



Louvain School of Management

Essays on Islamic Finance
The stakes and interest for its stakeholders: a study on
the Belgian retail demand and the financial supply
Hybrid Research in Management Science

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Why did I decide to conduct PhD thesis research?

Why not just follow additional Masters or a certificate in the matter of interest? Why spend so many years in research? My first answer would be "*for the passion*". This is a valid motivation but not a sufficient one to hold a project for a half decade. Then I had to reflect on the drivers that would sustain that passion over time, to take over when passion will diminish, to be enhanced when the passion will be at its apogee. First of all, my interest for this topic has no limits. I have the same passion for basketball, piano or reading fantasy novels. My curiosity makes me to always want to read more, understand more, discover more...

Another driver that has sustained this passion is the profound respect that I have for science and the search for 'reality/truth'. This PhD is my way to be part of it, to contribute in knowledge production. Finally, it also shows to myself (and to the others) that I can do it as a matter of pride and personal achievement.

Abstract

Retail consumers' values have taken an increasingly important place in the financial decision-making over the last 20 years. The ethical norm has become a variable for the consumer demand. In the same time financial institutions and public authorities are figuring out how to regulate financial markets to respond to that demand.

Within the management science discipline, the core objective of this thesis is to assess if Islamic finance can propose a relevant alternative funding retail offer in Belgium and what are its stakes in a capitalistic environment.

The relevance of this solution is studied from different perspectives: economical, financial performance and from engagement motivation angle.

To achieve this objective, four different groups, from the demand and the supply, are questioned: retail consumers, SMEs managers, professional advisors and financial institutions. Each of these four stakeholders is at the origin of an independent but complementary thesis part that contributes to the discussion around the general research question: Is there an interest to develop retail Islamic finance in Belgium?

The thesis sets up with a presentation of its principal objectives, the drivers to study Islamic finance, the general methodology and the research plan.

This problematic is therefore built around 4 parts and encompasses a sociological dimension. The nature of this management science thesis is an explanation of the relative disequilibrium between the sociological and the financial dimension.

A first part considers a retail consumers' survey where personal ethics is discussed as a potential significant variable in the decision-making process. A second part analyzes the professional advisors' discourses. It examines what are those actors' engagement motivations. This is studied with qualitative interviews, at the light of pragmatic sociology theory. A third quantitative part presents a SMEs managers' survey where religiosity is measured as a variable in the decision-making process. It tests if religiosity has a significant impact on that process to consider Islamic finance instruments. Finally, a fourth part makes a financial comparison between conventional Belgian banks and Islamic financial institutions. The idea here is to assess if volatility – as a measure of an action value variation - makes the Islamic finance funding solutions interesting for Belgian banks. The correlation between risk and return is studied with Sharpe ratios and Jensen's Alpha.

The thesis general conclusion points out the tensions and potential drawbacks in proposing Islamic finance as a relevant retail funding solution for its stakeholders in Belgium. I highlight the fact that on the demand side, there is not enough engagement driver from the consumer, and on the offer side, the financial interest to offer those funding solutions is relatively limited. Conclusions are put in perspective as the focus is on retail banking and not on investment banking. Finally, this thesis expresses what is at stake when implementing Islamic finance and to what need of capitalism it does answer.

Keywords: Islamic finance, religiosity, pragmatic sociology, Sharpe ratios, ethics

Résumé

Depuis les 20 dernières années, les principes et valeurs des consommateurs ont pris une place de plus en plus importante dans leurs procédures de décision quant à leurs besoins financiers. Ils considèrent notamment une dimension éthique comme variable dans leur raisonnement. Par ailleurs, les institutions financières et les autorités publiques réfléchissent elles aussi à comment réguler la finance et à répondre à cette demande.

Dans le champ disciplinaire des sciences de gestion, l'objectif principal de cette thèse est d'évaluer si la finance islamique, en tant qu'offre de financement, peut proposer une alternative pertinente en Belgique, du côté de la demande et de l'offre. D'autre part, la thèse discute de ses enjeux dans un environnement capitaliste.

La pertinence de cette solution de finance islamique est étudiée du point de vue économique, financier et au regard des justifications d'engagement mobilisées par ses acteurs. Afin de discuter de cette pertinence, quatre différents groupes, issus de l'offre et la demande, sont interrogés : le consommateur particulier de détail, les managers de PME, les professionnels en conseil et les institutions financières.

Chacun de ces intervenants est à la base d'une partie de thèse indépendante mais complémentaire qui contribue à la discussion sur la question de recherche : Existe-t-il un intérêt à développer la finance islamique en Belgique ?

La thèse démarre par une présentation des objectifs principaux de celle-ci, les motivations d'une étude sur la finance islamique, la méthodologie générale et un plan de recherche.

Cette problématique est donc construite autour de 4 parties et comprend une dimension sociologique. La nature de cette thèse en science de gestion explique un relatif déséquilibre entre les études économique-financières et la partie sociologique.

La partie initiale est une enquête auprès des consommateurs de détail. La composante éthique est discutée comme étant une variable qui peut affecter la procédure de prise de décision. Ensuite, une partie sur les professionnels du conseil interroge, à l'aide d'interviews qualitatives, quelles sont leurs justifications d'engagements lorsqu'ils conseillent en finance islamique. Les principes de la sociologie pragmatique sont ici mobilisés pour explorer ce champ. Troisièmement, une partie quantitative propose une enquête auprès des managers de PME. Elle teste notamment si la religiosité a un impact sur la procédure de prise de décision de considérer les instruments de la finance islamique. Finalement, une quatrième partie fait une comparaison financière entre des banques conventionnelles belges et des banques islamiques. L'idée est de vérifier si la volatilité – au sens d'une variation de valeur - rend les solutions de financement de finance islamique plus intéressante pour les banques belges. La corrélation entre le risque et le return est étudiée au moyen de ratio Sharpe et d'Alpha de Jensen.

Enfin, la conclusion générale discute les tensions et potentiels désavantages quant à proposer des solutions de finance islamique aux différentes parties prenantes. Je souligne le fait que du côté de la demande, la dimension éthique n'est pas une motivation suffisamment importante auprès des consommateurs. Du côté de l'offre, l'intérêt financier à proposer ce genre de solution de financement est relativement limité. Les conclusions sont mises en perspectives car le focus de la thèse est sur les banques de détail et non pas sur les banques d'investissements.

Enfin, la thèse discute des enjeux liés à l'implémentation de la finance islamique en Belgique et aux besoins du capitalisme auxquels elle répond.

Mots clés : Finance islamique, religiosité, sociologie pragmatique, ratio Sharpe, éthique

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GENERAL INTRODUCTION AND RESEARCH PLAN

This general introduction explains what Islamic finance is, how the thesis is structured and how the 4 studies that compose it are linked and how they relate to each other. It also shows how the research question is the conducting wire that guides the problematic construction, the methodology, the 4 parts that frame the analysis and the objectives of the thesis.

The problematic construction allows to present the research hypothesis. These ones are articulated around the stakes of proposing Islamic finance in Belgium, for the offer and the demand. Authors and models that are here mobilized to theoretically sustain the questioning raised from the initial research question.

1. Genesis of an intellectual motivation and epistemological posture: Islamic finance in question

This doctoral research needed thorough drivers to be started and solid foundations to be scientifically relevant. This strives to contribute to the realm of a specific knowledge, which cannot be achieved without a strong personal motivation that find its roots in a deep intellectual curiosity and a thirst for knowledge. Within this general introduction, this is what the first section is clarifying.

Islamic finance, as the main object of the research, needs to be here briefly defined¹. This object, also called *Sharia law* compliant finance, is a finance that respects specific rules (industry of investment, financial mechanisms, ...). Among those main rules, we find 3 interdictions and 2 obligations:

- Interdiction to invest in forbidden sectors (alcohol, gambling industry...);
- Interdiction to use Interest rate in the financial operations;

¹ Thorough definitions are given in part 1, 2 and 3 of the thesis.

- Interdiction to speculate or to have uncertainty in the contracts;
- Obligation to relate the financial products to tangible assets (derivatives are mostly completely forbidden);
- Obligation to use profit and loss sharing principle (*à priori* definition of the profit repartition between the stakeholders).

All these principles are ruled by a double governance system: the financial team governance (financial managers, lawyers, financial experts...) and the *Sharia board* governance. This board has the responsibility to ensure all contracts and activities are valid. All these interdictions, obligations and Sharia board specificities are subject to interpretations and to various debates within the industry. This thesis will only focus on the Belgian market Islamic finance interpretation and implementation.

The motivation to conduct this research has been initiated after the 2008 subprime mortgage crisis where individuals, financial institutions and regulators were paying more and more attention to the ethics dimension and deontology² in the financial industry. Setting up the right monetary policy and streamlining the market ethical customs are some of their new goals. Within that context, new solutions are emerging in the financial market that claim to answer the needs of the industry's demand and offer. Islamic finance is positioning itself as a relevant solution that fulfils ethical and financial prerogatives (Obaidullah, 2005). This thesis is precisely discussing this posture.

Another motivation to conduct this research within the management science field, came from an increasing understanding of how conventional finance is working. What finance students learn during their master's studies is that most of the major leverage in finance is the interest rate and the debt mechanisms. This is how, *a priori*³, Islamic finance presents itself as a finance working *without* interest rate. It raises the question of how can a 'finance' work without this interest rate principle? What do we mean with ethical finance? Those initial reflections were the triggers to initial readings about Islamic finance. A first review of literature led to give interest to Mahmoud Al Gamal works about Islamic finance. In "*Finance Islamique. Aspects légaux, économiques et pratiques*" (El-Gamal, 2009), the author gives a thorough explanation

² These two concepts (ethics and deontology) are often mentioned in the literature with different definitions. They are explained in the 2nd part of the thesis: "*What are the ethical justifications offered by Belgian and French service providers of Islamic finance?*" A succinct definition of ethics, which is also closely related to morality, would refer to the 'way of being' of an action. Not the nature of the action itself but its meaning and value according to the context and the norms it refers to. Deontology refers to the applied ethics where it explains how those ethical principles are implemented in the economy, medicine, law and any field of human activities.

³ Conclusions, *à posteriori*, will test this assumption.

of what this phenomenon is about and how it works. His contributions are catching the interest as he is giving a non-apologetic and scientific criticism on that industry. His position states that Islamic finance has become a very ‘legally’ oriented finance where the initial purposes were no more at the center. From there, it raised again the question of what is Islamic finance. What does it mean for the ones who use/practice it?

Before considering its potential financial interest, research explores if there are different interpretations of Islamic finance. Reading through literature, we observe that Islamic finance is a polemic subject of research. Between the myriad of apologists who presents it as an ethical finance and the opponents who condemns the intrusion of religion in economy, we find a wide array of opinions and studies.

This research goes beyond a theoretical exploration where authors and theory would be mobilized without confronting them to the reality of the field. Furthermore, this thesis is not either conducted in an only empirical perspective in the sense of a collection of data from different sources. The objective is to gather new data and lead an analysis with a right balance between a relevant theory and to test it with the reality (Beaud, 2006).

Once the matter of study has been chosen, the search for supportive professors to oversee a scientific work became essential. My interest lying in the management science discipline, I naturally thought about a mixed approach between finance and sociology. With his expertise in quantitative finance, professor Pierre Devolder⁴ from UCL showed a sound interest to bring his guidance and expertise to an object of study in expansion: Islamic finance engineering and its comparison with conventional finance. On the other hand, professor Mohamed Nachi⁵ from ULiège showed his interest and brought his expertise in sociology with the pragmatic ‘style’⁶. The field of interest fitted with their expertise without being at the core of their research. This is also where new knowledge is aimed to be discovered. They never imposed a strict directive line but kept on pushing to read, criticize and dig beyond personal bias and premature analysis (without taking enough distance). A supervisor committee pushes you to adopt and nurture a scientific approach. This thesis is the fruit of what constructive discussions and continuous ups and downs have generated since 2013.

⁴ <https://www.dss.uniroma1.it/sites/default/files/CV%20DEVOLDER.pdf>

⁵ https://www.uliege.be/cms/c_9054334/fr/repertoire?uid=u193944

⁶ See *Infra*. This style will be widely discussed in Part 2.

On the epistemology level, literature reports many postures in management where two main streams emerge: Positivism and Constructivism/Interpretivism⁷. Where positivism tends to explain reality with an hypothetico-deductive methodology, constructivism tries to inductively discover reality (Girod-Séville & Perret, 1999, pp. 13-33). Each of these approaches have their advantages and their limits. Working in the management science field, on a subject that tackles a human science phenomenon, is a perfect setup to use a mix-methodology where I can discover Islamic finance and explain its expressions.

This section gave a brief definition of Islamic finance, the rationale that has triggered to conduct this thesis and establish the supporting cast to lead this research. Next sections develop how the research question is the foundation of the problematic, what is the methodology and what are the objectives of this study.

2. From a research question: what is the interest for stakeholders to implement retail Islamic Finance in Belgium?

Proposing an alternative finance within a capitalist financial offer is triggering to find out what are the reasons to propose such a finance. In other words, how this finance is positioning itself in the offer of capitalism. Indeed, capitalism offers different proposal of ethical finance. Where does Islamic finance positions itself in this offer. Can we consider it as a different offer from capitalism? An offer of religion? An offer of ethics? To what capitalism need is Islamic finance answering. What is the ‘Why’ of Islamic finance? Facing modernity, what is the proposal that Islamic finance is offering? What are the tenets that pushes it either as an alternative to conventional finance or to a ‘window-dressing’ copy of it? Patrick Haenni speaks about “(...) de proposer une religiosité en résonnance avec la culture de classe des bénéficiaires : un islam proactif, ouvert et accusant une « orientation économique » (Max Weber) marqué » (Haenni, 2005, p. 9). Those questions are all built around the initial curiosity of what is a Sharia*⁸ law-based finance (see appendix 1 and Part 2, Chapter I, section 3) and how would it be relevant to implement it in Belgium. Sharia Law is a complex and nuanced concept on which is based Islamic finance. Although I will give a brief definition of it in part 2, discussing it is not the stake nor the angle of study of this research.

⁷ However, research in management science is mostly built on a positivist epistemology (Kaufman & Banker, 2004, pp. 281-298)

⁸ Arabic words are in italic with an asterisk. They are ordered by apparency in a glossary at the end of the thesis.

Based on initial intuitions, few years ago, I knew what I wanted to explore but I did not know what precisely. While this interest for Islamic finance (as from now on, Islamic finance will be either noted IF or kept written fully when clarity requires it) grew over time, I wanted to avoid simplistic and scientifically void assumptions/questions such as:

- IF is good because it is ethical;
- IF would have avoided the 2008 crisis;
- IF institutions haven't been touched by the crisis as *Murabaha** operations are not interest-based nor interest-like;
- IF is not investing in non-ethical industries such as weapons;
- *Sharia boards** are guarantors of good practice in IF institutions, IF is cheaper (because interest free) to its customers...

Departing from those opinions and based on first literature review, we can observe three financial industry triggers that raised curiosity that led to conduct this thesis:

- IF is proposed as a successful alternative and ethical economy in several markets (D'Cruz & Zuyati Zulkifli Azi, 2020): Malaysia and Pakistan are leaders in retail markets, Luxembourg is performing with private investment (Laarab, 2019). These observations lead us to consider this finance as a viable solution in some countries.
- Literature shows that Belgian demand is requesting more and more ethics and values when considering credit and investment products (Dineur, 2020).
- In regards to Belgium, it exists a significative Muslim population (De Raedt, 2004, pp. 9-30). It raises the interest to know if there is a correlation between the fact of being Muslim and being willing to invest in IF products.

From these observations, **the research question asks if there is an interest for its stakeholders to have retail Islamic finance in Belgium?**

This question gives an axis of research and pillars on which the problematic is built. Whereas new debates or features will bring new directions of research⁹, the initial research question will always get the study back on what we are initially searching for. The clarity of this question did not come immediately after readings or with discussions with fellow researcher but more after a moment of distancing where all the ideas took time to fertilize.

⁹ Given the duration of my thesis that has started in 2013, it is inevitable that new topics came to influence my work.

These elements are the cornerstones of the initial problematic construction where the interest was progressively piqued. From there subject of research, the mobilised concepts, the methodology and the research plan are set in place. These long months of back-and-forth work between the initial theoretical plan and its continuous on field findings have been made possible with the advices of my promotor and the readings about IF¹⁰.

At first glance, we could imagine that this starting question is too large and non-feasible due to the multitude of actors and the complexity to reach them. This is where my subjective stance is helping to solve that issue. Given my background and my professional activity as a consultant in Islamic Financial Markets¹¹ I have the access to all major actors of this IF industry. I have access to a panel of actors that are the core informants for the empirical studies.

3. On the construction of a problematic: theoretical apparatus and mixed-methodology

Where the research question orients the study, the problematic's construction set the stakes, the theoretical foundations and the methodologies mobilized that are the binder of the research.

Questions mentioned in previous section triggered interrogations about the definition of IF, its scope, its limits, its field of applications and tools. All those elements are depending on the stakeholders we are considering (Public authorities, private and professional consumers, professional advisors, financial institutions, legal regulators...). These interrogations triggered thus the different angles to approach the object of research. Problematic is thus structured around what IF is, how relevant is it to have such proposal in Belgium, what relevancy does it has and to whom. Theoretical apparatus with mobilized authors and models helps to give a

¹⁰ During this exploratory phase, I could not prevent myself from falling into a reading chaos trap which got me lost into books and articles related to IF. Falling into this trap is not a major problem as such. Staying stuck or falling again in it is more concerning. This preliminary reading session taught me to better pick my further readings and the references I am going to use for the research. This is the essence of a relevant state of Arts, especially in an exploration phase. Reading Research papers and available data may also lead one to give too much attention to the method and neglect the objectives. This is another trap to avoid: not to rush into choosing any methods. In an initial phase, the project definition is far more important than finding the proper technique to investigate it. A trap which I could not prevent myself from falling into was the 'emphase obscurcissante' (Campenhoudt, 2011, pp. 13-14) or the obscuring phase: trying to think in a complex way to describe simple situations. Useless complexity may lead to confusion when conceptualizing a problematic or just finding a starting question. It reminded me of my favorite high school teacher's quote: "Ce qui se comprend bien, s'énonce clairement". I changed directions many times before simplifying my ideas and choosing a path. My high school teacher's quote was perfectly completed by my thesis promoter's advices and guidance: I needed to take time, distance and simplify the questioning.

¹¹ www.isfin.net

deeper perspective and understanding of individuals motivations and rationale in their decision-making process.

The problematic is set in a socially constructed context with its temporal dimensions (Luckmann & Berger, 1986). IF is a young industry with low standardisation and little available data. A first aim will be to understand the actors' perception of their reality, taking into consideration their objectives and interests. Duberley et Johnson (2000, p. 7) assert: "*Our epistemological commitments influence the processes through which we develop what we take to be warranted knowledge of the world*". The nature of the phenomenon (financial operations ruled by legal prescriptions, moral perspective and global context) led to work with a mix-method that allows to explore a recently developed industry with discourses and actors' opinions.

By essence, the management science discipline cannot stay on theoretical level as it is an applied science where human beings enter into interaction. I can neither stay on the pure empirical level as management science deals with organisation and their optimisation which undoubtedly refers to a theory, a problematic and an on-field analysis. Given my academical background, I oriented the research on management and the financial aspects.

I voluntarily left aside legal aspects. This decision is justified by 2 elements. First of all, I would not have given justice to the legal discipline that requires years of study to propose a relevant analysis. My focus remained on the financial aspects of the topic. Secondly, instead of entering in the technical and legal feasibility¹² of proposing Islamic finance in Belgium, my focus is to study if there is a financial and/or sociological interest to have such offer. This goes before getting into a technical discussion on the feasibility of setting up Islamic finance legal contracts and transactions.

The chosen methodology of the research is a mixed-approach of a qualitative and quantitative methods. Thesis is divided in 4 parts with different angles of approach: a marketing, a social, an economic and a financial perspective. While the parts 1, 3 and 4 are tackled with quantitative data-oriented methods that use Likert scales, data comparison and analytical statistics such as chi-squared tests, part 2 uses a qualitative and sociological method. Opposition between these two approaches is here not relevant. Both methods are seeking reality, from different angles. One by measuring it, the other by understanding it. The decision has been taken not to stay stuck in one single method but to use different angles in function of the informants/data and the

¹² Which could be a valid option (Van Someren, 2016).

outcome. This is where method is related to the research question. The thesis wants to know about implementing retail IF in Belgium. For that we need to understand what IF means, and from there, to measure the financial performance interest to use it. Each part will give a comprehensive and specific methodology description.

Here below a schema of the research plan:

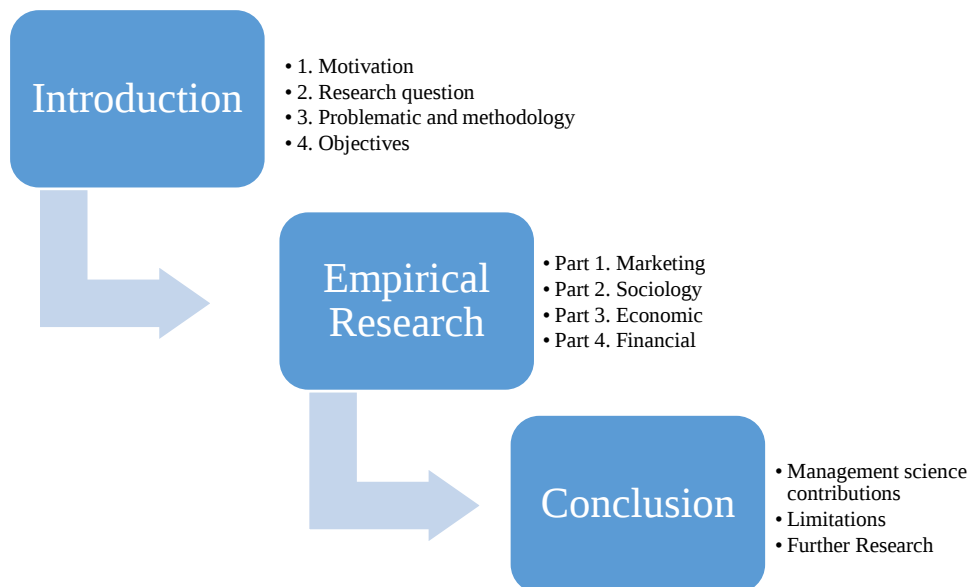


Figure 1 - Thesis Research plan

4. Objectives. How relevant to implement Islamic finance in Belgium?

The research question and the problematic construction aim to understand the potential interest for stakeholders to have IF proposals in Belgium. When talking about the relevance to implement Islamic finance in Belgium, we also need to discuss what relevance or interest are we talking about and to whom it matters. After a couple of years of reflection and given the nature of the management science discipline, the problematic around IF opportunities to be implemented in Belgium is discussed at the light of its relative added value/relevance for its different stakeholders: retail and professional consumers, professional advisors and financial

institutions (thesis does not discuss relevance for public authorities nor NGO's¹³). This objective has led to a reasoning in 4 parts.

