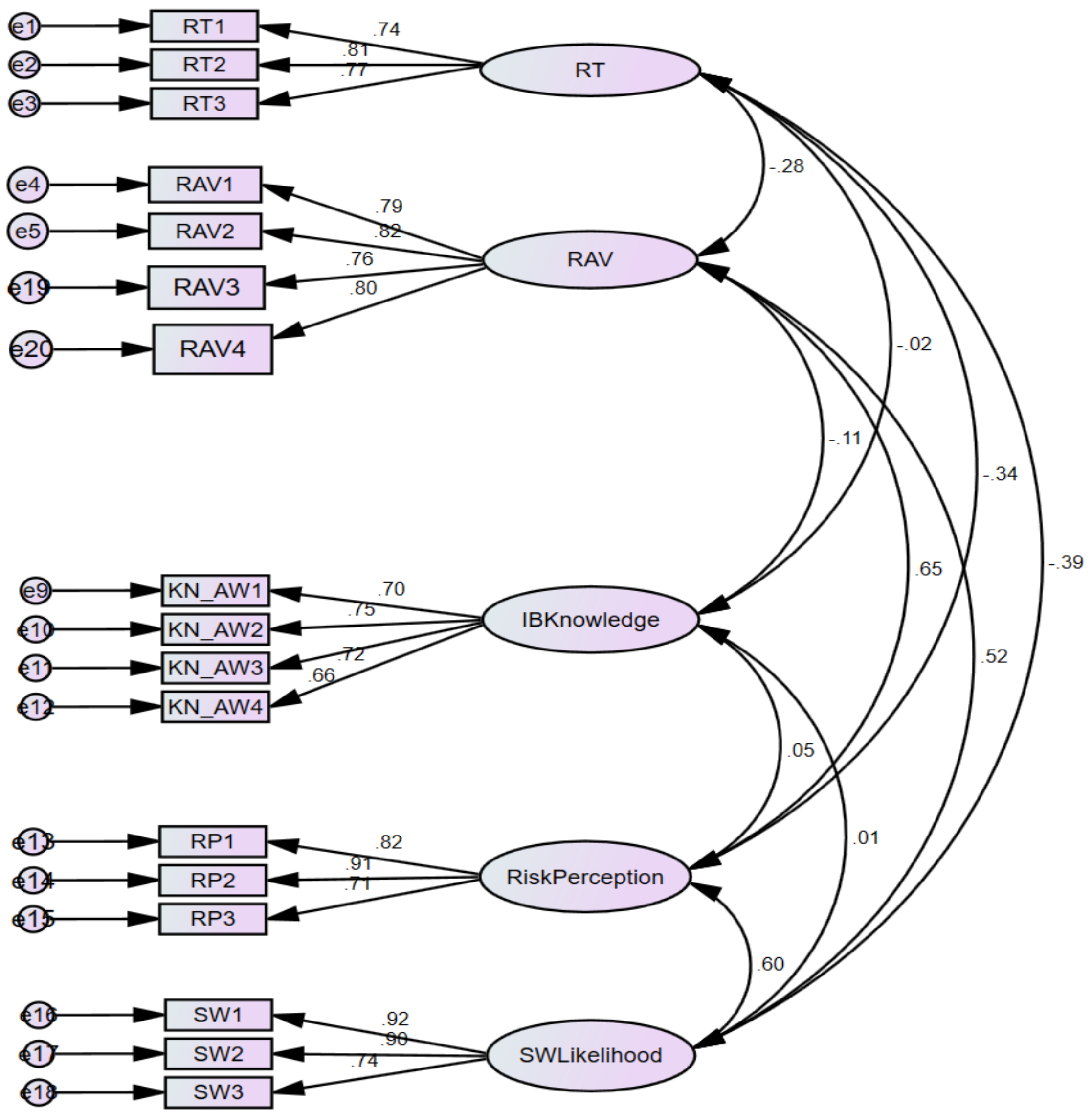

Figure 5-5 Confirmatory Factor Analysis - Measurement Model

In line with Vinzi et al. (2010), these values were checked to ensure that they equalled or surpassed 0.707 and the squared loading was equal to or exceeded 0.5. The squared item loading is held to offer an indication of item variance that an underlying construct is unable to explain. Expertise, investor knowledge and investor confidence were removed from the final measurement model due to low loadings of items**.**

Table 5-7 Validity and Reliability for Measurement Model

	CR	AVE	MSV	MAX (H)	RT	IBKnowledge	Risk Perception	SW Likelihood	RAV
RT	.814	.594	.144	.820	**.771**				
IBKnowledge	.809	.515	.010	.811	.004	**.717**			
Risk Perception	.847	.652	.369	.898	-- 0.380	.050	**.808**		
SW Likelihood	.900	.752	.241	.915	-0.358	.021	0.491	**.867**	
RiskAversion	.872	.631	.369	.874	-0.330	-0.098	.608	.473	**.794**

The model has been tested for convergent and discriminant validity. Convergent validity is the extent to which a trait is well measured by its indicators (Hair et al. 2010). Table 5-7 presents the measurement model and reliability results. For composite reliability and Max (H) (Hancock and Mueller, 2001), the results indicate that for this model all H values exceeded the minimum level > 0.7. For convergent validity AVE > 0.5 was indicated for all constructs. Convergent validity can be established when composite reliability is greater than 0.7, composite reliability is greater than the Average Variance Extracted (AVE) and AVE is greater than 0.5 (Hair et al. 2010). The results indicate these requirements to hold true for all variables. Discriminant validity is established as the Maximum Shared Variance (MSV) is less than the AVE and the square root of AVE is greater than inter-construct correlations. For most items, the average composite score surpassed the 0.70 threshold value. In addition, based on Lu et al. (2007, p.861), discriminant validity was held to exist if the analysis showed that the items for each construct *"share more common variances with their representative constructs than any variance that construct shares with other constructs"*. The measurement results in Figure 5-5 indicated good discriminant validity with covariances less than 0.8 overall (Easterby-Smith et al. 2012).

5.4.1.2 Model Fit Measurement Model

Following specification of the conceptual model, the next stage of the SEM analysis involved assessment of model fit. This was performed to identify how well the model accounted for the data. Measurement models aim to evaluate the effectiveness of latent variable representation by the measured items, while structural models focus on the causal relationships between latent variables (Lei and Wu, 2007).

Three sets of goodness of fit (GIF) measures can be utilised: parsimony fit indices; absolute fit indices and incremental fit indices (Hair et al. 2014). A number of measures can be applied to identify goodness of fit. Their accompanying metrics are shown below in Table 5-8 in conjunction with their accepted threshold values (Hu and Bentler, 1999). In summary, Table 5-8 indicates that overall, based on these measures, a good fit between the data and the model exists and a strong basis is established for proceeding with the structural model and path analysis. There is poor fit as indicated with the significant p-value, however it is acknowledged that chi-square (X^2=261.91; df=109) can be sensitive to large samples. The multiple indices of fit were employed showing good overall fit of the measurement model.

Table 5-8 Model Fit Results Measurement Model

Measure	Threshold	Result	Fit
CMIN/DF	< 3	2.403	Good
P-value	>0.05	.000	Poor
CFI	>0.90	.959	Good
RMSEA	<0.5	.049	Good
PCLOSE	>0.5 to 1	.569	Good
RMR	<0.5	.048	Good
Overall Model Fit			**Good**

The results of the model indicate several paths in the model that are statistically significant. The path coefficients in Table 5-9 indicate the relative amount of variance of the variables on the dependent variables.

5.4.1.3 Common Method Bias

Harman's single factor score was employed to test for common method bias in which all items were loaded onto one common factor. Harman’s one-factor test is a simple method to test for common method variance. With this test if a significant level of common method bias exists in the data then an exploratory common factor analysis into which all items from every construct are loaded will generate a single factor that accounts for most of the covariance between the measures (Chang et al. 2010). It has been widely used in numerous risk related studies (Martins et al. 2014; Schaupp and Carter, 2010; Glover and Benbasat, 2010) and across business research (Li et al. 2018; Lin et al. 2018; Mo et al. 2017; Yoo et al. 2017; Ingram et al. 2016). In this study the total variance for a single factor was significantly less than the 50% threshold (38%). This preliminary result suggests that there was no major concern with regards to common method bias. To further investigate this, the common latent factor (CLF) test was applied.

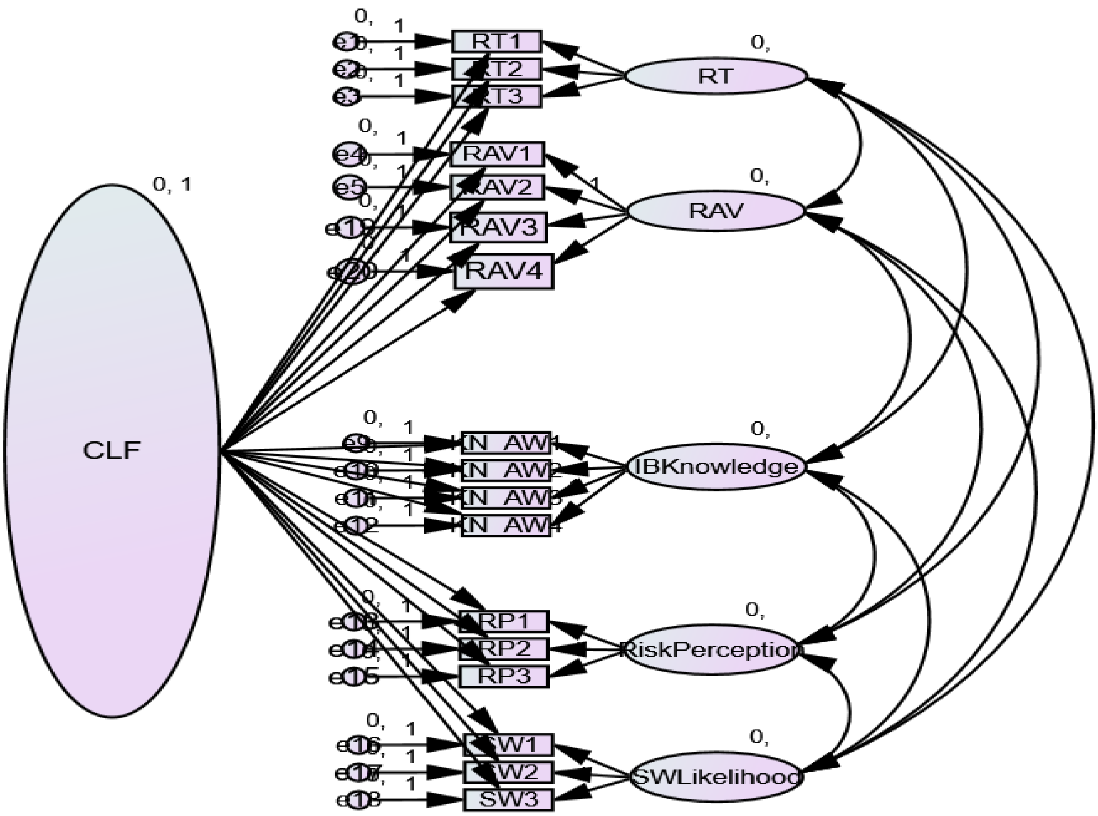

Figure 5-6 Common Latent Factor Test

The CLF test was used to capture the common variance among all observed variables in the model. This is regarded as a more accurate method for common method bias (Gaskin and Lim, 2017). Figure 5-6 shows the factor model with additional common latent factor construct. The model bias plugin CFA tool created by Gaskin and Lim (2017) was used to compare the unconstrained common method factor model to the fully constrained models. The chi-square test for the zero constrained model was significant (Delta, X^2=151.233, DF=17, p=0.000) and the equal constraints test was also significant indicating unequal distribution of bias (Delta X^2=135.193, DF=16, p=0.000). This shows there is significant shared variance which led to retention of the CLF in the subsequent causal analyses. The factor scores were imputed for the causal model while retaining the CLF to address the shared bias by parcelling it out (Gaskin and Lim, 2017).

5.5 Path Analysis

Before evaluating the path results, a model fit assessment was undertaken to establish the adequacy of the model's fit for the structural model. Based on the results in Table 5-9, good model fit was established ($\chi 2$=15.967, df=8, p=0.047) across all model fit measures.

Table 5-9 Model Fit Results Structural Model

Measure	Threshold	Result	Fit
CMIN/DF	< 3	1.962	Good
P-value	>0.05	0.047	Moderate
CFI	>0.90	0.987	Good
RMSEA	<0.5	.044	Good
PCLOSE	>0.5 to 1	.563	Good
GFI	>0.9	.993	Good
AGFI	>0.9	.960	Good
SRMR	<0.5	.030	Good
Overall Model Fit			**Good**

The model in Figure 5-7 is the result of the modification process. Modifications to the model were considered necessary as a result of the challenges involved in constructing a perfect model with first attempts. Where the data does not fit the model well, in terms of showing unacceptable measure results, any modifications made should be founded on theory. The model can be modified to improve model and degrees of freedom by eliminating items from the model with high error or items measuring a variable not showing statistical significance (Gaskin and Lim, 2017; Hooper et al. 2008; Gallagher et al. 2008). Two constructs were removed (Age and Education) from the final model as they were categorical rather than numerical, and which will be analysed to identify group differences.

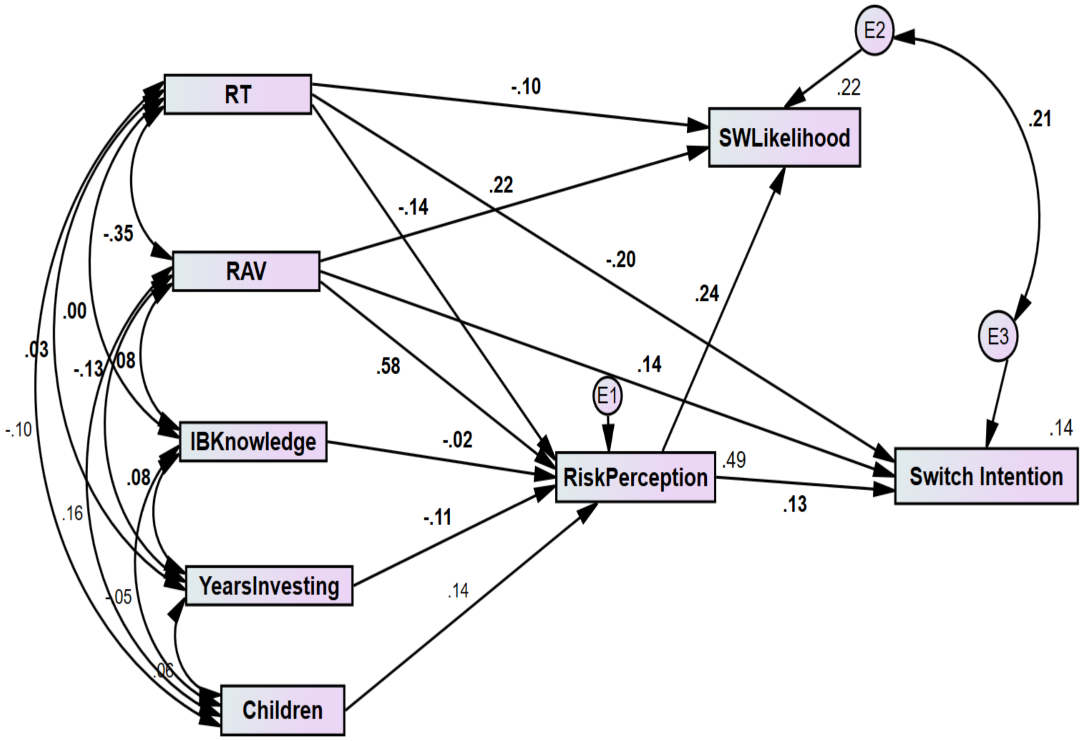

Figure 5-7 Structural Model Results

A third technique involves deleting or adding direct paths (Kline, 2015). To streamline the model, those paths with non-significant co-efficients were eliminated. Based on theory, direct paths can be added among latent variables to optimise different model fit measures with the intention of re-specifying a model, which can more effectively account for the observed data. The choice of method, however, is less important than ensuring that all modifications are theoretically justifiable (Kline, 2015; Hooper et al. 2008; Gallagher et al. 2008).

5.6 Hypothesis Testing

The key hypotheses for this study are addressed with the results from the SEM analyses. These present standardised regression coefficients of the paths in the model. Of the 11 paths analysed, all were statistically significant with the exception of one path. The standardised estimates indicate the relative contributions of each predictor variable to each outcome variable (Hooper et al. 2008).

5.6.1 H1 Relationship between Risk Attitude and Risk Perception

The first hypothesis tests the relationship between risk attitude and risk perception:

H1a Risk tolerance positively influences risk perception.

H1b Risk aversion positively influences risk perception.

The results in Table 5-10 show that Risk Tolerance negatively influences Risk Perception (β=-0.136, p=0.000). Therefore Hypothesis H1a is not supported.

In relation to H1b the results show that Risk Aversion exhibited positive influence on Risk Perception (β=0.580, p=0.000). Therefore Hypothesis H1b is supported.

Table 5-10 Path Analysis: Risk Attitudes

Paths			Estimate	S.E.	C.R.	P
Risk Perception	<---	Risk Tolerance	-0.136	0.047	-3.915	0.000
Risk Perception	<---	Risk Aversion	0.580	0.036	16.322	0.000

5.6.2 H2 Relationship between Risk Attitude and Switching Behaviour

The second hypothesis tests the relationship between risk attitude constructs and consumer decision-making as follows:

H2a Risk tolerance positively influences a) switching likelihood and b) switching intention.

H2b Risk aversion positively influences a) switching likelihood and b) switching intention.

As shown in Table 5-11, Risk Tolerance has a negative influence on both Switching Likelihood (β=-0.100, p=0.021) and Switching Intention (β=-0.203, p=0.000). Hypothesis H2a is therefore not supported. In respect of Hypothesis H2b Risk Aversion has a positive influence on Switching Likelihood (β=0.219, p=0.000) and Switching Intention (β=0.145, p=0.011) and thus there is support for H2b.

Table 5-11 Path Analysis: Risk Attitude and Switching Behaviour

Paths			Estimate	S.E.	C.R.	P
Switching Likelihood	<---	Risk Tolerance	-0.100	0.096	-2.309	0.021
Switching Likelihood	<---	Risk Aversion	0.219	0.090	4.027	0.000
Switching Intention	<---	Risk Tolerance	-0.203	0.035	-4.452	0.000
Switching Intention	<---	Risk Aversion	0.145	0.033	2.545	0.011

5.6.3 H3 Mediation Effect of Risk Perception

A mediation analysis was conducted to test H3:

> H3a Risk perception mediates the relationship between risk tolerance and a) switching likelihood and b) switching intention.
>
> H3b. Risk perception mediates the relationship between risk aversion and a) switching likelihood and b) switching intention.

The indirect effect is calculated using the user-defined estimated plugin for AMOS (Gaskin and Lim, 2017) which applies the statistical mediation analysis approach by Hayes (2009). This names two parameters and then calculates the indirect effect. Statistically significant coefficients for indirect paths support partial mediation for the four indirect paths as indicated in Table 5-12. The effects are statistically significant for the paths tested. The results show that risk perception has a mediating effect on the relationship between risk attitudes (risk aversion and risk tolerance) and decision-making (switching likelihood and switching intention).

Table 5-12 Mediation

Path	Indirect Effect	SE	Bias	P-Value	Mediation
RT -- RP -- SWL	-0.085	0.034	0.001	0.004	Yes
RT -- RP -- SWI	-0.260	0.009	0.000	0.001	Yes
RA -- RP -- SWL	0.265	0.096	0.001	0.007	Yes
RA -- RP -- SWI	0.085	0.018	0.000	0.001	Yes

In respect of H3a, risk perception has a partial mediating effect on the relationship between risk tolerance and a) switching likelihood (β=-0.085, p=0.004) and b) switching intention (β=-0.260, p=0.001). Thus hypothesis H3a is supported.

In respect of H3b, risk perception has a partial mediating effect on the relationship between risk aversion and a) switching likelihood (β=0.265, p=0.007) and b) switching intention (β=0.085, p=0.001). Thus hypothesis H3b is supported.

5.6.4 H4 Relationship between Risk Perception and Switch Decision-making

Hypothesis H4 tested the relationship between risk perception and switching behaviour as follows:

H4a Risk perception positively influences switching intention.

H4b Risk perception positively influences switching likelihood.

The results in Table 5-13 provide support for Hypothesis H4a as risk perception exhibited a positive influence on switching intention (β=0.131, p=0.022). In relation to Hypothesis H4b, results identified that risk perception positively influences switching likelihood (β=0.241, p=0.000). Therefore this hypothesis is also supported.

Table 5-13 Path Analysis: Risk Perception and Switching Behaviour

Paths			Estimate	S.E.	C.R.	P
Switching Intention	<---	Risk Perception	0.131	0.032	2.295	0.022
Switching Likelihood	<---	Risk Perception	0.241	0.088	4.419	0.000

5.6.5 H5 Risk Perception Under Different Conditions

A multiscenario analysis was conducted to examine differences between the baseline model and the four scenarios. Two hypotheses were tested:

H5a The influence of Risk perception on switching likelihood is significantly different under alternative risk scenarios (Shariah Compliance, Profit Performance, Economic Conditions, Interest Rates).

H5b The influence of Risk perception on switching intention is significantly different under alternative risk scenarios (Shariah Compliance, Profit Performance, Economic Conditions, Interest Rates).

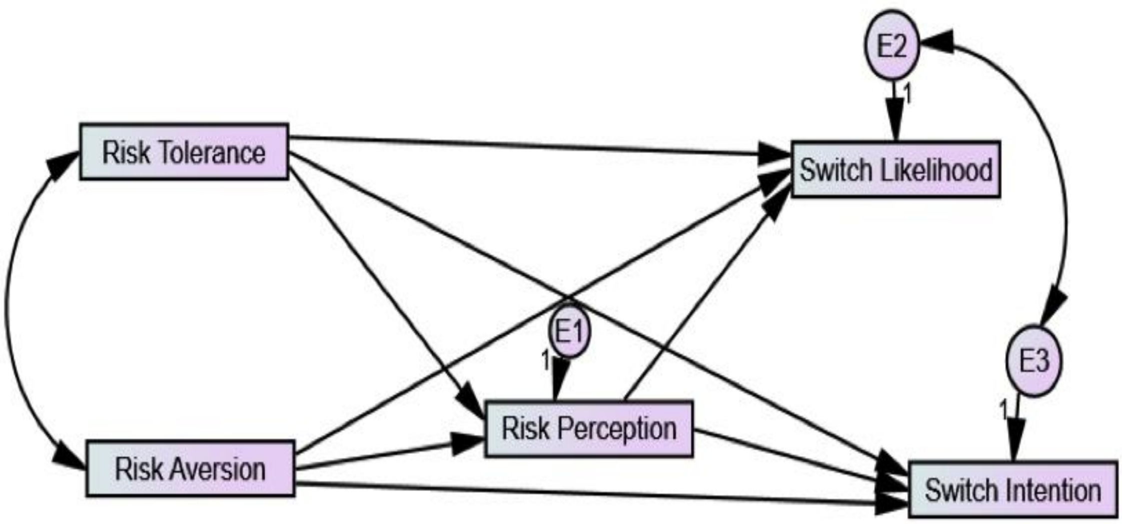

Figure 5-8 Structural Model for Risk Attitude, Risk Perception and Switching Behaviour

The model was simplified, as shown in Figure 5-8, to examine the relationship between risk aversion, risk tolerance and risk perception, following which the relationship between risk perception and switching intention and switching likelihood was examined.

The model fit for this simplified model indicates an overall fair fit as shown in Table 5-14 based on meeting the majority of the thresholds indicated. Poor fit is indicated with CMIN exceeding the minimum threshold and SRMR marginally over the upper threshold, but overall fair fit provides the basis to explore the model further in terms of differences between the risk scenarios.

AMOS is enabled to produce a pairwise comparison matrix to compare all parameters against all groups, with each group representing the 4 scenarios including the baseline scenario. The model was run 4 times, comparing the baseline scenario with each risk scenario. For example, the respondents' existing (baseline) risk perceptions towards IB products were compared against scenario 1 that represents Shariah conditions. The critical ratios and regression results for each model were used to generate z-scores for each path within the model.

Table 5-14 Multigroup Model Fit Results

Measure	Threshold	Result	Fit
CMIN/DF	< 3	4.534	Poor
P-value	>0.05	.000	Poor*
CFI	>0.90	.970	Good
RMSEA	<0.5	.037	Good
AIC	>0.5 to 1	.947	Good
BIC	>0.9	.953	Good
AGFI	>0.9	.931	Good
RMSR	<0.5	.054	Fair
PCLOSE	< 1.0	0.089	Good
Overall Model Fit			**Fair**

The results in Table 5-15 indicate the z-scores' significance for all paths in the model. The z-scores in the highlighted rows indicate the paths that are significantly different between the baseline responses and responses under Shariah compliance scenario. For scenario 0 (Baseline responses), risk tolerance has a low effect (β=0.129, p=0.017) on risk perception compared to a stronger negative effect (β=-0.350, p=0.000) on risk perceptions under scenario 1 (Shariah compliance) with a z-score of -4.619. The effect of risk aversion on risk perception is significantly higher under the Shariah compliance scenario with a z-score of 3.036. A similar pattern is noted in terms of risk tolerance and switching intention and risk aversion and switching likelihood and switching intention.

Comparing the difference between baseline and profit performance scenario, as shown in Table 5-16, with a z-score of 11.137 (p=0.000) the difference in the effect of risk aversion on risk perception is significantly higher in scenario 2 compared to scenario 1. The negative effect of risk tolerance on switching likelihood is more than double under scenario 0 compared to scenario 2 with a z-score of 3.102. The effect of risk perception on switching likelihood differs under scenario 2 with an effect of β=0.311 (p=0.000) compared to β=0.167 (p=0.000) under scenario 0 and z-score of 1.725. The path risk tolerance to switching intention indicates a weaker negative effect in both scenarios but with a statistically significant difference with a z-score of -2.358.

Table 5-15 Baseline versus Shariah Compliance Scenario

			Scenario 0		Scenario 1		Z-score
			Estimate	P	Estimate	P	
Risk Perception	<---	Risk Tolerance	0.129	0.017	-0.350	0.000	-4.619***
Risk Perception	<---	Risk Aversion	0.373	0.000	0.733	0.000	3.036***
Switch Intention	<---	Risk Perception	0.004	0.778	0.019	0.151	0.927
Switch Likelihood	<---	Risk Perception	0.167	0.000	0.284	0.000	1.485
Switch Likelihood	<---	Risk Tolerance	-0.392	0.000	-0.284	0.010	1.435
Switch Likelihood	<---	Risk Aversion	0.217	0.014	0.499	0.000	1.82*
Switch Intention	<---	Risk Tolerance	-0.034	0.031	-0.127	0.000	-3.405***
Switch Intention	<---	Risk Aversion	0.022	0.249	0.069	0.010	1.567*

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

Table 5-16 Comparison Baseline versus Scenario 2 Profit Performance

			Scenario 0		Scenario 2		Z-score
			Estimate	P	Estimate	P	
Risk Perception	<---	Risk Tolerance	0.129	0.017	0.001	0.896	-1.619*
Risk Perception	<---	Risk Aversion	0.373	0.000	2.080	0.000	11.137***
Switch Intention	<---	Risk Perception	0.004	0.778	0.010	0.462	0.452
Switch Likelihood	<---	Risk Perception	0.167	0.000	0.311	0.000	1.725*
Switch Likelihood	<---	Risk Tolerance	-0.392	0.000	-0.164	0.009	3.102***
Switch Likelihood	<---	Risk Aversion	0.217	0.014	0.344	0.008	0.843
Switch Intention	<---	Risk Tolerance	-0.034	0.031	-0.069	0.000	-2.358**
Switch Intention	<---	Risk Aversion	0.022	0.249	0.043	0.172	0.619

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

Comparing responses under scenario 0 and economic conditions (scenario 3), only 3 paths were found to be different, as indicated in Table 5-17. The effect of risk perception on switching likelihood had a significantly higher effect, more than double β=0.317 (p

=0.000) compared to β=0.167 (p =0.000) with z-score 1.989. The effect of risk aversion on risk perception is significantly higher under scenario 3 with a z-score score of 9.602.

Comparing baseline responses with responses under interest rates scenario indicates three paths that are significantly different. For the path risk perception to switching intention the zero effect under baseline scenario risk perception becomes significantly higher under scenario 4 with a z-score of 3.805, as shown in Table 5-18.

Table 5-17 Comparison Baseline versus Economic Conditions Scenario 3

			Scenario 0		Scenario 3		Z-score
			Estimate	P	Estimate	P	
Risk Perception	<---	Risk Tolerance	0.129	0.017	0.037	0.422	-1.149
Risk Perception	<---	Risk Aversion	0.373	0.000	1.894	0.000	9.602***
Switch Intention	<---	Risk Perception	0.004	0.778	0.009	0.367	0.487
Switch Likelihood	<---	Risk Perception	0.167	0.000	0.317	0.000	1.989**
Switch Likelihood	<---	Risk Tolerance	-0.392	0.000	-0.168	0.048	3.353***
Switch Likelihood	<---	Risk Aversion	0.217	0.014	0.219	0.106	0.024
Switch Intention	<---	Risk Tolerance	-0.034	0.031	-0.005	0.665	1.049
Switch Intention	<---	Risk Aversion	0.022	0.249	-0.019	0.434	-1.281

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

Table 5-18 Baseline versus Interest Rate Scenario

			Scenario 0		Scenario 4		
			Esti-mate	P	Estimate	P	z-score
Risk Perception	<---	Risk Tolerance	0.129	0.017	0.259	0.000	1.545
Risk Perception	<---	Risk Aversion	0.373	0.000	1.237	0.000	-1.546
Switch Intention	<---	Risk Perception	0.004	0.778	0.049	0.000	3.805***
Switch Likelihood	<---	Risk Perception	0.167	0.000	0.505	0.000	5.023***
Switch Likelihood	<---	Risk Tolerance	-0.392	0.000	-0.301	0.000	1.501
Switch Likelihood	<---	Risk Aversion	0.217	0.014	-0.129	0.099	-2.907***
Switch Intention	<---	Risk Tolerance	-0.034	0.031	-0.007	0.703	1.264
Switch Intention	<---	Risk Aversion	0.022	0.249	-0.084	0.000	-4.323***

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

The effect of risk perception on switching likelihood is significantly higher under scenario 4 with a z-score of 5.023. Finally, the effect of risk aversion on switching intention is significantly smaller and moving from positive to negative under scenario 4 compared to scenario 0 with a z-score of -4.323.

5.6.6 H6 Consumer Characteristics

Analysis was conducted of participant characteristics to test the relationship between consumer characteristics and risk perception. Certain consumer characteristics were shown to have positive influence on risk perception.

> H6a Financial expertise has a positive influence on risk perception.
> H6b IB knowledge has a positive influence on risk perception.
> H6c Number of children has a positive influence on risk perception.

The results shown in Table 5-19 indicate that Financial expertise based on the number of years investing exhibits a negative influence on Risk Perception (β=-0.111, p=0.000). Therefore H6a is not supported. Results for the influence of IB Knowledge on Risk Perception were not statistically significant (β=-0.018, p=0.594) therefore hypothesis H6b is not supported. The findings show that H6c is supported as the number of children has a positive influence on Risk Perception (β=0.139, p=0.000).

Table 5-19 Path Analysis: Consumer Characteristics

Paths			Estimate	S.E.	C.R.	P
Risk Perception	<---	IB Knowledge	-0.018	0.059	-.534	0.594
Risk Perception	<---	Years Investing	-0.111	0.008	-3.361	0.000
Risk Perception	<---	No Children	0.139	0.032	4.207	0.000

5.6.7 H6 Consumer Characteristics – Age and Education

For the age variable an independent samples t-test was conducted to determine if there were differences in risk perception between age groups:

> H6d There is statistically significant difference in risk perception between age groups (young consumers, older consumers).

Table 5-20 shows the mean scores for risk perception for age. Risk perception scores for each level of age group were normally distributed, and there was homogeneity of variances, as assessed by Levene's test for equality of variances for age (p = 0.794). In relation to age risk perception was higher for the older age group (4.345 ± 1.22) than younger age group (4.079 ± 1.25), a statistically significant difference of 0.266 $t(472) = 2.272$, $p = .024$ as shown in Table 5-21. Thus the hypothesis H6d is supported.

An independent samples t-test was also conducted to determine if there were differences in risk perception between education groups:

> H6e There is statistically significant difference in risk perception between education levels.

Table 5-20 Risk Perception Means by Age and Education Groups

Variables	Groups	N	Mean	St. Dev	Std. Error
Age	Young (n= 297	297	4.079	1.254	0.717
	Old (n= 177)	177	4.345	1.224	0.092
Education	Non-Graduate	105	4.219	1.240	0.121
	Graduate	140	4.062	1.353	0.112

Table 5-21 Independent Sample Test Risk Perception

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. 2-tailed	Mean Diff	Std. Error
Age	0.68	.794	2.272	472	.024	.2660	.1170
Education	1.490	.223	.844	243	.399	.1570	.1664

Risk perception scores for each level of education group were normally distributed, and there was homogeneity of variances, as assessed by Levene's test for equality of variances (p=0.223). As shown in Table 5-20 for education, the results on risk perception were higher for non-graduates (4.219 ± 1.24) than graduates (4.062 ± 1.35), with a mean difference of 0.157 that was not statistically significant $t(243) = 0.844$, ($p = 0.399$) as shown in Table 5-21. Thus hypothesis H6e is not supported.

5.6.8 H6 Consumer Characteristics - Gender

In relation to gender, further analysis was undertaken to control for gender and explore differences based on gender for different paths:

H6f There is statistically significant difference in risk perception between male and female consumers.

The testing and results for this hypothesis are reported in the multigroup analysis in Section 5.6.8.4. This is preceded with results to establish for model fit, model validity and measurement invariance.

5.6.8.1 Model Fit

Figure 5-9 shows the structural model for the multigroup analysis to compare the path coefficients between the two groups. Table 5-22 shows that overall, based on model fit measures, a good fit between the data and the model exists and a strong basis is established for proceeding with the structural model and path analysis.

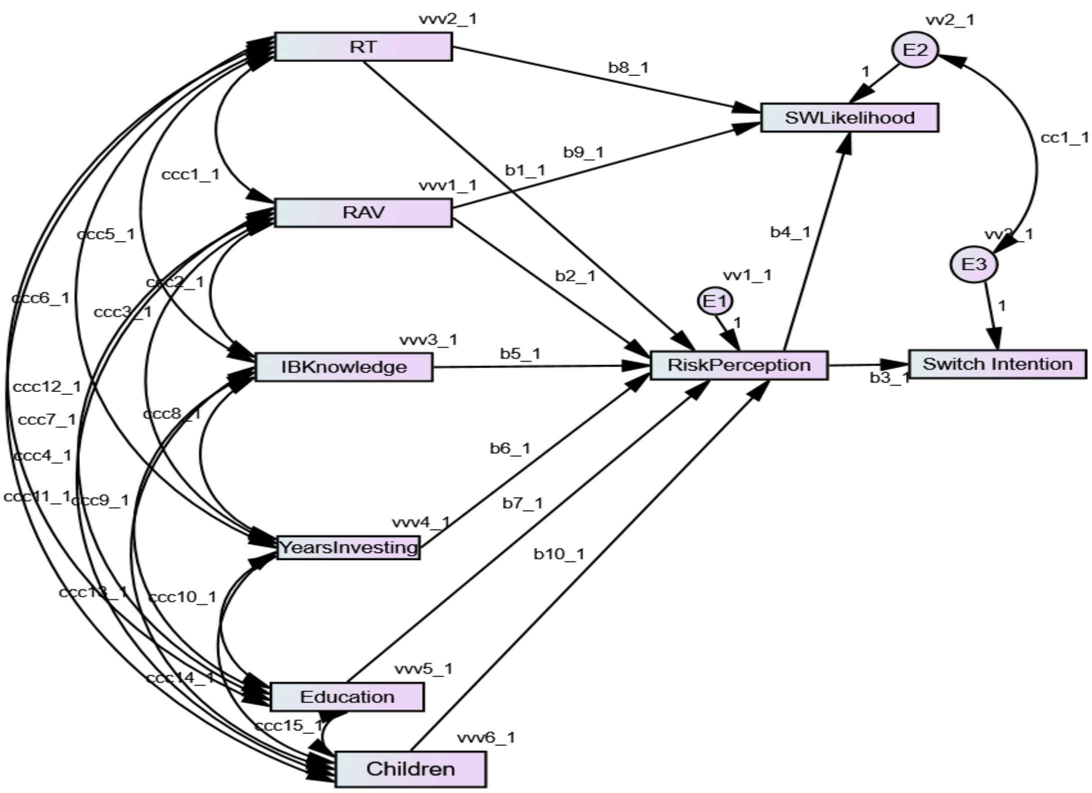

Figure 5-9 Structural Model for Multigroup Analysis

There is poor fit as indicated with the significant p-value, however it is acknowledged that chi-square and p-value can be sensitive to large samples. However, multiple indices can be employed to provide overall fit of the measurement model (Hu et al. 1999). All other indices in Table 5-22 show good fit.

Table 5-22 Model Fit for MultiGroup Structural Model

Measure	Threshold	Result	Fit
CMIN/DF	< 3	5.93	Poor
P-value	>0.05	0.012	Poor
CFI	>0.90	0.913	Good
RMSEA	<0.5	.099	Good
PCLOSE	>0.5 to 1	.968	Good
GFI	>0.9	.960	Good
AGFI	>0.9	.901	Good
SRMR	<0.5	.065	Good
Overall Model Fit			Good

5.6.8.2 Model Validity

The model was tested for convergent and discriminant validity for both male and female groups and the results presented in Table 5-23 and Table 5-24 respectively.

Table 5-23 presents the measurement model and reliability results for the male sample. In terms of the composite reliability and Max (H) (Hancock and Mueller, 2001), the results indicate that for the male model all H values exceeded the minimum level > 0.7. For convergent validity AVE > 0.5 was indicated for all constructs. Convergent validity can be established when composite reliability is greater than 0.7, composite reliability is greater than the Average Variance Extracted (AVE) and AVE is greater than 0.5 (Hair et al. 2010). The results show that these requirements hold true for all variables. Discriminant validity is established if the Maximum Shared Variance (MSV) is less than the AVE and the square root of AVE is greater than inter-construct correlations. For all items, the average composite score surpassed the 0.70 threshold value.

Table 5-23 Model Validity for Male Sample

	CR	AVE	MSV	MaxR(H)	RT	IBKno wledge	RiskPer-ception	SWLik eli-hood	RAV
RT	0.786	0.551	0.081	0.788	**0.742**				-0.274**
IBKnowledge	0.745	0.531	0.011	0.772	0.104	**0.705**			
RiskPercep-tion	0.822	0.620	0.299	0.988	-0.284**	-0.042	**0.787**		
SWLikelihood	0.900	0.751	0.129	0.910	-0.278***	-0.094	0.358***	**0.866**	
RAV	0.874	0.633	0.299	0.874	0.110	0.008	0.547	0.359	**0.796**

* $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$

The measurement model and reliability results for the female sample is presented in Table 5-24. For the composite reliability and Max (H) (Hancock and Mueller, 2001), the results indicate that for the female model all H values exceeded the minimum level > 0.7, ranging between 0.776 and 0.911. For convergent validity AVE > 0.5 was indicated for all constructs. Convergent validity can be established when composite reliability is greater than 0.7, composite reliability is greater than the Average Variance Extracted (AVE) and AVE is greater than 0.5 (Hair et al. 2010). The results show that these requirements hold true for all variables. In respect of discriminant validity, for all items the average composite score surpassed the 0.70 threshold value, with scores ranging between 0.721 and 0.836.

Table 5-24 Model Validity for Female Sample

	CR	AVE	MSV	MaxR(H)	RT	IBKno wledge	RiskPer-ception	SWLik eli-hood	RAV
RT	0.764	0.520	0.121	0.776	**0.721**				-0.317***
IBKnowledge	0.787	0.552	0.026	0.788	-0.068	**0.743**			
RiskPercep-tion	0.829	0.631	0.435	0.911	-0.347***	0.037	**0.794**		
SWLikelihood	0.874	0.699	0.169	0.890	-0.170*	0.161*	0.411***	**0.836**	
RAV	0.884	0.655	0.435	0.887	0.101	0.108	0.660	0.385	**0.810**

* $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$

5.6.8.3 Measurement Invariance for Gender Groups

Measurement invariance was conducted to ensure that the same underlying constructs were being measured across gender groups. Measurement invariance was tested at three levels: configural invariance, metric invariance, and scalar invariance. In step 1, a freely estimated model was used to test configural invariance across groups. Model fit results indicate that adequate goodness of fit was achieved when analysing freely estimated models across two groups by gender. Overall model fit results indicated that the model had configural invariance ($\chi2$=423.3, p=0.000) as indicated in Table 5-25.

Table 5-25 Configural Invariance

Type	X^2/DF	CMIN /DF	CFI	RMSEA	SRMR	PCLOSE	Invariance	P
Configural Invariance	423.3 (250)	1.693	0.956	0.040	0.0589	0.995	Yes	0.000

Table 5-26 Nested Model Comparison for Metric and Scalar Invariance

Model	DF	CMIN	P-Value
Measurement weights	12	16.946	.152
Measurement intercepts	23	23.932	.461
Structural covariances	38	41.052	.338
Measurement residuals	61	60.411	.497
Model Fit: **CFI** (0.956) **RMSEA** (0.040) **SRMR** (0.0589) PCLOSE (0.995)			

For metric invariance comparison between constrained and unconstrained regression weights were statistically non-significant (CM/DF=1.41, p=0.152). For scalar invariance the measurement intercepts, as shown in

Table 5-26, indicate the model to be invariant across the two groups (CM/DF=1.04, p=0.461). However, partial scalar invariance was achieved after unconstraining three intercepts and structural covariances for one item on the risk perception scale (RP1) and one item on the risk aversion scale (RAV2), and one item on IB Knowledge scale after assessing the intercepts for differences in estimates.

5.6.8.4 Multigroup Analysis Results

A multigroup analysis was conducted to assess the difference between genders. A descriptive analysis of the key constructs in Table 5-27 indicates some differences between male and females. However, when the model was subject to multigroup analysis the difference in betas for the overall model and the difference in betas for individual paths were not statistically significant. The analysis was conducted using AMOS plugin for

Multigroup analysis (Gaskin and Lim, 2018) assessing the whole model comparing the male and female samples. The chi-square difference test based on a comparison of the male and female groups showed that there was no statistically significant difference between genders with df18 and chi-square of 35.198 and the p-value (0.183). Thus the hypothesis H6f can be rejected as the results do not support any difference in risk perceptions between males and females.

Table 5-27 Construct Mean by Gender

Construct		Female	Male
Risk Aversion	Mean	2.88	2.14
	SD	0.75	0.78
Risk Tolerance	Mean	2.21	2.57
	SD	0.82	0.54
Risk Perception	Mean	5.04	3.72
	SD	0.77	0.99
Switching Likelihood	Mean	3.64	2.90
	SD	1.21	1.85

Further, examination of local tests of the individual paths shown in Table 5-28 confirm that while there are partial differences, in all cases where there is difference in the betas, the relationship between variables is only significant for one of the genders. For instance, the positive relationship between Risk Tolerance (RT) and Risk Perception is statistically significant for females (β=0.307, $p < 0.001$) and males (β=0.109, $p < 0.05$). However, the P-value (p=0.506) for the difference in beta (β=-0.416) is not statistically significant. Table 5-28 shows some differences in the path relationships between genders.

Table 5-28 Multigroup Gender Test - Local Tests

Path Name	Female Beta	Male Beta	Difference in Betas	P-Value for Difference
RT → RiskPerception	0.307***	0.109*	-0.416	0.506
RAV → RiskPerception.	0.280***	0.588***	-0.308	0.636
IBKnowledge → RiskPerception	-0.008	0.016	-0.024	0.562
YearsInvesting → RiskPerception	-0.058	-0.089**	0.030	0.906
Education → RiskPerception.	0.028	-0.020	0.048	0.979
RiskPerception → switch_yn	0.433***	0.126	0.307	0.691
RiskPerception → SWLikelihood	0.445***	0.058	0.386	0.543
RT → SWLikelihood	0.188**	0.074	-0.262	0.769
RAV → SWLikelihood	-0.052	.356***	-0.409	0.367

Significance Indicators: * $p < 0.050$; ** $p < 0.010$; *** $p < 0.001$

The relationship between risk perception and risk tolerance and risk aversion is positive and statistically significant only for males ($\beta=0.109$, $p< 0.05$); ($\beta=0.588$, $p<0.001$). The relationship between years investing and risk perception is only significant for males ($\beta=-0.089$, $p<0.010$). The relationship between risk perception and switching likelihood is only significant for females ($\beta=0.445$, $p<0.001$). In spite of this, for all paths as Table 5-28 indicates the difference between betas is not statistically significant.

5.7 Thematic Analysis of Interview Data

This section presents the results analysed thematically for the second stage of the research, which focused on gathering in-depth qualitative data from semi-structured interviews. The interviews consisted of 14 questions designed to explore responses to the quantitative findings and draw out further details. The results are based on 20 interviews randomly drawn from the pool of 45 survey participants who had indicated their willingness to participate in a follow-up interview. This sample consisted of 11 women and 9 men, all UAE nationals, reflecting the majority nationality in the survey, and aged between 20-34 years employed at Abu Dhabi Police, GHQ and who are bank customers.

A major focus of the interviews aimed at exploring underlying reasons and perceptions for the interviewees' responses in the survey in relation to the research questions identified in the introduction chapter 1. The questions focused on three broad areas consistent with the quantitative survey: consumers' risk attitudes in terms of their risk aversion, tolerance for risk and influencing factors; risk perceptions of IB products; and exploring risk perceptions of IB products under four scenarios. The qualitative analysis was undertaken in NVIVO 11 and coded according to the core themes of the study and inductively. Codes were grouped according to three main areas of analysis discussed above, as shown in Figure 5-10.

5.7.1 Determinants of Financial Consumer Risk Attitudes

The majority of participants are unwilling to take risks, with two thirds of respondents describing themselves as risk averse and one-third as willing to take risk. Table 5-29 shows that the most cited reasons for their unwillingness to take significant risks are related to life stage: the responsibility of raising a family and the need to protect the savings they had built over time. The most important factor is the security of their capital, no matter if the excepted return is low.

Some participants indicated a more balanced rational tendency where they carefully selected between risks that maximised profits and at the same time minimised their losses. Risk seekers in the sample who described themselves as less pragmatic and were willing to take high risks were primarily motivated by high profit. A small number of respondents explained that they would have described themselves as risk seekers but had become more risk averse after incurring losses in the financial crisis.

Responses were evenly balanced in relation to the impact of the financial crisis on interviewees' risk attitude. A slight majority of respondents stated that the 2008 financial crisis had not affected their willingness to take risk. Some participants saw in the crisis an opportunity to invest rather than an inconvenience. A small number stated they had lost financial assets and encountered financial instability, which made them more averse to risk. One participant highlighted the consequences of the crisis on their risk attitude:

> *"The financial crisis has made me more cautious and has made me feel more uncertain. Whereas before I was more willing to take chances, today I prefer to avoid risks".*

Name	Sources	References
Interviews Coding	17	17
Determinants	17	17
Service Factor Risk	18	19
Barriers to switching	9	21
Comparison of risk between IB and Conventional Banks	18	37
Religious Factor	18	19
Effect of Financial Crisis	18	26
Reasons for Perception	17	17
Risk Attitude	17	17
Risk Assessment	8	8
Changing Risk Attitude	2	2
Factors affecting risk attitude	18	26
Financial factor for risk attitude	18	20
Knowledge	18	20
Personal Experiences	18	19
Family	17	19
Friends and Colleagues	18	18
Risk Averse	18	30
Risk Seeker	2	18
Personal Factors	17	17
Experience	8	23
Age	9	21
Religion	7	21
Knowledge	7	20
Family	8	20
Friends Colleagues	7	19
Financial Situation	7	18
Economic Conditions	8	19
Risk Perceptions	17	28

Figure 5-10 Coding System within Nvivo 11

Table 5-29 Risk Attitude Themes

Thematic Code	Sub-theme	#Interviewee
General Attitude	Risk averse • Secure returns • Low risk	High (9-11)
	Risk seeking • Profit maximisation	Low (1-3)
	Contingent • Balanced • Pragmatic • Conscious of external factors	Low (1-3)
Determinant Factors	Family responsibility	High (9-11)
	Experience and Knowledge	High (9-11)
	Friends and colleagues	Low (1-3)
	Economic conditions	Low (1-3)

Many participants stated that they already averted financial risk, regardless of the impact of the financial crisis.

In terms of personal factors, experience was cited as one of the fundamental factors when taking financial risk, followed by knowledge. To a lesser degree, economic conditions and the influence of friends and colleagues were cited as important factors. As one participant noted:

> *"My personal knowledge and experience and the experience of my family and friends help me to understand the risks and this affects my willingness".*

All participants were influenced by a certain change in income or job security, and almost all became averse to financial risk. A minority of the sample were willing to take risks in this scenario, but factors like income and low risk safe investments were factored into the equation.

5.7.2 Risk Perception of Financial Products

Interviewees were invited to compare Islamic banks with conventional ones in terms of risk. The vast majority of the participants perceived IB to be safer than conventional banking based on several factors: that IBs have fixed interest rates; are more flexible; provide greater transparency in investments; reflect safer transactions; as well as their adherence to Shariah Principles, as shown in Table 5-30. For one participant system transparency was important:

"Less riskier. Because they're more transparent than Conventional. They tell you how you will invest and what you'll gain out from profit. It spells out in the beginning. The riskiness they invest in is not high either. Conventional has higher risk in my opinion; there are more unknowns".

A small number perceived no difference between IBs and conventional banks in terms of financial risk, with some consensus that both banking systems were similar in terms of investments, interest rates and flexibility.

Table 5-30 Comparison Risk Perception Islamic Versus Conventional Banking

Theme No	Theme	#Interviewee
1	IB safer than conventional banks: greater transparency; fixed rate of return; safer transactions	High (9-11)
2	No difference between the two banking systems; both are comparable for interest rates and flexibility	Low (1-3)
3	Perceived risk of IB products is overridden by religious beliefs	Med (4-8)
4	Would not invest in Islamic Banks if the financial products prove to be risky.	Low (1-3)

The results show that half of the respondents would invest in Islamic Banks, despite the riskiness level of the banks' products, due to religious beliefs and the transparency policies of IBs. The other half is divided between people who consider both Islamic and conventional banking to be similar in financial product riskiness and those who would not invest in Islamic Banks if the financial products prove to be risky.

The majority of participants did not perceive any risks associated with current accounts. Underlying this perception was the consensus view that this financial product was important. For some of the participants, charges and bank privileges were important aspects and influenced their attitude to switch or retain. Only a minority considered that respecting Islamic laws was more important in terms of current accounts and risk perception than the rules and regulations the bank offers.

Participants were divided on their general views on investment deposits. For some, this type of financial product was not considered as important, with a number of reasons cited related to the low level of profit, the risk of losing money and the long period of time in obtaining interest. As one participant cited:

> *"I don't do investment deposits. I won't wait for a year to get a return since am looking for quick win. You can lose money on investment deposits too and they're quite hard to understand if you're going to get a good return on your money or not. There's no guarantees".*

In contrast, a smaller number of participants perceived investment deposits as important to them, mentioning the expected returns that these deposits can provide. Nevertheless, multiple participants disclosed readiness to change their opinion should no profit be involved. The view was reiterated by some participants that they would only use an Islamic Bank, due to religious beliefs and regulations.

The overall consensus among the participants was that saving deposits were important. Their value was perceived mainly to rest on the interest that saving deposits provide. One participant expressed the importance of interest on savings on their attitudes:

> *"If the interest stops yes it may play a factor for me to switch to another bank. Realistically though I don't see much risk for savings deposits as these are pretty secure usually as the government often guarantees savings".*

Multiple participants also stressed their importance provided the bank offered improved withdrawal flexibility. Only a minority viewed interest benefits as unimportant and these generally emphasised the security and safety of their money. As one participant highlighted:

"I would still keep it. I don't care about the profit. It's a way of not spending not a way of gaining profit".

The minority of participants who considered this product unimportant cited two principal reasons: either they generally do not save money or they have saving deposits in another country. A small number of participants stated that they would only use Islamic bank services.

Across the groups as a whole, there was a general consensus that most participants were unwilling to take much risk with their money. This was the case even over the long term (five years or more) and few participants mentioned the potential for risk and return to balance out over time. The most common reasons cited for being averse to taking risks related to life-stage: the responsibility of raising a family, taking on large financial commitments such as a mortgage and, among older participants, the need to protect any savings they had built up over time. However, some participants were willing to take higher risks with their money to give themselves the chance of making higher returns. These participants tended to be young and single or higher earners.

5.7.3 Risk Perceptions and Decision-Making Behaviour

Multiple motives were advanced for why participants would switch or retain any of their investments in IB, with secular rationales foremost. Financial reasons were the most commonly cited and of those the majority perceived better financial returns within conventional banks. Performance, reputation, service and responsiveness to customer needs were also emphasised as strong factors influencing decision-making. In particular, the ability for banks to be flexible in their treatment of customers and in the management of assets and investments was emphasised. In nearly all cases, the perception of risk in banking products was agreed to play a role in switching decisions.

5.7.3.1 Shariah Compliance Scenario

In relation to the Shariah compliance scenario, there was strong indication among the majority of participants that deterioration in Shariah compliance entailed a high level of risk for the financial products. The key themes for each scenario are summarised in Table 5-31. For the Shariah compliance scenario, a large number of the sample perceived high risk towards Islamic financial products. However, some participants expressed doubts in relation to the general level of Shariah compliance achieved within banks and the view was consistently expressed that Shariah compliance was overall superficial only. Nevertheless, the claim of Shariah compliance was important for several participants, even if not wholly achieved, because it symbolised a commitment. One respondent expressing this view noted:

> *"Even if they Islamic bank are not implementing Shariah strictly or according to what we believe, it is important that they follow the system".*

One respondent noted a fear that he cannot breach his religious duty. A minority perceived the security and clarity offered by Islamic banks as a key influencing factor. A minority distinguished a negative risk implication in Shariah deterioration, either through the wish to abide with Islamic rules on finance or through a perceived elevation of risk.

Perspectives varied on the reasons why investments were retained or switched under that scenario. Those that would retain their investments principally cited reasons of either satisfaction with bank services or performance or a level of pessimism in relation to encountering improved Shariah compliance elsewhere. Among those that would switch their investments, there was strong consensus that they would switch to another Islamic bank, as adherence to Shariah rules was important to them:

> *"As I mentioned before; IB or conventional banks I find both are similar in process. … Conventional banks are seen as less risker and provides better investments options to me rather than my IB. However, I wouldn't switch to conventional bank. That is because of Sharia principles that I consider priority to me".*

For some, this arose from belief, while for others IB was perceived as the less risky choice in comparison to conventional banks. A perceived loss of transparency and trust was also mentioned by several participants as motivation for switching banks.

Table 5-31 Risk Perception Themes

Scenarios	Risk Perception Themes		
	High (N=13)	**Medium (N=4)**	**Low (N=3)**
Shariah Compliance	• Shariah compliance is highly valued • Duty to adhere to Islamic law • It can lose investors/depositors funds • Respect for religion • Claim of adherence is still significant	• Doubt that Shariah impacts on financial risk of products • Can be negative on impact trust	• Shariah compliance not related to financial risk • Shariah is superficial
	High (N=10)	**Medium (N=6)**	**Low (N=4)**
Profit Performance	• Poor profit affects bank stability and reputation • Can affect bank financial position	• Lack understanding to assess if high risk • Profit not main goal	• Profit not main goal • Safe secure location for their funds
	High (N=6)	**Medium (N=4)**	**Low (N=10)**
Economic Conditions	• High risk but not in control of Bank • Affects return of business investments	• Increased risk but can be managed	• The government safeguards banks well • Financial stability is supported by government
	High (N=1)	**Medium (N=1)**	**Low (N=18)**
Interest Rates	• High rates mean financial products risk losing opportunity	-	• Not directly affects risk of IB products • IB products not based on Interest rates

5.7.3.2 Profit Performance Scenario

In contrast to Shariah compliance, a smaller majority of participants perceived a high level of risk in terms of deterioration in profit performance for the financial products. Table 5-31 indicates themes were more evenly balanced across the risk perception scale. One reason cited by multiple participants concerned their usage of banks not for investment or maximising profitable returns but as a secure and stable location for liquid assets or for current account services. The pursuit of profits was generally perceived as being more valid and appropriate elsewhere. Several participants mentioned their loyalty to and trust in the bank and offered a rational response in terms of seeking to understand the reasons for the fall in profitability before judgement is made:

> *"Am very loyal to the bank. So I will clarify the reasons behind the deterioration and will understand, I have no issues to support the bank. I would stay with it. As long as my savings are safe which I think they are".*

Of those participants that viewed a decrease in profit performance as important to them, several emphasised a fall in bank reputation which was considered more significant and a risk. The overall consensus among participants was that they would retain their investments in the bank under that scenario. Motivations focused principally on loyalty to the bank as long as stability was maintained. However, a change in stability was cited by several as potentially impacting their decision-making. Those that would switch mainly emphasised the importance they placed on profitable returns. In terms of switching intention, Figure 5-11 summarises the overall pattern of results and themes. Under all scenarios in spite of high risk perceptions associated with each scenario the majority consistently would not switch.

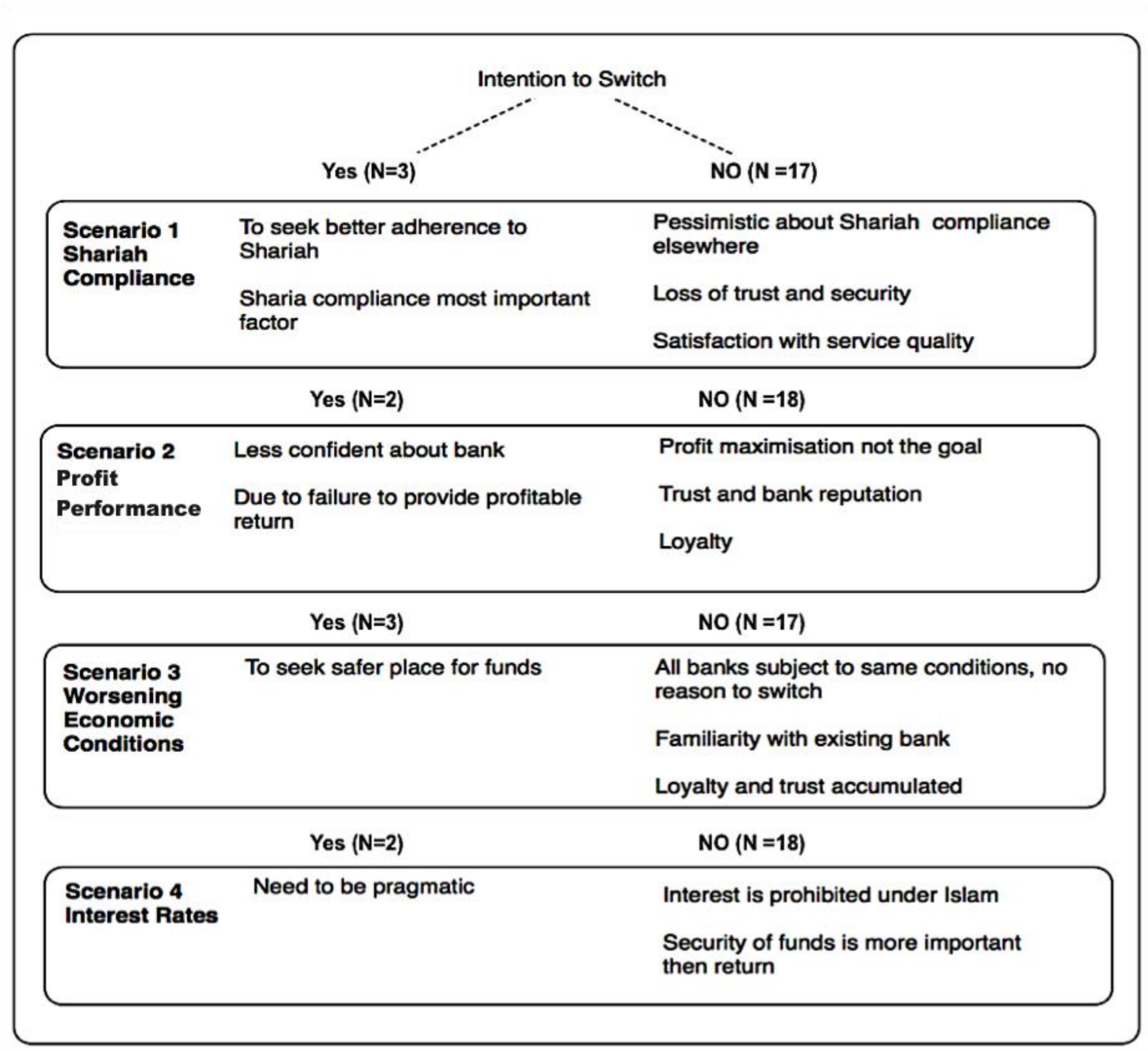

Figure 5-11 Switching Behaviour Themes

5.7.3.3 Economic Conditions

A small majority of participants considered that deteriorating economic conditions represented a low level of risk. A few noted the safety and security of government-backed banks, while one participant observed that deteriorating conditions were likely to affect the whole of the banking sector and they would seek to invest in the bank most likely to weather the crisis. As one participant explained:

"It's an external factor. If they don't have money though in the bank then I would take my money out. I think though this is unlikely as the government guarantees many banks".