Part one is an exploratory marketing study that aims to explore consumers' needs in terms of credit solutions and if personal ethics impact the decision to engage in IF credit solutions.

In order to build the problematic, a couple of concepts such as IF and ethics are introduced. Only short definitions are here presented here whereas deeper discussions are addressed in ulterior parts 2 and 3.

Furthermore, defining what a consumer is and how their satisfaction is obtained is key to shape their needs. These elements are discussed alongside the consumer's decision-making rationale. Through a review of contemporary literature, we observe that a Jones model gives a comprehensive vision of the decision-making process and set ethics as an essential piece of that process where it places the consumer satisfaction as one of its core objectives.

From there, the research question discusses if Belgian retail consumers are considering IF loans and how their ethical profile impacts their interest in those solutions?

To reach this objective, an online consumers-based survey is administered. Thanks to the Forsyth ethics position questionnaire (EPQ), the ethics type of consumers is correlated to their decision to consider Islamic finance credit solutions.

The conclusion of this part gives an answer to the main research question on the retail consumer perspective: **what is the interest for retail consumers to have IF implemented in Belgium and how their ethical profile impact that interest.** By answering this question, we determine if there is an interest for IF loans in Belgium and if that interest can be impacted by the ethical type of consumers.

Part two leads an empirical-inductive exploration of the engagement justifications of Belgian and French service providers of IF. Facing global financial concerns, institutional and private actors are trying to find new ways of sustaining their capitalist growth. In the plurality of ethical finances, Islamic finance is presented by its experts as an alternative source of economic growth. An empirical-inductive exploration of the justifications of Belgian and French service providers of IF is here proposed. The objective of this part is to understand if there is any ethical justification suggested by those actors when offering IF advisory.

¹³ The approach by financial instrument relevance will also not be tackled.

Within a constructivist framework, the theoretical model mobilizes three pillars.

First, based on the comprehensive approach of Max Weber, an explanation is given, *lato sensu*, of the link that can be found between economics and ethics. Hereafter, further analysis is proposed about what reasons a similar analogy can be applied to the relationship between economy and the Sunni Islamic ethical principles of finance. Then, a description is given about the concepts of ethical finance and IF. Eventually, the model is completed with the contributions of Boltanski and Thevenot's theories in order to understand the narrative rationale of the IF service provider's discourses. It also discusses the way they find justice and how compromises.

Thereafter, on a field research basis, an exploration is conducted on the oral discourses of French and Belgian service providers of Islamic finance. This qualitative part is based on 21 semi-directive interviews. The material allows us to uncover the actor's understanding of IF and their justification for offering Islamic finance. It also highlights its potential justification linked to ethical finance. This on-field study is followed by a discussion on the tension between theoretical and pragmatic objectives of IF. **The conclusion** of this part allows to **understand the justification to engage in Islamic finance for professional advisors** and what does it mean to them when implementing or advising it.

Part three is an explicative quantitative firm-level survey that aims to test if SME managers are willing to use IF credit, in function of their religiosity.

Facing global financial concerns, institutional and private actors are trying to find alternative routes to sustain their growth and to control their cost of credit. The objective of this part is to explore two questions: (1) to what extent SME managers are open to IF loans solutions and (2) what is the impact of their religiosity on their decision-making process?

In order to assess the relevance of Islamic finance loans opportunities and the religiosity impact, three concepts are called up: SMEs, IF and religiosity. The Research methodology is an explicative quantitative firm-level survey that is submitted to SME managers in Belgium. The hypothesis tests if the religiosity of SME managers has an impact on the willingness to fund oneself with Islamic finance loans. Conclusion ends with a discussion on the general opportunity for SMEs to (re)fund with the use IF loans and the religiosity significance on the decision-making process.

Part four is a financial performance comparison between full-fledged Belgian conventional banks and Islamic banks. The objective of the results will help the shareholder to determine how relevant it is to have an IF proposition in Belgium.

Focus is on retail activity of a bank and not on its investment activities (given the fact that the same bank can offer retail and investment services). This decision has been made in order to focus on one of the primary missions of Islamic finance which consists of sustaining tangible economy. Retail banking with their savings and credit activities have their main focus on proximity banking. The objective of the thesis is to study if it is relevant to implement a bank in Belgium, for its Belgian customers. When discussing government and big structures investment activities, there is no necessity to have a local retail Belgian Islamic bank. Indeed, investors are putting their money into strong Islamic finance markets such London or Luxembourg financial hubs (Komorowski & Kubiszewska, 2014, pp. 245 - 258). Large debates can be found in the literature when referring to the Islamic finance investments activities. When we consider that the activity of an investment bank is to offer: (1) advisory for Merge and Acquisitions, (2) capital raise, (3) stock introductions, (4) bond loans and (5) hedging/placements opportunities for its clients. We quickly come to the question of securitization¹⁴. Where this activity consists of transforming debts in financial assets and interest rate is a leverage that generates revenue, it's legitimate to reflect on the original interdiction of Riba/interest rate in Islamic finance.

For this reason, Sharia board advisors are adding rules to investment banks activities in order to authorise their activities. Without entering into a technical discussion at this stage, these authorisations are also subject to criticism and are not allowed by all Sharia boards. This being not the focus of the thesis, this question is left open. On the same level, Islamic insurance (Takaful in Islamic finance) will not be covered in this thesis.

Throughout the years, Islamic banking has been presented by its defenders as a credible and financially effective industry. The final part of this study assesses this assumption by proposing a methodological framework to compare financial performance ratios of Islamic and conventional banks. I intend to determine if Islamic finance lays in the classical arbitrage zones of risk/return or it finds itself in an exceptional alternative.

After a discussion of the key concepts of Islamic banks and financial performance, I developed a CAMEL ranking methodology and the reason for using it. The CAMEL model is a

¹⁴ “*Titrisation*” in French.

performance evaluation tool that focuses on the financial performance of an industry. This analysis is completed by Sharpe ratio risk indicators to take into consideration the volatility factor. Jensen's Alpha will also be calculated to observe the excess return (the asset return given its risk AND the market return). Data in the study are gathered from financial reports of UK based Islamic banks, Belgian and British conventional banks. The results and managerial implications of this research are discussed to assess if Islamic finance has a role to play in Belgium.

Finally, given the introduced angles of study and the mix-methodology used, my research gives a nuanced answer on the relevancy to offer Islamic finance solutions in Belgium. Each part of the thesis gives a different angle and relevancy to this offer. None of them gives a black or white answer but more of a conditional and contextual proposal.

All these 4 parts are always referring to the research question that has guided the whole narrative weave of the thesis. For that purpose, theory, methodology, specific concepts and empirical inputs haven't been built and centred around these parts.

Results and conclusions have to be taken with critical distance due namely to 2 factors: samples are relatively small. Although statistical tools were mobilized, it's not the purpose of the thesis to assert that my conclusions are reflecting, without a doubt, what reality is in Belgium.

This remark leads to the second caution to be taken in the reading of my results and conclusions: the multiple-disciplinary nature of my management research does not make it an in-depth specific expertise in financial risk sharing, in econometrics or in sociology. On the contrary, my research uses tools from these various domains to give nuanced research angles to a complex object. This is the back-and-forth movement between technical specificity and general perspectives of the thesis.

PART 1. ARE BELGIAN RETAIL CONSUMERS TAKING ETHICAL BEHAVIOR INTO CONSIDERATION WHEN EXAMINING ISLAMIC FINANCE LOANS SOLUTIONS? A MARKETING APPROACH

Part 1 Abstract

In the management science field, this part one of the thesis is an exploratory marketing study that aims to explore consumers' needs in terms of credit solutions and if personal ethics impact the decision to engage in Islamic finance retail credit solutions. In order to build that study, a couple of concepts such as Islamic finance and ethics are introduced. Furthermore, defining what a consumer is and how his satisfaction is obtained are also key concepts to cover. These elements are discussed alongside the consumer decision-making rationale. Through a review of contemporary literature, we observe that Jones model gives a comprehensive vision and set ethics as an essential part of the consumer satisfaction objective and variable in the decision-making process. To reach this objective, an online consumers-based survey is administered. Thanks to Forsyth ethics position questionnaire, the ethics type of consumers is defined. Conclusion of this part gives a nuanced answer to the main research question on the retail consumer perspective: Is there an interest for retail consumers to have an implementation of IF in Belgium and how their ethical profile impact that interest. By answering this question, we endeavor to determine if there is an interest for Islamic finance retail loans in Belgium and if that interest can be impacted by the ethical profile type of the consumers.

Keywords: Decision making process, ethics, Islamic finance, consumers.

Introduction. Consumers ‘needs and their Ethics profile

This first part is the initial pillar of an extensive research thesis about IF, its various meanings, purposes, and its relevance for its actors in Belgium. It also discusses the relevance to consider ethics as a normative dimension for agents’ actions, within the field of management (de Nanteuil & Taskin, 2011).

This entire research is oriented towards the retail banking and not the investment banking. Such a choice has been made in order to focus on the individuals needs and the way they seek for funding opportunities. Sustaining individuals and SME’s activities are one of the main missions of Islamic banking industry (Ahmed & alii, 2017). The current goal of the thesis is to consider whether proposing Islamic finance solutions to retail consumers is a relevant and financially viable solution for the non-corporate consumers and the banks. Investment Islamic finance solutions can be found in the Luxembourg where those activities benefit from the know-how from the conventional banking sector and the liquidity of the financial market itself. Since its 1978 historical position (Mausen, Palgan, Wang, & White, 2020), Luxembourg is a privileged financial partner for Asian and Middle actors¹⁵. Investment vehicles are developed in a way that allow shariah-compliant investment funds easy to structure and to trade. Considering those solutions in Belgium would raise a double -difficulty: (1) competing with a well-established financial place that has legal and political frameworks, know-how and Middle-East visibility and (2) would require top-notch resource and expertise to propose such complex products. For those reasons, we think it’s more relevant to start considering Islamic finance by its retail angle.

Indeed, literature shows an important impact of ethics (Jones, 1991) in this decision-making process (Dubinsky & Loken, 1989). The main objective of this part is to explore and discover the need and interest of retail consumers to get an Islamic finance loan and if their personal ethics profile significantly impacts that decision. How do individuals perceive those financial solutions? Is this a feasible solution for consumers? Do their ethics profile impact their decision to get an Islamic finance loan? All those answers will lead to fuel the discussion in the next parts of the thesis.

¹⁵ <https://www.luxembourgforfinance.com/en/financial-centre/islamic-finance/>

Considering the objective and the context of this part, a questionnaire was submitted to Belgian retail consumers in order to measure their ethics position profile and to measure their willingness to get a loan via Islamic finance solutions.

In a first wave of questions, we discover what are the needs of the consumers in terms of credit solutions (Do they need a loan, what kind of credit do they need, what maturity, what structure, what do they mobilize when they make a decision, is ethics a criterion of choice...).

In a second wave, we dug deeper to understand and measure which type of consumer considers ethical loans. This measure is calculated upon 2 Forsyth ethics dimensions/constructs: relativism and idealism (Prat dit Hauret, 2010, pp. 367-373). Relativism is a measure of how ethics can vary from one situation to the other depending of the context. This dimension is particularly interesting as it shows how Islamic finance perception for the consumer could be impacted by its general perceived context and objectives¹⁶. The dimension of Idealism determines how ethically individual act if he considers the final goal as a greater achievement¹⁷. Beyond these measurements, the purpose of this article is to discover if retail Belgian consumers are indeed impacted by their ethical profile when considering IF solutions. And if so, what are those profiles: relativist or idealist oriented.

In the first chapter of this part 1, we go through a review literature of the key concepts of what is a consumer, how his/her satisfaction is measured, what is IF, ethics and how the process of decision-making is built. This is where Jones model is mobilized and for what reason.

In chapter two of this part 1, we develop the research question and hypothesis which focuses on the impact of ethical profile when considering IF loans solutions. we also introduce the research design outlines. The research protocol and the methodology are explained. They are used to gather the data in this exploratory and confirmatory phase.

In chapter three, we present the findings and we discuss the main research question and hypothesis. What are the theoretical and managerial contribution of this part? What are its limitations, particularly related to the sample sizes? This part 1 ends with a conclusion about the interest for retail consumers to consider IF products.

¹⁶ The more important this dimension is, the more the consumer would consider ethics principle as not universal.

¹⁷ The greater the importance of this dimension is, the less a consumer will consider making compromises about it.

CHAPTER I. THEORETICAL MODEL OF JONES AND LITERATURE REVIEW

1. The demand: Consumers motivations

Retail consumers sensibility and awareness tend to increase due to various grading and ‘likes’ for the services they invest in (Dubuquoy, 2011). They tend to be socially responsible and take into considerations values beyond the budget constraint. Internet has become an important feature in the consumer rationale (Chessel, 2012). This feature has allowed the consumers to be a purchaser but also a ‘marketer’ in the sense that she/he can evaluate and comment on the product/services she/he will use. This is the new consumer that market and industry have to pay attention to when offering their solutions (Levine, Locke, Searls, & Weinberger, 2011). In the 20th century, the consumer is still perceived as an irrational and isolated individual (Gide, 2001) that can either buy or refuse to buy (Hirschman A. , Exit, voice, and loyalty: Further reflections and a survey of recent contributions, 1974, pp. 7-26). In the 21st century, the consumer is more and more considered as individual that needs to be logically convinced but also as being a part of group of consumers that need to be emotionally touched. On top of those elements, the number of consumers has exploded (labour market access to woman, middle class development...) and their capacity to purchase has grown at the same time (Chessel, 2012).

For instance, a product can be produced in China, shipped to Germany and bought by a consumer in Belgium to be bought by a Moroccan habitant. In the banking industry the reality is different whether we talk about retail consumer or a corporate consumer. Whereas the corporate consumer can be based in any country and invest into a bank/financial institution in any country due to an extreme dematerialisation, a retail baking consumer will be located in the country in which the bank is operating. He/she cannot be based in Belgium and get a loan in France, for instance. However, the service provider or the bank can be based in France and offer a solution to a Belgian consumer (via a subsidiary, M&A’s...). This is mainly due to the internet globalisation and to international regulation (Antéblian, Filser, & Roederer, 2013, pp. 84-113)

Thanks to this new profile of consumers, new products and solutions are shaped by the remarks and criticism made by these same consumers. With comments and purchases, consumers force the producers, suppliers and banks to provide with an adapted offer to their need.

This new retail consumer can also be a co-producer of the product/service he/she buys. For instance, we can think about an operating system such as Linux where consumers are active contributors of the same product development (Conseur, Fiorito, & Gable, 2010, pp. 879-893). Kwortnik and Ross define this consumer experience as “*une interaction du consommateur avec le produit qui soit à la fois plaisante, mémorable, et créatrice de sens*¹⁸” (Kwortnik & William, 2007, pp. 324-335), especially in the retail market. Multiple dimensions shape the consumers identity, motivations and satisfaction. Here below a broad literature review with various dimensions of satisfaction of the customers:

Dimension	Items	Authors
Convenience	Distance	Westbrok and Black (1985)
	Clarity	Sinha and Uniyal (2005)
	Accessibility	Sinha and Uniyal (2005)
Pleasure	Distraction	Tauber (1972)
	Adventure	Babin and al. (1994)
Social interaction	Role	Tauber (1972)
	Community	Borghini and al. (2009)
Economic drivers	Price	Westbrok and Black (1985)
	Promotions	Arnould (2000)

Figure 2 – Overview of retails consumer experience Literature

The consumers are seeking for a satisfaction in various ways through their purchase or consumption experience (Vanhamme, 2002, pp. 55-85). Other criteria can also be found in the literature such as: emotion, attitude and quality of service (Ladhari, 2005, pp. 171–201).

¹⁸ Original citations remain in the body of the thesis. English translation is given by the author. Here: “*a consumer interaction with the product which is nice, memorable and meaningful*”

Authors make a difference between satisfaction and emotion as they define the satisfaction as an *à posteriori* cognitive state awarded for agreed efforts (Hunt & Vitell, 1986, pp. 5-16).

Whereas emotion is defined *à priori* as feelings before the consumption experience. From these dimensions we understand the consumer satisfaction is not a rigid concept but an evaluative construct that has several dimensions to be considered. Consumer in the 21st century is not the one from the 20th century. Technology and globalisation have added new dimensions to consumers identity and satisfaction.

Henceforth, the decision-making process is also in constant evolution. This is what next section is taking into consideration to frame that process.

2. Decision Making Process models: Jones theory that encompasses Moral as a significant variable in the consumer rationale

To shape the understanding of the process in which individuals engage when making a decision, we read in literature several models about these processes. Questions arise such as: “*what are the factors influencing such process? Is ethics a dimension of that process? What do we mean by ethics¹⁹ ?*” we observe that ethical decision making is often composed of 3 factors: moral judgement, moral intention and the moral intensity (which is itself composed by 6 items: Social Consensus, Magnitude of Consequences, Temporal Immediacy, Proximity, Concentration and Probability of Effect). Hereafter, I briefly explain here those concepts and the model that I decide to work with.

a. Ferrell and Greshman model

Ferrel and Greshman introduced one of the first decision making model (Ferrel & Greshman, 1985) where they attempted to define the individual predictive variables that impact the ethical decision-making process. They also discussed the contextual variables that precisely impacted the individual predictive variables (age, gender...). This double impacting variable defines the (un)ethical consumer decision. Firstly, the consumer perceives an ethical dilemma (could be bribery, collusion, unfair judgement...). Then, the ethical decision process starts with

¹⁹ Ethics concept is widely explained in Part 2 of this thesis.

a multi-stage process where individual factors (values, cultural background, intentions...), organisational factors (professional code, deontology) and environment factors (peers, society...) have an impact on his decision. As a result of their research, they conclude, based on their model, that a consumer facing an ethical concern is influenced by his personal and contextual variables when making a decision. Ferrell and Greshman contingency framework can be illustrated as below:

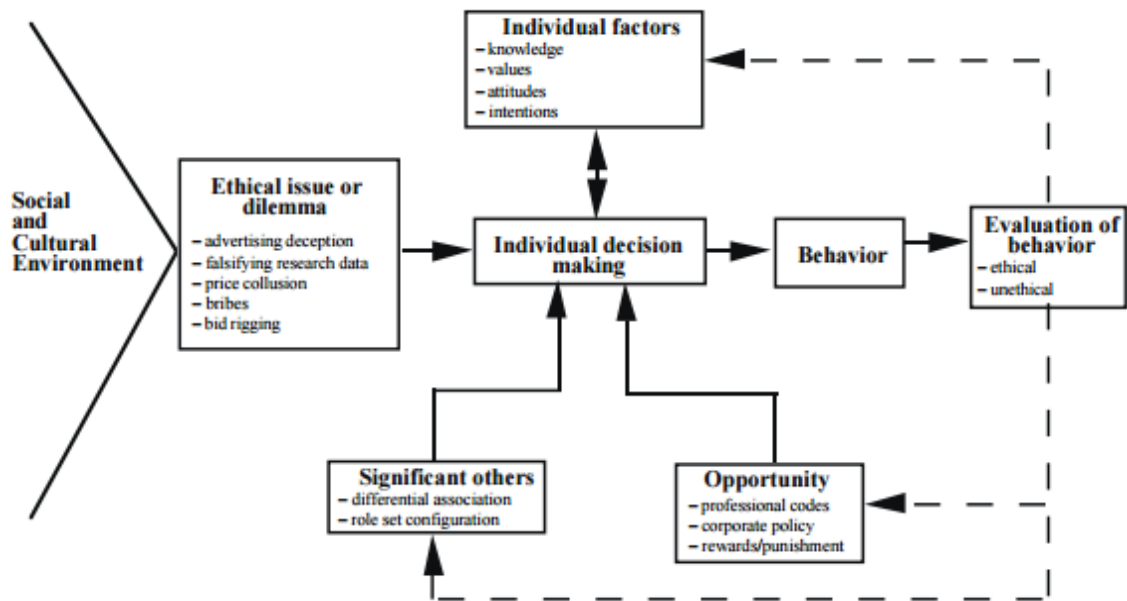


Figure 3 - Ferrell and Greshman Ethical Decision-making process

b. James Rest model

James Rest proposes a 4-component sequence when individuals are making an ethical decision (Rest, 1986). His contribution is ever since used in most of the models. Identified sequence is: (1) identifying/sensing a moral issue, (2) moral judgment, (3) Having a moral intention/motivation (to apply the moral judgement), and (4) commit in/implement a moral action. This multi-stage model is found in many other models (Hunt Vitell, Trevino, James...).

c. Trevino model

Linda Trevino argues that an ethical decision is a combination of individual moderators (ego, interdependency level) and contextual moderators (working conditions, peers' control,

management...). These moderators are impacting the ethical decision making process as mentioned in Rest model: (1) ethical dilemma, (2) moral judgement, (3) intention, (4) action (Trevino, 1986).

d. Hunt Vitell (H-V model)