Several participants indicated the adoption of a rational approach in terms of evaluating bank exposure and risk within the deteriorating environment and making decisions accordingly. In terms of switching intention, the view was taken that this risk would not motivate them to withdraw their custom from any particular bank if negatively affected by external conditions. The few participants that would switch their investments under that scenario cited risk to their investment as a major factor. Participants would either switch to another Islamic bank or choose to place investments outside of the banking system altogether and in real estate or gold. Of those that would choose to stay with their banks, customer service and familiarity were major factors cited, while a few participants mentioned that they do not make investments in times of financial crisis.

5.7.3.4 Interest Rates

A significant majority of participants perceived a low level of risk towards financial products associated with a long lasting, increasing trend in forecast interest rates. In terms of switching intention, most participants would not switch under this scenario citing religious motivations and security. Consistently, interviewees emphasised the prohibition of interest in Islam, while the importance of security of funds was viewed as more significant than the financial return by this sample. They expressed this religious factor as a key reason for their risk perception scale as summarised by one participant:

"I will not switch to conventional even if it has an Islamic window; conventional from the name it's a bit specious; therefore I'd rather to be in Islamic banking system because am more aware of it and I feel comfortable in it's services".

Opportunity cost was noted by a minority of participants as a key factor influencing their perception of risk. This was explained as a pragmatic consideration as high interest rates in conventional banks presented a financial opportunity that forced them to think rationally.

5.8 Summary

This chapter presented the results from the quantitative and qualitative analysis undertaken for this study. Descriptive results in section 5.2 present the overall pattern of results for the participants and their responses. The results of the exploratory analysis in section 5.3 produced the identification of the underlying structure of a relatively large set of variables. Covariance based Structural Equation Modelling (CB-SEM) was undertaken using AMOS in SPSS to estimate, assess, and identify potentially significant relationships among variables.

The evaluation of construct validity was considered to examine correlations existing between all the variables and consequently lessening the quantity of variables to a smaller collection of factors or dimensions. Confirmation factor analysis was successfully undertaken including the verification of the measurements model and the structural model. The process confirmed the validity and reliability of the measurement model and good fit for the data. Based on this, the structural model was interpreted and the key relationships and effects size was identified in the model. Section 5.6 presented the results for the path analysis for the model; direct and indirect effects; mediating, moderating and multigroup analyses.

The final section in this chapter presented the results of the thematic analysis stage of the research, which focused on gathering in-depth qualitative data from semi-structured interviews. The analysis revealed key themes that were consistent with and provided additional insights into consumers' risk attitudes in terms of their risk aversion, tolerance for risk and influencing factors; risk perceptions of IB products; and risk perceptions of IB products under four scenarios. These results are discussed in the next chapter.

Chapter 6 Discussion and Analysis

6 Discussion and Analysis

6.1 Introduction

The previous chapter presented the results from two data collection stages gathering both quantitative survey data and qualitative data from in-depth interviews on risk perception in Islamic banking (IB). This chapter discusses the findings arising from this data and the key findings in relation to the theoretical framework in Chapter 3. The discussion is based on the research context, which focused on investigating the relationship between risk perceptions of IB products and investment decision-making. The structure of discussion is guided by the four key research questions:

- How does risk perception influence IB consumer decision-making?
- What conditions influence the relationship between risk perception and IB consumer decision-making behaviour of risk averse investors?
- To what degree do external conditions affect switching intention and switching behaviour for risk averse IB consumers?
- What factors and determinants affect risk perceptions towards products and intention to switch of risk averse IB consumers?

The data is contrasted with the literature to identify consistencies and differences, and enable the contribution of new knowledge to this field. This discussion underscores the role of risk perception in IB and integrates two strands of data analysis. On balance, the discussion reveals that risk perception is not limited to an objective assessment of uncertainty and financial risk tolerance but is based on a diverse array of subjective and socio-cultural factors that influence decision-making. While external conditions significantly impact on risk perception and switching likelihood, to varying degrees switching intention is mitigated by religious and pragmatic factors. Further, risk perception can vary according to socio-demographic factors, such as financial expertise, age and number of children.

6.2 Risk Perception

Risk perception is acknowledged to be influenced by risk attitude but few studies have researched the role of risk perception in IB. This study examined how risk perception influences IB investment decision-making.

The qualitative data provided significant insight into the relationship between risk perception and consumers' IB decision-making. A key finding indicates that consumers perceive that overall IB is safer than conventional banking citing greater transparency, fixed rates of return and safer transactions. This is broadly consistent with Demiralp and Demiralp (2015) who point to a perceived heightened risk associated with conventional banks following the 2008 financial crisis, while the literature also highlights perceptions of higher returns in comparison with conventional banks (Demiralp and Demiralp, 2015; Awan and Bukhari, 2011; Haron et al. 1994). The quantitative results provide a more granular view and show that there are differences in risk perception towards different IB products. The baseline data of consumers' risk perception towards IB products indicated that on average a moderate level of risk was perceived in relation to the three types of financial accounts. However, a significantly higher level of risk was perceived for investment and current accounts, which were perceived as twice as risky as savings accounts. This difference can in part be explained by the preference to deposit funds in saving accounts, which was viewed as less risky. This is consistent with the risk aversion attitude that reflects the most dominant position of the sample. The qualitative data shows that consumers overall were reluctant to take risks, with the majority describing themselves as risk averse while a much smaller proportion were open to taking risks, lending support to evidence in the literature indicating that those with religious affiliations, and in particular Muslims, are more risk averse and less risk tolerant than non-religious people (Leon and Pfeifer, 2013; Renneboog and Spaenjers, 2012; Dohmen et al. 2011; Bartke and Schwarze, 2008). Further, these findings are consistent with other studies, such as Eid and Amin (2012) that evidenced variations in risk perception influenced by different risk factors associated with the different instruments in the IB sector. The findings also provide support for Alsoud's (2013) assertion that Islamic financial institutions are impelled towards greater definition and understanding in relation to customer needs.

The findings from the qualitative interviews provide further insights into the difference of risk perception towards Islamic products. Deposit accounts were perceived as less risky due to the understanding that savings were safeguarded by the government. This may account for investment accounts and current accounts being perceived as more vulnerable than savings deposits in the quantitative data. The perception of risk is evidently influenced by consumers' understanding of the different types of risk associated with different accounts. While data from the interviews evidenced the distinction in risk, interviewees cited a range of factors for the higher level of risk they perceived with investment and current accounts.

Participants explained that the complexity of IB operations made them uncertain about the activities associated with investment fund accounts and current accounts. This uncertainty appears to influence a higher level of perceived risk towards these types of products. Such responses from interviewees additionally point to an awareness of a range of risks associated with different types of account. However, the interviewees sampled were unable to describe specific risk factors associated with bank investments, beyond their perception that funds from investment and current accounts were exposed to higher levels of risks than savings accounts. Differences in risk perception towards financial instruments and the potentially higher level of risk in IB activities are noted in the literature (Gait and Worthington, 2009). A lower level of risk could be associated with the interviewees' view that deposits would be protected by the government. This concords with the social amplification approach to risk perception which argues that the nature of communications on risk events from senders such as the government to the individuals can amplify or lessen risk perceptions. In the financial context, the role of the media and the role of regulators and governments can act as major influences (van Winsen et al. 2011).

This is also consistent with findings from Khan and Ahmed (2001) who found that risk perceptions differed with different forms of Islamic financing. In the study, consumers held the belief that deposits could be safeguarded by Islamic banks and that the government in turn safeguards the banking sector. Some interviewees expressed a deeper understanding of Shariah principles by associating a higher perception of risk towards investment and current accounts that were linked to Mudharaba instruments. Interviewees indicated their awareness of the religious limitations inherent in Mudharaba, as it is forbidden to guarantee against business losses. This is consistent with findings by Mohd-Karim (2010) in Malaysia's IB sector, where empirical data pointed to a higher level of perceived risk with accounts associated with profit-sharing contracts. This suggests there is a preference for secure investment opportunities in IB.

6.3 Knowledge and Risk Perception

The level of investment expertise and knowledge of financial products emerged as factors with different impacts on risk perception. The findings showed that hypothesis H6a was not supported as financial expertise in terms of years investing had a negative, rather than positive, influence on risk perception. A relationship was found to exist however, suggesting that those with greater financial experience had lower risk perceptions. This contrasts with results for H6b in terms of the positive influence of IB knowledge on risk perception which were not statistically significant, and therefore this hypothesis is not supported. This result is surprising as greater IB knowledge would intuitively be expected to have some influence, either positive or negative, on risk perception. Further study and larger sample sizes could help to provide greater verification and understanding of the effect of consumers' knowledge of IB banking and products on risk perception.

The qualitative data showed that both experience and knowledge formed key determinants of risk attitudes. Interviewees indicated their preference to invest in products they are familiar with. The results suggest that higher familiarity and understanding of the different types of activities can effect a lower perception of risk. This is consistent with the cultural risk perception paradigm stressing the intrinsic subjectivity of risk perception. Risk perception is argued to be based on a person's experiences, emotions and knowledge and is a distinctive process attaching meaning to objective circumstances (Slovic 2013; 1987). This is also consistent with psychological approaches to risk in which a range of risk characteristics are assumed to influence risk perception such as knowledge and immediacy with novelty (Fischhoff et al. 2000; Slovic, 1987).

Interviewees expressed the influence of information and financial knowledge on their risk perception. Those possessing greater awareness of the way in which the funds in the different accounts were being utilised in bank operations indicated a lower level of risk perception. Interviewees that were unable to provide information or knowledge of the accounts expressed a greater level of risk perception. This differs from the quantitative findings in suggesting that financial knowledge does influence risk perception. One reason for this inconsistency could relate to the scales used to measure IB knowledge in this study. Further research may serve to clarify and provide additional evidence on the relationship between knowledge and risk perception, discussed further in Section 7.4.4. The qualitative findings are consistent with the literature that proposes a domain focused view of risk perception highlighting knowledge and experience as key factors influencing risk attitudes (Grable and Rabbani, 2014; Thaler and Johnson, 1990). Gufstaffson and Omark (2015) found that, regardless of education, financial literacy had an increasing effect on financial risk tolerance. This suggests that familiarity and access to sources of information can reduce risk perception levels, a significant finding given that Muslim customers have frequently been shown to have limited knowledge and awareness of IB concepts and the differences between IB and conventional banking (Akbar et al. 2012; Khan and Asghar, 2012; Thambiah et al. 2011; Rammal and Zurbruegg, 2007; Erol et al. 1990). Addressing confusion and ambiguity over the nature of applications in the different types of accounts may moderate risk perception. This supports Sjöberg's (2001) finding that the lack of information among non-experts influenced their perception of risk.

A related finding emphasised that financial experiences in previous investments or losses caused interviewees to adopt a more cautious approach. This was cited as a major factor by several interviewees and indicates that specific events can cause them to significantly reassess their risk position. The qualitative findings thus support the hypothesis H5 that risk perception towards IB products differs as an effect of external conditions. Major economic events or losses appeared to exert a significant impact on risk perceptions and in turn influence consumers to become more risk averse. This is substantiated by evidence from Baghani and Sedaghat (2016) who found that past performance of investments influenced risk perception. For some interviewees, previous knowledge and experience of negative events appear to possess an emotional effect. In this study, emotional factors emerged from interviewees' expressions of concern and potential stress associated with the financial crisis. Both long-term and short-term factors were cited by interviewees as influencing their risk perception. Concerns over the financial crisis and current economic conditions around the world generate stress that appears to heighten risk perceptions.

This contributes to a deeper understanding of the interplay between cognitive resources, emotional state and risk perception. Experience of previous events creates enduring fear or concern that influence risk perceptions towards IB-products. Furthermore, interviewees expressed concerns over wider situational factors, such as stability and security. The stability of the economy was identified as a source of concern in relation to pay advancement and financial security. It is evident that they perceived less stability and security than in previous years. Earlier studies also evidenced an increased risk perception regarding the labour market than in previous years (Abbott et al, 2006; Tulloch and Lupton, 2003; Quilgars and Abbott, 2000). The level of income influenced consumers' risk perception and reflected a higher risk tolerance and capability to cover financial costs (Murtaza et al. 2013). However, the majority of respondents expressed relative security of their present positions and confidence in the government to secure employment of UAE citizens in the public sector. This acts as a further cushion for IB consumers in the UAE that potentially mitigates their risk perceptions and creates bias in risk perceptions. It points to the influence of situational factors on risk perception. It also suggests that in the UAE IB consumers' risk perceptions are significantly sensitive to government support and guarantees.

6.4 Socio-Demographic Factors

The output of the SEM analysis indicates that certain consumer socio-demographic characteristics impact on risk perception. Children and family responsibilities were one characteristic shown to have an effect across both sets of findings. The hypothesis H6c was accepted as number of children positively influenced risk perception. Meanwhile the qualitative data suggests that family responsibility was a factor on the minds of investors and their decision-making and a potential determinant factor of risk perceptions. The interviews indicate that ensuring financial security for their children impacted significantly on risk perception. For those citing family responsibility, security of capital even when faced with low returns was critical. A strong commitment was expressed by the majority of interviewees and cited as a reason to view investments and current account products that were not guaranteed as safe as involving a higher risk. This is consistent with the literature which shows that norms and values inherent within family traditions and culture impact on risk perception towards different types of investments (Murtaza et al. 2013; Hoque et al. 2010; Williams, 2005). More broadly, this is consistent with social-cultural approaches to understanding risk perception and decision-making in which perceptions of risk are held to originate in the person's opinions and life experience, and are constructions about the world embedded in a culture's peculiarities, value system, and social norms (Slovic, 2016; Trautmann and Vieider, 2012; Zinn, 2009; Finucane and Holup, 2006; Rohrmann, 2005).

In terms of age, the t-test analysis found that there was a statistically significant difference between age and risk perception, therefore H6d is supported. Risk perception was found to be higher for the older age group than the younger. Some bias in the age group distribution should be noted as for instance 30-40 year olds accounted for 53% of the sample. Murtaza et al. (2013) found that age was a determining factor affecting risk perceptions towards Islamic products. It was found that young investors' risk perceptions towards socially responsible investment were low compared to older age groups. The finding is also consistent with the trends identified within the broader literature that show that age has a significant influence on risk tolerance, either reducing (Bonsang and Dohmen, 2015; Sahm, 2012; Al-Ajmi, 2011; Fan and Xiao, 2006; Hallahan et al. 2004; Yao et al. 2004) or increasing tolerance towards risks (Larkin et al. 2013; Grable and Joo, 2004; Grable and Lytton, 1999b).

Meanwhile the t-test results showed no statistically significant difference between levels of education and risk perception, therefore hypothesis H6e is disconfirmed. This suggests that education has limited impact in terms of influencing consumers' risk perceptions. The finding exhibits limited consistency with the literature as studies have pointed to a relationship between level of education and risk perception. Mohd-Karim (2010) found that the level of financial sophistication correlated with education influenced Islamic investors to take greater risk. In a related study, less educated consumers attached less significance to Islamic investments that were sensitive to environmental issues (Murtaza et al. 2013).

The multigroup analysis based on a comparison of gender groups showed that globally there was no statistically significant difference between males and females. Therefore the results do not provide full support for hypothesis H6f. However the results for key constructs show that there is statistically significant difference in risk perception between male and female consumers. While the local tests provide some indication of partial differences these results are not conclusive. To some extent this finding contradicts the strong trend shown in the literature indicating that females have lower risk tolerance than males (Nelson, 2015; Cooper et al. 2014; Lemaster and Strough, 2014; Faff et al. 2008; Yao et al. 2004; Grable, 2000; Bajtelsmit and Bernasek, 1996). Previous studies have attributed this to significant variances in confidence levels between the genders in terms of financial decision-making. Findings show that controlling for other demographic variables, women have less self-confidence in financial decisions than men (Tekçe et al. 2016; Barber and Odean, 2001; Estes and Hosseini, 1988). The failure to find significant difference between the genders in this study suggests that further research is needed that can explore and clarify gender differences in the IB and UAE context.

The qualitative data points to the role of friends and family in influencing interviewees' risk position, primarily in terms of providing information and experiences which potentially shape their risk perception. The influence of friends and family is noted in Ajzen and Fishbein (1980) and termed Subjective Norm. Amin et al. (2014) describe Subjective Norm as the perception of group approval or disapproval and found it was the second most significant factor impacting the intention to switch towards Islamic home financing. There is also some consistency with cultural theory which underlines the importance of social norms and value systems in shaping perceptions of risk (Slovic, 2013; Rohrmann, 2005).

6.5 Religion and Risk Perception

The qualitative data points to the importance of religion as a significant factor on risk perception outcomes. Overall participants attached great weight to their religious beliefs when discussing perceived risk between conventional and Islamic banks. Interviewees described their risk perceptions more in terms of the importance of abiding by an institution that ascribed to religious values, rather than as objective factors. This accords with a body of risk perception literature indicating that the evaluation of risk is highly affected by socio-psychological and cultural aspects (Boholm, 2015; Breakwell, 2014; Breuer et al. 2014; Renn and Rohrmann, 2000; Rohrmann, 1995). Beliefs, culture and life experiences are all shown to be key factors in interpreting risk (Roszkowski and Davey, 2010).

However, the qualitative findings in this thesis suggest a further dynamic in relation to risk perception. Interviewees expressed a tendency to override high-risk perceptions in favour of their religious values. Only a small proportion would not invest in Islamic banks if the financial products proved to be risky. High-risk perceptions, as discussed in regards to switching intention and switching likelihood later in this chapter, are mitigated significantly by religious values. This finding contrasts with León and Pfeiffer (2013) who found religious involvement equated to greater risk aversion. The religious obligation that emerges from interviewees strongly suggests that risk perception is somehow detached from their risk attitude. For example, in one case the interviewee explained that their risk perception responses were based on the current situation, even though they had taken that investment decision months previously. When making the investment, their decision was more objective, while at the interview stage they were influenced by their religious beliefs.

This suggests a temporal factor in risk perceptions based on different influences at particular stages. In other words, at the time of investment a person may be more objective and perceive higher risk, but once committed their evaluation of the risk perception is tempered by their religious values. This is supported by a second interviewee who argued that Islamic banks were based on moral values that benefit society and ascribed religious loyalty and commitment as leading to lower perception of risk. This is consistent with the significant consensus in the literature that risk perception should be more closely related to social than to cognitive psychology and cannot be solely understood by the cognitive intuitions of probability calculus (Kahan, 2012; Roszkowski and Davey, 2010). The findings support the significance of socio-cultural factors underlined in the literature. Murtaza et al. (2013) found that investors with religious values had greater preference for ethical investments. Research has demonstrated that religious values play a significant role in consumer perceptions compared to non-religious consumers (Bazeem, 2015; Swimberghe et al. 2011; Kliukinskaite, 2009; Vitell, 2009).

Innovations and changes in financial products can cause greater uncertainty, particularly concerning Shariah principles. The qualitative data suggests that Muslim consumers may find the Shariah compliance of financial products questionable. However, at the same the findings suggest that consumers are willing to consider pragmatic factors and therefore that the religiosity dimension is subjective. This supports Al-Tamimi et al. (2009) whose findings suggest a resilient consumer preference for Islamic banks over conventional banks in spite of negative perceptions.

Baghani and Sedaghat (2016) found that risk perception and risk tolerance both exerted a statistically positive influence on investors' decision-making. Minimising risk perception can therefore result in a potentially greater desire for investments. While risk tolerance can be viewed as an objective factor that is beyond the control of banks, risk perception can potentially be minimised through information communication and improved awareness.

6.6 Risk Attitude and Risk Perception

Risk attitude, in terms of risk tolerance and risk aversion, was found to influence risk perception towards IB products and the likelihood of switching. In regards to risk perception the SEM analysis indicated that both attitudinal constructs were predictors, however the character of the influence differed. Risk tolerance has a negative influence, indicating that people with higher tolerance perceived less risk with IB products and disconfirming H1a. As expected H1b was supported as risk averse consumers tended to perceive a higher level of risk with financial products. These findings provide some support for van Winsen et al.'s (2011) position that these notions should be combined to improve risk behaviour understanding. Generally, risk attitudes and risk perceptions have been regarded as discrete and separate behavioural determinants, however these findings show that a relationship exists in which risk attitudes influence risk perceptions.

In terms of switching behaviour the results show moreover that H2a is not supported, as risk tolerance had a negative influence on both switching likelihood and switching intention. Conversely H2b is accepted as risk aversion positively influenced switching likelihood and intentions. In terms of the unique effect of risk tolerance on switching likelihood, the quantitative results showed that there was no statistically significant difference between male and female groups.

6.7 Risk Perception and Switching Intention

A further objective of this thesis is to determine the degree to which conditions relating to Shariah compliance, profit performance of IB, and economic conditions influenced risk perceptions towards investments and impact investor decision-making. Firstly, this is explored and discussed in relation to the impact on switching likelihood, to assess how far consumers are from switching to an alternative form of investment. Secondly, the impact on decision-making is explored in terms of the effect on switching intentions and the underlying explanatory factors.

The quantitative findings from the SEM analysis indicated that switching intention and switching likelihood is positively influenced by risk perception. This shows that hypotheses H4a and H4b are accepted. In relation to hypotheses H3a and H3b the results fully support the contention of the mediating effect of risk perception. Risk perception was found to have a mediating effect on risk attitudes and switching likelihood and switching intention. The total effects indicate a negative effect in terms of risk tolerance and switching likelihood mediated through risk perception, and negative effect in terms of risk tolerance and switching intention through risk perception supporting hypothesis H3a. For risk aversion to switching likelihood total effects indicate a positive effect mediated through risk perception and positive effect in terms of risk aversion and switching intention through risk perception. Hypothesis H3b can therefore be fully accepted. This finding indicates the distinctive effect of risk perception on consumer decision-making behaviour under certain conditions. Risk aversion and risk tolerance alone do not explain switching likelihood or switching intention. As expected, risk aversion and risk tolerance had a significant effect on switching intentions and likelihood; however, risk perception which is predicted by risk tolerance, risk aversion and individual characteristics explains a partial amount of variance in switching likelihood and switching intention.

The data for baseline switching intention and likelihood indicated that, on the basis of current risk perceptions, the majority of participants had no intention to switch their investments. This result was consistent across all types of financial products. A significant finding is that while risk perception increased for all scenarios, it did not correspond to a similar shift in switching intention. The increase in perceived risk did not translate to a proportionate increase in intention to switch. This finding suggests some inconsistency with the Theory of Reasoned Action (Ajzen and Fishbein, 1980) and the implication derived from it that changes in consumer risk perception may alter their intentions and thus their behaviour (Ouellette and Wood, 1998) towards Islamic banks in terms of withdrawal.

Rather, within this sample, consumers of Islamic banks exhibited a high level of loyalty. Loyalty for a range of different factors appeared to be highly resilient to increased risk perceptions. This finding is consistent with research demonstrating the resilience of IBs in the financial crisis (Hassan and Kayed, 2010) and the resilience of customer loyalty to IBs more generally (Ahmed et al. 2014; Al-Tamimi et al. 2009). Further, it supports the finding in the literature that IB is a safer and more stable option than investing in conventional banking (Hasan and Dridi, 2010). However, the findings from this study indicate that, in spite of this difference, the IB contexts presented are associated with higher risk. However, while this translates to higher switching likelihood there was comparatively lower impact on switching intention. While risk perception strongly influences closeness to switching as evidenced by the increases in switching likelihood between scenarios and the z-scores in section 5.6.5 a loyalty factor may constrain that decision to switch. While risk perception and switching likelihood increased under different scenarios it is likely based on the qualitative data that consumers' situational and personal factors exert a moderating influence.

In terms of the qualitative data, the majority of interviewees believed that IB, in spite of the risk scenarios presented, was nevertheless significantly safer than conventional banks. Some respondents argued that in spite of the higher perceived risks under the different scenarios, both systems were comparable. More significantly, religious belief impacted significantly on switching intention. Multiple interviewees expressed a tendency to overlook the potential financial implications of the risk presented under the different scenarios influenced by their religiosity. This indicates that the importance consumers attach to their religious belief mitigates risk perceptions. Mohd-Karim (2010) found that in spite of a lack of guarantee for deposits, the majority of investors would remain loyal to Islamic banks. The literature emphasises the importance of investor discipline in mitigating bank lending risk (Diamond and Rajan, 2000). However, this research supports IB literature by evidencing a greater complexity in IB consumers and the role of religion in risk perception and withdrawal risk. It provides an alternative perspective to other studies (Osoba, 2003; Miller and Hoffmann, 1995) whose findings suggest a higher level of withdrawal risk of Muslim consumers compared to conventional ones, on the basis that religious people are more risk averse and influenced by bank performance.

6.8 Risk Perception and External Conditions

The evidence from the quantitative data indicated that the four scenarios presented to respondents influenced consumers' risk perception. The results presented provide strong support for hypotheses H5a and H5b that the influence of risk perception on switching intention and switching likelihood is significantly different under alternative risk scenarios. The general pattern across all scenarios was discussed in the previous sections. The focus of the discussion in this section centres on specific factors expressed by interviewees as underpinning their perceptions and switching intention. In terms of the individual impact of the different conditions presented across the four scenarios, the effect and underlying reasoning were varied. Scenario 1 was related to the deterioration of Shariah compliance and the risk that bank operations and products have become less compliant with Shariah principles. Quantitative findings identified that consumers' risk perceptions are significantly sensitive to deteriorating Shariah compliance standards. Under this scenario, risk perceptions increased significantly by more than one third from the baseline measure and the switching likelihood increased by more than half. Multiscenario analysis further showed that the effect of risk aversion on switching likelihood increased from a moderate level to a high one. This indicates that Shariah compliance as a factor can significantly influence risk perceptions. This was supported by the qualitative data, which showed that for the majority of participants deterioration in Shariah compliance entailed a high level of risk for the financial products.

The increase in risk perception under this scenario was not unexpected given the attention attached in the literature to Shariah non-compliance risks. Eid and Amin (2012) found that although liquidity was a critical factor when questioning a cross-section of employees from financial institutions about the perceived severity of a range of risks, non-bankers viewed reputation and Shariah non-compliance risks as critical factors (Eid and Amin, 2012).

The increased risk perception compared to baseline perceptions underscores the importance of Shariah compliance. This finding is consistent with the qualitative data from the majority of interviewees expressing strong religious sentiments underpinning their risk perceptions. Multiple interviewees explained that a flaw in Shariah compliance undermines the moral and ethical values they hold as important. Shariah principles represented a major attraction to IB and a fundamental distinction from conventional systems, supporting findings from a range of literature emphasising the importance of compliance with Shariah principles in bank selection (Ariff, 2014; Masood et al. 2009; Rashid et al. 2009; Dusuki and Abdullah, 2007).

Shariah principles forbid investments in high-risk ventures or in ventures that have potentially extreme negative impacts (Kayed and Mohammed, 2010). This factor appears to influence risk perceptions of investors. It is evident from the interviews conducted that Muslim consumers placed significant reliance on this principle as a cushion that minimises their risk. The quantitative results indicated a significant difference between the average baseline perceptions of risk towards Islamic products and the perceived risk towards Islamic products under the Shariah scenario. When presented with a significant deterioration of Shariah compliance, risk perception increased significantly. This aligns with the literature on operational risk in the IB sector, which cites Shariah non-compliance as a key operational risk (IFSB, 2016; Ginena, 2014). The increase in closeness to switching under this scenario is explained by the perceived loss of protection that the Shariah framework provides. Several interview participants expressed their awareness of protections provided by Shariah principles controlling risk-taking behaviour. This suggests that risk perceptions are influenced by a sense of security afforded through the regulations of Shariah (Kayed and Mohammed, 2010; Khatkhatay and Nisar, 2007; Hakim and

Rashidian, 2002). The Shariah framework applied to IB defines mechanisms that constrain a culture of risk taking (Kayed and Mohammed, 2010). Therefore, any information or knowledge of a flaw in such a system has the implication of increasing the likelihood of switching. Shariah compliance in IB has been raised as an issue within the literature with the hypothesis that failure to maintain compliance standards can significantly affect retention of IB customers. Evidence in the Indonesian context supports this premise, with IB customers citing Shariah compliance issues as the principal reason for withdrawal of funds (Abduh, 2012). An increase in risk perception and likelihood of switching by 50% on the baseline evidenced in this study under this scenario supports this position in the literature.

The data suggests that risk perceptions influence as expected the likelihood of switching and indicates that external conditions and situational factors exert an influence on consumers' likelihood of switching. The closeness to switching indicated by the increased likelihood of switching suggests that the perceived deterioration of Shariah compliance can potentially erode tolerance. There is significant potential for a reduction of that tolerance to influence the perceived risk to a degree that increases switching intention. This may reflect an erosion of trust and reputation, which the literature has identified as a significant factor in the retention of Muslim consumers (Ashraf, 2014; Reyazat, 2012). Kammer et al. (2015, p.17) further underline the potential impact on customer retention, stating that "*the requirement of Shariah governance and compliance on uses and sources of funds also poses risks: a determination of noncompliance could also trigger client flight*".