Hunt and Vitell (1986) introduced the concepts of deontology and teleology (Hunt & Vitell, 1986). Deontology is applied when people focus on their own norms and values to base of their actions (with possible exceptions) whereas teleology focuses on the consequences of one's actions. They claim that moral issues and actions will be combined with these two theoretical positions. H-V model could be illustrated as below:

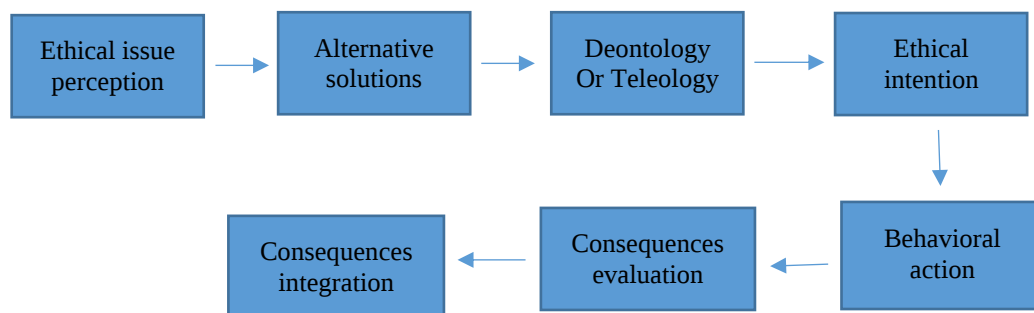


Figure 4 - H/V model (a)

Where the cultural environment (religion, political system), industrial environment (informal norms), organisational environment (informal norms), and the personal experiences (religion, moral force, ethical sensitivity...) have an impact on the ethical issue/concern perception. This model is however mainly criticised regarding several aspects: (1) what is 'good' is difficult to identify by nature, (2) would 'good' be quantifiable anyway, and (3) consequences are difficult to be identified in advance. For all those reasons, Hunt and Vitell have themselves revised their model which incorporates new developed concepts (Fort, 2000). As a result of their research, they claim that moral philosophy is an additional variable to the decision-making process. From there, amended H-V model is illustrated (Blaber , Brady, & Gougoumanova, 2011) as:

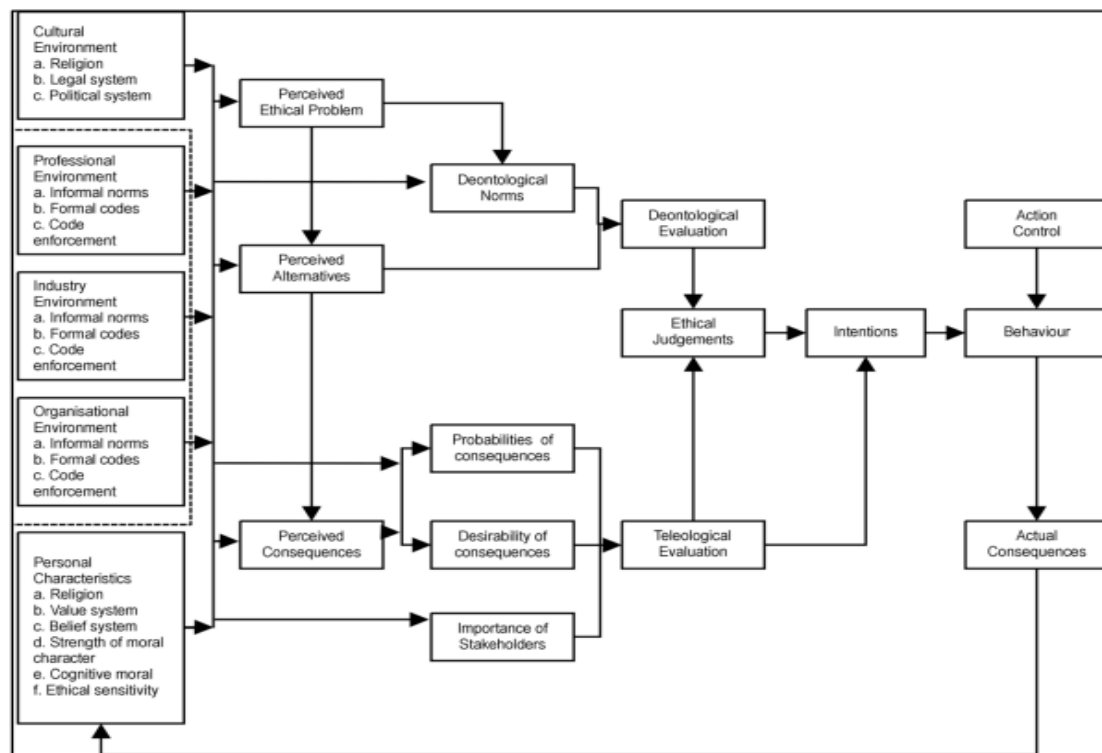


Figure 5 - V/H model (b)

e. Dubinsky and Loken model

Dubinsky and Loken made a synthetisation of the reasoned action in the ethical decision-making process (Dubinsky & Loken, 1989). Individuals are making decision by using rationally all the available data they have, *à priori*. The intention is determining the action. Individual behavioural action is shaped by potential outcomes. This model allows the possibility to measure the motivation and the intention of an individual. The model's limit is situated in the non-tackled articulation between the shift from intention to action. As a result of their research, they claim that the reasoned action influences the decision-making process.

Dubinsky and Loken model can be illustrated as below:

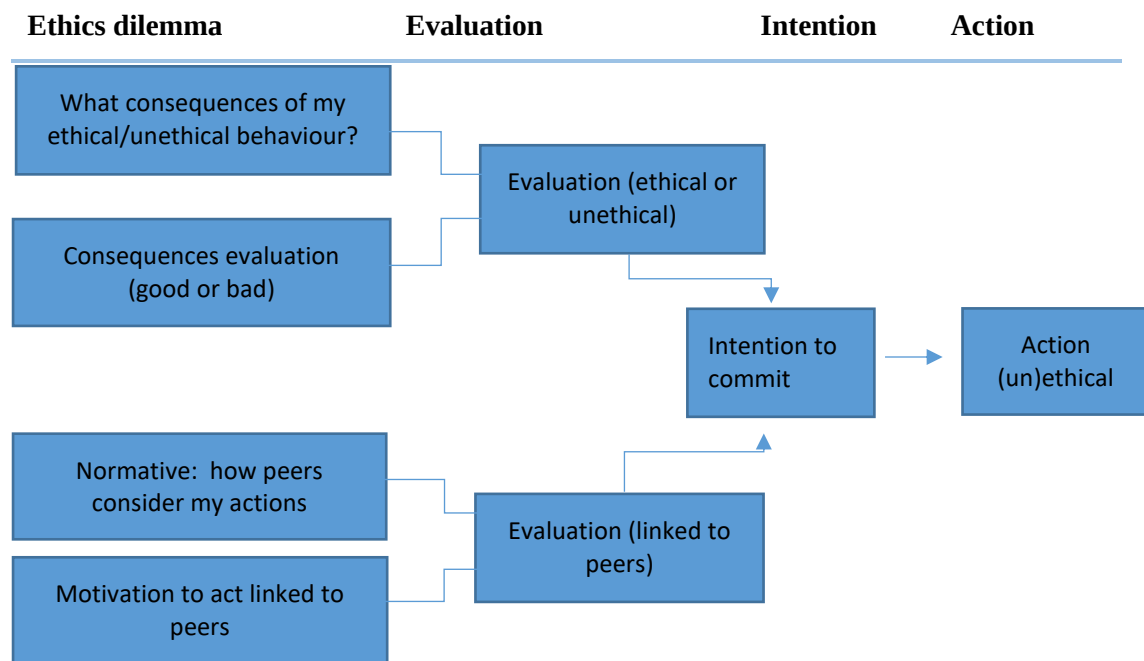


Figure 6 - Dubinsky and Loken model

f. *Jones moral intensity model as a decision-making process: between Idealism and Realism Forsyth Ethical profiles*

Thomas Jones (1991) shapes the corners of a model that discusses the impacting factors in the ethical decision-making process. The relevancy of his model lays in the fact that it uses the concept of ‘*moral intensity*’. This concept is defined by Jones as: “*a construct that captures the extent of issue-related moral imperative in a situation*” (Jones, 1991). This moral intensity nuance has an impact on the decisive steps when making a decision. The more ethics intensity is at stake, the stronger the action will be grounded in ethics. *Moral intensity* is a multidimensional construct of six characteristics²⁰:

- Effect concentration (behaviour will impact a small or a big group);
- Proximity (feeling close to a victim by religion, culture, geography...);

²⁰ However, these six dimensions could be reduced to three, given McMahon and Harvey, 2006: they explain consequences in time, link between the actors (agents) and social morally (not) accepted judgment of the action.

- Temporarily close to the agent (time duration between the present and the future consequences of the behaviour);
- Social consensus (degree of social agreement between agents which says that a behaviour is evil or good);
- Effect probability (probability that a behaviour will take place and the probability that this act will harm/benefit others);
- Consequence's severity (sum of harms/benefits done to agents/victims).

Thomas Jonas contribution places moral decision-making process into a comprehensive and contextual environment where individuals are not only making ethical choice out of any context but in an interconnected and multi-level socially constructed context. Moral reasoning for a financial system is dependent of the socio-cultural environment of the agent who applies the reasoning. This is an issue-dependent mechanism. For this reason, contextual features is taken into consideration when studying empirically the impact of ethical beliefs into financial decision-making process. This is the existing gap this part tends to discuss when discovering what are the consumers need and how their ethical position type makes a difference in their decision-making process when considering Islamic finance solutions. In Jones's framework, moral dimension is called moral intensity as the more the moral issue is close to the agents (in terms of impact and direct consequences) the more the agent will act accordingly with intensity to the issue.

The Jones model can be illustrated as below:

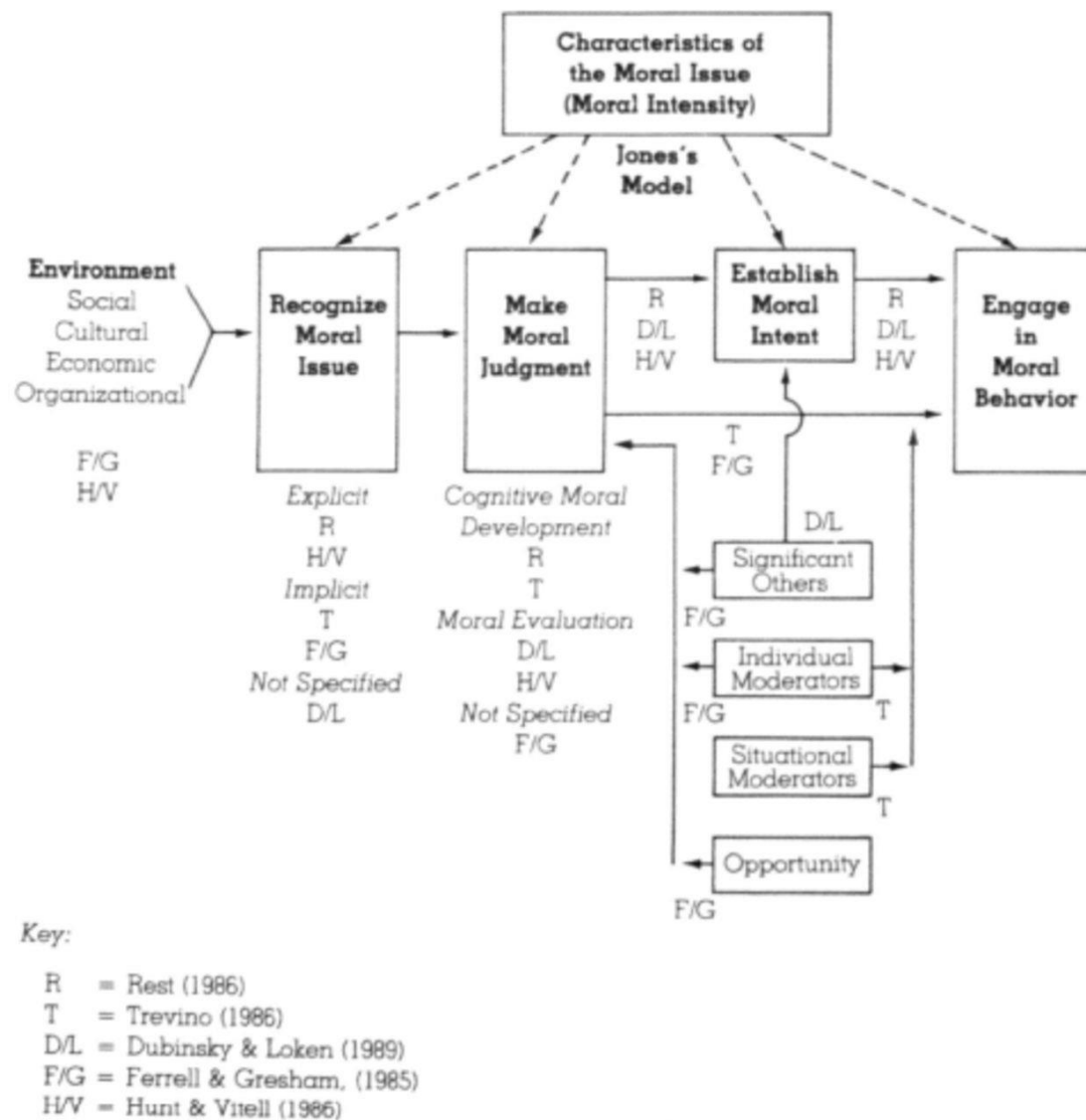


Figure 7 - Jones Model

Finally, we can summarize the literature review of the models in the following table:

		1985	1986	1986	1986	1986	1991
		Ferrell & Gresham	Rest	Trevino	Hunt & Vitell	Dubinsky & Loken	Jones
Individual factors	<i>Values, principles</i>	V		V	V	V	
	<i>Moral intensity</i>						V
Contextual factors							
	<i>Professional</i>	V		V	V		
	<i>Cultural</i>	V			V		V
Making decision process steps	<i>Peer's influence</i>	V					
	<i>Evaluation (1)</i>	V	V		V	V	V
	<i>Alternative evaluation</i>				V	V	
	<i>Moral judgement (2)</i>	V	V		V		V
	<i>Intention (3)</i>		V		V	V	V
	<i>Engagement (ethical or not) (4)</i>	V	V	V	V	V	V
	<i>Reasoned action</i>					V	V
	<i>Consequence's evaluation</i>				V		

Table 1 - Ethical decision-making process model summary

Within those models, consumer's strategy is decided between three specific options when making an investment/loan (Harrison, Newholm, & Shaw, 2005):

- Detachment: consumer claim that they consume less than others which is, per se, ethical.
- Rationalisation: consumer only act with ethical concerns on some investments.
- Integration: consumer consume with ethical concerns in all cases.

Depending on the variable (professional, geographical origin, gender), other authors contribute to the debate by adding other factors to the decision-making process: a model applied in the Sales field (Wotruba, 2013, pp. 29-40) where age, education, gender and salary influence the ethical perception when making a decision; a model where the more socially interacting with the others, individuals will tend to consider even more ethics their decision; a model where

managers have stronger incentive for ethical concerns (Lam & Siu, 2009, pp. 167-180); where age has an impact on a decision making model (Trevino , 1986); where religion has an impact on ethical decision (Hunt & Vitell, 1986) and where consumers place their choices in an idealist or relativist perspective (Forsyth, 1980, pp. 170-190).

This former contribution is here below further explained as there is an interesting add-on to the Jones' model. With Forsyth theory, we identify two different consumer's postures: either a relativistic or idealistic moral philosophy. A high relativist profile will reject global and universal morality and will consider a case in various contextual ways. She/he will not use moral standards for which she/he is not convinced. A high Idealist profile will consider the consequences obtained with specific moral actions. She/he will try not to harm anyone. From these two moral philosophy postures, ethics become either teleological (focus on finalities) or deontological (focus on conformity to the rules). This is represented in the 2x2 below matrix:

	Low Relativism	High Relativism
High Idealism	Absolutist: Principled idealists believe people should act in ways that are consistent with moral rules, for doing so they will in most cases yield the best outcomes for all concerned;	Situationist: Idealistic contextualists favour securing the best possible consequences for all concerned even if doing so will violate traditional rules that define what is right and wrong;
Low Idealism	Exceptionist: Principled pragmatists endorse moral rules as guides for actions, but admit that following rules will not necessarily generate the best consequences for all concerned;	Subjectivist: Pragmatic relativist base their ethical choices on personal considerations, such as individualized values, moral, emotions, or an idiosyncratic moral philosophy.

Table 2 - Theoretical Forsyth framework

The questionnaire protocol that is built for the empirical research is based on Forsyth framework and on the Moral intensity model of Jones. Indeed, moral values²¹ assessment allow to link it to the moral action (investing in ethical solution). This specific model and scale measurement are discussed in the research design chapter.

²¹ Moral is here synonym of ethics. A complete discussion is given in Part 2.

3. Islamic Finance and ethics

Islamic finance and ethics definitions and concepts are widely discussed in the parts 2 and 3 of the research²²: “*what are the ethical justifications offered by Belgian and French service providers of Islamic finance*”²³ and “*Does religiosity have an influence on small and medium sized enterprise manager’s decisions to use Islamic finance products*”²⁴. In those Parts, we widely explain what is IF, its definition and origin. A blueprint of its actors, products and financial solutions is also introduced.

To frame the object of research in this part, a common definition of IF is presented as a Sharia compliant-based finance²⁵, where Sharia is the body of laws and rules extracted from Quran and *Sunna**²⁶ (prophetic sayings and acts in the Muslim sphere) (Abeng, 2015, pp. 47-54). An important feature/distinction to be made here is that IF is not only trying to be efficient economically and financially speaking but it has also the imperative to be ‘legally’ authorised by *Sharia* (El-Gamal, 2009). There is a legal constraint that is supervised by a double governance principle (classical governance and a *Sharia* board advisory compliance).

We observe that IF solutions are of two kinds: PLS (profit and loss sharing) and debt-based solutions. Most of these operations are supported by banking intermediary (Toussi, 2010). The PLS solutions are partnerships (stocks, joint venture, capital-risk, entrepreneurial funding²⁷). Debt-based solutions are Sales/Buy operations (+ mark-up margin) that result in a debt for the credit taker. Although IF is often presented as a PLS, entrepreneurial funding enhancer, reality is much more prosaic and mostly portray Islamic finance as debt-based solutions as the main mechanisms for profit generation. This is a very often addressed criticism to IF apologetics. This is discussed in Part 2 as this is not the essential interest of this part 1.

²² Which also means that each part of this research could be read independently but only short explanation is given here to avoid redundancy.

²³ Instruments and mechanism are fully explained in Part 2.

²⁴ Idem.

²⁵ See General Introduction of the thesis.

²⁶ Other sources (*Ijma** – consensus; *Qiyas** – Analogy...) exist but they will not be discussed in this thesis.

²⁷ Mudaraba and Musharaka solutions are discussed in part 2.

CHAPTER II. RESEARCH MODEL AND HYPOTHESIS: **BELGIAN RETAILS CONSUMERS AND THEIR ETHICAL** **BEHAVIOUR**

4. Research question: Are Belgian retail consumers taking ethical behaviour into consideration when examining Islamic finance loans solutions?

This chapter covers the question “*Are Belgian retail consumer taking ethical behavior into consideration when examining Islamic finance loans solutions?*” After having defined a couple of concepts, we find out that customers satisfaction is a key factor in that process (McFarlane, 2013). Discussing the customer satisfaction value helps financial institution to position their offer for those consumers. Thus, relevancy of this research lays in defining if ethical type has an impact on this decision process for IF. It will then identify what type of customer would be more interested in ethical loans, such as IF solutions. We saw in the previous section that ethics impact the behavior of the actors (Haidt, 2001, pp. 814-834) (Kohlberg, 1984). We want to identify here if Belgian consumers, in function of their ethical type, find IF as a relevant solution for them. Individual ethical beliefs have an impact when judgements or decision have to be made (Barnett, 2001, pp. 1038–1057). Those aspects may also vary in function of the culture and the country of residence (Franke, Singhapakdi, & Vitell, 1999, pp. 19–36). For instance, studies show that Eastern countries and cultures are much more ‘relativist’ than western countries. This is here dully notified as a limitation to this study but opens the avenue for further research.

5. Research hypothesis (RH1): Ethical type of the consumers has a significant impact on the interest for Islamic finance solutions

- a. Main hypothesis. Ethical type of the consumers has a significant impact on the interest for Islamic finance solutions*

This section frames the design research and the hypothesis that consumer ethical position profile, whether it has a low or a high degree of relativism or idealism has a significant

impact on the interest for Islamic finance solutions. I try to confirm if potential differences are only due to random sampling and if they are significant or not. From there, the null Hypotheses can be formulated as below:

- RH0a: Interest in IF is **equivalent** between high idealism profile and low idealism profile.
- RH0b: Interest in IF is **equivalent** between high relativism profile and low relativism profile.

The alternative research Hypotheses (RH1) are:

- RH1a: Interest in IF is not equivalent between high idealism profile and low idealism profile (which means ethical profile has a significant influence on that interest).
- RH1b: Interest in IF is not equivalent between high relativism profile and low relativism profile.

My research Hypotheses (RH1a/b) are bilateral and do not discuss a positive/negative correlation between the variables. The objective is to determine if there is a correlation or not between ethical profile/behavior and the interest in IF loans²⁸.

- { **RH0a:** I assume that the DV and IV are unrelated.
- { **RH0a:** $\eta_{aa} = \eta_{ab}$
- { **RH0b:** I assume that the DV and IV are unrelated.
- { **RH0b:** $\eta_{ba} = \eta_{bb}$

Where η_{aa} (Group A with high Idealism ethical type and interest in IF) = η_{ab} (Group B with low Idealism and interest in IF). Not rejecting H0 means that we do reject H1 but we cannot prove H0. Rejecting H0 means we accept H1.

And where η_{ba} (Group A with high Relativism ethical type and interest in IF) = η_{bb} (Group B with low Relativism and interest in IF). Not rejecting H0 means that we do reject H1 but we cannot prove H0.