However, a major quantitative finding from this study is that while the scenarios significantly raised the level of perceived risk associated with Islamic products, a large majority indicated no intention to switch. In spite of the higher levels of perceived risk associated with deterioration in Shariah compliance, consumer retention based on those figures remained relatively strong. The qualitative data points to a number of underlying factors underpinning this finding. Firstly, interviewees expressed the view that compliance was not in itself the overriding factor and that commitment to Shariah principles was significant. There was an expectation that the system was not perfect and still under development. This is consistent with van Greuning and Iqbal's (2008) argument that the IB industry is relatively young. Furthermore, failure to adhere to Shariah principles by one institution can be generalised to other institutions (van Greuning and Iqbal, 2008). This suggests that investors may perceive all Islamic Banks similarly in terms of Shariah compliance, in turn affecting their intention to switch between Islamic banks. This is supported by the qualitative data where doubts in relation to improved compliance elsewhere were expressed.

However, this study focused on the intention to switch to an alternative banking system. While the failure to manage Shariah risk can become a major source of risk perception, the perception of Shariah compliance risk is mitigated by the findings from this qualitative data. The results indicate some degree of tolerance towards failure in this area by consumers. This suggests that consumers afford IB a significant degree of latitude and view the banking sector to some degree as work in progress. This is consistent with research by Amin et al. (2013) showing that Muslim banking customers were willing to tolerate small errors, providing they had a positive image of the bank overall. Furthermore, interviewees from the qualitative interviews indicated a major limitation in identifying alternatives to IB as they generalised such a scenario to all banks including conventional banks. It is possible that the financial crisis severely undermined the credibility of conventional banking systems. This suggests that any perceived risk associated with Shariah compliance is mitigated significantly by risk factors in conventional banks. This is a key factor in minimising the likelihood of switching to conventional banking systems. This conclusion would be consistent with evidence highlighting the attractions of IB for consumers on the basis of perceived resilience in the face of financial crisis (Ariff, 2014; Abdullah et al. 2012).

This finding is significant as it suggests that the likelihood of switching could be higher if Muslim consumers perceived greater differentiation between Islamic banks and conventional banks. In support of this finding, one quarter of interviewees believed that Shariah had little impact on the operation of financial risk of products and that Shariah risk was a superficial factor.

This is substantiated by the concern expressed by a small number of interviewees over the uncertainty concerning the stability and performance of the Shariah system and the effect on their funds. This concern is reflected in the literature in terms of a broader performance risk associated with deficiencies or malfunctions in IB activities as identified by Kuisma et al. (2007). The importance of performance aspects in IB and the potential to influence negative risk perceptions is evidenced by other studies (Nasir et al. 2015; Littler and Melanthiou, 2006; Grabner-Kräuter and Faullant, 2008). This affects trust that in turn increases risk perception. However, the comparable or greater perceived risk of the conventional financial system minimises the withdrawal risk in terms of the IB sector.

The quantitative results showed that the second and third scenarios exhibited a similar pattern of results for risk perception and switching behaviour. An increase in risk perception was noted under both the profit performance scenario and the economic conditions. Conditions based on static or zero profit performance in the short to medium-term influenced risk perceptions. Moreover the effects of risk aversion on risk perception increased from low to moderate and low to high for profit performance and economic conditions respectively.

The perceived risk associated with poor profit performance was expressed in terms of the impact on the banks' overall stability and reputation. The qualitative results present a more nuanced picture however. Multiple interviewees perceived a high level of risk in terms of deterioration in profit performance for the financial products. For the remainder, profit maximisation was not the main goal but rather a secure and stable location for liquid assets. The literature underscores the relative significance of Islamic bank deposits in maintaining liquidity compared to conventional banks. The perception of risk for investors is as much related to achieving returns as it is in terms of maintaining the security of their savings. The degree to which investors may associate overall withdrawal risk with poor profit performance may impact individuals' switching likelihood and intention.

The distinction between these scenarios and the Shariah scenario lies in the switching intention, where a much lower percent changed compared to the baseline switching intention. Profit performance was less significant than Shariah with a lower percentage of the sample indicating their intention to switch (21% compared to 24%). While profit performance was a significant factor, a minority of interviewees mitigated the risk perceptions, prioritising stability and safety over profit performance. The importance of Shariah compliant characteristics over profit represents a key finding in the work of Mohd-Karim (2010) where certain profit-sharing instruments were less desirable due to the perceived lack of compliance.

Nevertheless, achieving returns and high profits remains generally a significant factor, although its relative importance is not fully understood in the literature. The quantitative data extends knowledge in this area indicating that static profit performance had no influence on switching likelihood. This is broadly consistent with evidence by Farooq and Zaheer (2015) who found that withdrawal risk decreased in financial panics. Overall, the sample indicated the same level of likelihood to switch with a moderate increase in the switching intentions. Furthermore, some interviewees expressed a lack of understanding in terms of the impact of profit performance of the bank overall on their financial products. Awareness and information on this theme may potentially influence higher levels of perceived risk. The qualitative results show that most interviewees perceived a low level of risk from economic conditions due to perceptions of government support to, and safeguards for, the banking sector. Of the minority perceiving a high level of risk to returns, most did not view this as within bank control.

In terms of switching likelihood, the effect of risk perception under the economic conditions scenario had a significantly higher effect, more than double compared to the baseline. This is not wholly consistent with the qualitative findings which indicated interviewees' perceptions that perceived risk based on economic conditions was mitigated by several perspectives. This finding warrants further research, and is discussed further in Section 7.4.4**.** Firstly, interviewees viewed economic factors as beyond the control of the banks and as a factor that affects Islamic and conventional banks alike. Moreover, a low level of risk was perceived due to perceptions of government support to and safeguards for the banking sector. This is consistent with evidence from the US, Austria and Italy highlighting that the perception of state cushioning influenced financial decision-making (Schneider et al. 2017). Most interviewees cited that they would not switch under this scenario, citing perceptions of similar risk elsewhere, and the familiarity, loyalty, and trust built with their existing bank. While economic conditions are perceived as high risk in terms of the potential negative impact on financial returns, the effect on switching likelihood is considerably less than in the Shariah compliance and profit performance scenarios. Further, the lower switching intentions due to these factors appear to minimise withdrawal risk. Masood et al. (2014) argue that awareness of Islamic instruments beyond the basic concepts is limited. This may potentially explain the perceived low switching intention and tolerance for weak Shariah compliance.

In relation to the fourth scenario presented, the qualitative data showed that interest rates exhibited less of an influence on risk perceptions. The majority of interviewees placed less emphasis on the risk associated with this scenario as the notion of interest is forbidden in Islam. In one case, an interviewee expressed the concern that investors in conventional banks would benefit from a higher rate of interest. This suggests an awareness of the opportunity cost of high interest rates, and a limited understanding and awareness of the impact of interest rates on the banks' overall financial stability. In theory, a change in interest rates may lead investors who are more objectively orientated to divert their funds to conventional banks. This was consistent with findings by Abdul Kader and Yap (2008) whose evidence indicated that Islamic banks in spite of the interest-free context were exposed to interest rate change. Demiralp and Demiralp (2015) also highlight customer sensitivity to interest rates. Banks may design products and investments that circumvent interest restrictions by guaranteeing profits that can be construed as a breach of Shariah compliance. The qualitative data showed that in terms of switching behaviour most would not switch under this scenario citing mainly religious reasons and an emphasis on security rather than financial returns. There is some inconsistency here with the quantitative findings which show that risk perception, and the effect of risk perception on switching likelihood is significantly higher than the baseline. The differences in these findings suggests the merit of further research to clarify the influence of interest rates in the IB context, discussed further in Section 7.4.4.

High switching costs associated with UAE banking may help explain the low intention to switch under the different scenarios. Sayani (2015) found evidence of network externalities and economic switching costs within the price maker context of the UAE. This may create a barrier to switching in spite of high-risk perceptions, combined with the relationship and trust factors IB consumers identified as important factors. Interviewees expressed that high levels of satisfaction, trust, reputation and service quality of IBs were key factors that minimised their intention to switch. This supports findings by Amin et al. (2013) highlighting the significance of these factors on customer loyalty towards Islamic banks in Malaysia. Customer satisfaction and image impacted trust which in turn influenced customer loyalty. Additionally, some interviewees found conventional banks comparable in terms of service quality and safety of their funds further reducing the intention to switch or the likelihood to switch. These findings suggest that Islamic banks may be able to achieve a significant differentiation on the basis of Shariah compliance.

6.9 Summary

In summary, the findings from this study suggest that risk perception is not based wholly on objective financial cognitive assessment or uncertainty. Rather, the findings point to an interplay of non-objective factors that influence risk perceptions towards IB products and decision-making. On the basis of the empirical evidence, IB consumers perceive a higher level of risk associated with three of the four scenarios. Overall, external conditions impact on risk perceptions. These results indicate that risk perceptions vary across different types of products based on subjective knowledge and information investors possess in relation to those products. Situational factors such as government support and policy act as a mitigating factor in terms of risk perceptions. Understanding of Shariah principles appears to minimise risk perceptions, on the basis that it conveys reassurance in terms of the protection afforded through the Shariah safeguards. Uncertainty is expressed regarding the use of funds in investment accounts and current accounts compared to saving accounts, which exhibited a lower level of perceived risk compared to other types of accounts.

In regard to specific conditions, risk perceptions varied between the different scenarios presented. Analysis of the four contrasting scenarios indicates that situational contexts impact on risk perceptions. Shariah compliance impacts most significantly on risk perception underscoring the importance of religiosity. Poor economic conditions and profit performance impact risk perceptions underpinned by uncertainty on job security and threats to financial security. The relationship between risk perception and switching likelihood and switching intention across the different scenarios suggests that IB consumers are willing to accept risk to varying degrees. Different subjective factors mitigate the switching likelihood and switching intention.

A key finding from this study is that rational objective motivations are balanced significantly against religious and pragmatic factors. Religious principles influence Islamic consumers' risk perceptions towards IB products by overriding the profit motivation. The achievement of zero or low returns is not a sufficiently powerful factor to influence a switch to conventional banking. Further, comparisons with conventional banking factors indicate loyalty based on trust, reputation and religious values as factors that minimise switching likelihood and switching intention.

A dominant theme emerging from the study is anchored in the view of respondents that perceptions were compounded by a range of external factors that made them more aware of risks. Indirectly, knowledge and experience of the financial crisis generates uncertainty that affects risk perception based on subjective probability of potential financial loss. Attitude towards risk is not constant and anchored wholly in personality traits. Individual factors may combine to generate a particular risk position making consumers more or less risk averse or affecting risk perceptions positively or negatively.

Further, the findings of this study point to a number of determinants of risk perceptions. Indirect determinants including education and gender appear to play a role in the process of decision-making in terms of influencing risk perceptions. These factors emerged as statistically significant in impacting on the level of risk perception and switching likelihood. These characteristics of consumers combine with a range of subjective factors that vary between individuals based on their beliefs, socio-culture, knowledge and experience to influence decision-making towards IB products.

A degree of tolerance is exhibited by the sample in this study toward Shariah compliance. While risk perceptions and switching likelihood are heightened, switching intentions are mitigated based on religious and pragmatic factors. Consistent with the work of Abduh et al. (2011), IB is viewed as financially safer based on both religious orientation and value system associated with Shariah principles and the perceived financial guarantee from the government for deposits. While profit performance is a significant issue, it is not the dominant factor influencing risk perceptions and decision-making.

One of the key issues for the IB industry relates to the question of sustainability of the growth of IB and its ability to retain customer depositors. The literature emphasised depositor funds as an essential source of funding for IB operations and financing, as Islamic principles forbid earning of any interest-related income (Abduh et al. 2011). This finding provides only marginal support for the likelihood of significant withdrawals if investors perceive an Islamic bank as a poor performer (Ahmed, 2003). The findings suggest however that under the right conditions for consumers there is risk of withdrawal evidenced by the heightened switching likelihood, constrained by switching barriers and costs. However, closeness to switching is mitigated by religious, socio-cultural and pragmatic factors. Critically, the findings from this study imply that IBs should be aware of the impact of external conditions on risk perception and while they enjoy significant loyalty and religious commitment, strategies should be explored to minimise closeness to switching and maximise retention. This is consistent with the view underlining the importance of focusing on the maximisation of customer value and the fulfilment of Muslim consumers' financial needs (Henry and Wilson, 2004). The financial crisis and economic context influences risk perception underpinned by concerns relating to financial and job insecurity that in turn reduces tolerance for poor profit performance.

Chapter 7 Conclusion

7 Conclusion

7.1 Introduction

The primary aim of this study was to investigate the relationship between risk perceptions of Islamic banking (IB) products and investment decision-making. The secondary objective was to determine the degree to which conditions relating to Shariah compliance, profit performance of Islamic banks and economic conditions (interest rates and income) influence risk attitudes towards investments and impact investor switching intentions.

The research framework was developed and presented in Chapter 3 to examine the impact of the relation between consumer characteristics, risk perceptions under different conditions, and the influence on switching likelihood and switching intention. While the focus of this framework is founded on the role of risk perception, the dynamic relationship identified in the literature between risk perception and risk attitude is incorporated as a further dimension of this research. The framework reflects the theoretical emphasis placed on the interaction between risk attitude constructs, risk perception, risk aversion, risk tolerance, and socio-demographic and psychological factors. Risk perception is influenced and can be affected by both socio-demographic and psychological factors. Risk perception is incorporated as the central element of this study as a distinct component of overall risk attitude and its relationship as a predictor and mediator of switching likelihood and switching intention. This chapter summarises the key findings and theoretical contribution to the literature.

7.2 Summary of Key Findings

The primary aim was to investigate the relationship between risk perceptions of Islamic banking products and investment decision-making, and to determine the degree to which external conditions influence risk perceptions towards investments and impact investor switching intentions. A summary of the key findings is outlined in Table 7-1 located at the end of Section 7.3**.** A review of the literature was conducted to identify key themes relating to risk perception, risk attitudes and consumer decision-making towards IB products.

Chapter 2 provided a review of the literature on the financial crisis and IB. Chapter 3 presented a review of risk perception and risk attitudes studies that have shaped the development of the research framework for this study pointing to the importance of the relationship between consumer characteristics and attitudes and financial behaviour. The focus of this review served to address two central questions:

- How does risk perception influence IB investment decision-making in terms of switching intention?
- What conditions influence the relationship between risk perception towards IB products and investment decisions?

RO1 To undertake a literature review to investigate the relationship between consumers' risk perception and consumer decision-making in relation to switching behaviour.

Chapter 3 explored risk perception and risk attitude constructs, including risk tolerance, risk aversion and risk perception, revealing them to be underpinned by a number of socio-demographic and psychological factors. The dynamic financial and IB context outlined in Chapter 2 and risk attitude literature review in Chapter 3 formed the basis of the research framework for investigating risk perception and its impact on risk behaviour, conceptualised as switching intention and closeness to switching. The various facets of risk attitudes including risk perception were defined and contrasted.

This review confirmed the theoretical value of understanding the role of risk perception, and revealed a gap in relation to understanding the relationship and role of different aspects of risk attitude, including risk perception, on investor decision-making. The literature pointed to risk attitudes as an amalgamation of several constructs that interplay to influence risk perception and risk actions of individual investors. Risk perception was identified as an integral component of the risk assessment and behaviour processes of individuals. The review demonstrated that while considerable studies had attempted to explore risk attitudes from an economic-centric approach, there was an increasing body of literature that recognised a complex interplay of socio-cultural factors.

This aligns risk perception more closely to social factors than to cognitive psychology and probability-based algorithms to measure and understand behaviour.

Furthermore, the review emphasised a research gap in terms of risk perception. Methodologically, the majority of these studies have adopted a quantitative approach while many studies were concentrated in Europe, America and Asia. The quantitative design of most studies may be attributed to the rational objective measurement of risk attitudes and risk perception. A central view arising from this review is that an objective perspective insufficiently explains or frames consumer decision-making processes for Muslim consumers in a sector with unique risks and characteristics compared to conventional banking. This consequently emphasised the importance of a broad range of contextual factors in influencing consumer decision-making.

RO2 To implement a survey and interviews to gather primary quantitative and qualitative data on IB consumer risk perceptions towards IB products, switching intentions and closeness to switching.

This objective was addressed in Chapter 5, which describes a sequential mixed methodological approach. The quantitative data collection stage was followed by qualitative in-depth interviews. The quantitative stage employed a survey questionnaire for the first phase of data collection to gather data on risk perceptions and attitudes of IB customers towards IB banking products. The questionnaire survey of the study was designed to generate insight into consumer perceptions of risk in relation to the products and services offered by IBs in the UAE. A self-administered questionnaire was conducted utilising a secure online survey system used by academic and professional researchers. The quantitative data was analysed using Structured Equational Modelling (SEM).

The survey sample was drawn from a total population of Abu Dhabi Police of 34,077 employees. For this study, Abu Dhabi Police, GHQ was considered which has 7 main administrative departments with a total of 34,077 employees representing 41% of the total population of The Ministry of Interior in UAE, which is considered a high percentage compared with any other organisation in Abu Dhabi. For each administrative department there are 6 sub-departments.

The second phase of data collection within the case study strategy employed a semi-structured method to gather in-depth qualitative data from subjects on their perspectives and the underlying factors influencing their perceptions and decision-making. Qualitative data was collected from a small subsample of bank customers who participated in the questionnaire survey. The data was analysed using a thematic analysis approach.

The findings from the quantitative and qualitative data indicated the distinct role of risk perception. Quantitative data evidenced the relationship between risk aversion, risk tolerance and risk perception and indicated that consumers' risk perceptions changed and impacted on decision-making to varying degrees under different scenarios. The qualitative data pointed to the importance of Shariah principles and religiosity as key influences that attenuated switching intention.

RO3 To apply the primary data to evaluate the relationship between external conditions (Shariah compliance, profit performance of IB and economic conditions), risk perceptions and switching behaviour in IB consumers.

The results pointed to significant differences in risk perceptions and switching intentions and switching likelihood under different conditions. In terms of differences between scenarios, the results indicated that external factors influenced risk perceptions and decision-making. When comparing responses under different risk scenarios with existing perceptions and switching attitude, a difference in effects was noted between these groups. Faced with a deterioration in Shariah compliance, risk tolerance and risk aversion account for higher effects on risk perception, switching likelihood and switching intention. For scenario 0 (Baseline responses) risk tolerance has a low effect (β=0.129) on risk perception compared to stronger negative effect (β=-0.350) on risk perceptions under scenario 1 (Shariah compliance) with a z-score of -4.619. The effect of risk aversion on risk perception is significantly higher under the Shariah compliance scenario with a z-score of 3.036. A similar pattern in terms of risk tolerance and switching intention and risk aversion and switching likelihood exists. Consistent with the statistical data, the qualitative results showed that deterioration in Shariah compliance entailed a high level of risk for the financial products. Moreover, despite perceptions of superficial compliance in IB, the claim of adherence was significant and viewed to fulfil religious duties. The majority would not switch under this scenario citing satisfaction with bank services or performance or doubt of improved compliance elsewhere.

Under profit performance and economic conditions scenarios, risk aversion and risk tolerance exhibited higher effects under the risk scenarios compared to the baseline scenario. Comparing the difference between baseline and profit performance scenario with a z-score of 11.137 the difference in the effect of risk aversion on risk perception is significantly higher in scenario 2 compared to scenario 1. The negative effect of risk tolerance on switching likelihood is more than double under scenario 0 compared to scenario 2 with a z-score of 3.102. The effect of risk perception on switching likelihood differs under scenario 2 with an effect of $\beta=0.311$ compared to $\beta=0.167$ under scenario 0 and z-score of 1.725. The path risk tolerance to switching intention indicates weaker negative effect in both scenarios but with a statistically significant difference with z-score of -2.358.

Supporting the quantitative findings, the qualitative data shows a high level of risk was perceived in terms of deterioration in profit performance for the financial products. A key qualitative finding clarifies that poor profits were viewed as affecting a bank's stability and reputation, and potentially impacting a bank's financial position. However, for a minority profit maximisation was not the main goal but rather a secure and stable location for liquid assets. Most respondents would not switch under this scenario due to loyalty to the bank as long as stability was maintained.

For the economic conditions scenario, the statistical results indicate that the effect of risk perception on switching likelihood had significantly higher effect, more than double the small effect ($\beta=0.167$) in scenario 0 compared to ($\beta=0.317$) in scenario 3 with z-score 1.989. The effect of risk aversion on risk perception is significantly higher under scenario 3 with a z-score of 9.602.

The qualitative findings show consistency with the quantitative data in relation to switching intention and likelihood as the majority would not switch under this scenario citing similar risk elsewhere and the familiarity, loyalty and trust built with their existing bank. Insights from the qualitative data emphasised either perceptions of low risk due to government safeguards and support for the banking sector or high risk which was however beyond bank control.

Comparing baseline responses with responses under interest rates conditions for the scenarios indicates four paths that are significantly different. For the path risk perception to switching intention, the zero effect under baseline scenario risk perception becomes significantly higher under scenario 4 with a z-score of 3.805. The effect of risk perception on switching likelihood is significantly higher under scenario 4 with a z-score of 5.023. Finally, the effect of risk aversion on switching intention is significantly smaller and moving from positive to negative under scenario 4 compared to scenario 0 with a z-score of -4.323.

The qualitative data is not consistent with statistical results, with the consensus perceiving a low level of risk to financial products from interest rates, the lowest of all four scenarios. Moreover, most would not switch under this scenario citing mainly religious reasons and an emphasis on security rather than financial returns.

This suggests that under certain high-risk conditions individuals' attitudinal position has a greater impact on switching behaviour. It is notable that the relationship between risk perceptions is not significantly different under this scenario. There was significant difference of effects size between scenarios to indicate that external conditions impact on risk perceptions and switching behaviour in different ways. For instance, deterioration in Shariah compliance and poor profit performance impacted risk perception and switching likelihood to a greater degree than poor economic conditions and interest rate scenarios.

RO4 To apply the primary data to evaluate the relationship between risk averse consumer characteristics (such as, age, sex, education, number of children) and risk perception.

The quantitative results showed that demographics have an influence over risk perception. Age, number of children, and financial expertise in terms of investing in the financial market were all found to influence risk perception. A comparison of the male and female groups showed that there is no statistical difference between genders.

The qualitative data indicated some consistency with the quantitative results in terms of financial experience, which emerged as a key determinant factor of risk attitudes. While the quantitative data shows that IB Knowledge does not have a relationship with risk perception, the qualitative data points to the importance of knowledge and awareness as an influence over risk perceptions. Moreover, the importance of family responsibility in determining risk perceptions and attitudes was emphasised, supporting the quantitative data which found that the number of children positively influenced risk perceptions. Security of capital even when faced with low returns was perceived as critical by this significant section. Consistent to some degree with the quantitative data, financial experiences affected risk attitudes among a minority, with risk aversion growing following loss experiences in the 2008 financial crisis.

RO5 To identify factors and determinants affecting risk perceptions towards IB products and intention to switch

Under the baseline model, risk aversion exerted a positive influence on risk perception. The relationship between risk aversion and risk perception is relatively strong (β=0.580). Risk tolerance negatively influenced risk perception indicating that people with higher tolerance perceived less risk with IB products. Risk tolerance has a moderate negative influence on risk perception (β=-0.136).

Findings from the qualitative data provide further insight into factors and determinants affecting risk perceptions of IB products and switching intention. Key findings showed that IB was perceived as safer than conventional banks due to greater transparency, fixed rates of return and safer transactions. Many perceived the risk of IB products to be overridden by religious beliefs and very few would not invest in Islamic banks if the financial products proved to be risky. However, the majority of participants identified themselves as risk averse.

The SEM results indicated that risk perception, risk aversion and risk tolerance all exerted an influence on switch decision-making. Both risk perception (β=0.131; β=0.241) and risk aversion (β=0.145; β=0.219) had a positive influence on switching intention and switching likelihood. Risk tolerance meanwhile negatively influenced both switching intention and switching likelihood (β=-0.100; β=-0.203).

Partial mediation indicates that risk perception mediates the relationship between risk attitudes and switching intention and switching likelihood. In the case of risk tolerance to switching likelihood, there is a negative indirect effect (β=-0.085). For the path risk tolerance to switching intention, risk perception also has negative indirect effects (β=-0.260). Similarly for risk aversion and switching likelihood there are indirect effects (β=0.265). For the path risk aversion to switching intention, risk perception has an indirect effect (β=0.085).

7.3 Reflecting on the Key Findings

In evaluating the relationship between external conditions (Shariah compliance, profit performance of IB and economic conditions), risk perceptions and switching behaviour in IB, the findings present a broader and more complex understanding of consumer decision making in IB. The premise that risk attitude is a stable factor is challenged by these findings as the evidence indicates that Muslim consumers are influenced by a number of factors that impact the decision-making process. Rather than being economic, the dynamic is a socio-economic decision process that is complex and interrelated. A summary of these findings is presented in Table 7-1 at the end of this section.

The evidence indicates that the external context can shape and heighten risk perception towards banking products. The appraisal of the risk scenarios presented was underpinned by emotional cognitive factors. The sample expressed their fear and uncertainty over the economic context and perceived different levels of risks in their banking products across different scenarios. Muslim consumers were influenced by emotional factors notably their fears over the past financial crisis and their family responsibility. Since the financial crisis the economic situation in the Middle East has been challenging and it is likely that this context underpins concerns towards financial stability and job security with apprehensions for their family being paramount. Furthermore, the uncertainty of the economic and financial environment can generate further concern. Yet a major issue in IB is the confusion in products and instruments, and the inconsistency in the application of Shariah that undermines transparency and information. This can in turn serve to generate further uncertainty and perceived risk in IB. The unpredictability and volatility of the economic environment presents a further challenge even for experienced investors. Less experienced financial consumers may have less expertise or availability of objective knowledge, which can enhance the influence of close family and social relations. Muslim consumers may attach greater significance and reliance on those sources they trust the most.

While the experience of the financial crisis may heighten consumers' fear and uncertainty, financial knowledge and experience maybe attenuate fears and influence risk perception through a more informed appraisal of risk. Individual personal characteristics in terms of their experience, knowledge, age and life stage can impact in different ways on risk perception. Financial and investment experience may influence financial literacy and understanding of financial information and this may explain the effect of financial experience on risk perception both emotionally and cognitively, as they may possess more or less confidence about the risk context. Higher self-confidence arising from financial experience and knowledge may minimise fear and uncertainty from the unknown due to the perceived accuracy of their appraisal that may in turn influence a lower risk perception. IB risks associated with Shariah compliance and financing techniques is a unique aspect of this banking system, and consumers' experience, knowledge and awareness can influence the level of risk they perceive. Further, the level of complexity can limit transparency and understanding of Islamic products and can lead consumers to misperceive risks. Given the subjectivity of this risk perception, there is the potential for misperception based on flawed information or advice and support from family and friends.

Individuals possess different levels of expertise and this may account for different levels of risk perceptions across different scenarios. Those that lack that experience may again lean toward and draw on trusted sources of information and knowledge including friends, family and peers. Risk perceptions can be influenced by norms and values of individual consumers. Those with strong cultural and family attachments will be more influenced than those with weaker ties.

While risk aversion and risk tolerance may be stable, risk perceptions can change frequently and clearly influence decision-making given the different responses. These findings demonstrate that it is possible to distinguish the effect of risk perception and taken together with risk aversion and risk tolerance it is possible to see that risk perception can influence decision-making. As the socio-cultural context can shape risk perceptions it further impacts on decision-making in terms of likelihood of switching and switching intention. In this study a major finding is that religion and loyalty may constrain switching intention. In other words in spite of the level of perceived risk Muslim consumers may choose not to act. Religious considerations and Shariah compliance emerge as significant factors in consumers' decision process. The evidence indicates that when presented with different scenarios Muslim consumers' risk perception will vary. External conditions represent key drivers for risk perception. The findings indicate that consumers' risk perception is heightened and their switching likelihood is influenced by external conditions. The results varied for different contexts most notably for the risk scenario for Shariah compliance and the risk scenario for profit performance. Both represented risk factors associated with IB but with notably higher impact on risk perception and decision-making for Shariah compliance. It may well be that Muslim consumers have a high level of trust in IB that attenuates switching likelihood in terms of switching intention. This may be explained by cultural or religious principles indicated from the qualitative findings such as loyalty or relationship. Alternatively Muslim consumers may be reticent to switch to conventional banking due to a lack of information or experience with conventional banks or they may be confident in their ability to manage or absorb the risk. For Islamic banks high switching likelihood represents a risk of flight that can be mitigated with strategies to address a major factor of Shariah compliance. The withdrawal of government support for Islamic banks in the face of financial constraints represents a further risk dimension that may influence risk perceptions. Further, limited risk communication by banks may influence risk perceptions and emphasises the importance of subjective social support to appraise risk and take action.

Trust may be explored further to understand and explain the interaction between risk perception and switching intention. Muslim consumers might possess significant loyalty to a bank for many reasons including relationship with key personnel or service factors that engender trust, with the effect of moderating risk perception and switching intention. This loyalty may extend to IB over conventional banking. The qualitative findings suggested that Muslim consumers afford Islamic banks a degree of latitude such that they view the claim of Shariah compliance as important in spite of weaknesses in actual compliance.

While profit performance and opportunity cost as a result of higher rates of interest influence risk perceptions and actions in terms of closeness to switching, there is greater concern attached to religious principles. The degree to which individuals ascribe to religious principles could be a factor in influencing risk perceptions and the closeness to switching. Muslim consumers may be willing up to a point to compromise financial benefits as they attach greater importance to their religious beliefs. This raises the question in terms of how far religious principles attenuate switching intention.

On balance a process of appraisal can be evidenced that is based on subjective factors. From practical perspectives, this decision-making process bears relevance for bankers to identify risk management in relation to how Muslim consumers' thought processes can be incorporated into risk analysis. Bank advisors can influence risk perception by enhancing the quality of information and by providing greater transparency of Shariah compliance.