²⁸ My rationale tests if there is a relationship between an independent variable and a dependent variable. The null hypothesis claims that there is no significant impact between those variables and that their variation is unrelated.

With the rejection of these H0's, we would state that there is a significant difference in interest in IF in function of the EP (Ethics Position) type:

{ **H1a:** Idealism EP has a significant influence on the interest for Islamic Finance solutions²⁹.
H1a: $\eta_{aa} \neq \eta_{ab}$

{ **H1b:** Relativism EP has a significant influence on the interest for Islamic Finance solutions.
H1b: $\eta_{ba} \neq \eta_{bb}$

To test these research Hypotheses, Forsyth Ethics Position Questionnaire (EPQ) has been amended and submitted to Belgian individuals in order to understand and measure the impact on this process. The purpose of this EPQ is to statistically explore what type of customer would be interested by IF solutions. Studying personal ethics behaviour is a complex concern. The discussion between what is ethics and un-ethics is particularly complex. Authors have discussed and disagreed about the link between personal ethics and implied behaviour (Hartshorne & May, 1928). For instance, asking if death penalty is ethical or not cannot be answered without questioning the comprehensive context. For this reason, a measurement scale that (1) helps to measure the research question and (2) takes into consideration the complexity of what ethics is, has been chosen. 2 constructs are mobilized: idealism and relativism. For the readers comfort, a definition reminder presented in chapter I, section 2 is here submitted:

- Idealism: A high Idealist profile will consider the consequences obtained with specific moral actions.
- Realism: A high relativist profile will reject global and universal morality and will consider a context before acting.

Forsyth and Schlenker (1977) have developed this scale by introducing items that study universality and consequences of ethics. In 1981, Forsyth ended up with an amended scale which states that high relativist individuals would consider a situation on a punctual moment (limited in time and space) whereas high idealist individuals would consider a situation to be

²⁹ Unlike t-test, H1 is bilateral and not unilateral.

ethical when the pursuit of an objective will not hurt other people. This scale measures how people consider what is ethical or not.

The objective there is to identify what consumer is interested or not by IF solutions. Once we label those consumers in groups (A and B), we can identify who has an interest in it. A possibility could be that no group (neither A nor B) has an interest in IF.

b. Test selection and significance level: Chi-square tests

The research Hypotheses have each 2 groups (high and low EP – Idealism and Relativism) and the dependent variable is qualitative. A comparison is sought between these two groups proportionality to infer if there is a relationship between the IV (EP) and DV (interest in IF). The variables are nominal and ordinal. There are two samples per hypothesis. Given those elements, **Chi-square tests** are used.

Chi-square analysis applies for nominal (and ordinal) variables with a limited number of categories. This test is aiming to know if there is a relationship between EPQ and the interest in IF solutions. For such purpose Chi-square studies the difference between the theoretical and observed frequencies in a contingency matrix.

c. Hypothesis rejection/acceptation and internal validity

An α Statistical significance of 5% has been chosen. This corresponds to rejecting H_0 when H_0 is actually true (assuming that the interest in IF is not the same whereas they are actually the same between the groups³⁰). If the P-value is smaller than 5%, H_0 is rejected and H_1 accepted³¹. If the significance level is bigger than 5%, H_1 is rejected.

The hypothetical prediction here is that a consumer with a high level of Idealism or Relativism may be more interested in IF than consumers with a low level of Idealism or Relativism.

Forsyth (1980) studied the consistency and internal validity of their measures where they found out the orthogonality of the two constructs (idealism and relativism):

³⁰ A β type error is also possible if I do not reject H_0 whereas I should have rejected it and accepted H_1 .

³¹ Moreover, we do not suppose the strength or the direction (unilaterality) of the relationship.

- Their Cronback alpha's range between 0.73 and 0.84. In the Research, validity is agreed that the correlation between these 2 dimensions have similar alphas.
- *Test bias*: Respondents were not repeatedly questioned.
- *Questionnaire bias*: the survey was initially validated by researchers, students and random consumers to make sure that the questions were well formulated and understandable.
- *Sample bias*: 137+ respondents fully answered the online questionnaire which gives more representability.

6. Research design methodology: a consumer based online-survey in Belgium

a. Methodology

To address the research goals, a survey has been administered from 4th till 28th of January 2019 to a sample of **234** Belgian consumers. Lime-survey online questionnaire has been used. Data were entered and described with Excel and SPSS (version 24). Descriptive statistics are presented in the next section.

- Out of the **234** administered surveys, **137 answers** are fully completed and usable for the study. The relative low number of usable answers obliges us to qualify with caution the results and the general scope we can apply to our conclusions.
- 97 were thus incomplete and usable for the research.
- Regarding **nationality 90.5% (124 valid answers) of them are Belgian which is the relevant groups for our study (73 males and 51 females).**
- Collected data showed a **58.4%** of male respondent and **41.6%** of female respondent.

The questionnaire (see appendix 5) has been administered in French which means it will only reach the French speaking population in Belgium (in further research, results could be compared with Flemish speaking population). Given the nature of the questions, a short definition of what is Islamic finance has been given to the respondents. Questionnaire has been translated in French by a native French speaker. Given the complexity of the wording and meanings, questionnaire has been translated back and forth from English to French and from French to English to ensure the same meaning was respected.

Most of the questions are 1-5 points Likert scale where 1 means strongly disagree to 5 which means strongly agree. The questionnaire has been given to a test group to verify its feasibility, clarity and timing. It is anonymous. The average time for completion is 10 minutes.

The survey has been adapted to answer the research question objectives. Part I of the questionnaire answers to the general socio-demographic questions and tackle ad-hoc behaviour questions. Part II assesses the ethical behaviour decision which is the focus of the study.

Idealism score is calculated by averaging the scores from items 1 to 10. Relativism score is calculated by averaging the scores for items 11 to 20. As these constructs are research scale, there is no ‘norm’ to which we can compare it. Nevertheless, Forsyth calculated median score **3.7 on 5 for idealism** and for **relativism is 3.1 on 5** (Forsyth, 1980). It is visualised in the matrix below:

Low Relativism (<3.1)	High Relativism (>=3.1)
Low Idealism (<3.7)	High Idealism (>=3.7)

b. The variables

The independent variable (IV) being the profile type (Relativism and Idealism dimensions), it is thus calculated with an amended EPQ (Ethics Position Questionnaire). It measures a score which indicates a **high relativism type if average is equal or superior to 3.1 (out of 5) and a high idealism** if the average score is **equal or superior to 3.7 (out of 5)**. Idealism construct dimension is measured by adding value of each answer of the questions from 1 to 10. Then the average is calculated. Same rationale goes for Relativism by adding value of each answer from 11 to 20. Values of the answers are 1 = strongly disagree; 2 = slightly disagree; 3 = neither agree nor disagree; 4 = slightly agree and 5 = strongly agree.

The dependent variable (DV) is the interest in Islamic finance solutions: 0 being a non-interest and 1 being an interest in those solutions. An interest does not necessarily mean that the respondent will actually engage in buying in such solutions.

CHAPTER III. FINDINGS: HIGH ETHICAL PROFILES DO NOT HAVE SIGNIFICANTLY MORE INTEREST FOR ISLAMIC FINANCE

“Le ridicule, c’est la confusion des ordres³²” (Comte-Sponville, 2004, p. 94)

7. Testing the hypotheses (1): Islamic finance solutions in Belgium

a. Descriptive Statistics

In this section, most of the relevant figures and proportions of the sample are presented:

- Out of the 137 answers, only 124 (90.5%) are relevant for the studies as the study is only considering Belgian consumers.
- Sample is composed of 73 males and 51 females.

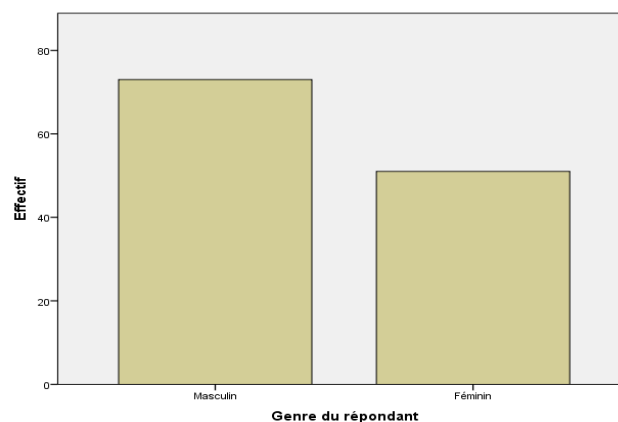


Figure 8 - Male/Female distribution

- The average age of that sample is 36 years old. Youngest respondent is 20 years old. Oldest respondent is 69 years old.

³² « The ridicule, is the confusion or orders ». The author makes reference to Pascal theory about the different sphere of legitimacy.

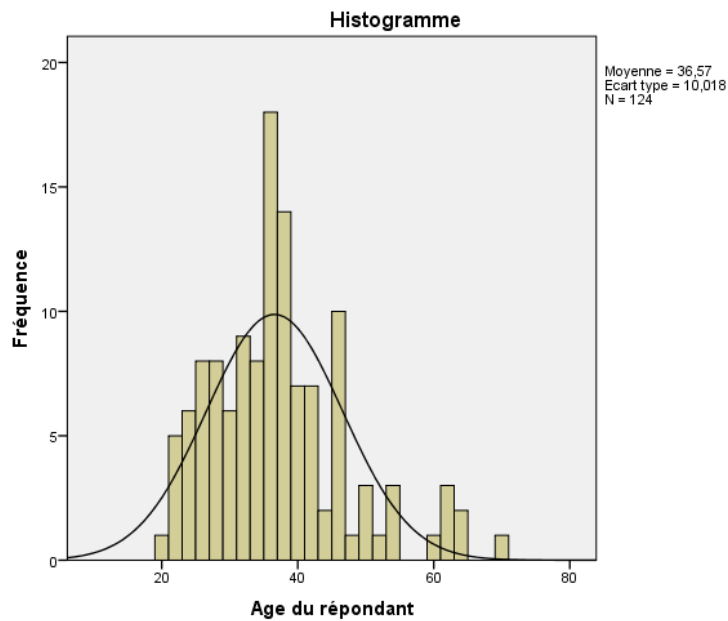


Figure 9 - Age distribution

- 63,7% of the sample main occupation is Employee (79 people out of 124). It is presented here below:

Main occupation

	Frequency	%	Valid %	Cumulated %
Employee	79	63.7	63.7	63.7
Student	12	9.7	9.7	73.4
Worker	8	6.5	6.5	79.8
Retired	2	1.6	1.6	81.5
Independent	14	11.3	11.3	92.7
Unemployed	4	3.2	3.2	96.0
Other	5	4.0	4.0	100.0
Total	124	100.0	100.0	

Table 3 - Main occupation table

- Sample average revenue per family is 5751.02€ Net per month

- Sample religion is presented here below:

What is your religion ?

	Frequency	%	Valid %	Cumulated %
Atheist	20	16.1	16.5	16.5
Catholic	18	14.5	14.9	31.4
Protestant	3	2.4	2.5	33.9
Sunni Muslim	72	58.1	59.5	93.4
Chiite Muslim	1	0.8	0.8	94.2
Boudhist	1	0.8	0.8	95.0
Agnostic	6	4.8	5.0	100.0
Other	3	2.4		
Total	124	100.0		

Table 4 – religion distribution

Majority of the sample is Belgian Sunni Muslim: 58.1%. This proportionality triggered our intention and it has led us to dig further into this specific sample³³. Discussion is led in the final section of this part.

- To the question whether the participant knows about Islamic Finance, results are

Do you know what Islamic Finance is?

	Frequency	%	Valid %	Cumulated %
Not at all	35	28.2	28.2	28.2
Very little	32	25.8	25.8	54.0
A little	30	24.2	24.2	78.2
Pretty much	19	15.3	15.3	93.5
Very well	8	6.5	6.5	100.0
Total	124	100.0	100.0	

Table 5 - Knowledge about Islamic Finance

Cumulatively, it shows that 78.2% have no or very low knowledge of Islamic finance in Belgium. It is **still an unknown finance for most of the consumers**.

³³ Religion specificity (Muslim sample) is studied in the section 8.

- To the question of whether interest rate perception is a concern for the consumer, we observe that this is not a major concern within the sample.

Are you uncomfortable with interest rate perception on your savings?

	Frequency	%	Valid %	Cumulated %
Not at all	10	8.1	8.1	8.1
Very little	9	7.3	7.3	15.3
Indifferent	36	29.0	29.0	44.4
Pretty much	29	23.4	23.4	67.7
Very well	40	32.3	32.3	100.0
Total	124	100.0	100.0	

Table 6 - Concerns about interest rate perception

We observe about 50% (44.4%) of the respondent are indifferent or do not bother by interest rate perception. We could legitimately ask ourselves if the non-interest rate in IF principle would be relevant for Belgian consumers. This is out of the scope of the research.

- To the question if IF was proposed, would you be interested in such solutions, we observe a majority willing to consider such solutions (38,7% - pretty much – and 30,6% - very well).

If an IF loan was proposed, are you interested in such solution?

	Frequency	%	Valid %	Cumulated %
Not at all	6	4.8	4.8	4.8
Very little	8	6.5	6.5	11.3
Indifferent	24	19.4	19.4	30.6
Pretty much	48	38.7	38.7	69.4
Very well	38	30.6	30.6	100.0
Total	124	100.0	100.0	

Table 7 - Concerns about interest rate perception

$38.7\% + 30.6\% = 69.4\%$ (values are rounded) of the sample does have an interest in IF loans.

The data has been recoded as below:

Interest in IF Loans

	Frequency	%	Valid %	Cumulated %
No Interest in IF Loans	38	30.6	30.6	30.6
Interest in IF Loans	86	69.4	69.4	100.0
Total	124	100.0	100.0	

Table 8 - Interest in IF loans

We observe that:

- A majority of people from the sample are interested in IF loans.
- From there, in function of religion, the sample is divided between people willing to consider IF loan and consumers that do not interested in getting an IF loan:

Your religion * Your interest in IF Loans

		No Interest in IF	Interest in IF	
Your religion	Atheist	13	7	20
	Catholic	10	8	18
	Protestant	2	1	3
	Sunni Muslim	7	65	72
	Chiite Muslim	1	0	1
	Buddhist	0	1	1
	Agnostic	4	2	6
	Other	1	2	3
Total		38	86	124

Table 9 - Religion vs interest in IF loans repartition

We observe that the major interest in IF loan lays in the Sunni Muslim population.

As for the ethical position, the sample (124) average idealism score is: 4.07 (out of 5) and the average relativism is: 3.35 (out of 5). This means that in average, our sample has high idealism (above and/or equal to 3.7) and high relativism (above and/or equal to 3.1).

	N	Minimum	Maximum	Average	SD
Idealism Score	124	1.30	5.00	4.0702	0.67112

Table 10 - Idealism score

	N	Minimum	Maximum	Average	SD
Relativism Score	124	1.80	5.00	3.3532	0.66802
N valide (liste)	124				

Table 11 - Relativism score

- b. *RH1a: A group with high Idealism has a different interest in IF than a group with low Idealism*

Participants are divided in two groups: Low idealism (Idealism score < 3.7) group A and High Idealism (score => 3.7) Group B:

High/Low Idealism group

	Frequency	%	Valid %	Cumulated %
Low Idealism group A	32	25.8	25.8	25.8
High Idealism group B	92	74.2	74.2	100.0
Total	124	100.0	100.0	

Table 12 - Idealism group distribution

Hypothesis RH1a where we test whether the group B with high idealism ethical profile has a different interest in IF loans compared to group A with low idealism ethical profile. To test the dependence between these two qualitative variables, SPSS is used to compute a Chi-squared analysis:

High/Low Idealism group * Interest in IF Loans

		No interest in IF	Interest in IF	
Groups	Low Idealism group A	12	20	32
	High Idealism group B	26	66	92
Total Frequency		38	86	124

Table 13 - High/Low Idealism vs interest in IF distribution

Chi-2 tests

	Value	Degrees of freedom	Significance (bilateral)	Exact Sig. (bilateral)	Exact Sig. (unilateral)
Chi-2 - Pearson	0.954a	N-1 =123	0.329		
Continuity correction	0.568	1	0.451		
Likelihood ratio	0.932	1	0.334		
Test exact - Fisher				0.376	0.224
Linear association	0.946	1	0.331		
N valid	124				

- a. 0 cells (0,0%) have a theoretical size below 5. Minimum theoretical size is 9.81.

Table 14 - Comparative/inferential analysis. Chi-Squared test

- Sample size in each group is A (low Id.) = 32; B (High Id.) = 92
- Chi-squared value= 0.954
- Signification (asymptotic) level bilateral=0.329
- Alpha error =0.001
- Degree of freedom=123 (N-1)
- P-value is the alpha error (risk of committing a mistake by claiming that a difference in proportion between the two groups (A and B) exists when it does not.
- Significance level (asymptotic in the table) is here > 0.05
- Which means I can **NOT reject H0**. Given my data, my variables (IV and DV) are unrelated (independent). **Idealism ethical profile does not have an impact on the interest in IF loans (H1 is false). There is NO significant difference in proportion.** Difference between the two groups is thus not significant (chi-squared =0.954, df = 1, N=124, p<0.05). We can conclude that **high idealism ethical profile does not influence with significance the interest in getting IF loans.**

c. *RH1b: A group with high Relativism has a different interest in IF than a group with low Relativism*

Informants are divided in two groups: Low Relativism (Relativism score < 3.1) group A and High Relativism (score => 3.1) Group B:

High/Low Relativism group

	Frequency	%	Valid %	Cumulated %
Low Relativism group A	9	7.3	7.3	7.3
High Relativism group B	115	92.7	92.7	100.0
Total	124	100.0	100.0	

Table 15 - Relativism group distribution

High/Low Relativism group * Interest in FI Loans

		NO interest in IF	Interest in IF	
Groups	Low Relativism group A	3	6	9
	High Relativism group B	35	80	115
	Total	38	86	124

Table 16 - High/Low Relativism vs interest in IF distribution

Chi-2 Tests

	Value	Degrees of freedom	Significance (bilateral)	Exact Sig. (bilateral)	Exact Sig. (unilateral)
Chi-2 - Pearson	0.033 ^a	N-1 = 123	0.856		
Continuity correction(b)	0.000	1	1.000		
Likelihood ratio	0.033	1	0.857		
Test exact - Fisher				1.000	0.559
Linear association	0.033	1	0.856		
N valid	124				

a. 1 cell (25,0%) has a theoretical size below 5. Minimum theoretical size is 2,76.

b. Computed for a table 2x2

Table 17 - comparative/inferential analysis. Chi-Squared test

- Sample size in each group is A (low Rel.) = 9; B (High Rel.) = 115
- Chi-squared value= 0.033
- Alpha error =0.001
- Signification (asymptotic) level bilateral=0.856
- Degree of freedom=123 (N-1)
- Significance level (asymptotic in the table) is here > 0.05
- Which means **I can NOT reject H0**. Given my data, **my variables (IV and DV) are unrelated (independent)**. Relativism ethical profile does not have an impact on the interest in IF loans (**H1 is false**). There is no significant difference in proportion. Difference between the two groups is thus not significant (chi-squared =0.033, df = 1, N=124, p<0.05). **We can conclude that high Relativism ethical profile does not influence the interest in getting IF loans.**

8. Testing the hypotheses (2). Islamic finance solutions in Belgium. A Muslim sample

- a. RH2a: Muslim with high Idealism have a different interest in IF than Muslim with low Idealism

As triggered above, religion of the sample may also have an impact on the ethical profile and the decision to consider IF solutions. For this reason, an only Muslim sub-sample has been studied as well. This second analysis is here below led. Muslim participants are divided in two groups: Low idealism (Idealism score < 3.7) group A and High Idealism (score => 3.7) Group B:

Interest for IF			
	No	Yes	Total
Low Idealism Muslim (A)	1	9	10
High Idealism Muslim (B)	7	56	63
Total	8	65	73

Table 18 - Idealism repartition for Muslim population

Hypothesis RH2a where we test whether the Muslim group B with high idealism ethical profile has an equivalent interest in IF loans compared to the Muslim group A with low idealism ethical profile. To test the dependence between these two qualitative variables, SPSS is again used to compute a Chi-squared analysis:

Chi-2 tests

	Value	Degrees of freedom	Significance (bilateral)	Exact Sig. (bilateral)	Exact Sig. (unilateral)
Chi-2 - Pearson	0.011 ^a	73-1=72	0.917		
Continuity correction(b)	0.000	1	1.000		
Likelihood ratio	0.011	1	0.916		
Test exact - Fisher				1.000	0.700
Linear association	0.011	1	0.917		
N valid	73				

a. 1 cell (25,0%) has a theoretical size below 5. Minimum theoretical size is 1,10.

b. Computed for a table 2x2

Table 19 - comparative/inferential analysis. Chi-Squared test

- Sample size in each group is A (Muslim with Low Id.) = 10; B (Muslim with High Id.) = 63
- Chi-squared value= 0.011
- Signification (asymptotic) level bilateral=0.917
- Alpha error =0.001
- Degree of freedom=72 (N-1)
- P-value is the alpha error (risk of committing a mistake by claiming that a difference in proportion between the two groups (A and B) exists when it does not.
- Significance level (asymptotic in the table) is here > 0.05
- Which means I can **NOT reject H0**. Given my data, my variables (IV and DV) are unrelated (independent). Idealism ethical profile does not have an impact on the interest in IF loans (**H2a is thus false**). There is no significant difference in proportion. Difference between the two groups is thus not significant (chi-squared =0.011, df = 1, N=73, p<0.05). We can conclude that **high idealism ethical profile within Muslim population does not influence the interest in getting IF loans**.

b. *RH2b: Muslim group with high Relativism has a different interest in IF than a Muslim with low Relativism*

Here below the distribution interest for IF solution in function of the relativism profile:

High/Low Relativism group * Interest in FI Loans

	Interest for IF		<i>Total</i>
	<i>No</i>	<i>Yes</i>	
Low Relativism Muslim (A)	2	19	21
High Relativism Muslim (B)	6	46	52
Total	8	65	73

Table 20 - Relativism distribution for Muslim population

Chi-2 tests

	Value	Degrees of freedom	Significance (bilateral)	Exact Sig. (bilateral)	Exact Sig. (unilateral)
Chi-2 - Pearson	0.062 ^a	1	0.803		
Continuity correction(b)	0.000	1	1.000		
Likelihood ratio	0.064	1	0.801		
Test exact - Fisher				1.000	0.583
Linear association	0.061	1	0.804		
N valid	73				

a. 1 cell (25.0%) has a theoretical size under 5. Theoretical size is 2.30.

b. Computed for a table 2x2

Table 21 - comparative/inferential analysis. Chi-Squared test

- Sample size in each group is A= 21; B= 52
- Chi-squared value= 0.062
- Alpha error =0.001
- Signification (asymptotic) level bilateral=0.803
- Degree of freedom=1 (N-1)
- P-value is the alpha error (risk of committing a mistake by claiming that a difference in proportion between the two groups (A and B) exists when it does not.
- Significance level (asymptotic in the table) is here > 0.05
- Which means we can **NOT reject H0**. Given the data, variables (IV and DV) are unrelated (independent). Relativism ethical profile does not have an impact on the interest in IF loans (**H2b is thus false**). There is no significant difference in proportion. **Difference between the two groups is thus not significant** (chi-squared =0.062, df = 1, N=73, p<0.05). We can conclude that **high Relativism ethical profile does not influence the interest in getting IF loans**.