Table 7-1 Summary of Key Findings

Risk perception is not only based on objective assessment of uncertainty and financial risk tolerance; it is based on different factors and the interaction between social-cultural and psychological factors that influence decision-making.
External conditions significantly influence risk perception and switching likelihood to varying degrees; however they can be mitigated by religious and pragmatic factors (Government support, Media) in relation to switching intention. • The increase of switching likelihood in IB represents a flight risk that can be mitigated with strategies to address a major factor of Shariah compliance (How far do religious principles attenuate switching intention?). • Bank advisors can influence risk perception by enhancing the quality of information and by providing greater transparency on Shariah compliance. • The withdrawal of government support in the face of financial constraints represents a further risk dimension that may influence risk perception.
Risk perception is influenced to varying degrees by socio-demographic factors (age; number of children; financial expertise). However, the characteristics of consumers combine with a range of subjective factors that vary between individuals based on their beliefs, socio-cultural factors, knowledge and experience to influence risk perception and switching behavior in IB.
There is an interplay between cognitive resources, emotional state and risk perception. Previous experience of past events causes fear or concerns that influence risk perceptions towards IB. This shows that Muslim consumers are influenced by emotional and situational factors that affect their risk perceptions (e.g. economic crisis and family responsibility).
Considering subjective and socio-cultural dimensions helps in understanding of risk perception and decision-making. In turn this helps bankers to develop risk management in relation to how the thought process of Muslim consumers can be incorporated into risk analysis.
Risk perception has a mediating effect on the relationship between risk attitudes and consumer decision-making.
Experience and knowledge are considered key determinants of risk attitude. This perception is however considered subjective as there is a potential for misperception based on flawed information or advice and support from families and friends which affect risk perception.
Family responsibility is considered a key determinant of risk perception. The findings show that consumers with children and strong cultural and family attachment will be more influenced than those with weaker ties.

7.4 Study Contribution

This research makes several contributions to this field. The key theoretical and practical contributions are summarised in Table 7-2 and discussed further in this section.

Table 7-2 Study Contribution

Theoretical (Original)	This study addresses the gap in the literature relating to the lack of more comprehensive analysis of how attitudinal constructs of individuals interplay with internal and external conditions in influencing consumers' behaviours in Islamic banking and geographically in terms of the Middle East and UAE.
Theoretical (Original)	A significant emphasis has been placed on positivistic methods focused on objective empirically based research when examining risk perception and risk attitude. While this approach influences an objective measurement of risk perception used in psychometric paradigms, it is limited in understanding the subjective aspect of risk perception. The findings of this thesis provide new insight on the relative significance of different factors (internal and external) on an individual's decision-making process and points to a broader socio-cultural understanding of risk perception and the amplification effect of external conditions which interplay to influence switching behaviour. By widening the analysis of factors, risk perception was studied for the first time to account for both internal and external conditions using a mixed methods approach.
Theoretical	Risk perception and risk attitude have been regarded as discrete and separate behavioural determinants. Yet in studying the relationship between risk perception, risk tolerance, risk aversion, socio-demographic factors and external conditions, it is evident that consumer decision making is socially amplified and influenced by external conditions. • Contributes to existing interdisciplinary theory on risk perception offering a multifaceted understanding of the effect of risk aversion and risk tolerance on risk perception and the mediating effect of risk perception on the relationship between attitudes and consumer decision-making along with switching behaviours.
Theoretical/ Practical	The literature points to a lack of understanding of the Shariah operations and products among consumers in which understanding its principles appears to minimise risk perception on the basis that it conveys reassurance in terms of the protection offered through Shariah safeguards. Promoting greater education and awareness of IB products and how their funds are being employed can not only minimise uncertainty but also potentially maximise loyalty.

Practical	Subjective and socio-cultural dimensions support understanding of risk perception and decision-making. These help bankers to identify risk management in relation to how Muslim consumers' thought processes can be incorporated into risk analysis.
Practical	The findings contribute an understanding of the factors affecting risk perception in terms of the role of age, investor expertise, family responsibility, knowledge and religiosity and their effect on attitudinal constructs and behaviour. This study indicates that banks need to take some measures to inform and educate consumers on the different financial products and responses to crisis contexts particularly following the financial crisis; through ensuring resources are directed to effectively surveying and monitoring risk perceptions. Bank advisors can influence risk perception by enhancing the quality of information and by providing greater transparency of Shariah compliance.
Practical	Islamic banking industry is in flux and the financial crisis emphasises the need for a deeper understanding of consumer decision-making. While this study indicated consumers' loyalty in IB; it provides a basic exploratory model that provides a sound initial foundation for developing a system to capture key data for analysis that can be used to forecast behaviour or provide early signals and predict closeness to switching according to different external contexts of their consumers. Also, the framework provides guidance to practitioners to consider and promote awareness of the relative impact of contextual factors and the impact on risk perceptions, which helps in understanding of the importance of effective communication to focus on and address information biases.

7.4.1 Theoretical Contributions

Risk perception is argued to include an evaluation of the extent of uncertainty in a situation, how far that can be controlled and the level of confidence in this assessment (Sitkin and Weingart, 1995). As stated in Section 3.4, the relationship between attitudinal constructs of risk tolerance, risk aversion and risk perception lacks clarity. Some authors have suggested that the related constructs of risk tolerance and risk perception are confused, although they can both independently influence a person's behaviour regarding risk-taking (Murray-Webster and Hillson, 2016; Roeser et al. 2012; Hunter, 2002). The last two decades have witnessed a rise in interest in the study of the effects of risk perceptions on behaviour, due to the novel developments in and increasing complexity of the economic environment. However, much of the research has focused on an objective evaluation of risk perception. Hunter (2002) stressed meanwhile that individual risk attitudes can be differentiated. For instance, while risk tolerance is the level of risk a given person will consent to when acting towards a purpose, risk perception is essentially the cognitive activity concerned with accurately assessing internal and external conditions. This distinction by some authors has stimulated the research of this study and forms the basis for the novel contribution of this thesis. Further, this study addresses the gap in the literature relating to the lack of more comprehensive analysis of how attitudinal constructs of individuals interplay with internal and external conditions. In this respect, the results of this study provide support for these perspectives. They provide some validation for recent work by van Winsen et al. (2011) on risk perception, which showed that individual differences in the perception of the same objective risk meant that evaluation of the same risk differed according to circumstances. This view is supported by theoretical perspectives that point to psychometric, cultural and social influences (Glendon et al. 2016; Breakwell, 2014; van Winsen et al. 2011). By virtue of a multifaceted approach, the findings in this thesis provide novel insight into the relative significance of different factors on an individual's decision-making process. By widening the analysis of factors, risk perception was studied for the first time to account for both internal and external conditions.

By exploring the interaction between internal and external factors in this research a contribution is made in terms of the cumulative effect of factors in the decision-making process. A person's risk tolerance impacts on their decision-making process and imposes a financial threshold to their actions. Risk aversion meanwhile appears to be a stronger construct for characterising preferences for risk, based on the strength of relationship with risk perception. The effect on consumer financial decision-making can be in part attributed to their attitudinal constructs, and after reviewing the literature it was evident that a novel contribution was required to account for the interaction of alternative conditions both internal and external. Generally, risk attitude and risk perception have been regarded as discrete and separate behavioural determinants. Yet in studying the relationship between risk perception and risk tolerance and risk aversion, socio-demographic factors and external conditions, evidence is contributed that consumer decision-making is socially amplified and influenced by external conditions.

The interrelation between the facets discussed and between risk perception and attitudinal constructs has been the subject of only a small number of studies. This study confirms that risk perception is acted upon by a number of forces, and argues that risk perception is impacted by a more complex interaction effect that is highly subjective. Identifying these key factors and the extent to which they exert influence on consumer decision-making has further been studied from the perspective of external influences in terms of IB risks identified in the literature. Therefore this is the first study that examines both external and internal influences on risk perception. Section 6.1.3 shows that different scenarios and external conditions impact differently on individuals' risk perception. The evidence from the quantitative data indicated that the four scenarios presented to respondents influenced consumers' risk perception. This contributes evidence of the impact of external conditions on decision-making that is consistent with earlier research by Abduh et al. (2011) who stressed that not all people have the same perception of situations with negative effects, such as an economic crisis. It has been demonstrated that internal conditions in terms of socio-demographic, religious and cognitive factors such as knowledge, awareness and experience to varying degrees combine to influence decision-making. Risk attitude, in terms of risk tolerance and risk aversion, was found to influence risk perception towards IB products and the likelihood of switching. The SEM analysis indicated that both attitudinal constructs predicted risk perceptions, yet this finding points to new insights into the distinctive effect of risk perception on decision-making behaviour under certain conditions. Risk aversion and risk tolerance alone do not explain switching likelihood or switching intention which is partially mediated by risk perception.

Based on these findings a novel approach to risk perception in IB may incorporate a broader assessment of consumer perceptions. This study shows that Islamic banks may be able to shape risk perception through education and awareness and targeting communications both in relation to age and life-stage and to external events. The specific contribution in relationship to the key elements studied is discussed in the following sections.

7.4.1.1 Risk Attitude

Many studies in the literature are based on the premise that attitudes towards financial risk are based on rational economic motivations. The findings from this study contribute to the body of knowledge on the determinants of risk perception and consumer financial decision-making and provide further insights into the role and nature of risk perception. Specifically, a contribution is made to address a gap in the literature on the relationship between attitudinal constructs and consumer behaviour sectorally in terms of IB and geographically in terms of the Middle East and the UAE. Few studies were identified addressing attitudes towards financial risk in terms of risk perception, risk tolerance or risk aversion or the impact of these variables on consumer decision-making in these geographies. In these areas, the findings contribute to theory and empirical knowledge on the effect of these constructs on consumer financial decision-making. It contributes to existing interdisciplinary or social amplification theory on risk perception offering a multifaceted understanding of the effect of risk aversion and risk tolerance on risk perception and the mediating effect of risk perception on the relationship between risk attitudes and consumer decision-making.

Risk attitude, in terms of risk tolerance and risk aversion, was found to influence risk perception towards IB products. Risk tolerance is found to be a less important factor than risk aversion for consumer decision-making. The findings provide a qualitative contribution in highlighting pragmatic factors influencing IB investors' attitudinal position and indicating the relative effect of how socio-cultural, demographic and personal factors and cultural and social norms influence risk perception in the IB context.

7.4.1.2 Risk Perception

New insights are presented to address the theoretical gap in research on the role of risk perception on consumer decision-making. Specifically, this study supports earlier global research emphasising the role of risk perception as a distinct attitudinal construct and addresses a research gap on the role of risk perception in financial consumer decision-making in the UAE and the Middle East and IB. In the UAE and IB sector knowledge is contributed that indicates risk perceptions influence switching likelihood.

The combination of quantitative and qualitative results points to a broader socio-cultural understanding of risk perception and the amplification effect of external conditions which interplay to influence switching behaviour, thus adding new insight to cultural and interdisciplinary paradigms. This study provides a unique insight into the relation between risk perception and closeness to switching measured in terms of switching likelihood and switching intention. The findings contribute an understanding of factors and determinants of risk perception on intention to switch.

A key theoretical contribution emerging is that, through the lens of risk perception and the interplay with risk tolerance and risk aversion, individuals' attitudinal position is shown not to be based entirely on rational, financial cognitive assessment of uncertainty, but on a complex interplay of personal, cognitive and contextual factors. The characteristics of consumers combine with a range of subjective factors that vary between individuals based on their beliefs, socio-culture, knowledge and experience to influence risk perception and switching behaviour of IB consumers.

While the quantitative analysis pointed to the influence of consumer characteristics on risk perception and decision-making for certain variables such as age and financial investment experience, the qualitative data pointed to a broader interplay of factors that underpinned subjects' rational perspectives and views of risk perceptions and decision-making behaviour. Consequently, this study reinforces the significance of personal, cognitive and contextual factors in consumer decision-making and demonstrates greater complexity in terms of determinants of consumers' risk perception and their switching behaviour. The contribution lends further support to the distinct role of risk perception in influencing switching behaviour and in emphasising the significance of individual personal, social, cultural and psychological factors.

In addition to evidencing the unique effect of risk perception on intention to switch and switching likelihood, this research makes a further contribution to address a significant research gap identified in terms of theory and knowledge of the relationship between risk attitudinal constructs. In terms of the broader literature, few studies have been conducted on the relationship and interaction between risk perception, risk tolerance and risk aversion.

7.4.1.3 Risk Perception in IB

This thesis represents the first study that explores this research focus in the context of Islamic banking (IB) and the UAE. The nature of this study was exploratory and combined key variables discussed in the literature presenting an insight on the interplay between risk attitudinal constructs and switching behaviour. This contributed additional insight into the interplay between attitudinal constructs and the role of risk perception in influencing investor decision-making. In addition, this supplements the body of knowledge on risk perception and decision-making processes of IB consumers that to date have been a largely under-researched area. The study findings add to a wider understanding of IB consumers' risk attitude position and how this is mediated by risk perception which is in turn influenced by a wide range of external, social and cultural factors. The study provides greater insight and knowledge into the overall mind-set of IB consumers and identifies and isolates the key factors and issues influencing the risk perception and decision-making processes of IB consumers.

A key contribution is the insight that IB consumer decision-making is predominantly subjective rather than objective and rationally-based, and influenced by a mix of cultural, social, and economic factors. The study identified that Islamic consumers are primarily risk averse and place limited emphasis on profit maximisation. These risk attitudes are primarily influenced by family responsibility and experience and knowledge including experiences of the financial crisis and to a lesser degree by friends and colleagues. The study also highlighted that Islamic consumers perceive Islamic banks as safer than conventional banks. The influence of religion on financial decision-making was identified, with the perceived risk of IB products shown to be overridden by religious beliefs. The findings contribute an understanding of the factors affecting risk perception in terms of the role of age, family responsibility, investor expertise, knowledge and religiosity and their effect on attitudinal constructs and behaviour. It underscores the significance of establishing a contextual understanding of consumer decision-making across different cultures and groups. The current research supports a wider understanding that extends beyond rational economic considerations to incorporate subjective social and cultural dimensions.

Based on the research findings this study provides a framework for risk practitioners for understanding and assessing the risk culture. The framework depicted in Figure 7-1 essentially promotes a robust risk culture, which consistently supports appropriate risk awareness and provides a firm basis for initial monitoring. This shows that risk perception is influenced by external conditions, an individual's risk attitude, and socio-demographic, psychological and environmental factors. External conditions and risk aversion have the strongest effect on risk perception. In turn the framework incorporates risk perception as a predictor of consumer behaviour in terms of its relationship with switching likelihood and switching intention. Risk perception has a stronger influence on switching likelihood. However based on the qualitative findings the relationship between switching likelihood and switching intention is depicted as moderated by religiosity which also indirectly influences risk perception through its relationship with key environmental factors. High religiosity mitigates closeness to switching while low religiosity increases closeness to switching. This framework directs practitioners to explore risk perception according to the different external and socio-cultural contexts of their consumers. Understanding these factors is important for providing a robust initial foundation for developing a system to capture key data that can be analysed towards forecasting behaviour or providing early signals.

The framework is based on the findings of this study and reflects both the quantitative and qualitative results. The continuous lines indicate the relationships identified from the quantitative results, with bold lines representing the strength of relation. Dotted lines represent the relationships revealed in the qualitative findings.

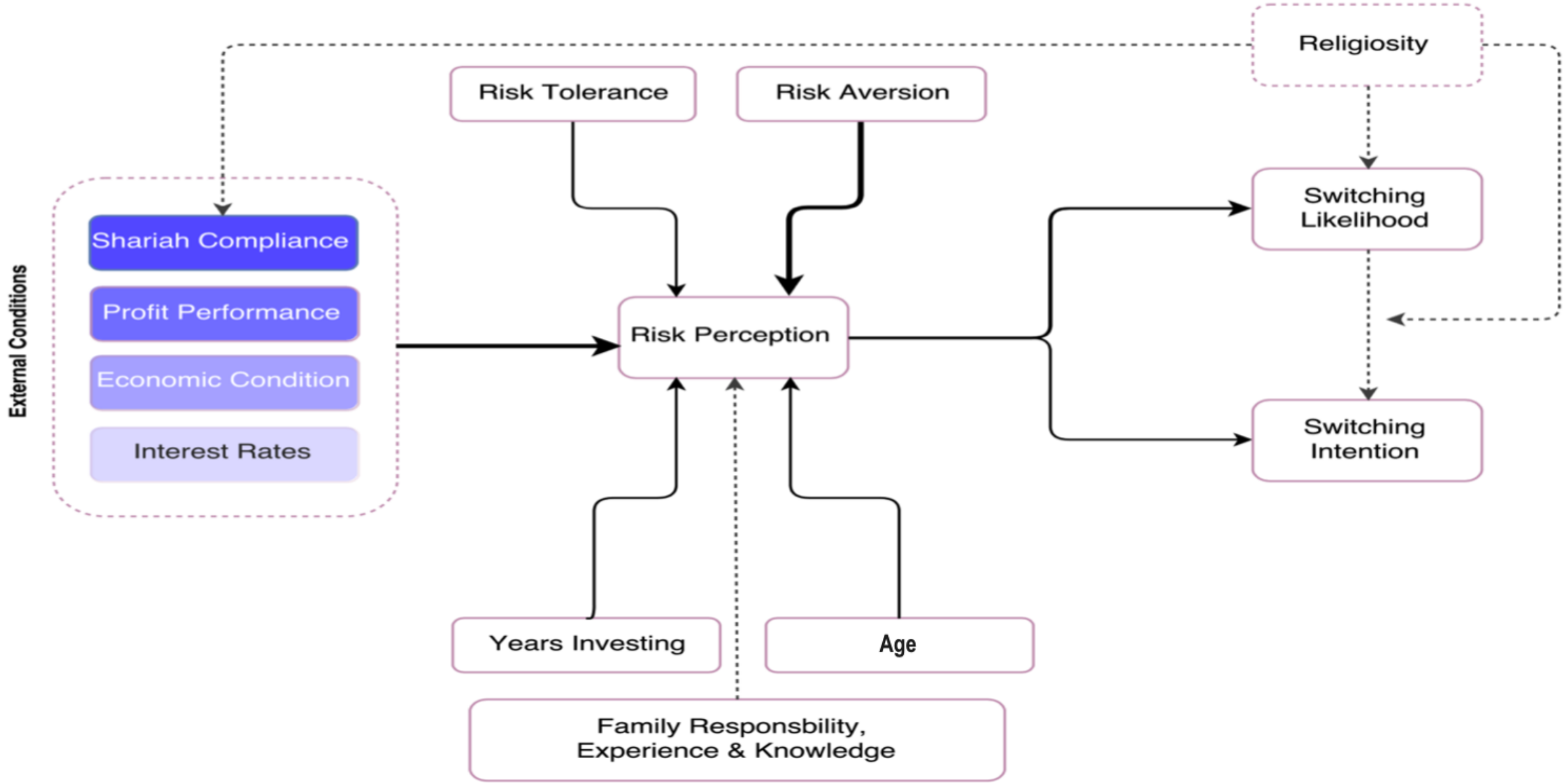

Figure 7-1 Framework for Risk Perception and Switching Behaviour

7.4.1.4 Risk Perception Environmental Conditions

This dynamic has been explored under different external conditions culminating in new insights on how different external conditions influence risk perceptions and switching behaviour. This study further contributes understanding and new knowledge on the scope of risk attitude and risk perception in Islamic consumer finance in relation to specific external conditions. A number of contextual factors interplay to shape risk perception and consumer decision-making. Further understanding is contributed on the influence of factors such as subjective investor knowledge and information and situational factors, such as government support and policy, which act as mitigating factors in terms of risk perceptions. Understanding of Shariah principles appears to minimise risk perceptions, on the basis that it conveys reassurance in terms of the protection afforded through Shariah safeguards. Uncertainty is expressed regarding the use of funds in investment accounts and current accounts compared to saving accounts which exhibited a lower level of perceived risk compared to other types of accounts.

7.4.1.5 Methodology Gap

There is a dearth of studies in risk perception and the limited studies predominantly emphasise a quantitative based approach centred on a psychometric, rational or objective focus. The conceptual framework arising from these findings presented in Section 3.10.1 has been validated and supported by the qualitative data offering new insights into the role of risk perception in the switching behaviour of IB consumers. The framework reflects attitudinal constructs and consumer characteristics in the literature. The nature of this study was exploratory and combined key variables discussed in the literature presenting an insight on the interplay between risk attitudinal constructs and switching behaviour. This study undertook a dual phased approach combining quantitative analysis in phase 1 with qualitative analysis in phase 2 in order to gain in-depth insight of the research phenomenon by permitting detailed exploration of the attitudes, views, emotions, beliefs and values of those involved based on the responses in the quantitative phase. Combining with a qualitative phase enabled identification of additional factors and understanding of underlying contextual factors, motivators and inhibitors. Scenario analysis provides a theoretical insight into the relationship between risk perception and switching likelihood and switching intention and how different subjective factors mediate and moderate switching likelihood and switching intention.

7.4.2 Practical Contributions

There is limited practical application of the concept of risk perception in the area of IB, although in conventional banking there is a greater awareness and examination of risk attitudes by the industry to understand and predict consumer behaviour. In relation to IB, this study demonstrates the significance of measuring and comparing risk perception between groups. The research contributes an exploratory model that practitioners can adopt to explore risk perception according to the different external contexts of their consumers. While this study has indicated customer loyalty in this sector, this can be eroded and this model provides a basic framework to examine and predict closeness to switching. Furthermore, understanding these factors provides a sound initial foundation for developing a system to capture key data for analysis that can be used to forecast behaviour or provide early signals. At a government level, the study contributes an important dimension for understanding investor confidence and resilience of the key industry for the economy. As the government reforms the banking sector in the next years, this thesis provides an enhanced understanding of consumer behaviour.

These factors lead us to question the resilience of Islamic banks compared to conventional ones in relation to customer retention. The factors relate to a number of issues associated with IB, including the maturity of IB and its products, and unique risks associated with IB. This question leads us to explore risk perceptions towards IB products and the conditions that may affect risk attitudes, as well as the impact on consumer decision-making towards investments and switching intention. The changing economic and financial context and the changing market structure of IB underline the importance of further knowledge in this area. Critically, the alignment of IB products and services is dependent on understanding this issue.

This research acknowledges the impact of risk perceptions during financial crisis on consumer decision-making and bank performance. The study contributes further knowledge on how different factors influence risk perceptions and investment decision-making. It contributes an understanding of the influence of determinants on decision-making via risk perception. Few studies have been undertaken for Islamic banks and financial institutions addressing the issues outlined above. Further research is needed in examining the risk perceptions of IB consumers. The studies that exist on this subject attempt to explore and investigate the viewpoints of both Muslim and non-Muslim consumers towards IB (Dusuki and Abdullah, 2007; Gerrard and Cunningham, 1997).

7.5 Strategic Implications

The implication of the research findings of this study is to promote theoretical insights to inform policy and strategy in this industry. In the Introduction chapter, key issues were outlined concerning the sensitivity of IB consumers to economic conditions and risk perceptions. Alignment of IB products and services is crucially dependent on comprehending risk perceptions.

Further, the results from this study provide insights into the resilience of Islamic banks compared to conventional ones in relation to customer retention. These factors relate to a number of issues associated with IB, including the maturity of the sector and its products, and unique risks associated with IB. This question leads us to explore risk perceptions towards IB products and the conditions that may affect risk attitudes, as well as the impact on consumer decision-making towards investments and switching intention. The changing economic and financial context and the evolving market structure of IB underline the importance of further knowledge in this area.

The findings from this study emphasise a number of factors that can inform bank strategy. It is evident from this study that consumers base their risk perceptions on a range of factors. Financial experience or knowledge of incidents, such as the 2008 financial crisis, can become enduring factors in consumers' risk perception. These combine with demographic, socio-cultural and personal factors to influence risk perception and decision-making. While the qualitative findings indicate a significant degree of loyalty and tolerance towards IB for a number of reasons, consumer decision-making is sensitive to risk perceptions. It is evident that lack of awareness and knowledge in relation to Shariah compliance generates a degree of uncertainty that potentially impacts on risk perception. In the case of employees of Abu Dhabi Police, while the sample population were found to be risk averse, this does not translate directly to low risk tolerance.

The findings have implications for IB in the UAE to enhance understanding of IB consumers' attitudes and their potential impact on switching behaviour and switching intentions. The results support the resilience of the loyalty of IB consumers to banks and to Islamic principles, which mitigates switching intentions in the face of heightened risk perception. However, the increase in risk perceptions and closeness to switching suggests that some threshold exists beyond which consumers may consider switching. This underscores the significance for banks to monitor and implement systems for research to stay in tune with consumer attitudes.

The significance of identifying customer satisfaction and the factors within retail banking which support it are critical in the current economic environment and following the recent crisis in financial systems globally. Proactivity in educating their customers is critical for Islamic banks enhancing consumer understanding not only of the general features of their products but also the underlying operational aspects associated with their products and services. The importance of taking into consideration psychological aspects when proposing Islamic products and services to consumers is underlined. Attitude, subjective norms and perceived behavioural control are fundamental in determining willingness to participate in IB products and services.

This thesis indicates further that banks need to understand and differentiate between a range of pragmatic and socio-cultural factors that affect consumers' risk perceptions. This in turn implies continuous environmental scanning and awareness of contextual factors and events that can potentially affect perceptions and switching behaviour. The subjectivity of risk perception combined with the varying effects of different factors in this study emphasises the need for banks to identify and verify key factors relevant to their consumers. The influence of expertise of IB principles and financial experience on risk perceptions indicates that banks can take some measures to inform and educate consumers on the different financial products and responses to crisis contexts particularly following the financial crisis. Overall, banks need to ensure resources are directed to effectively surveying and monitoring risk perceptions and providing communication and education to consumers.

The objective assessment forms only one dimension that influences risk perception. Personal factors and economic conditions indicate that consumers seek to maximise their returns. Banks need to develop strategies to address risk perceptions that are heightened under conditions where Islamic banks experience poor profit performance or interest rates are high. Greater transparency of bank operations and innovative product strategies need to be developed that counter such scenarios. At the same time, banks should seek to maximise the religiosity factor that minimises withdrawal risk. The findings from this study indicate that banks have dual tasks with the Shariah dimension: firstly to maximise the value of Shariah compliance to consumers, and secondly to ensure that Shariah products are transparent and effectively communicated. Again, the lack of understanding of Shariah operations and products among consumers suggests an opportunity to promote the ethical and moral values attached to Islamic banks. Promoting greater education and awareness of IB products and how their funds are being employed can not only minimise uncertainty but potentially maximise loyalty. The lack of product differentiation between IBs perceived by consumers suggests a strategic opportunity for a competitive advantage by creating value linked to existing financial products and service quality. The findings suggest that IB products and services can be strengthened by ensuring integration and communication of Islamic values in order to promote positive risk attitudes among consumers. Subjective norms can be enhanced through development of relationships with customers. In terms of behavioural control, education of clients would positively impact customer perceptions and potentially increase future demand for IB products and services. These recommendations are vital for the IB sector to support the industry's continued growth and sustainability.

7.6 Limitations and Future Research Recommendations

In spite of the original contribution offered by this research, certain limitations need to be acknowledged. While the random sampling strategy employed for the quantitative phase provides some scope for generalisation, some potential limitations should be emphasised. Firstly, the cluster random approach that was adopted has some potential for sampling bias

(Saunders et al. 2011) that may undermine the representativeness of the sample population. While the cluster was selected based on simple random sampling from the full listing of all department clusters in the population, there is potential for bias in this selection due to the lack of profiling of each organisation. This potential exists in terms of the organisational structure and configuration that may impact on the representativeness and generalisability of the findings.

While the research strategy based on a single case study of the ADP policing context limits generalisations, the sample population represents a cross-section of public sector workers that reflects the proportions of the UAE population given that the majority of the Emirati workforce (90%) is employed in the public sector (De Bel-Air, 2015). However the sample is drawn from the population of the Abu Dhabi Police, GHQ and naturally there will be some question in terms of the degree to which it is representative of the target indigenous population as a whole. The population represents a cross-section of Abu Dhabi Police, GHQ across 7 main administrative departments with a population of 34,077. For each administrative department, there are 6 sub-departments. This case study is limited to those 7 administrative departments, and while the findings may be generalisable to the population that the sample was drawn from, these results may not be reflective of risk perceptions and behavioural intentions of other police personnel in policing divisions across the UAE (Creswell and Clark, 2007). Moreover broader generalisation to other public sector workers in other Emirates should be approached with caution based on two limitations. Firstly, policing personnel may not necessarily be representative of all public sector workers in terms of risk attitudes and decision-making. Policing is a distinct public sector with its own specific culture and characteristics that may not reflect attitudes of employees in other public sectors. Furthermore this study is based solely on the public sector in Abu Dhabi, the capital and the richest Emirate in the UAE. However varying levels of prosperity and differences in culture and conservativism exist in other Emirates that may influence risk perceptions (Rugh, 2007) and could potentially affect the generalisability of the findings to public sector workers in other Emirates. Applying the findings to other Arab countries is also caveated by consideration of the distinct attributes of the UAE in terms of being one of the wealthiest and most liberal countries in the Arab region that could influence risk perceptions.

Thus, while there may be some grounds for arguing that employees of this body are representative of the UAE population, greater scope for generalisation can be achieved by a more cross-sectional design that incorporates large-scale random sampling across the seven Emirates of the UAE, or draws from a cross-section of the largest employers in the UAE, which would enhance the empirical generalisability of these findings. As a research strategy, the case study has been criticised for producing results which are less able to be generalised to other settings (Tsang, 2014). However, a mixed method approach contributes both empirical analysis and qualitative data that supports theoretical generalisation. These generalisations may be limited to Islamic countries or financial contexts that are comparable to the UAE or other Emirates in the UAE. Further research may employ cross-country comparison to expand and test the generalisations in the study to identify common factors that discount context.

More broadly, while a single case study approach may limit generalisation of the findings of this study, it may nevertheless provide a basis for transferability and comparability (Lincoln and Guba, 1985) as it has value by providing insight into a specific context and supporting theoretical generalisation in the domain of risk perception and in revealing and providing valuable information for evaluating empirical generalisability (Tsang, 2014). Nevertheless, future research based on multiple case designs may enhance generalisability of future research in providing greater opportunities for theoretical and empirical generalisation (Yin, 2009). While such theoretical generalisation can be generated from quantitative research, it has been argued that qualitative research provides an equally sound basis (Tsang, 2014). Even so a limitation in this respect pertains to the small sample of interviewees and the sampling approach, which impedes generalisation in drawing from the quantitative sample. While this research has been exploratory in nature, the sample size for the qualitative interviews is limited to 20 and a larger sample would need to be explored to verify a saturation point and the propositions arising from this study and progress. Diversifying the sample and sample size from different emirates and contexts is encouraged.

While configural and metric invariance was established for this study, partial scalar invariance has implications for further development of the risk aversion and risk perception scale which can be investigated further to establish full scalar invariance to support multi-group analysis. A further limitation pertains to the constructs adopted in this study that are drawn from the literature. The study focused on three key constructs of risk attitude (risk perception, risk aversion and risk tolerance), while several attitudinal constructs were omitted from the research framework. Further, the measure of risk perception, switching likelihood and switching intention was limited to a single item scale for the three products. This presents an opportunity to expand the research scope to explore the role of different attitudinal constructs, mediators or moderators and broaden the interplay within risk attitude dimensions. Additionally, a simple scale was used to measure financial expertise and knowledge and awareness of IB products by financial consumers. There is scope to develop a robust measure of this construct to precisely explore characteristics that define consumers' risk culture and context. While this was necessary due to practical limitations to minimise the survey completion time across the 5 scenarios, there is further opportunity to develop a multi-item scale for measuring risk perception and switching behaviour in this context.

The literature points to potential directions in this regard. In terms of risk perception based on their findings Mitchell (1999) and Mitchell and Greatorex (1993; 1990) recommend that in the service context two-component models to measure risk perception are used that include measures of uncertainty/probability. This is motivated primarily by the higher levels of uncertainty associated with this context. Future work could explore the use of the two-part uncertainty and consequences scale by Mitchell and Greatorex (1993) in which the probability component is operationalised on a 1-7 unlikely-likely scale while consequences are measured on a scale of 1-7 trivial to serious. Enhancing robustness in this research extends further to the risk tolerance scale. While Mandrik and Bao's (2005) scale indicated validity, it is based on a small exploratory empirical study. A more widely adopted and validated scale such as DOSPERT (Weber, 2002) could be considered in balance with the need for reasonable questionnaire length.

Furthermore this study adopted a binary scale to measure the switching intention of participants. Research suggests that binary scales meet similar standards to Likert-type scales in terms of generating similar interpretations with the same reliability (Grassi et al.

2007; Dolnicar and Grun, 2007). Nevertheless there is scope to explore other response options that could provide potentially more accurate data on switching intention. Literature on consumer behaviour and purchase intention points to a possible avenue showing that probability scales perform even better than intention scales in terms of precision and as direct measures of likely behaviour (Wright and MacRae, 2007; Bemmaor, 1995).

Potential further exists to expand the response scale used in this study from a four-point to a seven-point scale to enhance the accuracy and depth of the quantitative results. The low number of response categories means that potentially the capture of refined and nuanced data on the participants' risk attitudes and their underlying differences of opinion was limited (Krosnick and Presser, 2009; Schaeffer and Presser, 2003). A seven-point scale for example could provide scope for more refined distinctions to be collected while not imposing the greater cognitive burden associated with lengthier scales (Krosnick and Presser, 2009).

A further avenue would to examine the methodological rigour of the study. Discrepancies can point researchers to possible flaws in the construction of the instruments for measurement such as unintended ambiguity or a lack of necessary depth in participants' responses, and whether quantitative questions target like or different concepts (DiLoreto and Gaines, 2016). In particular the lack of statistical significance for the influence of IB knowledge on risk perception is counterintuitive and differed from the qualitative findings. This could relate to the scales used to measure IB knowledge in this study, which for the sake of brevity were highly generalised and used a limited, self-reported scale to measure levels of knowledge and awareness of different IB products and principles. This may not have provided sufficient depth in participants' responses to fully allow for the capture of the interplay between knowledge and risk perception suggested by the qualitative results, and points to scope for future research to develop and enhance the quantitative approach used to measure this variable.

Furthermore greater methodological robustness could be explored in terms of the approach adopted to measure risk perception. In this study participants' risk perceptions were measured by means of a self-completed survey, drawing on measurement scales based on psychometric models of risk. Self-rated assessments of risk are highly subjective and literature points to the possibility for participants to rate themselves higher or lower than would be justified by a more objective measure of understanding (Lavrakas, 2008). This presents an opportunity to incorporate axiomatic measures of risk perception in which participants assess probability distributions over possible outcomes under experimental conditions (Weber, 2001). Axiomatic measures such as the widely applied (conjoint expected risk) CER model were developed specifically to describe financial risk (Weber, 2001) and according to Holtgrave and Weber (1993) may be a better predictor of perceived risk in the financial domain than psychometric models. Greater accuracy in the measurement of participants' perceived risk in future research would facilitate enhanced understanding of how their risk perceptions change under different conditions.

Notwithstanding these limitations, this research emphasises critical new avenues of research that account for diversity of populations and conditions. Significantly, the results of this study indicate that external contextual and situational factors play a critical and subjective role in influencing risk perceptions of financial consumers and their switching behaviour. Based on this insight, further research can explore a range of different external conditions. Furthermore, in terms of the profile of study participants this was characterised by homogeneity in professional grouping. Future research can investigate different professions within the policing sector and explore whether diverse professions differ in terms of risk perceptions. While other sectors and countries may share some of the IB profile characteristics of those in this sample, the characteristics will differ and therefore this research model needs to be tested in different sectors and countries. Additional criteria can be included in future research designs to provide additional control variables. This study investigated risk perceptions and switching behaviour under different scenarios based on potential future conditions. There is particular value in undertaking longitudinal research to explore ways in which external conditions and contexts impact on risk perceptions over time. This focus provides a foundation to explore and verify the degree to which risk perceptions can be predicted accurately under different conditions. A comparative analysis may examine risk perceptions between different sectors and regions, and between conventional and IB as well as different risk attitude groups. Moreover the identification of differences in quantitative and qualitative findings in terms of the effect of different external conditions on switch decision-making, points to a further avenue for research in terms of the use of qualitative methods to reveal underlying factors that may not be uncovered by quantitative studies. For example, to explore the impact of interest rate change on consumer perceptions and behavioural intentions in the unique IB context. Further, the significance of religiosity identified in this study provides a further research avenue to investigate in terms of the relationship between risk perception and religiosity under different banking systems. The role of religion on risk perception which emerged from the qualitative phase can be incorporated into the model for quantitative analysis to investigate the relationship between religion and perceived risks. In conclusion, these findings support further research to investigate personal and situational factors including religion to identify the relative effects of different factors on risk perception and consumer behaviour.

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Appendices

Appendix A Survey Instrument

Cardiff Metropolitan University | Prifysgol Metropolitan Caerdydd

An Exploratory Study Of Risk Perception and Consumer Investment Decision-making in Islamic Banking Products in UAE

Participant information Sheet

Dear Respondents,

My name is Reem Sabah Obaid Qambar and I am a PhD student at Cardiff Metropolitan University under the supervision of Dr. Simon Thorne, Dr. Mukul Madahar, Prof. Andrew Thomas and Prof. Eleri Jones. The title of my research is "An Exploratory Study Of Risk Perception and Consumer Investment Decision-making in Islamic Banking Products in UAE".
I am undertaking a survey to investigate the relationship between risk perception and investment decisions of Islamic banking consumers in the UAE. The data obtained from the survey will be used to provide a greater understanding of consumer risk related to banking and to make recommendations for the marketing strategies of banks in the UAE.

You have been selected to participate in this study because you're a bank customer. I would like to invite you to participate in this study by completing this survey.

This survey will take approximately 20 to 30 minutes to complete. I will ensure that the data collected from you are safely stored in a password protected file to which only I will have access. I would like to inform you that the School of Management research ethics committee at Cardiff Metropolitan University has reviewed this research. No incentives are provided for your participation and there are no known risks. To maintain your anonymity neither your name nor any personal details of your bank account will be collected. If you have any questions or concerns about the conduct of this research, please contact: **sthorne@cardiffmet.ac.uk**.

If you are willing to participate, please continue reading and follow the instructions and answer all questions as honestly as possible. Your participation is entirely voluntary and submission of the completed survey will be taken as voluntary informed consent.

You may withdraw at any time during this survey.

Thank you for reading this information and for the time I hope you will contribute in answering the questionnaire.

Yours sincerely,

Reem Qambar
PhD candidate in Cardiff School of Management at Cardiff Metropolitan University
reqambar@cardiffmet.ac.uk

Next

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An Exploratory Study Of Risk Perception and Consumer Investment Decision-making in Islamic Banking Products in UAE

Section One: About You

*** 1. Marital Status**

- ○ Single
- ○ Married
- ○ Widowed
- ○ Divorced

*** 2. Age**

- ○ 20-24
- ○ 25-29
- ○ 30-34
- ○ 35-39
- ○ 40-44
- ○ 45-49
- ○ 50-54
- ○ 55-59
- ○ 60-64

*** 3. Gender**

- ○ Male
- ○ Female

*** 4. Do you have any children?**

- ○ Yes
- ○ No

*** 5. Number of Children**

[▾]

*** 6. Education Level**

- ○ High School and Below
- ○ Bachelors degree or equivalent
- ○ Higher Education

*** 7. Religion**

- ○ Muslim
- ○ Non Muslim

*** 8. Nationality (Please select your nationality from the list below).**

[▾]

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An Exploratory Study Of Risk Perception and Consumer Investment Decision-making in Islamic Banking Products in UAE

Section One: About You

Please indicate the degree to which you agree to each of the following statements.

*** 9. Have you invested any money in any financial market or instrument?**

◯ Yes

◯ No

*** 10. How long have you been investing?**

*** 11. I am fairly confident in my ability to make investment decisions.**

Strongly Agree	Agree	Disagree	Strongly Disagree
◯	◯	◯	◯

*** 12. I have in depth knowledge of how the stock and bond financial markets work.**

Strongly Agree	Agree	Disagree	Strongly Disagree
◯	◯	◯	◯

*** 13. Are you aware of the risk mitigation plan of the Central Bank in the UAE?**

◯ Yes ◯ No

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An Exploratory Study Of Risk Perception and Consumer Investment Decision-making in Islamic Banking Products in UAE

Section Two: Islamic Banking Principles

*** 14. Please indicate your level of awareness of the following Islamic principles .**

	Not at all aware	Slightly aware	Moderately aware	Extremely aware
Mudarabah	○	○	○	○
Bai' Bithaman Ajil	○	○	○	○
Murabaha	○	○	○	○
Al-Ijarah Thumma Al-Bai	○	○	○	○
Wakala	○	○	○	○
Qard	○	○	○	○
Hibah	○	○	○	○
Musharaka	○	○	○	○
Riba	○	○	○	○
Gharar	○	○	○	○

*** 15. Please indicate your level of understanding of the following Islamic principles.**

	Poor	Fair	Good	Excellent
Mudarabah	○	○	○	○
Bai' Bithaman Ajil	○	○	○	○
Murabaha	○	○	○	○
Al-Ijarah Thumma Al-Bai	○	○	○	○
Wakala	○	○	○	○
Qard	○	○	○	○
Hibah	○	○	○	○
Musharaka	○	○	○	○
Riba	○	○	○	○
Gharar	○	○	○	○

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An Exploratory Study Of Risk Perception and Consumer Investment Decision-making in Islamic Banking Products in UAE

Section Three: Risk Attitude

Please indicate the extent to which you agree with each of the following statements.

*** 16. My friends would say that I am cautious.**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

*** 17. I prefer my money to be safe from risk.**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

*** 18. Being financially cautious is not important to me.**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

*** 19. I do not mind investing my money in something that might decline in value if I also had the potential of a high return.**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

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Section Four: Risk Tolerance

Please indicate the extent to which you agree with each of the following statements.

*** 20. I can tolerate and adapt to significant, unexpected and unfavourable changes in the financial environment, e.g. the recent global financial crisis.**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

*** 21. I am willing to tolerate some significant negative returns on my investment in order to seek a potentially higher return than would normally be expected from a stable investment.**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

*** 22. I am satisfied with maintaining the purchasing power of my investments (achieving returns equal to the inflation rate)**

Strongly Agree	Agree	Disagree	Strongly Disagree
○	○	○	○

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Section Five:Your Risk attitude towards your Islamic Banking Products

*** 23. Please select your primary bank from the following list.**

For this bank please answer the following questions:

*** 24. Please indicate the level of risk you associate with the following products.
Give risk rating between 1 and 9. From Low risk (1) to High Risk (9)**

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

*** 25. Do you intend to switch any of your investments in Islamic banking to an alternative banking system?**

○ Yes

○ No

*** 26. What is the likelihood that you will switch any of your investments in Islamic banking to an alternative banking system. Please indicate on the 9 point scale below, where 9 is definitely switching and 1 is definitely not switching.**

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

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Your Attitude and Decision-making Under Different Scenarios

In the following sections we will present you with a number of scenarios. You will be asked questions about your risk attitude towards Islamic Banking products and your investment choices under different scenarios.

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Scenario One

Please consider the following scenario and enter your responses.

*** 27. Deterioration in Shariah Compliance - The bank's operations and products have become less compliant with Shariah principles. Based on this scenario please indicate the level of risk you would now associate with the following products at this bank.**

Give a risk rating between 1 and 9. Where 1 = Low risk and 9 = High Risk

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

*** 28. Based on the above scenario would you switch any of your investments in Islamic banking to an alternative banking system?**

○ Yes

○ No

*** 29. Based on the above scenario, what is the likelihood that you will switch any of your investments in Islamic banking to an alternative banking system. Please indicate on the 9 point scale below, where 9 is definitely switching and 1 is definitely not switching.**

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

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Scenario Two

Please consider the following scenario and enter your responses.

*** 30. Deterioration in Profit Performance - The bank's profit performance is forecast to be static at zero over the next 2 years. Based on this scenario please indicate the level of risk you would now associate with the following products at this bank.**

Give a risk rating between 1 and 9. Where 1 = Low risk and 9 = High Risk

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

*** 31. Based on the above scenario would you switch any of your investments in Islamic banking to an alternative banking system?**

○ Yes

○ No

*** 32. Based on the above scenario, what is the likelihood that you will switch any of your investments in Islamic banking to an alternative banking system. Please indicate on the 9 point scale below, where 9 is definitely switching and 1 is definitely not switching.**

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

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Scenario Three

Please consider the following scenario and enter your responses.

*** 33. Deterioration in Economy - A long lasting high inflation and low economic growth period is forecast. Based on this scenario please indicate the level of risk you would now associate with the following products at this bank.**

Give a risk rating between 1 and 9. Where 1 = Low risk and 9 = High Risk

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

*** 34. Based on the above scenario would you switch any of your investments in Islamic banking to an alternative banking system?**

○ Yes

○ No

*** 35. Based on the above scenario, what is the likelihood that you will switch any of your investments in Islamic banking to an alternative banking system. Please indicate on the 9 point scale below, where 9 is definitely switching and 1 is definitely not switching.**

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

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Scenario Four

Please consider the following scenario and enter your responses.

*** 36. High Interest Rates - a long lasting increasing trend in interest rates is forecast. Based on this scenario please indicate the level of risk you would now associate with the following products at this bank.**

Give a risk rating between 1 and 9. Where 1 = Low risk and 9 = High Risk

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

*** 37. Based on the above scenario would you switch any of your investments in Islamic banking to an alternative banking system?**

- ○ Yes
- ○ No

*** 38. Based on the above scenario, what is the likelihood that you will switch any of your investments in Islamic banking to an alternative banking system. Please indicate on the 9 point scale below, where 9 is definitely switching and 1 is definitely not switching.**

	1	2	3	4	5	6	7	8	9
Current Account Deposits	○	○	○	○	○	○	○	○	○
Savings Deposits	○	○	○	○	○	○	○	○	○
Investment Deposits	○	○	○	○	○	○	○	○	○

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Section Six: Follow-up Interview

A follow-up interview would be taken after completing this survey; if you are interested in participating in the follow-up interview [by phone, in person, or email]. Please provide your email address to be contacted. ***(Please note that your survey responses may no longer be anonymous to the researcher. However, no names or identifying information would be included in any publications or presentations based on the data gathered from the interviews, and your responses to this survey will remain confidential).***

*** 39. Are you willing to participate in a follow-up interview?**

- ◯ Yes
- ◯ No

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Section Seven: Follow-up Interview

*** 40. Please provide your e.mail address below:**

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Appendix B Interview Questions and Transcripts

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PARTICIPANT INFORMATION SHEET

I am Reem Sabah Obaid Qambar, a PhD candidate at Cardiff School of Management, Cardiff Metropolitan University (UK) under the supervision of Dr. Simon Thorne, Dr. Mukul Madahr, Prof. Andrew Thomas and Prof. Eleri Jones. The tittle of my research is *"Investigating Risk Preception Towards Investments In Islamic Banking Products- A Case Study From The Abu Dhabi Police, GHQ".*

I am currently conducting research, which investigate the relationship between risk preceptions of Islamic Banking products and investment decision- making. At this stage of my research I am concerned with collecting data from Abu Dhabi Police, GHQ and seek to have interview with you. Your opinions are important to me and will enhance the research project by achieving the aim and objective of the study.

1. I provide my consent to participate in the above research. I confirm that I have read the Participant Information Sheet and fully understand what my role in this research involves. Any questions that I had have been answered to my satisfaction.
2. I am fully aware that I can choose to withdraw from the research at any time without prejudice, and for any motive.
3. I have been advised that all information I provide will be kept confidential and measures undertaken to safeguard my privacy.
4. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me. This research complies with data protection legislation.

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. ☐
3. I agree to take part in the above study. ☐

Signature of Participant ……………………… Date………………………

Name of person taking consent ……………… Date ………………………

Signature of person taking consent ……………………………

1. In terms of your willingness to take risk would you describe yourself as more risk seeking or more risk averse. Why?

Interview prompts

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realize higher average return?

You are willing to take big financial risks?

You happy to incur risk and let possible gain outweigh the possible negative consequences?

OR Risk Averse Tendency

Try avoid any risks no matter the possible profits.

OR Have Neutral Tendency

Balanced in that tend you carefully to select between risk as to maximize profit and at the same time minimize losses.

Would you describe yourself as pragmatic in that you are indifferent of the risk and instead behave in such a way to leave the most options open.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Follow-up

Do you perceive overall more or less financial risk in Islamic banking? Why?

3. What personal factors do you think influence your willingness to take or avert financial risk?

Spontaneous response

Prompts

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors

Which of these is the most/least important? Why?

Prompt for other factors

Any economic or change in business conditions: interest rates, inflation, Islamic banking performance.

4. Can you say in what way a change in your personal circumstances such as job security, income would affect your willingness to take or avert financial risk?

Spontaneous Response

Prompts

Job security

Change in family size

Change in income

Other

5. How do you perceive the riskiness of financial in Islamic banking compared to conventional banks?

Prompts

More or less risky? What factors influence your perception? Since the financial crisis of 2008 how has you perception of Islamic banking versus conventional banking changed?

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

Spontaneous Response

Prompts

For instance if you perceived lower/greater riskiness of the investments in your Islamic bank how would it affect your willingness to take or avert risk? Why?

Risk Perception of Financial Products

7. Can you discuss your rating this scenario for the:

Current account. Why?

Investment deposits. Why?

Saving deposits. Why?

Prompts

Explore views for rating?

Most important least important factors

8. Can you say why you would switch or retain any of your investments in Islamic banking?

Prompts

If you perceive some risk with your banking products does that influence your decision to switch?

What factors influence your decision?

Do your perceptions influence your overall willingness to take or avert risk?

Do your perceptions influence the level of risk you willing to take for your investments?

Risk Scenarios

Shariah Compliance

9. Why did you associate this level of risk for the financial products deterioration in Shariahh Compliance?

Prompts

Explore views for rating? Most important least important factors influencing perceptions.

10. Why did you decide to retain your investments/switch your investments under that scenario?

Prompts

What factors influence your decision? Do your perceptions influence your overall willingness to take or avert risk? Do your perceptions influence the level of risk you willing to take for your investments?

Deterioration in Profit Performance

11. Why did you associate this level of risk for the financial products deterioration in profit performance?

Prompts

Explore views for rating? Most important least important factors influencing perceptions

12. Why did you decide to retain your investments/switch your investments under that scenario?

Prompts

What factors influence your decision?

Do your perceptions influence your overall willingness to take or avert risk?

Do your perceptions influence the level of risk you willing to take for your investments?

Deterioration in Economy

13. Why did you associate this level of risk for the financial products deterioration in economic conditions?

Prompts

Explore views for rating?

Most important least important factors influencing perceptions

14. Why did you decide to retain your investments/switch your investments under that scenario?

Prompts

What factors influence your decision?

Do your perceptions influence your overall willingness to take or avert risk?

Do your perceptions influence the level of risk you willing to take for your investments?

Interview Transcript 1

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why? I see myself as a Risk Seeking person. Before I make any investments decisions I review my assets and responsibilities that I may have then re-think the overall situation am currently at before taking any risk.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realize higher average return?

Now, am I willing to take high financial risks in order to realise higher average returns? I would have to say yes. And again it depends on the responsibilities and assets I have before taking any invest. For example, it depends on my salary and how much I get; weather If I want to save it or invest in it. I do calculate the risks in a period of time; and see the possibility to take risks and actually decide to get involved in any investment decisions.

You are willing to take big financial risks?

If am finically comfortable then I would defiantly take on big financial risks. Also, if I have a big saving amount I would go for it. Also it depends on the project and if I trust the project that am about to invest in; then I would put my money in it. For me the project and the material (financial assets) is important when deciding to take risks to that regards and make any future investments.

You happy to incur risk and let possible gain outweigh the possible negative consequences?

If it has high risk then I wont go for it; it wont be ok because if it influences me and my money I would re-think of investing my money in it. The project has to have stable return for me. And again it all depends on the project itself. Say I have huge financial income then it won't affect me as much as if I have low income.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

It's possible. If there is a profit and I know I will get a return on my investments then I don't mind the risks. It doesn't matter the percentage of the profits as long as am getting something out of it.

Natural Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

I do balance between the risks I have and the options available for me as to leave them open to choose the suitable options to go for it as Plan B. Risks are always a tricky thing and I have to keep them in consideration at all times to maximize my profit.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

No it didn't affect me. Because I do believe that post the financial crisis things has been resolved quickly in UAE. I think there's no problem with my job or anything. Of course during the crisis I wouldn't have invested my money in any form because the market wasn't stable at that time; however after the crisis; I would surely take decisions such to invest; but again that would depend on the available liquidity I have and the project am about to invest in.

Do you perceive overall more or less financial risk in Islamic banking? Why?

No I don't believe in that. The only thing that makes me put my money in Islamic bank is because of "Sharia Principles" and what the bank claims that it follows from religious gaudiness. I think Islamic banking safer but that's not what is important; it is important for religion that the bank follows sharia law. That being said, I do know all banks share the same principles and even IB do preform "interest" in different ways. So I don't think am much safer in IB than conventional banks; as I perceive them both to be similar in so many ways.

3. What personal factors do you think influence your willingness to take or avert financial risk?

Again as I said before; income and the project am about to invest in. There are many factors I keep in mind such as; experience and knowledge; the market situation and of course how stable is my investments are going to be over a period of time. I like to have a certain level of experience with what I'm interested in investing in.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important are experience and age are my main priority. If I don't have experience in certain projects I wouldn't get involve in it; I like to be full aware to what am planning to put my money in. and in regards to age its important to me because age is connected with my retirements and my income. The younger I am the more job security I have and my income would be higher. Once I retire and become older at age things would be perceived differently where my views could change towards taking risks of investing in certain projects. Least Important: religion is not a big factor to me; as I said before it doesn't matter if I would invest in IB or conventional; it depends on my knowledge and income that would boost my desire to invest and take risks.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

Bank performance is not a priority for me in this situation because before I decide to invest with my bank; I would look for the options and oversee all the investments proses and the profit am about to get involve in. Once am confidant of the investment process; I would make the decision to invest my money. Therefore the performance is not a big deal for me in this situation because I made my decisions based on the information I was given and requested from my side to the bank. Again if everything towards the investments was studied carefully and everything was clearly explained to me at the start before investing I wouldn't have any issues regarding the factors mentioned above.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

Am fully satisfied with my IB in regards to whatever crisis may hit the bank over a time; as my main issue is to be with a bank that abide to sharia laws and principles. That being said; if religion is not a big factor to me then I would say that at some point; investing in convectional banks is much better than IB because I believe they do offer less risky and profitable options to invest.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

I wouldn't invest in any other bank if I would take this step; as long as its an IB then am willing to invest.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? All customers are aware that if your current account holds an amount of less than 3000 Dhs then certain amount will be deducted from your salary. So I don't find it very risky to have a current account because it's ones responsibility to maintain certain amount in the account over a period of time to avoid any debits from the account.

Investment deposits. Why? This is considered important to me as considering investing in an amount for couple of years and then not getting any returns from it could affect my preference to deposit money. I would have the tendency to withdraw my deposits at some point if no returns were achievable. As investment deposits are linked to Mudharaba they're riskier and there's no guaranteed returns.

Saving deposits. Why? If am saving money but not getting any benefits out of it; then this again can make difference to me. I would eventually seek different options to save money that would earn me some profits. I know the saving accounts are less risky, but I am not sure about investment accounts or current accounts. IB can be quite difficult to understand especially the different products and how they work.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

As I mentioned before; IB or conventional banks I find both are similar in process. Yes, I did mention that Conventional banks are seen less risker and provides better investments options to me rather than my IB. However, I wouldn't switch to conventional bank. That is because of Sharia principles that I consider priority to me. It's true that IB may not follow the Sharia principles; but if they claim they do; then eventually it's on them not on me. Am with them because they say they follow Islamic gaudiness.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes it could be.

What factors influence your decision?

If the bank is not flexible with me; for example; I were placed in a situation before that I needed my salary to be credited to my account without any deduction for a certain month. However, the bank refused to be flexible with me in that; even though I informed that they can have full deduction next month. Different issues occurred upon that request; and the bank treated me unfairly even though am loyal and old customer. I was this close to switch to another bank due to their responses and attitude with me.

Do your perceptions influence your overall willingness to take or avert risk?

Yes of course if the bank is not flexible with my needs then I won't be taking investments projects with them. I don't want to be in a situation were the bank is not supporting my needs.

Do your perceptions influence the level of risk you are willing to take for your investments?

Of course they are; as I mentioned above; my perception depends on the bank itself and how it reacts towards certain needs that customer may have and how they respond to it. I could be interested in investing my money knowing that it could get me high returns but seeing how the bank preforms and acts to my needs can change my mind into taking any investments with them.

Risk Scenarios

Shariah Compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

I am fully aware that IB is not adhering to Shariah principles but am with them because they claim they follow the principles of Sharia, which is important to me. That being said if I were offered something better in a conventional banks I would go there because at the end of the day; IB is not abiding to the religion principles. (Most important factor to me). Even if the Islamic banks are not implementing Shariah strictly or according to what we believe, it is important that they follow the system.

10. Why did you decide to retain/switch your investments under this scenario?

I did mention before that I would switch my investments if the bank is not abiding to shariah laws; however, I would only keep switching to different IB. because of how they claim to following the principles of Shariah. I don't have any other choice. However, if this wasn't so important to me; as I said before; I would invest in convectional banks; because I believe they offer better rates.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

If profit is not stable with my investments I would stop my investments. I mean if I accepted to go through risks in order to maximise my profit. And suddenly no profit is given back to me. Then what's the point of wasting time and money over things that have no returns back? This again comes back to studying carefully from the beginning to what am about to invest my money with.

12. Why did you decide to retain/switch your investments under that scenario?

Profit is important to me. Say I invest my money in different forms weather it was investments deposits; saving deposits; certain investments projects offered by the bank. And I don't get any returns out of it or my money is not stable over a period of time. I would decide eventually to withdraw my money out of these investments. Because what's the point of having all these investments forms when no returns are given back. I can invest in different ways that would get me high returns that are better than sticking to the investments forms the bank offers.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

This is not so much important to me as the above two factors; because I mentioned before; in UAE things have been resolved quickly, helped by the government guarantees and support which makes things safer. I wasn’t that much affected by the recent crisis. And I was smart enough to not invest during the crisis. And again I’ve learned from friends and colleagues mistakes during crisis. So I think I do have a rough idea to what’s good to invest at and not at these situations. I wasn’t exposed to it fully therefore its not crucially important to me.

14. Why did you decide to retain/switch your investments under that scenario?

Since it didn’t affect me before; I wouldn’t switch my investments as I don’t usually seek investments through crisis.

Interview Transcript 2

In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk averse because I don’t like to be involved in things that I don’t understand very Cleary. I like to be aware of where I invest my money in.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

No. I don’t like to take risks in such investments even though it has higher average in returns; as I need to make sure that my money is safe before making any decisions to invest.

Are you willing to take big financial risks?

No. There is a rule in investments that I go by which is If the project doesn’t return you back any profit within four years of time then it’s a mistake to invest in it. That being said, I would look for the return investment over a period of time. But again, am not a risk seeking person. I like things to be clear and stable to me.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences?

No. as I mentioned before, I like my money to be at a stable form and no risky transactions are involved. I don’t like to have doubts towards weather I’ll get returns or not each time I decide to invest my money in a project. I favour if the bank tells me; you pay this amount and get in return fixed profited amount. At least I know what am getting over a period of time.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

If I was already investor in such investments; I don't think I would avoid the risks. I would try to minimize the risks as much as I can to maximize my profit. Even if minimizing the risks would urge me to loose some profit; I would still avoid risks.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

I see my self as I realistic person; I don't put myself in conditions where I need to explain myself and seek other options to rescue my investments.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

No, I think it came as a positive to me; because the market and costs went down. I was able to invest and purchase different things at good cost. Comparing to when prices were high before the crisis. Of course that doesn't mean that everything came positive; there are certain things that disadvantaged many people. The thing is how smart you are during these situations and where you invest your money is what counts.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

See; I do know that all banks are similar in processing your money. Am not quiet sure that IB is less risker because I've seen friends who are in conventional banks; they do share similar views. I could be at convectional or IB and perceive them similarly the only reasons my money is in IB is because I didn't get the chance to change my account into another one. Also, it's just a headache to close your account and switch to another bank.

3. What personal factors do you think influence your willingness to take or avert financial risk?

I don’t look for risky investments; if I know the profit I would get in return of any investment I may decide to invest at; then I would decide to invest. Other than that; I don’t think I’ll invest my money. Profit is important to me.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Two things that are most important for me are family and friends and certainly my knowledge and experience in the financial market is most important thing in my view that influences my willingness. My personal knowledge and experience and the experience of my family and friends help me to understand the risks and this affect my willingness.