Where 69,4% of the global sample is Muslim (Shiite or Sunni), Chi-2 analysis shows that this sub-sample has the same conclusion as the whole sample. Ethical profile does not affect the decision-making process to use Islamic finance loans, whether the population is mixed (Muslim and non-Muslim) or only with Muslim.

9. Qualitative empirical observations

In the online survey, an open qualitative question has been submitted. It asks about the wish or not to **have additional information about Islamic finance**. Answers gathered deserve to be here listed. They will be not studied in depth but will be mobilized for further reflexion in our conclusion. Non-exhaustive relevant answers³⁴ are:

- *Je ne connais pas assez ce système ;*
- *Parce que je ne veux pas d'une éthique fondée sur une religion quelle qu'elle soit, et que je connais trop ce que sont en réalité les banques islamiques pour être leurrée par leur discours.*
- *Je n'ai à priori plus besoin de contracter un prêt, quelle que soit sa nature ;*
- *Pas de raison particulière ;*
- *Je suis client dans ma banque depuis de nombreuses années et je ne compte pas en changer ;*
- *Par simplicité ;*
- *Probablement par peur de financer des mouvements islamiques radicaux ;*
- *Pas intéressé ;*
- *Au-delà du produit bancaire en lui-même, je ne cautionne pas les valeurs actuelles défendues au nom de l'islam notamment le rôle de la femme dans la société ;*
- *Déjà assisté à plusieurs conférences sur le sujet. Pas convaincue ;*
- *Indifférent ;*
- *Pas envie pour le moment ;*
- *Conceptuellement, le fait de lier la religion à des décisions privées ne m'enchante pas ;*
- *Pas intéressé ;*
- *Car il n'y a aucune garantie que la finance soit vraiment islamique et je n'ai pas non plus les connaissances requises pour pouvoir l'évaluer !*
- *Finalement le taux d'intérêt est transformé par des frais de dossier. Il s'agit donc juste d'un jeu de vocabulaire ;*
- *Raison probablement absurde mais peu de personnes autour de moi en ont fait l'expérience. J'ai donc peu de retours et je n'oserais (en partie) de ce fait,*

³⁴ Answers are presented in their original language.

probablement pas m'y aventurer. En revanche, si j'étais avec une personne pour qui l'intérêt représente un réel frein au crédit, j'envisagerai clairement cette option ;

- *Si je dois en faire un, c'est avec les banques BENELUX ;*
- *Si j'ai bien compris, je devrais payer un surplus qui n'aurait aucune raison d'être dans mon chef vu que je ne suis pas musulmane ;*
- *Parce que ce qui m'intéresse est davantage lié à l'éthique qu'à la dénomination "islamique" ;*
- *Je n'ai aucun problème à souscrire à un prêt pour lequel je dois payer des intérêts ;*
- *Absence d'affinité, préférence pour la finance éthique "a-religieuse" ;*
- *Je n'ai pas besoin d'un prêt ;*
- *Mon prêt actuel correspond parfaitement à mes besoins ».*

Many of the remarks show a mistrust or a lack of information and affinity with IF solutions. The idea here is not to quantitatively measure those considerations but to keep them in mind as a potential reason for not engaging into these solutions. This will be further discussed in the conclusion section.

Conclusion. Ethics as a non-decision-making variable when examining Islamic finance

10. Theoretical contribution: A decision-making process that does not encompass ethics

Findings shows that Ethics type (Idealist or Realist) do not have an impact on the interest in Islamic finance. For the studied sample, ethics seems not to be a significant variable in the decision-making process. Although results rejected the impact of the ethics type, the relative limited number of usable responses (137) forces us to take distance and caution about the generalisation of our conclusions. What we can extract from those results is the need to go further in generalisation and to test if those results would be similar with bigger sampling or different sampling (on Dutch-native speakers in Belgium for instance).

Where discussions about decision making process and measurement tools have been widely studied and debated (Bebeau, Narvaez, Rest, & Thoma, 2000), the niche nature of IF industry makes it as an interesting and complex object of study. Indeed, various factors that are taken into account when deciding to subscribe to such credit solutions. Literature doesn't provide studies regarding the factors that make consumers choose an IF solution or not, especially in non-Muslim consumers environment. Most of the published literature tend to be descriptive of focusing on financial comparison between the conventional industry and the IF industry. This means that available literature is offering quantitative methodologies where they focus on financial comparisons. However, the nature of this new industry tries to incorporate the ethics variable in the process but also other variables such as the media coverage, risk of image, political perceptions... Those qualitative factors are also drivers to the decision of consumers towards IF.

This study is only a preliminary step within a global discussion about the relevancy of such niche industry implementation in a non-Muslim and retail context (here Belgium). Findings have showed that, no matter the religion or the level of idealism/relativism, the cost of the loan stays a major concern.

Additional empirical findings show that the most frequent criteria of choice when getting a conventional loan is the personal ethics. This means consumer are cautious about the institution that grants them the loan and the nature of the loan. Even if the monthly cost of the credit appears in 46.8% of time as either 1st of 2nd choice in terms of criteria of importance, personal ethics appears 35.5% of time as either 1st or 2nd choice:

1st criteria when getting a loan

	Frequency	%	Valid %	Cumulated %
Cost of the loan	19	15.3	16.4	16.4
Ethical nature of the bank/loan	12	9.7	10.3	26.7
Loan duration	9	7.3	7.8	34.5
Total value of the loan	24	19.4	20.7	55.2
Smooth eligibility to get a loan	20	16.1	17.2	72.4
Personal ethics	32	25.8	27.6	100.0
Total	116	93.5	100.0	
Other	8	6.5		
Total	124	100.0		

Table 22 - Main criteria when getting a loan

2nd criteria when getting a loan

	Frequency	%	Valid %	Cumulated %
Cost of the loan	39	31.5	33.9	33.9
Ethical nature of the bank/loan	20	16.1	17.4	51.3
Loan duration	22	17.7	19.1	70.4
Total value of the loan	13	10.5	11.3	81.7
Smooth eligibility to get a loan	9	7.3	7.8	89.6
Personal ethics	12	9.7	10.4	100.0
Total	115	92.7	100.0	
Other	9	7.3		
Total	124	100.0		

Table 23 - 2nd criteria when getting a loan

Given these important proportion we could have thought that EPQ and interest in IF would have gone in the same direction. Findings show differently. We can explain this by a lack of information about IF as we observe a 78,2% of respondents who have little to no knowledge about IF.

Do you know what Islamic Finance is

	Frequency	%	Valid %	Cumulated %
Not at all	35	28,2	28,2	28,2
Very little	32	25,8	25,8	54,0
A little	30	24,2	24,2	78,2

Table 24 - Do you know what Islamic finance is

Further research could be led in order to assess if there is a correlation between the lack of knowledge about IF solutions and its rejection.

Other findings make these observations intriguing. Whereas there is no link between EPQ and interest in IF, consumers (69,4%) showed a significant interest in IF loans (chapter III, section 7). From these observations, we could think that (1) there is an interest for IF loans BUT (2) consumers are interested in IF loans, not for its Ethics nature but for funding/cost opportunities. This is not the ethics aspect that is depicted by the consumers when referring to IF in Belgium.

These conclusions are only valid in regards to this specific study led in a Belgium environment. Authors have stated that ethical decision-making may differ depending of region where it is taken. An Asian context could be thus different from a Western context (Jackson, Russell, & Ward, 2008). For instance, contributors found that Korean had a higher score for idealism than relativism which leads to believe that doing what is good/right is key in their rationale (Lee & Sirgy, 1999, pp. 70-80).

Finally, results draw the attention towards the fact that whilst IF is presenting itself as a finance based on ethical principles. These principles are either unknown or are not primary elements in the decision-making process of the consumers. Given a general trend of more ethics in economy (Puel, 2010) consumers are subject to individual ethical action than a systematic ethical solution. These contributions are in line with some contributions of André Comte-Sponville when identifying capitalism as being neither moral nor immoral but just a-moral (Comte-

Sponville, 2004). He does not depict the capitalism system in itself that which is moral or not, it is on the individual's those actions/decisions find their morality. IF is an economical proposal that lays on financial rules and constraints. With 69.4% of the studied sample has an interest in IF loans, this first part of the research concludes that:

- Consumers have an interest in IF loans;
- That interest is not impacted by their EPQ;
- However, they are not ready to invest in IF loans as there are other factors that prevent from investing in that finance.

Again, this studied Muslim sample is relatively small and its results are to be taken with caution and nuance.

11. Managerial implication

Defining in what a customer will be interested in and gets satisfaction from is an important task of a marketing and financial departments. Based on presented results, ethics is placed as a satisfaction value for the consumer and it is taken into consideration when offering a value proposition to the consumers. Satisfaction objectives are thought in terms of the product/service efficiency but also customer image perception.

This primary part presents whether individual's ethics have an impact on their decision to use Islamic finance solutions. Results of the study state that there is an interest in such solution but that interest is not linked to their ethical profile.

Forsyth EPQ dimensions questionnaire gave a relevant measurement of the Ethics type of consumers. This one has been amendment to allow to reflect on the type in regards to the interest to use IF credit solutions. Further research on Muslim and non-Muslim sub-sample in Belgium context have been both studied³⁵.

The EPQ profile is mobilized within the Jones model that sets moral intensity as a key factor in the decision-making process. Whereas findings showed no EPQ significant impact when

³⁵ Similar studies should and could be led in a Muslim environment context.

examining IF, we also observed that EPQ/morality is a significant criterion of decision making (2nd most important factor) for conventional industry. In other words, where EPQ is important for conventional loans, these criteria do not apply for IF.

How can we explain such a difference? This is where the qualitative open answers in chapter III, section 9 may give some additional line of thoughts: poor knowledge about IF, various fears about Islamic principles, the extra cost linked to such offer... The qualitative data showed many factors of doubt, concerns and mistrust about a finance that presents itself with religious ethical values. IF is there seen as a communitarian or window dressing operations (vocabulary, hidden interest rate...). There is an imperative for morality in this decision making but consumers do not associate that morality intensity when considering IF solutions. To be fully considered as ethical, the construct of morality is based on the 6 previously mentioned criteria: Effect concentration, Proximity (physical), Temporarily proximity, Social consensus, Effect probability and Consequence's severity. Further investigations could question what feature is missing to fully consider IF in Belgium as an ethical solution. Also, regarding the proximity dimension, due to a non-proximity with Islamic ethical principles may be one of the major factors for not considering IF as a relevant solution.

These considerations are vital for any organisation and especially for IF providers (via an Islamic window or an Islamic institution) who want to position themselves in a non-Muslim environment. This also means that working together between the marketing, product management and financial teams is part of the success for a niche industry such as the IF industry.

12. Limitations of the study

This part results lead us to determine if customers are impacted by their ethics profile when deciding to consider IF loans solutions. Given the relatively small size of the sample, we hardly can define that our proxy sample would represent a larger scale in Belgium population. On a methodological perspective, the protocol of questions has been submitted only in French which, *de facto*, does not encompass the Dutch-speaking population in Belgium. Furthermore, external validity could also be questionable: we obviously picked a sample where Sunni Muslim population is overrepresented. Sampling has not selected such criteria of choice.

This is not tackled in this part. This exploratory study has thus a limited scope of generalisation: research question can be refined to the belgium French-speaking population.

We also observe factors such a risk of image, lack of information, political perceptions are also factors that can impact a decision-making process. These risks analysis is also beyond the scope of this part.

Finally, with an approximative 23% of Muslim population in Brussels³⁶, opportunity of having such solutions can be asked but not on the ethics perspective which, given the study, is not a main criterion of interest but more on a financial/economical level. This angle of research is tackled in the next parts of this thesis.

³⁶ Romain A. and Nys G. (2021). Mini-Bru. Brussels Capital Region in figures.
https://ibsa.brussels/sites/default/files/publication/documents/PerspectiveBrussels-Mini-Bru_2021-ENG.pdf

PART 2. WHAT ARE THE ETHICAL JUSTIFICATIONS OFFERED BY BELGIAN AND FRENCH SERVICES PROVIDERS OF ISLAMIC FINANCE? A SOCIOLOGICAL APPROACH OF PROFESSIONAL ADVISORS

Part 2 Abstract

Within the management science discipline, this second part of the thesis is sociological research about Islamic finance. It proposes an empirical-inductive exploration of the engagement justifications of Belgian and French service providers of Islamic finance.

The objective of this part is to understand if there is any ethical justification proposed by those actors when offering Islamic finance advisory. Theory and concepts of Max Weber, the relationship between economics and ethics and Boltanski & Thevenot's model are mobilized. The field research is an interview-based exploration of the oral discourses of 21 French and Belgian service providers of Islamic finance.

Results show that the ethical dimension of the action to engage into Islamic finance is not as dominant. Findings also showed a complexity of the argumentations and the its different forms. Market and commercial dimensions are key to engage IF. My contribution proposes an explanation to this predominance.

The conclusion of this part allows to understand the justification to engage in Islamic finance for professional advisors and what does it mean to them when implementing or advising it.

Keywords: Pragmatic sociology, Islamic finance, Ethics

Introduction. A social dimension for a financial object

The 2008 financial crisis has shown the negative financial impact when favouring a higher financial return and a short-term vision. This is precisely what Aktouf forewarned already in 1997:” (...) *Against the slippage of the economy to the chrematistic. The latter notion, borrowed from Aristotle, is limited to the ability to enrich oneself and to acquire wealth, whereas the notion of economy (of oikos, the house, therefore the community in the broader sense, and nomia, the rule, the norm) clearly refers to the standard of conduct of the welfare of the community, or house in the very broad sense of the term*”³⁷ (Aktouf, 1997). He has emphasized the important contribution of identifying ethical justifications for economic growth, and not only the desire for profit accumulation, where financial optimization has come to involve complex financial engineering and mathematical algorithm processes. Aktouf also stressed how a ‘*financiarisation*’ based only on mathematical models and statistics would lead a whole economy to a wall.

In the wide offer of ethical finance services (Cramer & Hirschland, 2005) (Pearce & Turner, 1992, pp. 92-99) IF is presented as a religious-based alternative offer. Within this context, the primary aim to conduct this study is to frame the perception and understanding of the narrative discourses of IF service providers and to discover what justifications they have for providing such a service. By such, this research attempts to contribute to the discussion of the rationale behind individual’s actions.

The second aim of the study is to understand to what formal register³⁸ (Boltanski & Thévenot, 1987) actors are referring to and how they could reach situation of justice and compromise when they are in disputes (these authors call it ‘*épreuves*’). These authors develop a whole theoretical framework based on individual justifications, objects and dispositive (in the sense of a network of interactions, discourses, norms, expressed and non-expressed rules...) ³⁹ that are the pillars of the model presented in the chapter I, section 3.

³⁷ Translation from original version : « contre le glissement de l’économie à la chrematistique. Cette dernière notion, empruntée à Aristote, se limite à la capacité de s’enrichir et d’acquérir des richesses alors que la notion d’économie (de oikos, la maison, donc la communauté au sens élargi, et nomia, la règle, la norme) désigne bien la norme de conduite du bien-être de la communauté, ou maison au sens très élargi du terme ».

³⁸ This concept is called ‘cité’ by the authors.

³⁹ This concept is explained in next section.

From these considerations, three major questions arise which could be the subject of a single research project: 1) what ethics does IF bring to ethical finance? 2) what are the values of IF and its associated deontology; and finally, 3) is IF economically efficient? The former question is precisely what is covered in the coming parts 3 and 4 of the thesis where IF efficiency⁴⁰ is studied (efficiency for whom, what measures it, when it is measured, etc.).

To reach such goals, this second part of the research is divided into two chapters.

First chapter present the epistemology and the theoretical orientations on which the study is built. It focuses on the literature review and the grammar (in the sense of prescriptive rules) of the ethics concept. A relevant contribution for such a purpose is Max Weber as he studied the link between religious ethics and capitalism (Weber, *L'éthique protestante et l'esprit du capitalisme*, 1965). His reflections on how religious ethics (Protestantism, in his study) can drive economic growth will be discussed from a Sunni Islamic context.

Prior to develop further this introduction, it's important to strengthen the angle of the research by defining what and why Sunni Islam has been chosen. Sunni Islam is the majority trend in the Muslim world (90%). They refer to the Sunna⁴¹ (sayings and teachings of the Prophet of Islam – PBUH) and the consensus between the scholars when it comes to enacting new rules. Unlike the Shia trend, Sunnism is acknowledging not 1 (Ali for the Shia) but 4 legitimate caliphates (Abu Bakr, Umar, Utman and Ali). Sunnism is at the root of the Umayyad and Abassid dynasties that have ruled the Muslim world in the Middle-Ages. In the doctrinal plan, Sunna is considered as the second source for legal prescriptions, after the Quran itself. This trend of Islam is considered as the orthodoxy of Islam. We can find today 4 majority Sunni legal schools⁴² in the world: Hanafi (the largest school - mostly present in Turkey, Egypt, Pakistan...), Maliki (Maghreb countries, West Africa, Kuwait...), Shafi'i (Indonesia, Malaysia, ...) and Hanbali (Mostly in Saudi Arabia and Qatar. This trend is at the origin of the Wahhabism school which is one of the most orthodox trend of current Islam). This Sunni trend has been chosen in the thesis as it represents most of the worldwide Islamic finance activities and most of the Belgian consumers are Sunni (Lazar, 2019, pp. 127-139). For those two reasons, the choice has been made to consider these Sunni trend. Further research could have a focus on the

⁴⁰ This topic is however widely tackled in Part 4.

⁴¹ Which is composed of the hadiths, stories of the Prophet (PBUH).

⁴² Although they are many more other schools, the 4 here presented are the majority. Be aware that contradictory opinions can occur within the same schools.

differences between the different schools when it comes to proposing Islamic finance. This comparison is not the focus of the thesis.

His work is mobilized for the study but his contributions have a limitation for the current research. A second section in this chapter presents an additional pillar of the model: ethical finance in general and IF in particular. A brief blueprint⁴³ of contemporary IF is introduced in order to define the subject of interest. Section three of the chapter presents a third pillar of the problematic construction. Based on the pragmatic socio-anthropological model of Boltanski and Thévenot, the theoretical foundations are set up in an *a priori* grammar. We will see how these results can form a grammar and see if it already exists in the model or we need to form new one. This grammar allows to reach justice. This notion means that when informants are in dispute situations, they try to reach an agreement that can “stop” the dispute (Boltanski & Thévenot, 1991, p. 50). The further development of the grammar will be an iterative process where the models may be modified *à posteriori*, given the empirical research. This model finds also its justification in the need of setting a normative scope to a regime of action which is precisely one of the goals of this research. It is particularly relevant as IF actors are giving reasons for action (engaging in IF advisory) and mobilize moral rationale and/or objectives (Nachi, 2006), especially in a dispute situation where justice is sought.

The idea of justification and findings compromises between own religious beliefs and a successful business growth is enhanced by Muslim trends that find justification within their beliefs to financially succeed (Haenni, 2005). These types of compromises are discussed by this author and, more recently, by Bergeaud-Blackler in her analysis about the halal industry (Bergeaud Blackler, 2017). She shows how halal industry presents itself as an alternative to generate and capture profit. Their studies are also a source of inspiration that triggers to dig into the justifications mobilized by Islamic finance providers. Unlike their research, this part does not investigate into the root causes (internal and external) for such developments, but it rather focusses on how IF could be considered as an expression of modern re-islamisation⁴⁴. This concept of re-islamisation should be here nuanced. Assuming re-Islamisation would mean human activities (economy, politics...) are de-Islamised, *à priori*. This is not what the study intent to show. In this context, re-islamisation means that some principles of a trend of Islam is re-shaping with normative dimensions the human activities. Brigitte Maréchal provided with numerous and extensive work on this concept (Maréchal, 2000). To conclude this chapter 2,

⁴³ More detailed discussion on this topic on Part 3.

⁴⁴ Some authors will call it Political Islam. My thesis does not discuss this assumption.

an analysis is conducted on how the norm (here religious) makes an impact on the decision-making process of professional advisors to work in the IF industry.