Age: investing requires someone who’s mature and has clear set mind on what he wants to achieve. If I were too young I won’t be patient to get the outcomes from my investments; keeping in mind that investments usually takes time till you get returns out of it. Religion the least important to me: it doesn’t matter at the end of the day. Investments are not associated with religion; it doesn’t add value to where I put my money in.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

Yes of course; these factors are important to me because I don’t want to take risky decisions that would push me to prison if I don’t have enough money. Job security and not living in a risky environment is important to me.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

I think that risks are the same weather it's in IB or conventional; I don't see much difference in both of them. The only difference that IB abide to Sharia and conventional are not.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

It doesn't matter to me as I would invest in other banks because there are no difference in conventional and IB bank.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? All customers are aware that if your current account holds an amount of less than 3000 Dhs then certain amount will be deducted from your salary. So I don't find it very risky to have a current account because it's ones responsibility to maintain certain amount in the account over a period of time to avoid any debits from the account.

Investment deposits. Why? This is considered important to me as considering investing in an amount for couple of years and then not getting any returns from it could affect my preference to deposit money. I would have the tendency to withdraw my deposits at some point if no returns were achievable.

Saving deposits. Why? If am saving money but not getting any benefits out of it; then this again can make difference to me. I would eventually seek different options to save money that would earn me some profits.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

As I mentioned before; IB or conventional banks I find both are similar in process. Yes, I did mention that Conventional banks are seen less risker and provides better investments options to me rather than my IB. However, I wouldn't switch to conventional bank. That is because of Sharia principles that I consider priority to me. It's true that IB may not follow the Sharia principles; but if they claim they do; then eventually it's on them not on me. Am with them because they say they follow Islamic gaudiness.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes it could be.

What factors influence your decision?

If the bank is not flexible with me; for example; I were placed in a situation before that I needed my salary to be credited to my account without any deduction for a certain month. However, the bank refused to be flexible with me in that; even though I informed that they can have full deduction next month. Different issues occurred upon that request; and the bank treated me unfairly even though am loyal and old customer. I was this close to switch to another bank due to their responses and attitude with me.

Do your perceptions influence your overall willingness to take or avert risk?

Yes of course if the bank is not flexible with my needs then I won't be taking investments projects with them. I don't want to be in a situation were the bank is not supporting my needs.

Do your perceptions influence the level of risk you are willing to take for your investments?

Of course they are; as I mentioned above; my perception depends on the bank itself and how it reacts towards certain needs that customer may have and how they respond to it. I could be interested in investing my money knowing that it could get me high returns but seeing how the bank preforms and acts to my needs can change my mind into taking any investments with them.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

All banks has interest. It's all the same. If I started receiving interest on my account in IB; I would speak to the bank to stop crediting it to my account. Why am in IB if this is not very important to me; its because most of my friends and colleagues are in iB that's why am there. Am not gana invest and I don't necessarily will do any financial investments in the bank.

10. Why did you decide to retain/switch your investments under this scenario? Same reasons I mentioned in the Q's previously.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

This is not very much important to me, I don't get involved in investments. Current account is what matters to me.

12. Why did you decide to retain/switch your investments under that scenario?

I wouldn't switch because as long as things at the bank remain stable I'm happy staying with them they provide good service.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

I will take my money from the bank. I would switch to another bank. I will go to another IB. My first option is to go to IB then I might go to a conventional bank with Islamic window. Also I think knowing that there is government support for a bank in times of crisis may count in where I choose to go.

14. Why did you decide to retain/switch your investments under that scenario?

I mean I care about my money; if I felt at any point that my money is at risk I wouldn’t stay in the bank. I could decide to make profits in something else like gold as that always keeps it value.

Interview Transcript 3

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

I see myself as a Risk averse person. I always seek advice and think twice, hesitate before taking any financial decisions or any decisions in general; I tend to say no more than yes. I think this has been influenced by the stories and past experience I hear from my friends and colleagues; which mostly that they invested their money in certain projects and the losses were higher than gaining profit. I always gets closer to invest with my money; but get scared most of the time and change my mind eventually.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

If I would describe myself as risk taking I would say yes, am controlled by my emotions most of the time. To me taking a risk to invest in certain projects is not only about gaining money or adding profit; it's about adding more self-stem to my self and build my reputation among my friends and within the society as a good businessman who makes wise decisions.

Are you willing to take big financial risks? No.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences?

If it has high risk then I wont go for it; it wont be ok because if its influences me and my money I would re-think of investing my money in it. The project has to have stable return for me. And again it all depends on the project itself. Say I have huge financial income then it won't affect me as much as if I have low income.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

It depends on the risk itself and how I perceive it. As I mentioned before; profit is important but again sustaining my reputation among my friends and family is important. I don't like to be in that guy who took high risk to gain high profits and lost his money, if you know what I mean. But again taking or avoiding risks depends on different factors, culturally and respects are important two factors to me. Say my mother would urge me to invest or not to invest in certain project because she believes it can influence me negatively; I would listen to her advices even if she doesn't have the knowledge of certain projects. I believe that if the risk is high and the profit is high then it's worth taking a risk for it and investing to achieve certain goals I have.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

See am always cautious when taking upon certain investing projects; and of course I like to have my options always open to me. Say I decide to take a chance and invest in a project; I would look for all the constrains that would abide me to the contract. I always like to have the option to leave whenever I want if I felt at some point that am not comfortable enough with my investments.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

No, in UAE situation it was more as an opportunity and chance to gain money rather than being affected negatively. In my opinion, political and economic sphere in UAE weather its before or after the crisis wasn't affected badly as other countries in the world. True there were some downsizing and people lost their jobs; but lets look at it from the bright side; the boost that happened after the crisis was great. I think that very quickly the

UAE recovered and I think most people have job security. To me it was opportunity as prices went low and I was able to compare prices of utilities and real-estate projects and get the most out of it.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

I don’t see that this is a factor that I can decide on. If I were to say that IB is less risker or higher; I would have to look first at the owner of the bank itself; whether it’s supported by the government in case of a crisis. Then I would look at the banks details; product the bank offer; performance etc. Now maybe IB is less risker as according to the financial transactions and investments they do are less than conventional banks which means the impact is less on them at some point than conventional. IBs aren’t allowed to invest in high risk so that means there is more security than conventional.

3. What personal factors do you think influence your willingness to take or avert financial risk?

Friends and family; the position of the company would affect my willingness to take or avert risks. If investing was oversees; I would think twice before putting my money out there. But if investing were within my country; that would be more appealing to me. To me Investing in utilities is safer; because people always needs them and they wont be affected by a crisis or any other factor. For example, electricity, Etisalat Telecom Company, these small things are worth investing in them because they don’t get affected as much as big projects.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: income come first to me (because if I have high income then it won’t make a difference to me if I lost money) experience and knowledge. Since Knowledge is based on experience. Its setting theoretical decisions if you never applied what you’ve learned then it’s never a knowledge that’s why experience and knowledge come aside as priority. I like to invest in things that I know well or have had some experience with as that gives me confidence. Least Important: religion is not important but if we will talk about certain projects such having an alcohol business or pork etc then religion would matter here. Since we're talking about investing then it doesn't matter. Sex and age are not relevant to me either, if I would take a decision it would be entirety based on the facts and how experienced I have and weather my income would support getting involved in such investments.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

As I said before, income is important to make me actually take a step forward to invest. Income is connected to job security. If I don't have enough income then I wouldn't bother investing or taking any risks. Some people might seek low risk options but to me no; I like to maintain my assets and increase them gradually whenever I can.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

I honestly believe that risks are mutual between both, but again since I know that IB has less involvement in financial transactions they're considered to be much safer. Conventional banks are more out there; they would seek projects with high risks and high profits which eventually at some point become placing your money with them becomes very risky.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

Its not abut how risker is the product the bank offers. It's about how comfortable I am with my bank to actually decide to take a risk. It's a combination of factors that influence my decisions as I mentioned before.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? If it's IB it doesn't matter; because it depends on the rules and regulations the bank offers in terms of current accounts. Other than this; no current account doesn't influence my attitude to switch to another bank. The financial transaction it's logical most of the time; bank sets certain rules and you follow them; if not then deductions may happen but I mean it's all on you not the bank. Now, will I re-consider if the banks rules in terms of current account were harsh; yes I might reconsider other options but to change and switch to other bank. I don't think I would take a step towards that. Closing one account at a bank is a headache; what if I decided to switch entirely to another bank; that would take forever to do.

Investment deposits. Why? For me personally Investments deposits are not that important to me either. What matters to me if I place my money in the bank, then I would look for how much secure are my assets; performance of the bank; applications etc. The miles and other options the bank offers. Investment accounts are tricky to understand sometimes and there's no guarantee of returns.

Saving deposits. Why? Am not a big saver person so it doesn't matter to me as well. Generally I think savings accounts are a secure place to put your money and I might consider it if I wanted to save at some point.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

I won't switch. I don't believe that the profit you will make in a bank is better than a profit that you may make in different business or any other bank; therefore, I won't switch to another bank.

If you perceive some risk with your banking products, does that influence your decision to switch? No.

What factors influence your decision?

As I mentioned before it's all a combination of factors that influence my decisions. Income, family and friends, knowledge and experience.

Do your perceptions influence your overall willingness to take or avert risk?

Yes it would be but again it all depends on certain factors.

Do your perceptions influence the level of risk you are willing to take for your investments?

Yes it would be but again it all depends on certain factors.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

This will not affect my decisions. I know that banks fake everything. They say they do abide with the sharia law but they don't. All banks share the same concept but with different procurers; so if am happy with the bank then why changing it anyways.

10. Why did you decide to retain/switch your investments under this scenario?

I would stay in the bank because it's the bank fault that they don't follow the sharia regulations. Its on them not on me. I do believe that all banks has the same system, besides am happy with the services therefore I would stay.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

Profit to me is connected to the bank reputation. If the bank reputation went down then I would consider re-stating my money. Reputation matters to me in all aspects of procurers of the bank.

12. Why did you decide to retain/switch your investments under that scenario?

I will switch in terms of this situation; because reputation matters to me; but if you would ask me now if I will switch I would say no because to me all profits are the same in all banks.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

I make my evaluation upon the current situation I would go with the stronger bank that would survive in the crisis. I honestly believe that if the profit went low at a certain bank, then all other banks follow. I feel that all banks in UAE weather conventional or IB they do share the same losses. I don't seem them as a competition in some way because they do offer same offers same concepts.

14. Why did you decide to retain/switch your investments under that scenario?

Since it didn't affect me before; I wouldn't switch my investments as I don't usually seek investments through crisis.

Interview Transcript 4

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk averse. I am always pre-caution with everything. I try not to invest in my money. I always like to be on the safe side. The reason behind that is to secure my family from the risks of investing. I like to get profit with the minimum risks possible.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

No. I had so many chances before to invest in stocks and bonds and I knew that I would get high returns but I refused to take risks because it was high risk and am not very much into seeking high risks.

Are you willing to take big financial risks? No.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences?

Honestly no, I don't care how high is the profit. I just don't like taking risks nor investing.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

It depends on the percentage of risk. I have to match and calculate everything together. If am taking high risk and the profit is high; I wont go for it. But if it's low risk and low profit then I will decide to invest. I like to match the risk with the profit. I always seek minimum risks over anything else.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

I like to have quick profit and returns that are quickly maximum 3 months or 4 months. I like to manage my risks and look out of the surroundings and the current economic conditions. If I hear that the economy is not doing well then I wont invest in anything; I always run from these things.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

No. I was benefited from it a lot. Since am very scared to invest my money; I became a huge saver therefore from my savings I was able to purchase different lands and other business at a low cost because prices went low. My job and income is pretty secure I don't see that changing so I'm happy to invest when there's good opportunities.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

Yes. IB is more secure than conventional. Financial transactions are more secure than conventional. IB usually makes their Investments in real estate and local activities and the profit is affordable and acceptable. it's profitable in somehow.

3. What personal factors do you think influence your willingness to take or avert financial risk?

My needs plays vital role when making decisions. For example, if I need to purchase a house for my family or one of my family members requires treatment; then I would consider taking financial risks. Am speaking about mandatory needs only that will drive me to take financial risks.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: income come first to me- its mandatory even if I fall into risks. I need to make sure that my income will support me at all cases. If however, my income was too low then I won't be able to have different options to maintain my financial status. Martial status comes as the most second important factor to me; since am a married person with children; my decisions are based on analysing my needs and my family needs. Mostly I don't take big financial decisions because I get scared that I might get my family into debts and problems that am not seeking for. Knowledge and experience of course are important; as without having both I won't be able to get involve in any investments what's so ever. Least Important: religion; age; sex are not that important to me when making any decisions because its not something that I would usually be worried about. Any person with any religion, age, sex can be involved in a business or investment or any other project. Its how you manage your assets in a smart way.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

Job and income has always been an issue to me; and of course if I came cross low income and losing my job; things would differentiate to me. Since am too scared to invest as I mentioned before; I came across to be big saver. At certain situation these two factors may influence me and at some point they might not because I have my savings. But most likely these factors would have negative aspects on myself.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

IB is more secure than conventional. Financial transactions are more secure than conventional. IB usually makes their Investments in real estate and local activities and the profit is affordable and acceptable. it's profitable in somehow.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

I mean this depends on the investments am involved in or what am getting myself into it. Yes if the financial products at IB are risky then I would reconsider of course different options instead of taking a risk. It all depends on the market and how I perceive things at certain situations. The factors I mentioned before influence my attitude a lot when am about to make certain decisions.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? It doesn't influence me a lot. Mostly the rules and regulations in all banks are unified in terms of current accounts. Why would I switch to another bank? Even if there were deduction in my account it won't change anything.

Investment deposits. Why? This is important to me. If I were seeking profit and I didn't get anything in return; I will consider switching to another bank who provide me with better options in terms of my investments. Now, would I switch to only IB; not in for sure; if all of IB offers similar profits which am not happy with; then I would switch to conventional bank that would offer me high profit in terms of my investments. There's no guarantee of returns with IB investment accounts and sometimes they're a bit difficult to understand how they work exactly, they're not sure clear as with conventional bank.

Saving deposits. Why? It's important always. I need to have flexibility to withdraw my money at anytime; I don't like to have my money saved and not being able to touch it. Am not a huge fan of these rules and regulations that the bank offers sometimes. I do like that these accounts are underwritten by the government which gives me more peace of mind for sure.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

I will switch to conventional bank because the chances to win there are more than IB with a condition that there is no interest, which doesn't follow the sharia principles. I like to make balance between my assts.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

What factors influence your decision?

My needs plays vital role when making decisions. If am making enough profit or not. if the bank is offering my flexibility in terms of managing my assets. The bank performance and reputation as well.

Do your perceptions influence your overall willingness to take or avert risk?

Yes, if the bank is not flexible with me; the performance level went down then I would reconsider investing in many ways. At the end of the day profit matters and looking at my personality I don't like to be in a risky situations.

Do your perceptions influence the level of risk you are willing to take for your investments? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

See now am not a deep religious person. I place my money in IIB because they claim they follow Sharia principles; now weather they do follow the religious gaudiness or not that would be on them not on me. I followed what they claimed they follow. But again to me I find it less risker to place your money in IB even though the doubts are there.

10. Why did you decide to retain/switch your investments under this scenario?

I would switch for two different reasons; first Sharia is important to me; now if I found another IB that is more likely to abide by Sharia then I would switch to IB. Why choosing another IB because I believe they're less risker in somehow than conventional bank as I explained before. Now that being said, if I were to invest in my money and found out that IB is not abiding to the principles of Islam; then I would switch to conventional bank; chances to win and get more profit are in Conventional not in Islamic ones.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

This is a normal reaction. If the reputation of the bank is low I will switch to another bank and withdraw to another. I try to switch to an IB first if I couldn't find then would go for conventional bank. Maybe check that the bank is guaranteed by the government as that makes investing safer.

12. Why did you decide to retain/switch your investments under that scenario?

Profit performance is important to me. As I said before am not a huge investor and risk seeking person; yet I care about gaining profit on my savings. Presuming the profit performance of the bank went low; then my savings would be endangered and my chances of gaining any profit out of them are limited. Therefore; this is a reason for me to switch to another bank.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

I will withdraw my money in both cases. If the economic condition influenced the bank badly; then it's performance and profit would be lost. Financial transactions; different rules and regulations would be set by the bank that would influence me badly. If so I would Asses the situation and close my account to another stronger bank that would not be influenced badly by the economic crisis.

14. Why did you decide to retain/switch your investments under that scenario?

In my current situation; since the economic crisis didn't effect me badly before; I wouldn't switch my investments as I don't usually seek investments through crisis. Mostly after it.

Interview Questions 5

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk seeking person. Sometimes the benefit can worth the risk. It's a matter of the equation. In any decision you make in life you have options and how most rational people choose these options is that they asses the risk factors.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

Yes I would go for big financial risks if the returns were high.

Are you willing to take big financial risks? Yes.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences?

No am not. I'm a mean justified the ends guy. If I know that my investments has negative consequences on me; why would I go for it. I mean even if my investments tells me at year one I will loose money but in year two or three I would get high returns I wouldn't go for it.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits? No. If it were a good investment I would go for it.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

It depends on what investments we're talking about. I will Asses the risk itself and the profit. I will always look to high-risk high rewards.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Yes in a very good way. I invested in gold. Prices went low and then I was able to invest. I didn't really see any problems investing as to be honest I think the UAE is a pretty stable country financially and I wasn't afraid of losing my job or anything.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

Yes. Because it small regulation. The perceptions of risk in my assumptions that IB has certain regulation that they have to abide by and they don't invest in high risk so it's less risker than conventional banks and better for the economy.

3. What personal factors do you think influence your willingness to take or avert financial risk?

The macro economic situation; the global and economic situation and the certain relation to particular investment am about to take.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: Experience and knowledge: knowledge can be taught but a person with experience has seen the good and the bad where they made their mistakes. Knowledge: if they don't have experience then I need to have the knowledge to invest. So I believe they complete each other. Knowledge itself can't help, as it's only the theoretical part of the equation; you need both experience knowledge. Least Important: I don't care about age. Sex it's the least important. It doesn't make a difference if it's a male of female. Anyone can invest regardless to the gender or age.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

Not necessary to a certain aspect I would be less high risk seeking. I would be more caution and my attitude would change toward averse.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

I do. I think that there are differences between them. Emotional reasons because am a Muslim I would tend to see IB as more safer.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

Again; perceptions won't change much as due to emotional reasons and being religious. I would always choose IB in terms of placing my money in; now investments; it depends I would choose the best option depending on the investment strategy am about to follow.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? I would see it as a problem if am in a convectional bank because the money that would be deducted from my account in case of not maintain certain amount; would be used in interest based. However in IB I don't care and it doesn't matter.

Investment deposits. Why? Switch of course. If I don't get return. But to go to my only option to IB. Riba is very important to me.

Saving deposits. Why? Switch of course. If I don't get return. But to go to my only option to IB. Riba is very important to me.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

I will switch to IB at both investments deposits and saving deposits however not in terms of Current account.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

What factors influence your decision?

Those are similar factor to what I explained before; if my investment products are at risk I would asses the level of riskiness and then decide upon further actions. I would switch however to an IB at all cases.

Do your perceptions influence your overall willingness to take or avert risk?

Yes of course; it depends on how I perceive level of risk upon the products am about to invest at.

Do your perceptions influence the level of risk you are willing to take for your investments? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

I would switch to more sharia compliance Bank. But conventional no. I would still invest in a bank claims to be IB. there is a market available that market that you can still show as a client or a customer that your looking for a product that might be appealing to you. Some investor might invest and make investment in it of how much ppl are in it though.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

It doesn't matter to me. It's worth more to do the good things than the valuable things. Still iB. Switch to IB not conventional.

12. Why did you decide to retain/switch your investments under that scenario?

I wouldn't switch because as I said it doesn't matter to me. What matters more is that it is IB and that it gives good service.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

See certain environments require a person to not invest his money at and vice versa. In my situation; I would assess the level of risk on my bank and how it would be affected by the economic conditions. One thing is whether it is backed by the government. I would make my decisions based on that.

14. Why did you decide to retain/switch your investments under that scenario?

I will not switch to a conventional bank at all cases even if the bank has an IB window in it. I will choose more IB compliant bank. Or I might invest in something else instead like gold or real estate.

Interview Transcript 6

In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk seeking. I invested in high financial risks and I lost lots of money but still kept investing.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

Yes. I always look for high-risk high return but after I lost my money; I become more risk averse so now I wouldn't say I go for this option anymore.

Are you willing to take big financial risks? No.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences?

No. it depends on the type of project am about to invest in. if it's a factory I will speculate this but if it's in real estate investments. I will not accept this.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

No. For example if am in a project, if I needed to boost the investments to get high returns even if I were exposed to low risk to maintain the profit of the investment or the company; I would most likely take that risk in order to maintain my profit. I like the risk to be one time only but not as a consistent risks that to be exposed. Fairly one week or two which will help me maintain it and control it better.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

It depends on what we're taking on. I will Asses the risk itself and the profit. I will always look to high-risk high rewards.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Yes. It affected me negatively. On certain projects and how I choose to invest in. specially real estate. So it drove me away from investments in real estate. Things for a while after the crisis were less stable and it's made me more cautious to invest in certain things.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

Yes. Because interest rates are fixed and they cant play with it and increase it. Anyways all Banks are abided by the central bank but still IB is abiding by the type of the loan I can take from.

3. What personal factors do you think influence your willingness to take or avert financial risk?

On a personal level, friends and colleagues. The surrounding environment; friends past experience and stories on their own experience from investments. They affect me towards trying to invest in certain project.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: income: calculate my income against the project. Colleagues: they are the one who affect me the most. Knowledge: before getting into any project I must be aware of this project. I like to have some knowledge and familiarity with it. I like to know the risks before making the decision and trying to avoid it better than getting into it then getting exposed to it negatively. Marital status: children's and the responsibility that comes along with that. Constant fear of sustaining their level of comfort and securing their future. Least Important: Religion is not important. From my own experience I noticed that religion is not a factor in investments. Age: because in the market you see different ages regardless to the knowledge and experience they all invest it depends on the character of a person. Language: can play an important role; it depends on the project. It could be but not that much because everyone understands English at the moment.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

Yes this will affect me till I manage my income and job security as am married man with kids I wouldn't go for it; I have responsibilities and am scared because I have children now that am responsible on more than when am alone.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks? Yes I do believe so to the reasons I explained above.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

Abiding to religion and sharia principles are important to me; the choices I make in terms of investing in the bank doesn't have to be for religious reasons; I can still invest but I can decide not to take the interest; or giving it to charity. Switching could be if the level of risk is high; but keeping in mind that I always study the market before actually getting involved in any investment policy.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? It doesn't matter this is not relevant to me. Current is always safe to me.

Investment deposits. Why? I would switch from iB to IB even though there are no returns.

Saving deposits. Why? Same answer to investments. Also governments guarantee savings of people which for me gives me security for my money.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

I will switch to IB, however; it doesn't apply to the current account. The level of risk on both investments and savings could be high' as those are the ones that get affected mostly by different factors the bank is involved at. My priority is not the profit it self as long as my money is secure.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

I will stop all the financial products and will deal with them only in regards to my salary. I will look for investments that suite my salary and will save for the investments away from the bank interest. Even if the profit would take long time to do so.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

If the bank is committed to the sharia laws; I won't be switching my account because as I mentioned before due to religious reasons. And my savings are secure there I'm not so interested in profits. If not then I might switch to another iB but not to a conventional even if it has IB window in it.

12. Why did you decide to retain/switch your investments under that scenario?

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

This depends on how the bank is affected badly by the economic conditions and the level of risk is associated with it. Government support helps to lower the risk in a bank.

14. Why did you decide to retain/switch your investments under that scenario?

I wouldn't go to conventional bank. Because the money they have they transfer it to IB window. So from the beginning it came from interest. Why iB. to switch to another IB. because Dubai IB is more connected to Sharia Laws than ADIB. So I know it's abiding more to the laws than other IB banks.

Interview Transcript 7

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk Seeking person. It's for my family I seek for investments to secure my children's future.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

Yes of course. High-risk investments have different options. In stock market. There is a huge return if things went well and no political or economic issues or fraud in the market and not being honest. If am lucky is how I manage the market and play. Am more into stock. Mortgage and return its secure income and supports me a lot in gaining profit.

Are you willing to take big financial risks? Yes.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences?

I would go for this even if I had possible negative consequences as long as there is no profit. If there is risk I care about how high the percentage.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

Yes sometimes it depends on the type of the project. I study the situation. I am a bit not patient in terms of my investments especially when it comes to stocks therefore I sometimes get the profit but not as high as I was expecting because I wasn't patient. High risk but how to manage them is the smart way. If someone approached me to do a business I do study it from all angles I would have the option to get involved or not. if it's my money and under my name then things would go different way. I would have the option to invest and withdraw my money at any time I want.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

It depends on the business and the investment project am placing my money in. it all depends on my income. I like to keep my options open at all time. If I have huge income then I might do it but if not then of course not.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Yes. Negatively. It placed pressure on me. I had money placed in the stock market and I lost money a lot. The environment that surrounded me and many investors and colleagues were in debts. That affected me into be caution with my investments. At that point my money were in the market already so no positive influence came from the crisis. I think now things are more stable and I don't see me losing my job or anything I think the government seems to have a pretty good handle on things.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

Yes because they don't have combined interest like the conventional ones. Because IB are flexible with payments for example; If I couldn't pay my debits at certain months they would postpone the monthly instalments on me without any extra charges or extra interest. They're fixable in terms of my needs and consideration.

3. What personal factors do you think influence your willingness to take or avert financial risk?

I invest because am aware that if I would retire I won't have a retirement salary; I want to secure my family and kids future and buy them houses. Because am old enough now so my main goal is to create high standard living. As a Muslim I like to give away money for charity as well and help the needy. Social responsibility.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: Age- the older you are the level of risk becomes higher. I won't invest if am 60 years because I would have so many responsibility. My risk attitude would change and I wouldn't be able to manage losses. Experience and knowledge is important to me as well when I want to invest. I like to know about the products and at least have some familiarity with them. Least Important: Sex, for me income is somewhat not hat important- it could be I can invest in any amount no matter what it is. Religion is not important it's for everyone to invest regardless to what his/her religion is. And we have role models of famous investors who are not Muslims but did very well in the market.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

My attitude would change in a specific time till I maintain my job and income. However I'm not really worried about that aspect as the economy seems to be doing well.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

Conventional banks their interest is very high even the administrative process are high. IB interest are less; and because they abide to Sharia law; it might not be completely 100% that they're abiding to the laws. But its on them not on me. The advantage that they provide you without extra charges are better than conventional. The interest with IB is decreasing not increasing when you take loans from them.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk? Similar to the answer above.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? It doesn't influence me a lot/ it's unified in current account. The rules and regulations. You wont switch to another bank. Even if there were deduction in my account it won't change anything. I can maintain the rules and regulation, its not a reason for me to switch.

Investment deposits. Why? If I placed my money for a year and didn't get profit I would be upset- the bank always gives you options for the profit. Switch to another bank to an IB.

Saving deposits. Why? It's important always. I need to have flexibility to withdraw my money and have interest in it.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

I will switch to IB but not conventional bank. If this were persistent I would go for a conventional bank who has IB window. I mean if I were to invest outside the country and the country am about to invest in has no IB bank in it; then it would be a must for me to place my money in a conventional bank. Sometimes you just don't have enough options to follow an IB everywhere in the world.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

I would be very upset I would look for another choices. I would not seek just IB brand and logo. I would seek further details about the bank. If however, I would notice that all iB are the same I would be very disappointed but I would not switch to conventional– IBs are meant to be wider than just banking but to help society too and I very much believe in that.

10. Why did you decide to retain/switch your investments under this scenario?

Its not about religious reasons. Even without this. The performance of the bank is more comforting to me. Accumulative profits debits on me.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

I would take the historical file from them and see why this happening. If it’s not from them. Then I would consider because am happy with them. Trust is important to me and being punctual with the bank. But if not then I would shift. This is a risk as getting a profit is important.

12. Why did you decide to retain/switch your investments under that scenario?

I would stay because am a loyal customer if I were to stay in the bank. I would switch if there are no valid reasons for what’s happening in the bank. Of course to an IB bank first but again what matters to me is the trust that I can get from the bank.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

I would see what kind of crisis happened. And what are the situations that surrounding me. The environments. I would look at how secured the system is. If the bank got influenced a lot then I would definitely switch.

14. Why did you decide to retain/switch your investments under that scenario?

Most foreign banks has IB accounts at the moment and became more interested in it than Conventional bank. HSBC has IB. people are becoming more interested in the system of IB financial system. Chances are high that I would stay In iB but eventually if these factors were not explained and didn't get valid answers I would switch to a conventional bank.

Interview Transcript 8

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk averse. I take time to take a decision. I don't like to gamble with my money. I only choose 100% safety that my money would return with the profit that am looking for.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

No. I never go for high risk. I do always calculate risks. So I prefer to go to low risk low profit even if I have enough assts. I'd rather go for saving rather than going to investment and loose some of my money.

Are you willing to take big financial risks? No.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences? No. if I found that there are high risk in losing my money I won't go for it.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

No. I will take small risks. Like investing in bounds but not in stocks because it's a guaranteed profit. The down payment is always going back even if there are no profits on it.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open?

Yes, I see my self as a pragmatic person. I take my time to look at different choices even if the gain is a lot. I wouldn’t be attempted. So I make sure so my money won’t be lost. I don’t care if the gain is high and then I loose my money as long as I make full consideration to it. High Risk-high Gain- not pragmatic- ppl who don’t take risk this is not the case with me.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Yes in a way I was thinking of investing. But what happened scared me. So I preferred to save my money and I became more caution. I had an opportunity before the crisis; invest my money in stocks and bonds and I lost the money. which influenced me and therefore I don’t take risks in such after I lost. It made me realise that any economy can be affected and there is still ongoing consequences from the crisis. The risk I took was very well calculated but with the crisis I lost the money.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

I think that they’re both the same. I think the idea of no interest is there but it’s explained in different way. I was in an IB bank and then switched to a conventional bank and I noticed that they’re the same. Conventional are more flexible than IB.