The second chapter of this part 2 digs into the empirical findings and analyses actors' oral discourses from the words they use (Foucault, 1971). This chapter starts with a research design section where the methodology and protocol are explained. A qualitative exploratory questionnaire is conducted with interviews of Belgian and French actors (academicians/scholars and advisors) working in the area of IF. The interviews target informants' discourse on their justifications for providing IF and the tensions they may encounter. This empirical investigation allows relevant themes and categories to be discovered *à posteriori*. The material allows to discover the actors' understanding and justification for engaging in IF and its potential justification linked to ethical finance. The final objective is to compare the ethics grammar of the actors and to examine if the model of Boltanski and Thevenot can explain the actors' justifications and how potential conflicts/disputes are managed. What are the motivations and justifications of these actors? What objectives do they pursue when applying for IF advisory positions? Is conducting ethical finance a goal of IF actors? Is there a tension between the *à posteriori* grammar of the gathered material and the theoretical objective of IF? How are tensions/disputes between different justifications reconciled? Is there a possible compromise between the arguments of different actors? Those questioning lead to think about the role of Islamic finance: an expression of the political Islam, an alternative way to generate revenue for capitalism or an ethical finance?

In the conclusion, a reflection on IF is presented as long as and its different potential roles within a capitalistic system. At the light of the findings, we can discuss the research hypothesis which claims that, despite its official ethical objective, IF regime of justification is a compromise of Market and Civic world where profit generation is a key objective in the spirit of capitalism (Weber, 1965) and where ethics rationale will give a normative foundation of such actions. The potential role of IF industry as an expression of the political Islam is also addressed. A limitation to this part 2 is that the European-centred informant population that I interviewed whether a population in a Muslim country that I interviewed⁴⁵ may have a different justification to engage in Islamic finance and ways to find compromises.

⁴⁵ As a general note, original citations are translated to English in the body text. They are presented in their original language in the footnote. However, informants verbatim in chapter II are presented in their original language.

CHAPTER I. EPISTEMOLOGICAL AND THEORETICAL ORIENTATIONS

This chapter gives the outlines of the epistemological, methodological and theoretical orientations of this sociological part 2. On the epistemological side, this chapter presents the empiric-inductive path chosen to study an object (Islamic finance) that is not much known in Belgium. The methodology used is using semi-guided qualitative interviews. Relevant concepts need to be discussed to theoretically ground the study into on-field reality. For that purpose, Weber normative dimension of actions, Ethics, Islamic finance and the Justification model of Boltanski and Thevenot are mobilized.

1. An inductive alternative epistemology to mainstream finance studies

This very first section of the chapter starts with building the problematic of research and set its theoretical pillars. The model helps to ground the empirical findings and to develop an analysis based on the called up/mobilized theory.

In the management and finance disciplines, most of the studies are quantitative and based on hypothetico-deductive models (Maurant-Valet, 2010). Because of the recent IF industry growth and its lack of standardized data, an inductive exploratory qualitative study has been chosen as the direction of the study. This method allows to better represents people's relationship with IF. Management sciences try, by essence, to predict the future (econometrics, risk analysis, etc.) and to manage the consequences (Hendry, 1980). However, this predictive function cannot be realized if we exclude the motivations of actors that make the economy run. Therefore, other criterion should be taken into consideration in order to understand the current economic situation. Whether we talk about power relationships, the influence of contextual factors, and personal interpretations, human are always at the centre of these relations. A sociological perspective is adopted here to understand a new financial niche sector in general and the actors' justifications in particular. What are their objectives and processes of decision making? What

factors are considered when actors make decisions? How potential disputes are settled and how justice and compromises are obtained?

When it comes to economics and finance, outside of measurable parameters, we also have to consider qualitative parameters from human behaviours and sociological aspects which are more challenging to objectify and measure (emotions, individual history, rational and irrational drivers). Referring to a homo-economicus who only considers rational calculations does not take these specificities of human beings into account (Orléan, 2005, pp. 279-305). Within this approach each informant is considered as a source of information using a symmetry principle where any informants' discourses are taken into consideration without categorising his position, *a priori* (Callon & Latour, 1990). As position of an accountant will be as relevant as the position of a *shariah* scholar.

2. Weber normative dimension of action. Ethics and finance in the radar

a. What is Ethics? A rationale for action

To answer this question, Paul Ricoeur contributions are mobilized. Although ethics (from Greek ethos) and Morality (from Latin mores) have similar meanings for many authors (Sidgwick, 1988, p. p.11), we can still identify a difference (Ricoeur, 1986). Ethics refers to what action is evaluated as good (or bad) and morality refers to a norm (rule), considered to be universal and compulsory (Ricoeur, *Entretien avec Paul Ricoeur*, 2001)

Ethics are invoked at two stages. First, it comes *a priori* to give an intuition/an initial desire to act. Morality comes next to help establish norms (could be a religious code, social norm) and to create the compulsory feeling of a compulsory duty. Then comes the *à posteriori* ethics that to (dis)approves of the norms.. Through rationality, ethics defines what behaviour is acceptable or not. Ricoeur develops the idea of a pre-morale which comes from the intuition (or pre-ethics). Then comes the moral with its norms that set the obligations. Finally comes a post-moral or a post ethics that validate the norms. Facing a situation, one will apply ethics to provide a solution that corresponds to learnt values. One will reason to reach an ultimate good as in Aristotle concept of ethics in the “*Nichomachean Ethics*”. For instance, a lawyer could find it immoral to kill someone but may still defend a killer as his ethics requires that he defend any citizen, as a principle of justice.

Ricoeur's triangle is shown here below:

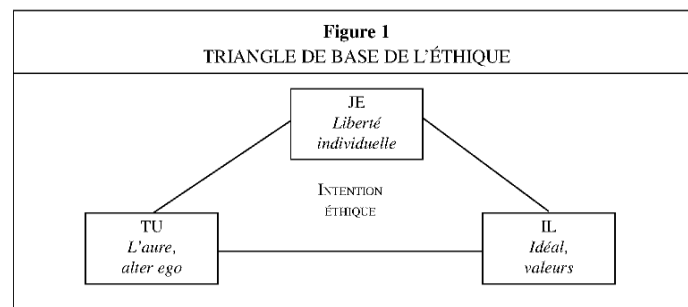


Figure 10 - Ricoeur Ethical Triangle

With his triangle, Ricoeur emphasis the individual and the collective stakes of ethics. These 2 dimensions that are articulating the 3 poles of this triangle (Ricoeur, *Fondements de l'éthique*, 1984, pp. pp.61-71):

(1) I/ “*Je*” pole refers to the individual freedom. This notion needs to be effective and concrete. It only happens when actions are possible.

(2) You/ “*Tu*” pole refers to the other which in turn, is also an I. Ethical position is truly reached when, to our own personal freedom, we acknowledge the personal freedom of the other. Typically, those 2 ‘I’ could enter in conflict when their actions, within their freedom, are opposite.

(3) He/ “*Il*” pole refers to an ideal to achieve and to defend. This is an internalized rule by each ‘I’. This pole is precisely when move from ethics to moral. Ethics comes *à priori* and *à posteriori* to fertilize moral which is grounded into rules and norms.

By this process, any new action or decision inscribe itself into an existing collective and previous background. Ethics needs to go through the filter of the norms. There comes the reciprocity principle where the other (You) represents a goal itself and not only a mean to reach our own personal goal⁴⁶. This process makes solicitude and self-esteem as principal pillars in his rationale (Pierson, 2007, pp. 31-43).

⁴⁶ Next section will make a comparison with Persian philosopher Miskawayh and how ethics is only reached through collectively.

We will see in the next section how Ricoeur rationale for ethics can be mobilised when discussing Islamic ethics.

In the same idea, Jacques Derrida states in “L’humanité” of 26 of January 2004: « *at the moment of the decision, the ethical moment, is independent of your previous knowledge. It’s precisely at the moment where “I don’t know what the good rule is” that the ethical question arises. Thus, what triggers me, it’s this an-ethical moment of ethics, this moment where I don’t know what to do, where I don’t have any available norms, where I’m not supposed to have available norms. The moment where I need to act, assuming my responsibilities, take a stand*⁴⁷”.

Beside this primary dichotomy, a second distinction related to ethics is between a *deontological* focus on motivations and intentions, and a *teleological* focus on the consequences/outcome of the actions. This study takes a teleological perspective of ethics. We can also define this concept as reflecting an ethics of responsibility (Weber, 1965) which consists of rationally taking into account the potential effect of our actions (teleological/consequentialist) and an ethics of conviction, which consists of justifying, *a priori*, our own actions in our supposed true beliefs.

In addition to this position, ethics concept can be nuanced by referring to philosopher Jean-Marc Ferry. In “*L’Ethique de la reconstruction*” (Ferry, 1996), the author argues that religion gives foundations to secularized ethics. The expression of love goes beyond the application of rational justice. Love, in Christian tradition, has its expression in forgiveness. This leads the victim to forgive the guilty party instead of applying rational secular justice. This behaviour is influenced by Christian morality as it allows one to “*process convictions conflicts into a pluralist consensus. And it offers a practical solution against the loss or potential lack of morality*⁴⁸”.

This type of ethics that focuses on forgiveness is not only an intellectual and theoretical operation of ethics reconstruction but it is also a process that allows individuals to reconcile and to go beyond the idea of ‘fault’ and its ‘payment’.

⁴⁷ Translated to English from the original version : « *Reste que le moment de la décision, le moment éthique, si vous voulez, est indépendant du savoir. C’est au moment du “je ne sais pas quelle est la bonne règle ” que la question éthique se pose. Donc, ce qui m’occupe, c’est ce moment an-éthique de l’éthique, ce moment où je ne sais pas quoi faire, où je n’ai pas de normes disponibles, où je ne dois pas avoir de normes disponibles, mais où il me faut agir, assumer mes responsabilités, prendre parti* » (Derrida, 2004).

⁴⁸ Translated to English from the original version : « *Procéduraliser les conflits de convictions en direction de consensus pluralistes, et elle offre un recours pratique contre les pertes ou déficits éventuels de sens moral* » (Ferry, 1996 : 98).

I propose that individuals always act in accordance with their history and traditions. One's rationale for action is not only based on teleology but has also an axiological, emotional and traditional basis.

Ferry goes further by positioning his own ethics in a decentralised position in a debate where other perspectives on ethics have their place: «*This structuring of arguments draws narratives from the dogmatism of the facticity of presenting the history as if, by itself and without taking into account competing histories, it could constitute a right*⁴⁹ ». It supposes a plurality of ethics (which would also imply a plurality of ethical finance justification).

This specific 'reconstruction' is an interesting contribution to the general discussion which encompasses a religious normative dimension to the regime of action. This concept highlights the fact that an action is a complex and nuanced construct. And this precise construct is namely built on religious tenet. Indeed, an action is built from different angles and perspectives. Author says that Christianity has offer pillars to modern ethics, even when not referring to it anymore. Even if religion is not obvious, it fertilizes the ethics and the norms. It has been reconstructed/rebuilt with religious tenet without mentioning them. Later sections show how this reconstruction can be applied to IF and Sunni Islamic ethics.

b. Weber and the Protestant ethics. The ethical dimension of the action.

The objective here is not to focus on the engineering mechanism and the technicality of a capitalistic economy. Instead, this section focuses on the construction of a capitalist economy and how its emergence is potentially linked to a religious ethics. Such a potential link has been discussed by authors like Amartya Sen (Sen, 1988), but the point here is not to elaborate on a potential separation of morality from a steady economy but to discuss the original moment where actors have initiated an economical behaviour revolution. Approaching an economic model with a religious analysis scheme is useful as the religious context (Lowy, 2004, pp. 93-103) is necessary for understanding economic development.

⁴⁹ Translated to English from the original version : « *Cette structuration des arguments arrache les récits à ce dogmatisme de la facticité consistant à présenter l'histoire propre comme si, par elle-même, et sans tenir compte des histoires concurrentes, elle pouvait constituer un droit* ». (Ferry, 1996, p. 56)

From there, Weber contribution is giving a framework to understand how a religion can give disposition to elaborate an economic system.

In order to structure a global argument, a discussion on ethical religious pillars for an economic system (capitalism in this case) needs to be established. In “*The Protestant Ethic and the Spirit of Capitalism*”, Max Weber shows how religious ethics can have an impact on capitalism. Eisenstadt calls it a “*capacité transformatrice*”⁵⁰ (Eisenstadt, 2007). Despite criticisms against his theory that have flourished in the past decades (Lowy, 2013, p. 28), a focus on a very specific feature of the Protestant ethic is here presented. This feature has led to a mind-set, among other features, that has conducted to the emergence of capitalism.

The contribution of Max Weber is different from that of other sociologists (e.g., Durkheim’s determinism) as he considers several features as social facts: the importance of values, the meanings actors give to their actions, the search for multiple causes, a refutation of a pure positivist or historicist position, the importance of religion in the development of an economic system (Bernard, 1970). Weber studied how important religions (Buddhism, Judaism, Protestantism, etc.) facilitated or hindered the development of capitalism. His main thesis states that « *the essential role of the protestant ascetism in the genesis of the modern (capitalist) rationality* »⁵¹.

This leads him to a fundamental question: Does occidental capitalism have its ethical roots in a religious ethos? Having individuals work rationally and freely is what Weber calls “*rational capitalism*” which finds its roots in Protestant ethics. In refuting the notion of Christian predestination (i.e., that part of humanity will be saved, the other damned), Protestants will work “*not in order thus to attain salvation, that is impossible, but because, for the glory of God*” (Weber, 1965, p. 61)

In “*The Protestant Ethic and the Spirit of Capitalism*”, the author observed that amongst a sample of entrepreneurs, technical employees, labour and capital holders, the majority of them were Protestants. Entrepreneurs had a predominant position in the economy, as they were owners of capital and leaders. These entrepreneurs, motivated by a Protestant ethic, would re-invest their own capital (or the one from the capital owner/saver) instead of spending it on immediate consumption. As such, they produced more wealth with their capital in the long

⁵⁰ *Transforming capability.*

⁵¹ Translated to English from the original version : « *le rôle essentiel de l’ascétisme protestant dans la genèse de la rationalité (capitaliste) moderne* » (Lowy & Wismann, 2005).

term. This is what he would call '*Protestant asceticism*' characterized by a willingness to increase one's own revenue.

Weber does not conceive of capitalist growth in the 15th century (which is the period of his study) as being an inevitable consequence of past actions, but as an expression of a religious initiative. As a comprehensive sociologist, Weber explains the causes and effects of individual human actions as being a product of the actor's decisions and the meaning they give to their actions. Weber explains the birth of capitalism with the following initial situation:

- Rational economic behaviour is the fundamental element of a modern civilization;
- Before the 16th century, Church authorities were so strong that no transformation in an agent's behaviour would have been promoted;
- A farmer was only willing to sustain himself and his family⁵²;
- Individuals did not expect long-term returns;
- Intense work was dedicated to the Church and not to life on earth;
- Protestants worked better and made more money than Catholics;
- Rich families were more likely to convert to Protestantism than to Catholicism.

With these arguments, Weber makes couple of hypotheses: Calvinist Protestantism and Ascetism (from Lutheran works) are at the origin of the financial and capitalist entrepreneur's dynamism in Europe, as they enhanced capitalistic economic behaviour. This involves the willingness to save money, to refrain from luxury, a strong work discipline, etc. A new body of values and behavioural rules developed from Protestantism. From this emerged a new 'ethos', a system of social and moral ethics.

Weber adds the fact that those values are an expression of freedom and not of subordination (to power, to hierarchy). Individuals express their own freedom to work without constraint. Discussing the achievement of such a goal is of course central to my rationale.

Protestantism does not believe in the Christian idea of predestination. They consider that it cannot be known whether one will go to heaven. No one can know if they will be chosen by God (in the sense of being saved by God). Every individual has to do good things on earth. This

⁵² Not seeking for additional gains.

thinking contrasts with that of Christians who believe that Heaven is already promised for some and any fault could be forgiven if a tribute is paid to the church.

Economic success, as a sign of God's favour, is a key to entering heaven. Calvinist Protestants are encouraged to succeed economically but not necessarily to consume what they have produced. This leads to the first forms of capital accumulation (savings), which will ultimately lead to credit operations⁵³.

Weber claims that the spirit of Protestantism constitutes an 'action' of an economic agent reflecting capitalistic behaviour. It is not a direct spiritual causal effect that is the source of capitalism but 'an agent in action'. Weber even refutes the unidirectional link between Protestants becoming capitalists; sometimes capitalists also become Protestants. It is indeed a specific code of conduct that has been provoked by Protestantism that has allowed the emergence of capitalism. That code of conduct can be present in different cultures or religions. Boltanski and Chiapello contend: "*For Max Weber, 'the spirit of capitalism' refers to the entire ethical drivers that, although external, in their capitalistic logic purposes, inspire the entrepreneur in the actions to accumulate capital*"⁵⁴

In "*La cage d'acier*", (Lowy, *La cage d'acier – Max Weber et le marxisme Wébérien*, 2013) underlines Weber's claim that human beings have duties and obligations they have received from God. This position is very similar to the concept of *Kafala* in Islam (the principle of agency). God has provided human beings with physical, mental and material resources and they will be only judged on what they have done with what they have been originally granted. Lôwy writes: "*Basically, the book does not affirm either the primacy of the economic factor ('material') or that of the religious ('spiritual'). Rather, it is a brilliant, penetrating and profound study of the reciprocal relationship, the intimate relationship, the profound connection between these two cultural structures: Protestant ethics and the spirit of capitalism, which hardly concerns itself with the question of the primacy*"⁵⁵. Weber calls these mental structures "*Wahlverwandtschaften*"⁵⁶, which provide the roots of the credit (from the Latin

⁵³ Indeed, the saver may use their own capital to lend their money to someone who needs it to expand their company.

⁵⁴ Translation to English from the original version : " Chez Max Weber, « l'esprit du capitalisme » renvoie à l'ensemble des motifs éthiques qui, bien qu'étrangers, dans leur finalité à la logique capitaliste, inspirent les entrepreneurs dans leurs actions favorable à l'accumulation du capital" (Boltanski & Chiapello, 1999, p. 42).

⁵⁵ Translation to English from the original version : « Au fond, l'ouvrage n'affirme ni la primauté du facteur économique ('matériel') ni celle du religieux ('spirituel'). Il s'agit plutôt d'une étude brillante, pénétrante et profonde de la relation réciproque, du rapport intime, de la connexion profonde entre ces deux structures culturelles : l'éthique protestante et l'esprit du capitalisme, qui ne se soucie guère de la question de la primauté ». (Lowy, 2013, pp. 05-30).

⁵⁶ « *Appears to be more closely related* " in Weber M., op.cit. P.88. However, I prefer the French translation of "The Protestant Ethics and the Spirit of Capitalism" which I consider to better reflect the Weber understanding of the concept of: "affinités électives" in Weber M., *L'éthique protestante et l'esprit du capitalisme*, Ed. Pocket, 1967, PP.103-104.

“credere”, to believe) operation structure that are the links between the Protestant willingness to increase capital and its ethos of intense work (referred to by Weber as *beruf*).

Thus, capitalism finds its roots in the junction of the individual quest for profit generation, ownership of capital (savings and credit) and the ethical Protestant attitude towards hard work. This new system, in which virtue is supported by credit, gives a positive vision of credit, and, consequently, on the interest rate mechanism. I also reject common plebeianizing such as “*capitalism is only about profit maximization, money, and greed*”. Such common quotes are not in the spirit of the concept of capitalism as theorized by Keynes. Greed is not a specific feature of capitalism: a butcher, a banker, a student, a homeless person, and an unemployed person can all be greedy. However, a company active in a capitalist economy that would not seek a return would go bankrupt very shortly. A capitalistic economy is herein defined as a system where profit comes from the exploitation of limited resources (human, assets, money, etc.) in an exchange process. Capitalism, according to Weber, is an economic system based on ownership of the means of production and based on psychological and moral factors (willingness to increase benefits, risk taking, rationality and competition). Weber does not claim that only occidental civilization has developed capitalism and the will to make money and the appetite for trade. He simply argues that the birth of capitalism finds its roots in the Protestant Reformation, in terms of agent actions and values that guided behaviours. In the Reformation, human beings were no longer considered to be committed to someone on earth but only to God. Savings, work, and wealth accumulation were valued not for themselves but as an affirmation of God’s will.

This new religious behaviour has provoked successful economic results but negative sociological consequences. The religious spirit has been enhanced by rational thinking, which in turn has reduced traditional religious and spiritual priorities. What matters to Weber is the growing rationalization specific to Western society. This is even more important than religion itself. Protestantism has allowed rationality to grow faster before it has allowed capitalism to rise.

3. Islamic ethics, Sharia law and deontology

« Islam is theologically Protestant, but politically Catholic⁵⁷ »

This section builds the object of Islamic finance and one of its fundamental pillars, Islamic ethics applied to economy. To build the rationale, we show first that Islamic ethics can be considered as a religious ethics. That religious ethics itself on which is grounded Sharia law. Sharia law which is the fundamental base on which Islamic finance is proposed. From there, we will show how Weberian contributions can be mobilized when it comes to religious tenets inspiring an economic system growth.

a. Islamic ethics as a religious ethics and how it applies to Islamic economy

Islamic ethics (Akhlaq*in Arabic) is a body of principles and norms that are issued from the Quran and the Sunna (when referring to the Sunni world). Like Judaism or Christianity, Islam is also giving indications and distinctions between what is right from wrong. God (as an external source) is judging and establishing moral order. This is not a human rationale that set the norm. Islamic scholars such as Al-Farabi (950), Ibn Sina (Avicenne, 1037) or Ibn Rush (Averroes, 1198) have also largely developed the concept of ethics within Islam.

Islamic ethics is thus giving the principles from which we can derive what is licit or not as actions. Those are the principles behind jurisprudence (*fiqh**). We find the same rationale when it comes to reflect on theological philosophy (*Kalam**).

From this presentation we can point out 2 important characteristics that Islamic ethics is a religious ethics (Reeder, 1997, pp. 157-181): (1) source is divine (and not human) and the way to produce it comes from revelation (Quran) and not from reason (however this will be nuanced in the next section when addressing the Mu'tazila approach⁵⁸).

This Islamic ethics can be discussed at the light of the Ricoeur 'triangle' (see previous section) where we can observe an articulation between the individual actions and the collective impact and reciprocity. The primacy comes from the individual and feed the collective ethics and happiness (this notion will be explained in the next section with the contribution of Miskawayh). On the ethical intention, the "I" and "You" poles of the ethical triangle represent

⁵⁷ Translation to English from the original version: « *L'islam est théologiquement protestant, mais politiquement catholique* ». (Arkoun, 2014, p. 156)

⁵⁸ Rationalists' method within the kalam - philosophical theology trend.

the individual responsibility and the mutual care those individuals have. The freedom of the other is as important as personal own freedom.

After presenting showing how Islamic ethics can be considered as a religious ethics, it is now relevant to present what we mean with Sunni⁵⁹ Islamic ethics applied to economics. Main principles of the ethics⁶⁰ applied to economy are here below explained:

- Property right: *“O true believers, consume not your wealth among yourselves in vanity; unless there be merchandising among you by mutual consent: neither slay yourselves; for God is merciful towards you”* (The Koran, 2005, p. 4:49);
- Management/Agency (*Istikhlaḥ*): Directly linked to the concept of property rights: Man is considered to be, above all, an agent of God on earth. Therefore, he has no 100 % ownership of property (as mentioned above). He is simply taking care of what God has provided to him (The Koran, 2005, p. 75:3);
- Economic freedom responsibility: *“O true believers, bestow alms of the good things which ye have gained, and of that which we have produced for you out of the earth, and choose not the bad thereof, to give it in alms, such as ye would not accept yourselves, otherwise than by connivance and know that God is rich and worthy to be praised”* (The Koran, 2005, p. 2:267);
- Fairness and equity: *“Moreover God commandeth you to restore what ye are trusted with, to the owners; and when ye judge between men, that ye judge according to equity: and surely an excellent virtue it is to which God exhorteth you”* (The Koran, 2005, p. 4:58). Cooperation between a banker and their client is a cooperative relationship (unlike a client / seller relationship) based on the principle of *“al ghunm bil ghurm”* (profit with associated risk);
- Moderate consumption: *“and who, when they bestow, are neither profuse nor niggardly; but observe a just medium between these”* (The Koran, 2005, p. 25:67). From there we can infer that moderate consumption comes from legal revenue, within an authorised sector.µ;
- Hoarding interdiction: *“O true believers, verily many of the priests and monks devour the substance of men in vanity, and obstruct the way of God. But unto those who treasure up gold and silver, and employ it not for the advancement of God's true religion, denounce a grievous punishment”* (The Koran, 2005, p. 9:34). As many previous authors (particularly

⁵⁹ I only discuss Sunni branch of Islam as a main stream in IF. Shi'a's branch could be considered in further study.

⁶⁰ Description is here succinct as it is not the core objective of this Part 2.

Aristotle) have claimed, hoarding is a cause of non-productivity, inefficiency and represents an important sin;

- Respect of commitments (The Koran, 2005, p. 17:34 and 5:1): “*and perform your covenant; for the performance of your covenant shall be inquired into hereafter*”. This claims honesty and fulfilment in commercial trading;
- Poverty alleviation: according to Al-Shatibi, God has assigned people the responsibility of providing for society’s needs” (Al-Shatibi, 2015, pp. 8-12);
- Riba and Gharar interdiction: These two concepts represent the idea that interest rates and uncertainty may lead to *fitna**/trouble).

Before going further, it is important to define what we are referring to when talking about capitalism. Fernand Braudel presented potential drivers to the constitution of capitalism⁶¹ (Braudel, 1985) in the 18th century (although its mental drivers started earlier - see paragraph b. Weber and Protestant ethics). It is based on three entities: a material life (number of people, resources, and food), a market economy (proximity market - a market that is close by where goods are exchange and where information circulates) and capitalism (where stakeholders are multiple and where information asymmetry exists). In this period, we evolve from a proximity business towards long-term and distance trading activities (as foreign exchange). To sustain such development, capital was necessary to support huge projects and to hedge the risk of losses. Nevertheless, the economy has expanded, it still needed a proximity market economy to exchange goods and a material life to produce and consume goods. This is the definition of Capitalism I use in this article (although Braudel and Weber disagree on the causes of the birth of capitalism⁶²). Braudel accuses Weber (Braudel, 1985, p. 64) of exaggerating the importance of capitalism as a promotor of modern society. He also states that Protestantism in the 16th century has not created anything but has simply copied old regimes (Amsterdam copying Venice, London copying Amsterdam...).

In brief, capitalism needs resources exploitation, international opportunities, and social hierarchies (and unequalitarian in fact). Two main features are thus essential: the capital and the capitalist (the mean of production and the producer/entrepreneur or wealth) (Braudel, 1985, p. 48). This capitalism as developed since the 18th century is a capitalism of production where

⁶¹ Although the word ‘capitalism’ did not exist in that century and it may sound here like an anachronism.

⁶² Braudel considers these causes to be based on the stabilisation of social hierarchy. In his words, Capitalism needs social hierarchy and social order to develop. We need that the savings from parents are transferred safely to their descendants.

since mid-1980's capitalism has evolved toward a capitalism of finance (where resources are not limited by tangible available resources, disintermediation is spread⁶³).

In '*Le nouvel esprit du capitalisme*', Boltanski and Chiapello define capitalism as a system able to regenerate itself thanks to the criticism it has to face. This is a cornerstone of the analysis that this paper is aiming to pursue: how capitalism uses alternative ethical finance in general and Islamic finance in particular to generate profit: how capitalism uses IF through its actors to sustain its profit. Those authors are investigating such justifications in management discourses in order to discover that spirit of capitalism where economic efficiency and moral justification are considered (Boltanski & Chiapello, 1999, pp. 167-177). These authors retain the idea of Weber that human beings need strong moral incentives to engage into an economic system. This gives echo to the reconstruction principle of Jean-Marc Ferry, as discussed in previous section (Ferry, 1996).

When we are referring to the link with Islam, Maxime Rodinson⁶⁴ claims it has no obstacle to capitalism development (Benaboud, 1986, pp. 309-325). Rodinson says: "*The fundamental Islam opposition to capitalism is a myth, (...) on the theoretical plan, Muslim religion has no objection against capitalistic means of production*"⁶⁵.

Islamic banking is a contemporary creation. Early ages of Islam and Middle-ages didn't know banking such as we know it today. IF was occurring between individuals and not as banking transactions as such. This consideration can be considered as an anachronism. Classical and Medieval Islamic jurisprudence produced rules for financial operations between individuals but it did not end up with a banking sector creation. Banking sector differentiates itself from financial sector by its capability to: pool a huge amount of financial resource (pooling funds from different actors), generate corporate governance (and not only individual), continue its business even if the business⁶⁶ owner passes away (Moral person creation).

However, Rodinson goes further than that: Islam was no obstacle to the development of the Muslim world economy *nor it is an enhancer*. I summarize his thesis as follow :

⁶³ This is an interesting study that I will not deepen in this part.

⁶⁴ With William Montgomery Watt and Duncan Black MacDonald, Rodinson is one of the most important Western Orientalists of the 20th century. He proposed a demonstration that that Islam was no obstacle to capitalist economic development.

⁶⁵ Translation to English from the original version : " « *L'opposition fondamentale de l'Islam au capitalisme est un mythe, (...) sur le plan théorique, la religion musulmane n'élève aucune objection contre le mode de production capitaliste* » (Rodinson, 2014, p. 166).

⁶⁶ IF was not yet operating on a banking and on large industrial level.

- Quranic revelation (610-632) period has not prevented any capitalistic development. Islam is perfectly compatible with such development. Rationality is not only a European feature. Muslim rationality is also predominant as Rodinson says: «*The Quran is a holy book in which rational thought occupies a very important place. In it, Allah continuously argues and reasons*⁶⁷ » ;
- Muslim populations in the Middle-Ages had similar activity structures as the capitalist ones. Rodinson explains that capitalism growth is thus a combination of several elements: “*We must start from essentially urban development, the accumulation of a considerable monetary fortune and the orientation of production (especially industrial production) towards the market*⁶⁸”. He does not mention Islamic principle as being one of these factors. I will maintain this argument when explaining that IF has not bothered to implement Islamic Ethics;
- Finally, Rodinson refers to his sociology expertise: « *One cannot think of the role of the Muslim religion as an ideology (mobilizing or not) in the present day other than in a context of class struggle. (...) Its future is a future of struggles*⁶⁹ ».

Although Rodinson mostly studies Marxism, he took the time to address Weber’s study of the incompatibility of Islam with capitalism⁷⁰. Weber gave little credit trading to activities in Islam whereas Rodinson claimed there was no valid argument for separating the origin of Islam and trading activities. On top of these customs, the Quran enumerates a large number of verses promoting trading and commercial activities. Rodinson also emphasizes the fact that Quranic scriptures often referred to rational thought, numeracy and reasoning as important mechanisms for development.

Indeed, Islamic scholars in medieval Baghdad and Cordoba developed structures and mechanisms to enhance financial engineering within the ethical framework of Sharia. Within this context, a legitimate question would be to ask why the Islamic world has not experienced a capitalism development such as that experienced in the West. This is exactly what Maxime Rodinson mentions in "*Islam and Capitalism*". Islamic economists and financiers claim that IF

⁶⁷ Translation to English from original version : « Le Coran est un livre sacré où la rationalité tient une très grande place. Allah ne cesse d’y argumenter, d’y raisonner ». (Rodinson, 2014, pp. 93-128)

⁶⁸ Translation to English from original version : “C’est d’un développement urbain essentiellement qu’il faut partir, l’accumulation d’une fortune monétaire considérable et l’orientation de la production (avant tout de la production industrielle) vers le marché » Ibid. p.82

⁶⁹ Translation to English from original version : “On ne peut penser le rôle de la religion musulmane en tant qu’idéologie (mobilisatrice ou non) à l’époque actuelle autrement que dans un contexte de luttes de classes. (...) Son avenir est un avenir de luttes». Ibid. 196

⁷⁰ This refers to what we mentioned in previous section where Weber did not develop much about Islamic economy growth.

respects Islamic ethics of economy by creating banks without an interest rate structure and by not considering money as a commodity (with an intrinsic value).

When the IF industry is led by conventional bankers, coming from conventional banks, this situation raises some questions about the legitimacy and coherence of such innovation. I would argue that those actors are mainly searching to transform conventional products into 'Sharia compliant' products. To illustrate such an argument, we can refer to most of the Arabic taxonomy for IF products that are equivalent to conventional financial products. The use of *Murabaha* and *Tawarruq* deals in copying traditional loans by calling the interest rate mechanism a 'mark-up profit'. Timur Kuran also discuss the polemical issue with *Murabaha*: "*the most popular lending mechanism of the Islamic banks, is simply an ancient ruse. It consists of several interest-free transactions that together amount to interest*" (Kuran, 2004, p. 15).

b. Sharia and deontology

Islamic finance is a finance based on *Sharia law* (Islamic law). Financial industry also calls it *Sharia-compliant finance*. To understand this concept of Sharia law-based finance, we need to understand what Sharia law means. Literature gives many ways to understand it. I don't pretend to give here an exegesis of how the *Quran** is defining it. Due to its polysemic and complex nature, we have frequently changed my understanding of Sharia law after reading each new articles of different authors.

Sharia law is indeed subject to many interpretations since its first expressions in the 7th century (century of the revelation of Islam). Since that period, *Sharia law* had fundamental developments and especially just after the death of the prophet of Islam, Muhammad (PBUH⁷¹). During the reign of caliphate Muawiya Ibn Abi Sufyan ibn Harb (661 - 680), Islam undertook an urban transformation which raised questions that were not originally covered by Islamic law (IzziDien, 2004). Since then, many changes have occurred in *Sharia law* developments, on the financial aspect in particular. Etymologically speaking when referring to Quranic scriptures, Sharia form and roots are '*Sha-ra- 'a*'⁷². This word is only used twice in *Quran* (Sales, 2005, 45:18⁷³): "*Afterwards we appointed thee, O Mohammed, to promulgate a **law** concerning the*

⁷¹ Conventional complimentary attached to the prophets in Islam in https://en.wikipedia.org/wiki/Peace_be_upon_him

⁷² Which literally means showing the way to the water place.

⁷³ Quranic verses are extracted from Sale G., *The Koran*, 1734- Sale's translation. First number '45' means number of the part/sourate and the second number, here '18' indicates the verse within the part.

*business of religion*⁷⁴: *wherefore follow the same and follow not the desires of those who are ignorant*". The second usage of *Sharia* in Quran is: "(...) *we have surely sent down the law, containing direction, and light*" (Sale, 2005, 5:48). *Sharia* refers here to God's law and as a path to follow⁷⁵. Facing this very concise descriptions, jurist and academicians had to work and to be creative to formulate rules that would lead financial/economical operations. They basically founded their theory on the Quran and the prophetic Sunna (teaching of the Prophet Muhammad, PBUH).

Finally, while talking about contextual interpretations of Islamic law, we cannot afford the luxury not to mention Mohamed Arkoun socio-historical method⁷⁶. He mostly worked on the Arab humanism and on the contribution of a Persian 10th century author, Miskawayh (Dubois, 2013, pp. 473-515). One of the Arkoun's major contribution is the concept of *applied islamology* (as opposed to the classic islamology) concept. From his perspective, Arkoun assumed that no scientific historical method was applied/used in Muslim societies for Quranic interpretations. To him, only religious historical versions were taught in the last centuries. From there, Arkoun main contribution is to first dig into a critical philology of the text and an historical contextualisation, the applied islamology. Classical islamology studies texts written between 7th and 13th century. The applied islamology (El-Makrini, 2015) studies those texts but it has a radical epistemological break with the classical view: it tends to suggest a comprehensive approach to the revelation by adding a historical, psychological, sociological, linguistic and anthropological dimension to the texts themselves. Arkoun will not only discuss the classical written texts which tend to be apologetic (Arkoun, *Actualité du problème de la personne dans la pensée islamique*, 1989, p. 27). He makes a distinction between the *Qur'anic* fact and the Islamic fact. Arkoun talks about : "*une tradition vivante qui permet à la Communauté de se ressourcer périodiquement dans la nouveauté radicale du premier Message, chaque fois que la sacralisation et la transcendantalisation tendent à pervertir et à figer la visée émancipatrice de la Révélation*" (Arkoun, 1992, p. 67). The *Qur'anic* fact represents the spirit and the existential message from the text where the Islamic fact is the norm and the existence discussion extracted from the texts. This is the epistemological demarcation theorised by professor Arkoun. He tries to get out the orientalist posture on one hand and from the apologetic traditional posture on the other hand in order to grasp what an Islamic rationality

⁷⁴ Some translations say: 'an ordained way'.

⁷⁵ Note that on the 6236 verses that contains the Quran, 228 refers to legal prescriptions. Among them 70 deals with family, 70 for civil law, 13 on jurisdiction and processes, 10 for constitutional issues, 10 for economic issues, 25 for international relations, 30 For criminal law in Khallâf, Abd Al-Wahhâb, *Ilm Usul al Fiqh (The Science of Usul al Fiqh)*, 8th Ed., Kuwait, 1968.

⁷⁶ Professor Mohamed Arkoun is born in 1928 in a small town in Algeria. He studied at university in Algiers then in Paris at La Sorbonne where he achieved a PhD in Philosophy.

could be. To achieve such an objective, he proceeds from a complete deconstruction (Arkoun, 1987, pp.125 – 133). To achieve such a goal, he mentions a double obstacle when willing to discuss an object phenomenon which lays in a religious dimension:

- Avoid the transcendental religious position from a word of God.
- Avoid a potential secular arrogance posture as an intellectual liberation.

With these positions being clarified, we want to underline the fact that this thesis is not an Islamic study nor an islamology treaty. What we study is finance, a regime of action and its relationship to the norm, hence ethics. This being said, we tend to avoid to enter into the closed circle of studying an Islamic object with Islamic tools (Arkoun, 2010).

Deontology, on the other hand, may have 2 definitions. One casual which refers to the obligations and norms within a sector. We can refer to professional deontology where workers are subjects to respect the same code of conducts within a sector. We can also refer to sport deontology where athletes are also expected to follow a body a formal and informal rule linked to the practice of their activity. In other terms, we can call it the “moral of a profession/activity”. Some sectors will materialise it under the form of a chart, code of conduct, an oath (Hippocrates oath in the medical sector).

The other definition of deontology lays in Moral philosophy where the ethics of duty claim that our actions must be grounded into values, principles and specific duties⁷⁷. Unlike ethics or Morality that refer to external norms to justify its action (to a religion, human rights, code of conducts...), deontology of duties will consider its actions as intrinsically moral (Kant, 1781). There is no consideration of the consequence⁷⁸ to consider an action as good or bad. The action is evaluated for itself. From there, many professional (and non-professional) sectors have implemented code of deontology from this moral philosophy.

Why making a distinction between Sharia law and deontology (in a Kantian understanding)? First of all, we need to refer to what we saw above about Sharia law. Sharia law derive its principles from Islamic ethics which comes from an external source (God) and comes with the revelation whereas deontology position itself as coming from human reason and does not refer to the consequences of the actions. Shariah law is founded on Islamic ethics and keeps ultimate consequences of actions in filigree.

⁷⁷ For instance, not lying, helping someone who needs help...

⁷⁸ Consequentialism and Utilitarianism where an action is judged good or bad in function of its consequences. Most prominent authors of this moral philosophy are Jeremy Bentham and John Stuart Mill

c. *Al-Mu'tazila and Asharite ethics*

When referring to legal prescriptions, we will be mentioning the legal previously presented 4 school of Jurisprudence (Maliki, Hanafi, Shafi'i and Hanbali). When discussing philosophical theology (within the speculative theology, the *kalam* movement), we will find Mu'tazila⁷⁹, Hanbali, Asharite (founded by ex-Mu'tazila, Abu al Hasan al-Ash'ar), Maturidi, and Zahiri trends (and many other minor).

The Mu'tazila movement developed a type of rationalism in Islam. Although this trend was majority in the Al-Andalus caliphate in the Middle-Ages, it is today very marginal. They asserted that Quran is not uncreated and not eternal (unlike orthodox Asharite trend).

Furthermore, one of the most interesting proposal of the Mu'tazila hermeneutical methodology is to apply human rational when a Quranic prescription is not aligned with the rest of the Quran and its creed. This means that interpretation is necessary when the meaning of a verse is not obvious or when its literal application is against the rest of the Quran. From there, ethics is taken from Quran itself, just as a Ashari would do, but it departs from the Ashari when the proposed ethics in a verse is in opposition with another verse. Unlike Asharite, Mu'tazila will here use intellectual rationality, beyond contextual Quran, to sustain an ethical behaviour.

Even if this position departs from mainstream Asharite creed (Ash'ariyyah. Encyclopedia Britannica, 2009), this type of theological rationalism is not to be mistaken with Descartes rationalism. Mu'tazila rationalism does not diverge from divine root to build its rationale about what is wrong or right.

Nevertheless, the Mu'tazila was not dominant and it is not at the root of the nowadays Islamic ethics, hence Islamic finance. We will not dig further in this thesis as the focus is on the Islamic finance that currently exist worldwide, which means Islamic finance that has its roots in the Asharite theology.

⁷⁹ Created by Wasil Ibn Ata in the 8th century in Basra, Irak.

d. *Moralist ethical approach of Miskawayh*

Given the positions discussed in the previous section and the multifaceted nature of Islamic ethics, we thought it was important to present the moralist ethical approach of Miskawayh⁸⁰ (the late author Mohamed Arkoun used to present him as a humanist).

In one of his major contributions, *Tahdhib Al-Akhlaq wa Tathir al'Araq*⁸¹, Miskawayh presents his ethical philosophy which has clear Aristotle's Nichomachean Ethics inspiration (Halavi, 2009, pp. 1-5). His philosophy about ethics places it in a concrete and consequentialist position towards action. He departs from a theoretical posture where principles are considered for themselves, à priori, independently from their consequences. On the contrary, he inscribes his philosophy in actions that lead to complete virtues, hence happiness (Bin Omar, 2016). Following this rationale leads to consider right or wrong, whether it comes from Quran or from human rationale (one not excluding the other), as an action per se and only on pure theory. This quest for happiness, through the ethical actions, is only reachable in society and not individually. Why? because those actions of virtue are only possible towards the others (for instance being gentle to a kid and offering him/her a gift). That is where living in a society makes sense⁸².

An important feature of his rationale lays in the process to reach morality. To him, it's a growth process that comes from education and admonishment. A moral action does not occur, per se, but with the past experience from our follow companion and awareness of punishment. Through reason, morality changes and adapt itself to the situation it faces. This element brings a valuable interest when it comes to religious ethics in general and Islamic ethics in particular. Moral actions evaluation comes à posteriori and it is validated in function of the happiness that it brings to the society as a whole.

From his contributions, it would be legitimate to discuss some of the proposed principles in Islamic finance, given their outcome. In the Islamic finance industry, we have banks that authorise a limited amount of interest rate in their operations (although they proceed to a purification of that money (Mulcahy, 2013)), aren't they already considering a moralist Miskawayh and consequentialist approach to the concrete practice of Islamic finance, although being a mostly represented by Asharite trends?

⁸⁰ Ibn Miskawayh (932-1030) is a Persian Islamic philosopher who worked on ethics. Authors like Al-Ghazali (d.1111) inspired himself from Ibn Miskawayh.

⁸¹ Purification of morals and cleaning of ethics.

⁸² In that sense, Miskawayh made several criticisms on the pure ascetical life.

e. *Applied Weberian sociological analysis to Islamic ethics in economy*

Considering the presentations in the section 2 (Weber) and 3 (Islamic ethics), this last paragraph will propose to show how the principles of the latter can enlighten the understanding of the Islamic ethics in economy.

Before entering into a discussion of how Weberian principles can be mobilized when analysing ethical principles that sustain and drive Islamic economy, it is important to remember the sociological perspective and not religious that Weber is applying in his analysis. Same process will apply for Islamic finance. We will not try to make a religious or theological analysis.

Weber reflects on the initial moment where religious ethics has given an impulsion to an economical system. Nevertheless, he doesn't propose religion as a unique factor (other type of analysis, namely quantitative, could list those variables and measures their impact on such development). Weber asserts that religion has an influence not on the technicality of economy but on the rationalism that has fertilized economy.