3. What personal factors do you think influence your willingness to take or avert financial risk?

I have a good secure job; and well-established life. I own a house and my living standard is well. Income and job security; the rest of my money now I can invest in it. Because I have no children I don’t have to worry about the kids future and other responsibilities as I have everything maintained well at the moment.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: experience- I like to be risk calculated and it help me reluctant in taking risk.. Knowledge. I like to know what I am investing in before I make any decisions, it's good to have some experience or knowledge with it, especially if you can have recommendations from friends or family. Age is important to have job security and being sustained in your life. When you're young you can take risk. Language is very important to me inside and outside the country (I need to be aware and understand the language to be aware of the investment am about to get involved in) Least Important: Sex- religion- you can always practice your religion in whatever you do. Even if I were in conventional bank you cannot use interest no matter what it is. I take interest and give it to the poor. You always have an option.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

My attitude will change; retirement's changed- it will all make me scared into taking further risks.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

I feel like conventional banks are more appealing and more market and appealing to the clients. IB depends on the culture and on specific ppl so they don't think they need to go to market for their products. The knowledge about their products are not very well known. They play on the religion factor more than the financial transactions and other products.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk? Explained above.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? I would switch to another bank. If the regulation and rules. Charge me a lot on the service. Using the ATM machines and chequebook. If the bank will give me privileges I would stay if not then I would switch.

Investment deposits. Why? I always maintain safe investment deposits. I don't circulate it between different accounts. It doesn't matter to me if there is no interest- am interested in security more than interest. Interest doesn't matter to me at both ways in IB or conventional.

Saving deposits. Why? Same answer as above. I know that the government here has made guarantees for savings so I'm fairly confident about the security for my savings.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

Flexibly and comfortable with the service. Access it anytime I want. If am short they can help me. Service quality of the bank. Performance is high. If I have lots of money in the bank. Person likes to be within special service because am a very busy person. So online and easy access is more important to me. If this falls a part then am driven to change my bank.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

I know IB is not abiding by the sharia laws. But again as I said; it doesn't matter all banking systems are the same; so the level of riskiness on IB is most likely to be similar in conventional banks.

10. Why did you decide to retain/switch your investments under this scenario?

I will switch my account. I always go to the banks that are famous and with experience and sometimes semi governmental and transparent. It doesn't matter to me if it's Islamic or not as long as these factors are applied.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

It doesn't apply to me for the reasons. Am very loyal to the bank. So I will clarify the reasons behind the deterioration and will understand, I have no issues to support the bank. I would stay with it. As long as my savings are safe which I think they are.

12. Why did you decide to retain/switch your investments under that scenario?

As a loyal customer; I won't switch as long as all reasons are valid.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

I think if the bank guarantees that it will bring my money back and make an arrangement with the customer that they would get their money back I would stay with it but at the end of the day I would seek my own benefits. So I would mostly switch to another bank.

14. Why did you decide to retain/switch your investments under that scenario? Same reasons mentioned above.

Interview Transcript 9

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk averse person. I like to take risks however at the moment with my liabilities I cannot take risks. I need to ensure that I would fulfil my liabilities before I become a risk taker. My attitude to risk changed after marriage, as I had no responsibilities before. I wasn't responsible for a family.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns? Low risk and low profit more than high risks.

Are you willing to take big financial risks? At the current state no but in one two years I might take a risk. I will be done with my liabilities.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences? Yes.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits? No. it depends on the risk level and how high it is.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open? Very pragmatic person.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Didn’t affect me in whatsoever. It affected me in the value in very few portfolio but what I have is not short term is all long term so it didn’t affect me. I feel pretty confident in the long term as the UAE is a pretty secure place economically and financially and my job is fairly secure so no I think it didn’t really affect the risk as long-term I think things are ok.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

Less riskier. Because they’re more transparent than Conventional. They tell you how you will invest and what you’ll gain out from profit. It spells out in the beginning. The riskiness they invest in is not high either. Conventional has higher risk in my opinion; there are more unknowns.

3. What personal factors do you think influence your willingness to take or avert financial risk? How much research I do. Something am more comfortable in; something am aware of.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: income and experience. The most important to me. Family. Responsibilities and liabilities can influence me taking risks. Income and experience are one of the main factors that can urge me to invest if I don’t have enough income no experience in the field then why invest. Least Important: age and Sex: doesn’t apply and not important to me at all. I think regardless to sex and age everyone is investing somehow in the market.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk? I wouldn't invest unless I have a secure job and income.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks? I think IB is less riskiness for the same reasons.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk? Mentioned before.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? It's not important to me. I don't find it very risky. And rules and regulations that comes on current accounts are fairly reasonable to me.

Investment deposits. Why? I would still keep it. I don't care about the profit. It's a way of not spending not a way of gaining profit.

Saving deposits. Why? I would still keep it. I don't care about the profit. It's a way of not spending not a way of gaining profit. There's a lot of security in savings accounts and if I thought I needed it maybe I would put my money there because they're government backed.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

Switch my accounts. If only I encounter bad service. The customer service is the most important to me. I don't use banks for investments; I like to invest in something else. I think generally there's a higher risk on investments accounts as those particularly can be impacted by bank performance and other things. Investment accounts are Mudharaba and there's no guarantee you won't lose money.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

Am with iB because of certain reasons as explained before and sharia is one of them; now my perspective would change if iB are not abiding to the rules of islam.

10. Why did you decide to retain/switch your investments under this scenario?

I will take my money out. It's important to me that they abide to the principles. I will shift to Conventional bank. I would have lost faith in IB. I would lose trust in the whole concept. Because they bretch it the trust given to them not trust them.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

It doesn't make difference to me. It's a risk but am willing to accept. At least I know my money's safe there.

12. Why did you decide to retain/switch your investments under that scenario? I wouldn't switch as long as my money is safe.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

It's an external factor. If they don't have money though in the bank then I would take my money out. I think though this is unlikely as the government guarantees many banks.

14. Why did you decide to retain/switch your investments under that scenario?

To another iB if all factors applies then will switch to conventional bank as I would be loosing faith in the whole iB system.

Interview Transcript 10

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

I used to be a risk seeking person before but now my attitude changed. I invested before and I lost money therefore my old experience changed upon past experience.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns? Low Risk with low interest and I like the profit to be stable for me.

Are you willing to take big financial risks? No.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences? No.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits? No. I would seek the risks and I will evaluate the situation and then would decide.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open? Very pragmatic person.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk? Didn't affect me in whatsoever. Not negatively and positively nothing at all.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

I have both convectional and IB. I feel that they're the same. In terms of personal loan-IB they buy the things and give it to you as a loan.

but for me I see that they share same principles.

3. What personal factors do you think influence your willingness to take or avert financial risk?

I study the investment and see if it has low risk. Stable risk. I always seek a companion to invest with me to lower the risks on both of us.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: Experience is very important to me. I always consult someone who is experienced in this project before I make a decision and get benefited from. I like to invest in things that I am comfortable with and maybe already know about. Least Important: Age: you can invest in any age.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk? No. am not depending on my salary to invest my money. Saver person.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? It's not important to me. Rules and regulation that applied by the bank doesn't influence me a lot. I didn't have an issue with it before. It's doesn't matter. Not switching to another bank.

Investment deposits. Why? No. I don't use I feel like it's useless. The profit is not as high as you would want it. The risk of losing money is always there. They're also pretty complicated to understand sometimes so it's hard to assess the risk. So I don't tend to depend on investment deposits a lot.

Saving deposits. Why? It doesn't matter. Am not depending on the profit that comes from the bank.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

Not going to change my account. Am happy with the service and the performance of the bank. They offer me good services and treat me as privileged client. Therefore am happy with staying with them. It's got more into it than just gaining profit. Reputation of the bank; the service; the performance are important to me.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

I already know that they're failing into actually following the principles of Islam. They only change the name of the financial products. They offer similar concept.

10. Why did you decide to retain/switch your investments under this scenario?

I will not switch because I like the services they offer. So I wouldn't switch. My money's safe there.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

This doesn’t apply to me as I explained before this is not something I would seek as am a bit cautious when investing.

12. Why did you decide to retain/switch your investments under that scenario?

I will most likely stay in the bank. As am not concerned a lot with this,

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions? I will withdraw my account. I would go for the government-supported bank.

14. Why did you decide to retain/switch your investments under that scenario?

If nothing from these factors applied then I would most likely stay in my bank because I like the Service they offer; their flexible with my needs. Ease of service and are quick in responding to my needs. I don’t go for IB because it’s Islamic I just go for the service.

Interview Transcript 11

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk averse. My investments and work choices and life choices has been well though of; and I always seek minimal risk at all times.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns?

I would seek more of low risk and whatever gives you the greatest return. Lower risk. I would not do start-up investments because I know that the risks of loosing are high at all times.

Are you willing to take big financial risks? No.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences? No. I would not take risk to go into debt. I would loose my money; I would not borrow money to invest in something.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

I would weight the risk. The possible outcome and the possibility of these profits based on my knowledge and experience. Am very careful when it comes to investments. Then I would make a decision. For example, restaurants always fail. Now would I invest in it. Of course Not; I need to look into it carefully before I invest in that.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open? Very pragmatic person.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

Yes it did affect me badly. I lost my job and things were bad in terms of my income. Even now things are less secure I mean there's still fallout from the crisis. The financial crisis has made me more cautious and has made me feel more uncertain. Whereas before I was more willing to take chances, today I prefer to avoid risks.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

I don't see any difference in both conventional and Islamic banking. I believe it depends on the country your placing your money in it. For example; If the Islamic bank were talking about is in Syria; the level of risk would go very high; considering the economic and political condition in the country. However, in UAE things are stable and the level of security in the country is high therefore I don't see that there are high risks in terms of financial products at IB to that reason.

3. What personal factors do you think influence your willingness to take or avert financial risk?

How much am willing to risk. As you become older. I don't have more earnings. The risk is always high. The older ppl get the more risk averse they become in terms of investments. I don't have lots of year left considering my age. If I make a mistake to now and invest in high financial investments where risks are high; the chances that I loose my money; I won't be able to sustain my assets for the long run.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: the only thing that would prevent me from investment is the business itself and the market am in. the amount of investment required. The length to return the investment. Time plays a factor to me because of my age; as I said before I don't have much years left so time is important in terms of returns and how long is the investment is. I wouldn't invest in a 20 years project or business; I would choose quick investments with quick return; if that makes sense. I would have to look at the business model they have and the amount of investment. My whole portfolio. Income of my overall net worth. I wouldn't put everything in something when it's booming if its crashed you would lose everything. Knowledge and experience would help me understand the market strategy and cost models in terms of gross profit and net profit would make huge factor.Least Important: religion, family, me being single. Children. All these are not relevant to me and doesn't influence my decisions; the things I discussed earlier are more relevant to me than those.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk?

Yes I would be much risk averse. I would be very caution in making investments.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks?

I haven't looked at Islamic Banking package. I haven't looked because most of my money is placed home in US. Also, because am aware that am not going to be in UAE for the rest of my life. I have a different model that I look at.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk?

As I mentioned before; there both the same in my opinion as I don't see much difference in both of them.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? This is not relevant to me whatsoever I mean I wouldn't switch my account, as I don't see any risks in terms of this account.

Investment deposits. Why? If I don't get any return I would take my money out of the instruments. You can't look at 30 days return. Over a year if I see that there are no returns then I would look for better mechanism to invest my money at.

Saving deposits. Why? – Now see this is important to me because in the States you don't get returns at all on savings; so if we were to speak about saving deposits in US then it wouldn't make difference to me. Now comparing this to IB or conventional bank in UAE; the case is different; you do get percentage of interest on your savings. If the interest stops yes it may play a factor for me to switch to another bank. Realistically though I don't see much risk for savings deposits as these are pretty secure usually as the government often guarantees savings.

8. Can you say why you would switch or retain any of your investments in Islamic banking?

If the return is good in IB then I would absolutely retain my money in it; however if it's not then I would switch to a conventional bank.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance. This doesn't play a factor to me as am not Muslim here; so it doesn't add anything to me.

10. Why did you decide to retain/switch your investments under this scenario? I will not switch because I like the services they offer. So I wouldn't switch.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

In the states your investments and savings are a bit in a risky situation; if the profit performance gets affected; then the government backs it. The FDIC they guarantee you up to 1000 per account. However talking in the situation of UAE; I feel safe in my investments at least in Abu Dhabi to the reasons I discussed earlier.

12. Why did you decide to retain/switch your investments under that scenario? I will most likely stay in the bank if things are stable; if not then I would be switching to an alternative.

Deterioration in economy

13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions? I will withdraw my account. I would go for the government-supported bank.

14. Why did you decide to retain/switch your investments under that scenario?

Look even if the economy was not stable; things weren't at it's best; in UAE things are different and much stable. I say this because I experienced the crisis in the states and it did affect me badly. I also did experience the crisis in UAE; did I lose my job? No. did I lose my money? No. I feel more safe in terms of my money in UAE than in any another bank. Why I would choose IB to put my money at is because; I always prefer to place my money in a local bank. It's easier to make a relationship with the teller. Customer service is a big reason.

Interview Transcript 12

1. In terms of your willingness to take risk, would you describe yourself as more risk seeking or more risk averse. Why?

Risk averse because stable income and job security. My income was stable; job security. After the shift in my job; everything is changing; so I started risks in terms of my personal life marriage; buying houses. I became more Risk seeking risk; because I need to increase my profit.

Risk Seeking Tendency

Would you say you are willing to take high financial risks in order to realise higher average returns? Yes. Already I took it; start-up companies with high risks that would give me high profit.

Are you willing to take big financial risks? Yes.

Are you happy to incur risk and let possible gain outweigh the possible negative consequences? Yes. I would take risk; I don't mind getting into debts even though the risks are high.

Risk Averse Tendency

Do you try to avoid any risks no matter the possible profits?

I would do risk analysis in order to make sure that I don't get to the point of bankruptcy. But again I would weight the project before getting into it.

Neutral Tendency

Would you describe yourself as pragmatic, in that you are indifferent to the risk and instead behave in such a way as to leave the most options open? No am not a very pragmatic person. I used to be but not anymore.

2. Do you think that the 2008 financial crisis has affected your willingness to take or avert financial risk?

No. didn't affect me whatsoever. I didn't place my money in the market I was saving them. There's still some risk in the markets so I don't bother investing in them.

Overall, do you perceive more or less financial risk in Islamic banking? Why?

Less Financial risk.. If you would take loan; it will be clear the payments; the period to total amount. I take the loan and I know everything. The system is clear. Conventional Is more complicated and it's unclear. Islamic banks can't invest in risky investments so I also know my money's pretty safe.

3. What personal factors do you think influence your willingness to take or avert financial risk? Expected income and profit out of the project and the associated risks. The time. How long it will take to invest. Easy money and profit to make. Needs time. I prefer quick wins.

Age, sex, education, income, religion, marital status, experience, knowledge, family friends or colleagues, other factors. Which of these is the most/least important? Why?

Most Important: experience: to be aware of the investments am about to place my money in; have some experience of it, maybe recommendations from friends; family is a drive to secure their future. Knowledge as well is important to me. Least Important: sex is not relevant. Age is also doesn't matter. I think if am older then I would be more risk seeking person.

4. Can you say in what way a change in your personal circumstances, such as job security or income, would affect your willingness to take or avert financial risk? Yes. It's a drive to get me out of my comfort zone in order to become more risk seeking person.

5. How do you perceive the riskiness of financial products in Islamic banking compared to conventional banks? I see IB is more stable and the level of risk is low because of clarity of everything.

6. Can you discuss how your perception of the riskiness of financial products in Islamic banking influences your willingness to take or avert risk? IB is less risky in my opinion; as I explained before. Everything is clear when you decide to invest with them.

Risk Perception of Financial Products

7. Can you discuss your rating for this scenario for:

Current account. Why? I don't perceive on the account any risks whatsoever. I've never experienced any risky situation with this account.

Investment deposits. Why? I don't do investment deposits. I won't wait for a year to get a return since am looking for quick win. You can lose money on investment deposits too and they're quite hard to understand if you're going to get a good return on your money or not. There's no guarantees.

Saving deposits. Why? I used to save but now not anymore; so I don't do savings anymore. I think of the three though this product is probably the safest because the government has guaranteed them.

8. Can you say why you would switch or retain any of your investments in Islamic banking? I Won't switch to another bank; only if the bank would offer me more personal loan percentage; then I would consider switching.

If you perceive some risk with your banking products, does that influence your decision to switch? Yes.

Risk Scenarios

Shariah compliance

9. Why did you associate this level of risk of the financial products under this scenario? i.e a deterioration in shariah compliance

The IB is abiding to the sharia through contract but from security wise their stable and its comforting and it's clear to customers. Conventional banks makes it complicated you have capital and profit; if you want to pay your loan then you would pay the interest.

10. Why did you decide to retain/switch your investments under this scenario? I won't switch to another bank for the reasons mentioned above.

Deterioration in profit performance

11. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in profit performance

If I were investing my money; then yes it would make difference to me. In the 90's this happened and many lost their money. Risk association and mitigation am not placing my money in the bank in order to make profit. I make my profits in different ways. It's basically there for security.

12. Why did you decide to retain/switch your investments under that scenario? I won't switch to the reasons mentioned before.

Deterioration in economy

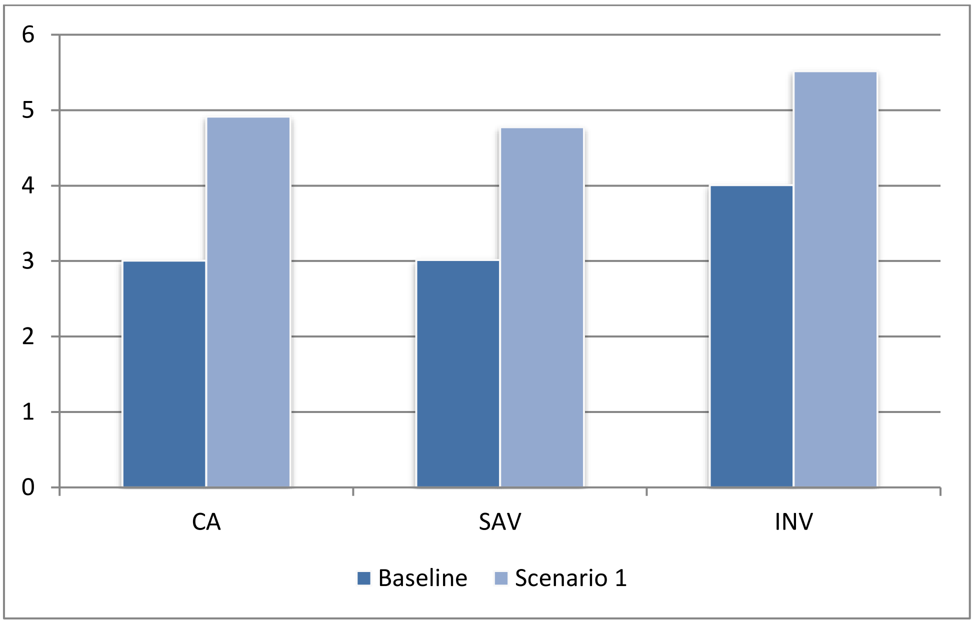
13. Why did you associate this level of risk for the financial products under this scenario? i.e deterioration in economic conditions?

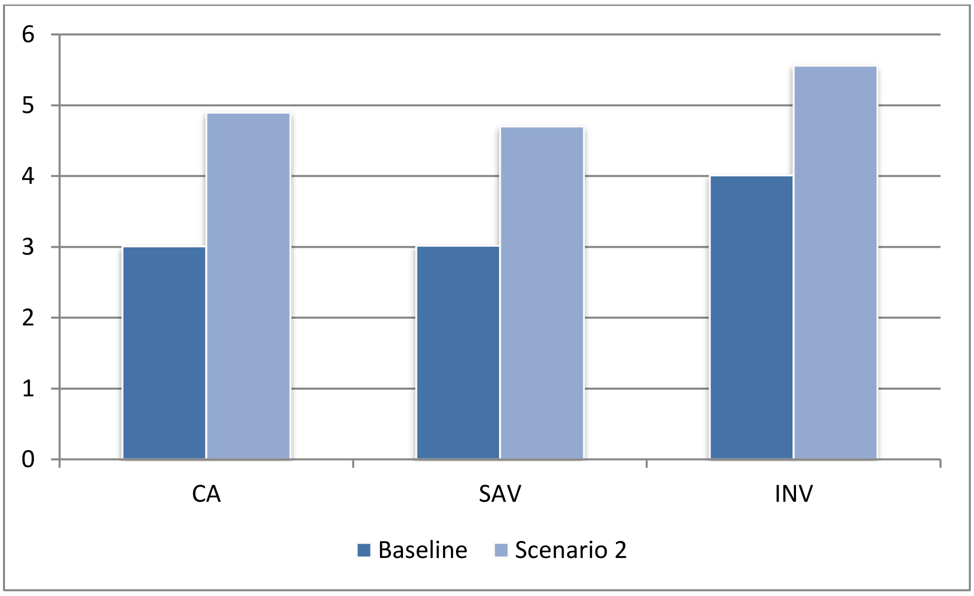
I will take my money and place it some other place. Even if the bank is supported by the government and the losses were high then I would take out my money. I would change my money to gold and invest in it as I see it in a better option.

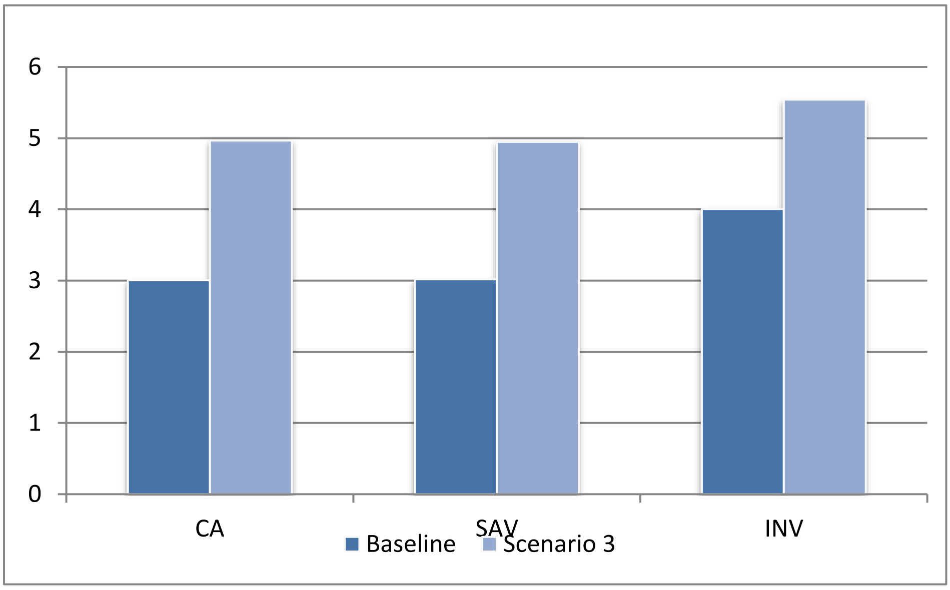
14. Why did you decide to retain/switch your investments under that scenario?

I will not switch to another bank; I will transfer everything I own to real-estate investments. I will not switch to convectional even if it has an Islamic window; conventional from the name it's a bit specious; therefore I'd rather to be in Islamic banking system because am more aware of it and I feel comfortable in it's services.

Appendix C Cross-tabulation for Switching Likelihood and Account Types



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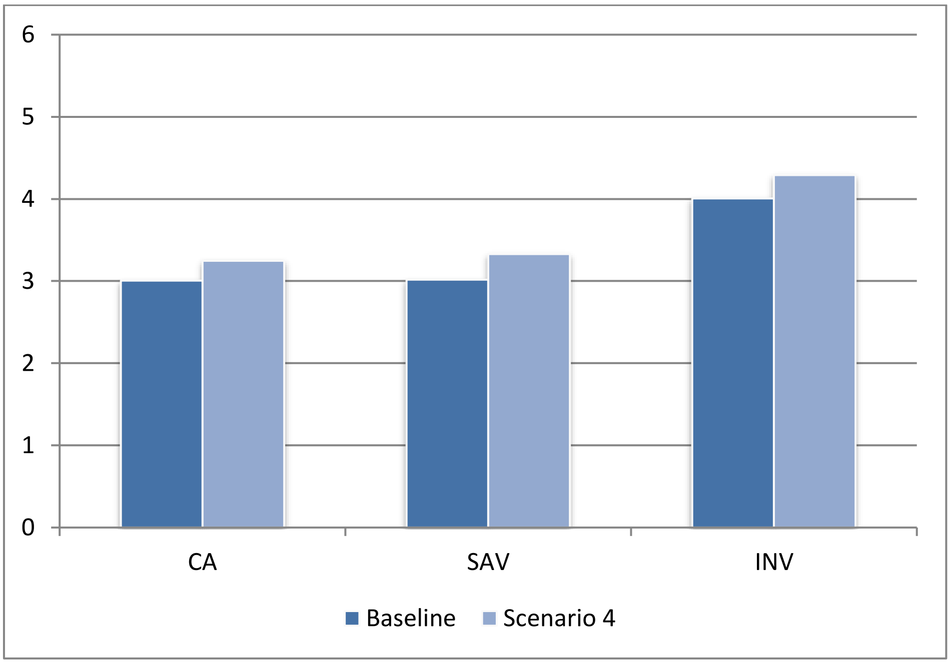
CA
SAV
INV
Baseline
Scenario 3


6
5
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3
2
1
0
CA
SAV
INV
Baseline
Scenario 4

Appendix D Factor Analysis – Total Variance Explained

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.412	30.065	30.065	4.989	27.718	27.718	3.994
2	3.041	16.894	46.959	1.548	8.598	36.316	2.535
3	1.869	10.386	57.345	2.288	12.710	49.026	3.549
4	1.506	8.366	65.711	1.468	8.157	57.184	2.512
5	1.163	6.458	72.169	.909	5.050	62.234	3.644
6	.574	3.188	75.357				
7	.567	3.149	78.507				
8	.511	2.841	81.348				
9	.485	2.696	84.044				
10	.456	2.531	86.575				
11	.405	2.253	88.828				
12	.403	2.239	91.067				
13	.344	1.912	92.979				
14	.334	1.855	94.834				
15	.298	1.653	96.487				
16	.248	1.380	97.867				
17	.219	1.216	99.083				
18	.165	.917	100.000				

Appendix E- Factor Correlation Matrix

Factor	1	2	3	4	5
1	1.000	-.099	.472	-.307	.590
2	-.099	1.000	.021	.003	.057
3	.472	.021	1.000	-.307	.487
4	-.307	.003	-.307	1.000	-.296
5	.590	.057	.487	-.296	1.000

Appendix F Pattern Matrices for Factor Loadings

Items	Factor		
	1	2	3
RAV1	.862		
RAV2	.859		
RAV3	.858		
RAV4	.835		
KN_AW2		.786	
KN_AW1		.673	
KN_AW4		.652	
KN_AW5		.605	
KN_AW3		.604	
RT2			.837
RT1			.833
RT3			.802
Eigenvalue	3.340	2.160	1.733
% of Variance Explained	28.60	18.03	14.43
Cumulative (%)	28.60	46.60	61.04

N=488 Extraction Method: Principal Axis Factoring

Factor Analysis		Factors Extracted	No Items	Initial Eigenvalues Total	% of Variance	Cumulative %
Risk Perception	Baseline	1	3	2.142	71.389	71.389
	Scenario 1	1	3	2.566	85.547	85.547
	Scenario 2	1	3	2.450	81.666	81.666
	Scenario 3	1	3	2.387	79.563	79.563
	Scenario 4	1	3	2.179	72.620	72.620
Switch Likelihood	Baseline	1	3	2.386	79.525	79.525
	Scenario 1	1	3	2.645	88.178	88.178
	Scenario 2	1	3	2.417	80.570	80.570
	Scenario 3	1	3	2.537	84.560	84.560
	Scenario 4	1	3	2.272	75.717	75.717

Dimension	**No Factors Loaded**	**No Factors Extracted**	**Items for Single Factor Extraction**	**Factor Loading**
Risk Perception Baseline	3	1	Savings Deposits	.988
			Current Account Deposits	.791
			Investment Deposits	.509
Risk Perception Scenario 1	3	1	Savings Deposits	.942
			Current Account Deposits	.895
			Investment Deposits	.820
Risk Perception Scenario 2	3	1	Savings Deposits	.942
			Current Account Deposits	.863
			Investment Deposits	.753
Risk Perception Scenario 3	3	1	Savings Deposits	.912
			Current Account Deposits	.855
			Investment Deposits	.734
Risk Perception Scenario 4	3	1	Savings Deposits	.914
			Current Account Deposits	.735
			Investment Deposits	.662

Dimension	No Factors Loaded	No Factors Extracted	Items for Single Factor Extraction	Factor Loading
Switching Likelihood Baseline	3	1	Current Account Deposits	.890
			Savings Deposits	.868
			Investment Deposits	.742
Switching Likelihood Scenario 1	3	1	Current Account Deposits	.927
			Investment Deposits	.902
			Savings Deposits	.891
Switching Likelihood Scenario 2	3	1	Current Account Deposits	.865
			Savings Deposits	.838
			Investment Deposits	.823
Switching Likelihood Scenario 3	3	1	Savings Deposits	.890
			Investment Deposits	.882
			Current Account Deposits	.857
Switching Likelihood Scenario 4	3	1	Savings Deposits	.862
			Current Account Deposits	.777
			Investment Deposits	.755

Appendix G Collinearity Statistics

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Age	0.720	1.390
	Education	0.977	1.023
	MaritalStatus	0.815	1.226
	awareRMP_yn	0.992	1.009
	Children	0.655	1.526
	Invested_yn	0.893	1.120
	YearsInvesting	0.876	1.142
a. Dependent Variable: risk0			
Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Education	0.831	1.204
	MaritalStatus	0.821	1.218
	awareRMP_yn	0.928	1.078
	Children	0.791	1.264
	Invested_yn	0.886	1.129
	YearsInvesting	0.877	1.141
	Confidence	0.682	1.467
	Knowledge	0.692	1.445
	Gender	0.803	1.245
a. Dependent Variable: Age			
Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	MaritalStatus	0.813	1.230
	awareRMP_yn	0.925	1.081
	Children	0.621	1.610
	Invested_yn	0.886	1.129
	YearsInvesting	0.875	1.143
	Confidence	0.677	1.476
	Knowledge	0.692	1.445
	Gender	0.909	1.100
	Age	0.693	1.443
a. Dependent Variable: Education			