With Islamic ethics, we can find a similar seek for rationality. Originally, those (Islamic and Protestant rationalities) came from similar religious roots. From there, can we assert they have grown into the same direction? This is less obvious as we can see many similarities in the genesis of their system and one major difference in the development of it.

With this difference, professor Isabelle Chappelliere from Sciences Po Aix produced a significant work on Islamic ethics and economical rationality (2004). In her work, she tried to observe if we could have an "Islamic Ethics and the Spirit of Capitalism". One of her conclusions is that Islamic ethics applied to economy come as : « *La théorie économique islamique, des précurseurs aux contemporains, nous semble être davantage une idéologisation ou une moralisation de l'économie capitaliste qu'un renouveau de la pensée.*⁸³ »

Although Western Europe and US banks have developed a rationalism that founds its roots in religion, those banks depart from religion or make little reference to it. There is no obvious reference to God or salvation when discussing rationality and first capitalism.

This observation is not the same within Islamic ethics where God and salvation are always "holy horizons" to reach.

⁸³ Translated to English from the original version: « Islamic economic theory, from precursors to contemporaries, seems to us to be more an ideologization or a moralization of the capitalist economy than a renewal of thought » (Chappelliere, 2009)

Weber's claim that human beings have duties and obligations they have received from God. This position is very similar to the concept of Kafala in Islam (the principle of agency). God has provided human beings with physical, mental and material resources and they will be only judged on what they have done with what they have been originally granted. Where protestant capitalism has departed from God and kept rationalism, Islamic capitalism keeps God and religion within its rationality and work within the dominant capitalism, as an expression of it and not as an alternative. This proposal is widely discussed in the chapter II and in the conclusion of this part of the thesis.

Although Weber contributions is a relevant element to mobilize in our research, we cannot continue without referring to the criticism about this theory. For instance, author such as Lowy particularly criticized Weber for not mentioning the link between Catholicism and capitalism, and for being occidental-centric. One could argue that a Catholic structure like the one in Belgium in the 19th century gave rise to greater capitalist success than that experienced within a Scottish Protestant structure during the same period. This is not the point of this study. It does not try to argue that Protestant ethics had an invariable causal effect on the development of an economic system. The point is to say that religious ethics influences people's motivation for action in combination with other factors (resource availabilities, history, etc.). Mentalities are shaped by religion and these mentalities have an impact on this new rationality. Weber does not assert a causal relationship or a primacy principle (religion having a first and dominant influence) between religion and the emergence of a new economic structure, but rather, he stresses a mutual attraction and a natural congruity between the two. Weber goes beyond the simplistic assumption that certain materialist or spiritual conditions gave rise to capitalism but rather emphasizes that the development of Protestantism and capitalism was a pluralistic and simultaneous process.

In addition to this argument, Weber asserts that the grace and kindness of the Catholic hierarchy of values mentality led to an aversion of the quest of profit. This concept was rejected by Protestantism when it proposed that people should seek to accumulate and maximize profit. This goal is not considered to be sinful by Protestants.

Finally, from Weber contribution, it exists a first limitation to my research in the usage of his theory. Indeed, we could ask ourselves why not accepting Weber's analysis on Islam and capitalism development? Although Weber insists that the positive impact of early Islam in Medina (+-630) is similar to the impact of Protestantism with Calvin its modern developments

are more difficult to tackle. Whereas Rodinson (Rodinson, 2014, p. 166) considers Islam to be a body of rules, spirit and ideas, Weber only considers it as religion with an ethical system fully ruled by clerical power (which according to Weber is an obstacle to rationalistic and modern capitalism development). He also considers the heavy bureaucracy and the favouritism in Islamic countries as an obstacle to economic developments. General theory of rationality is typically grounded in western civilization as Islamic finance has its roots in Muslim civilization⁸⁴. Western rationality has its roots in mathematics and promote experimental method (Colliot-Thélène, 2011). Whereas Weber makes a lineage between protestant ethics and western rationality, Muslim contemporary ethics does not register in the same western tradition. Weber contribution highlights the mental dispositions/spirit (*geist*) that come from a religion although the internal process of such contribution can be different (rationalization in western world versus irrational grounded religions⁸⁵) (Carré, 1986) .

Nevertheless, Weber has not extensively analysed the development of capitalism in a Muslim context. He also takes a historical and sociological position when claiming that Islam has a conquering and fighting spirit which is incompatible with peaceful capitalist development (Bryan & Turner, 2016, pp. 231-229). Despotism in Muslim states is also an obstacle to any entrepreneurial initiatives. These arguments cannot be refuted as such as they are based on facts. However, these arguments cannot be generalized, as Weber's criticism of Islamic ethics only applies to some Islamic countries and does not consider other factors accounting for slow capitalistic development. According to Abeng (Abeng, 2015, pp. 47-54) hard work and commitment are inherent features of Islamic ethics. Arslan's Research (Arslan, 2000, pp. 13-19) revealed that Islamic ethics is no impediment to capitalist development and can even promote it in some cases. Moreover, she demonstrated that Islamic ethics have a significant impact on the business decision-making process of a devout Muslim. Her study showed Islamic principles have a much bigger impact on decision making than secular principles. Capitalism has indeed many sources and its development could be explained in different ways. What can be retained from Weber is that religious beliefs have enhanced economic, rational action and behaviour. That action, combined with other factors, has led to capitalism expansion. The present study position states that capitalism and its stakes related to credit and interest rates that: The Protestant ethic has given capitalism its modern ethics by providing it with a set of moral actions and behaviours, which is an initial driver of the capitalism.

⁸⁴ Discussing civilizations differences is not studied in this Part.

⁸⁵ At this level, Weber was completely in line with the orientalism of his era.

A second limitation to the conducted research that comes from the usage of Weber contribution is that his main objective was to find out the conditions of development of Western Capitalism. His subject of study was grounded into his reality and he didn't claim his rationale had a universal scope. He studied the capitalism emergence at the light of a political and scientific context which is not the IF contemporary context. Although Weber compares the medina community of Prophet of Islam to the Calvin Geneva community. His theory of action is grounded in Utilitarianism in Western societies were seeking for profit maximization is the objective whereas other societies are more seeking for soul salvation and meditation, unlike the primitive Islamic community. This is what the findings will state here after in terms of rational of theory of action. Finding a difference between these systems of values shows a supposed incompatibility. This is a reason to tackle compromises and Justice between rationales of action with Boltanski and Thevenot model.

4. Ethical finance and Islamic finance

a. Ethical finance

Ethical finance is incorporated into ethical or sustainable banking, or socially responsible corporate finance. From classical lending and borrowing activities, banks have developed towards more and more profit-based financial operations on the securities markets. Alongside this development, financial institutions such as banks face concerns for more sustainable social and environmental responsibilities. Investors wish to participate in projects that are in line with their higher principles and values (Acquier, 2007).

A wide protest movement aims to bring finance back to its original mission: to serve the tangible economy by finding direct and profitable ways of funding. Within that context, corporate social responsibility (CSR) has been developed to measure and identify how moral values have a sound positive and sustainable impact on the economy (Joyner & Payne, 2002, p. 297). A detailed review is in appendix 6.

Before entering into a more detailed discussion, a first definition of what CSR is here presented: the legal, ethical and economic activities of a stakeholder (business entity, individual) are in line with the values of a given society (Carroll, 1999, pp. 258-278).

CSR is not an easy concept to define as it embodies many features and different definitions. Steurer defines four different levels of corporate responsibility (Konrad, Langer, Martinuzzi, & Steurer, 2005, pp. 263–281):

- Management system level: he refers here to ISO standards (Quality normalisation standards) into the process level of sustainability;
- Management level: CSR level where ethical individual decisions contribute to sustainable corporate development;
- Corporate level: Corporate sustainability; CS which allows a corporation to be sustainable. This is the normative societal level;
- Societal level: Sustainable development with an economic and social dimension.

Previous research (Marrewijk, 2003, pp. 95-105) describes that these different levels have a tendency to be integrated into the same concept. This is how CSR/ethical finance can be considered as a global sector contributing added value to a more ethical and sustainable economy. Quoting Drucker: “*it has to consider whether action is likely to promote the public good, to advance basic beliefs of our society, to contribute to its stability, strength, and harmony*” (Drucker, 2006, p. 388).

The CSR sector has experienced a huge growth in the last decades in Western industries and individual values have an impact on this sector. A Trends report in 2010 on socially responsible investing observes that the USA has \$USD3.07 trillion in total assets (USSIF, 2010). Authors like Bowen notably mentioned the importance of Protestant ethics in business life and a manager’s actions (Bowen, 1950). This point is in line with the argument I underline throughout my thesis: that religious values influence business decisions. Aguinis and Glavas have reported that over 90 scientific articles related to CSR have been published in top journals and reviews since 2005 (Aguinis & Glavas, 2012, pp. 932-968).

b. Islamic finance

Islamic finance is a social construct, a historical, a financial and legal reality for its actors. Its principles (El-Gamal, 2009) can be summarised by three interdictions and two obligations⁸⁶:

- ❌ Interdiction of *Riba** - interest rates;
- ❌ Interdiction of *Maysir** (speculation, gambling) and interdiction of *Gharar** (excessive contractual uncertainty);
- ❌ Interdiction to invest in a non-authorized sector (alcohol, gambling, adult industry);
- ✅ Asset-backed finance: every transaction must be backed with a tangible underlying asset;
- ✅ Profit and loss sharing (PLS): That there must be a profit and loss sharing ratio between the stakeholders of any operation.

These principles show that Islamic banks cannot bear toxic assets nor any interest rate-based operations (Credit Default Swap, etc.) nor any highly speculative products due to the gharar interdiction. It also prevents Islamic banks from investing in debt assets from other banks or governments.

The history of IF takes us back to the early ages of the Islamic missionary revelation in the 7th century (Murabaha/lending operations between the Prophet of Islam and his spouse, Khadija). Whereas IF forms have been widely used through the Middle-Ages (Massignon, *L'Influence de l'Islam au moyen Age sur la fondation et l'essor des banques juives*, 1931), slow modern 20th century IF developments can be summarized as below:

- Early 1930s: Al-Qutb (1906-1966) and Al-Banna re-Islamisation of Egyptian society. The ideological influencer, Al-Qutb (Qutb, 2006) and founder, Al-Banna (Al-Banna, 1978) of the Muslim Brotherhood campaign for an Islamic revivification are widely considered as the spiritual fathers of modern political Islam and modern Islamism (Maréchal, 2000). Al-Qutb dogma claims that the Muslim world is back to the pre-Islamic *Jahiliya* (ignorance) period and it needs to be re-Islamized. For that, an Islamic state needs to be established. In 1950, he promoted the abolition of the positivist Egyptian law (called *taghout* law, the law of the tyrant) in favour of the authority of

⁸⁶ These concepts are widely discussed in Part 3.

God and its Quranic laws. Both Al Banna- and Al-Qutb are against the only spiritualistic/Sufi dimension of Islam. They identify their approach as a third and alternative way to socialism in Egypt and to capitalism in general.

- 1940s: The Pakistani Sayyid Abu ala Maududi (1903-1973) was one of the first to establish the contemporary Islamic finance principles, based on the Quran and Sunna (he is also considered as the founder of the Pakistani Jamat Islamiyya Islamist movement). His vision is close to the liberal dimension of capitalism where private ownership is promoted;
- 1963-1967: The first Islamic bank 'Mit Ghamr' in Egypt is under the control of Ahmed Al Naggar;
- 1967: Tabung Hajji Malaysia. This is the first financial institution in Malaysia that aimed to collect savings for pilgrimages (initially created in 1963 under the name of "The Muslim Pilgrims Savings Corporation");
- 1969: Muhammad Baqer as-Sadr wrote the book *Al-Bank al-LA Ribawi fi al-Islam* (Islamic Bank without Interest Rate) where he set the pillars for an ideal Islamic economical society. There is an upper class, a middle class, and a working class that needs to be helped by the State. This position is close to John Rawls' theory of justice that tries to associate individual freedom and social solidarity. As-Sader's position lies in the Maududi stream of philosophy.
- 1969: Creation of the Organization of the Islamic Conference (OIC) with the objective of creating a common market for Islamic countries (with the idea of creating a world Islamic bank);
- 1975: The creation of the Islamic Bank of Development, Dubai Islamic Bank, Kuwait Finance House and Bahrein Islamic Bank;
- 1975(d.): Ali Shariati gives a more socialist and Shia dimension to a global Islamic economy;
- 1979: Pakistan structures its banking sector under the IF framework;
- 1983: Sudan, Iran and many other countries open their banking sector to IF.
- In 2014, UK became the first non-Muslim country to issue a Sukuk (Islamic bonds). This country counts no less than 20 banks offering IF products. Modern developments of IF can be found in appendix 9.

5. Ethics, religion and the justification model: A theory of action that encompasses a moral dimension judgement when engaging into a normative finance

- a. *Theory of conventions: Why mobilising pragmatic sociology style to study a financial phenomenon?*

This research is positioned between sociology, economics and management science (in the sense of the decision taken by actors). This is where convention theory⁸⁷ turns out. It studies how individuals decide and how they act in uncertain situations. This is the reason why mobilising sociological concepts is relevant when discussing a financial phenomenon.

The reason for using a sociological approach is to analyse the complexity of a new branch of finance and the way its actors interact (Wissler, 1989). These complex interactions lead to tensions and compromises between different registers of actions. From there, individuals adjust their behaviours to one to another. The position here assumes that individuals not only make decisions based on rationality (*homo-economicus*) but rather adapt their behaviour depending on the context (official environment discourses, objects, time, others' actions, etc.) (Favereau, 1995). It rests on two assumptions: (1) individuals can only agree in a common framework, and (2) rationality alone is enough to understand an individuals' motivations.

Mobilising Pragmatic sociology to study IF is not discussing its mechanisms in itself but rather its actors which make it live, with their values, norms and the interactions between them. Pragmatic sociology (noted PS) style is relevant here as **we have a moral dimension in the human actions. In order words, there is a normative dimension to the agent's actions** (Nachi, 2013). The actors make reference to various registers when they are about to make a decision. Instead of talking about reason or rational choice, rationalisation is referred as a process in which a decision is made and where it is justified with different registers. Thevenot would also call it a "*pluralité de justifications*" / plurality of justifications (Thevenot, 1989, p. 148), which describes how actors refer to moral principles to justify their actions (called "*remontée en généralité*" / generalisation ascent by Boltanski and Thevenot).

This Economy of Convention (noted EC here after) encompasses a theory of action which has: "*a wider conception of action, in its situation grounding, its uncertainty, and in its cognitive*

⁸⁷ Also called economics of conventions, noted here 'EC'.

and assessing capabilities of its actors⁸⁸”. This sociological style is called ‘pragmatic’ (not in the American sense used by authors like Dewey or Pierce) but in the sense of going beyond the opposition between an individual and the group by creating a methodological tool to analyse engagement modes from different actors (with different, *à posteriori*, sociological categories). This sociology is not a ‘natural’ science such as physics or mathematics. All this results in a plurality of justifications and reasons for actions, depending on the situation. Thevenot talks about actors with “une *personnalité à tiroir*”/Multiple personalities (Thévenot, 2006). PS theory lays on three main pillars: the concept of dispute (‘*épreuves*’), action regime (and its evolution from one position to the other) and the concepts of *polities/world*.

A second motivation for using pragmatic sociology (noted PS here after) is, when considering IF as multi-level justifications concept, to inscribe IF specificity in global capitalism and to understand its various expressions and potential tensions between its theoretical goals and its empirical realities. Pragmatic sociology highlights new forms of rationale and complex relationships through various tensions and compromises between the actors (Biggart & Beamish, 2003, pp. 443-464) and tend to reach a situation of Justice, where disputes are solved without violence (Nachi, 2006). Compromises reduce the tensions and allows co-existence between the actors by extracting equivalences which allows them to live together without being in a perpetually violent state. This is illustrated by Wissler (Wissler, 1989) in his credit institutions study case where specific dispositive⁸⁹ are set in place in a rural environment to reach a compromise between various logics/rationale of actions (domestic and industrial in his case): “*These constraints open the way to a compromise which, to exceed a dilemma, target a common higher good which is superior to each actor’s higher principle. The settlement of such complex situation lays in a mixed dispositive, often call a round-table in the studied banking company: the administration council gets together with the financial analyst to surpass the situation and to find an agreement much more common that reduce the previous tensions*”⁹⁰. From this case, we observe that PS grounds different contexts into a global one where interactions and fragile compromises exist. This PS style is a recent (last 30/40 years) sociological trend developed in France which has as its starting point the publications of ‘*Les*

⁸⁸ Translation to English from original version : « *une conception plus ouverte de l’action, de son inscription dans une situation, de son incertitude et des capacités cognitives et évaluatives des acteurs* » (Diaz & Thevenot, 2021).

⁸⁹ Network of combination of discourses, institutions, laws, moral and philosophical considerations which are strategically linked. This concept is explained in next session.

⁹⁰ Translation from original version : « *Ces contraintes ouvrent la voie à un compromis qui, pour dépasser ce dilemme, vise un bien commun supérieur au bien commun de chacune des deux natures en présence. La résolution de ce type de situation trouble repose sur un dispositif mixte, souvent appelé table-ronde dans l’entreprise bancaire étudiée : le conseil se réunit avec l’analyste financier pour dépasser la situation et trouver un accord plus général qui réduise les tensions antérieurs* ». (Wissler, 1989, p. 113)

économies de la grandeur' (Boltanski & Thévenot, 1987) and '*De la Justification. Les économies de la grandeur*⁹¹' (Boltanski & Thévenot, 1991).

b. *Theoretical Justifications Model: A state of dispute*

The Boltanski and Thevenot (called here after 'EG' – Economies de la grandeur model explains how human beings seek for a state of justice. By it, we mean "*ce qui arrête la dispute*⁹²" (Boltanski & Thévenot, 1987, p. 50) which allows individuals to live together without killing each other. In situation of dispute, the model shows how actors justify/clarify their positions and how they mobilise their moral sense via their perception of what is great/'grand' (value scale that actors use to judge a situation) to reach a state of compromise. The first question to investigate is "*are the individual's justification for action in peace or in dispute?* If they are in peace, two options are offered: either we are in peace in love which means we would accept anything from the other, without counting; or we are in peace with fairness where the objects are naturally distributed between the actors, given each other's expectations. There is no tension in those situations (Jacquemain, 2001, p. 7)

When individuals are in dispute (or in tension), this can be either be solved by power relations between the actors or it can be solved 'in justice'. In this situation, individuals try to avoid argument in violence, each stakeholder values their own arguments. This is precisely what I want to understand in this article. What are the justifications used by these actors and how, from their superior principles and various situations, could they reach a non-violent compromise⁹³).

This model allows those situations to be identified where IF informants would be in peace but still in dispute and how they would generalise a common superior principle to come to an agreement. Those principles are linked to specific situations and could change depending on the situations in which the informant is involved. This model helps us to understand the justification of IF actors and how they could find a solution in peace and justice when facing others different justifications in specific situations. Those models of '*monde*'/world (as an extension of a '*cité*', this is explained in the next section) are however limited in the sense that they can only discuss situations where the parties are in dispute and where argumentation is

⁹¹ I worked with French version and eth English translation (Boltanski & Thévenot, On Justification. Economy of worth, 2006).

⁹² "*What stops the argument*"

⁹³ This non-violent situation doesn't mean there is no power relationship between the actors as a stakeholder may always be more legitimate or have stronger position in the debate.

used to convince the other. In peaceful situations with love or fairness ('justesse'), agreements are found without arguments.

To what model the informant's discourses can be referred to⁹⁴? EG ("Economies de la grandeur") shapes a rationale of justification: « *We will not study for its own sake the ability of people to make connections and we will not explore the universe, in its infinite nature, including the whole classification, taxonomies, nomenclatures, etc., already implemented or still to be done. Among the infinite possible combinations, we shall not be interested in those which are not only common and therefore communicable, but which support justifications*⁹⁵ ». This model is based on the hypothesis that if we gather numerous justifications, we end up in 6 defined justifications models (*polities*)⁹⁶. **My empirical findings tend to discover if another grammar of references exist beyond these 6 justifications model.**

Another motivation for using such a model is the intuition that there exists a plurality of justifications of what is fair or true and that those justifications are to be taken seriously⁹⁷. In a plurality of actor's profiles, it's interesting to discover various justifications and how IF is interpreted by its actors.

A potential limitation of the model could be the fact that actors could lie, hide or modify their justification⁹⁸. Elster claims, in this context, that a society could not hold if it was only ruled by lie and hypocrisy (Elster, 1989, pp. 99-117). Therefore, we don't exclude that informant could lie but rather the fact that they could lie all the time. This supposed limitation leads us to an immediate validity condition of the requirement of empirical research.

⁹⁴ A definition of what a discourse is can be found in appendix 7.

⁹⁵ Translation to English from the author. Original version : « *Nous n'étudierons pas pour elle-même la capacité des personnes à faire des rapprochements et nous n'explorerons pas l'univers, d'ailleurs illimité, comprenant l'ensemble d classement, taxinomies, nomenclatures, etc., déjà mis en œuvre ou encore à faire. Parmi l'infinité des rapprochements possibles, nous ne nous intéresserons à ceux qui sont non seulement communs et donc communicables, mais qui soutiennent des justifications* ». (Boltanski & Thévenot, 1991, p. 48).

⁹⁶ EG delimit their analysis to French context even if they refer to European and American authors (Hirschman).

⁹⁷ Not standing in a dominant position and evaluating what is fair or not.

⁹⁸ An individual may claim to take a decision based on an economical basis whereas he took because of a family reason.

c. Dispute model foundations

While seeking for situation of Justice, PS mobilise a central concept of ‘dispute’ (*‘épreuves’*) which is the cornerstone of the model. In interactions with someone justifications of actions, actors are in a non-deterministic and uncertain moment. Their values and morality are engaged in a rationale in function of the situation and the actors implied in the dispute. IF actors will try to align (*‘mise en correspondance’*) their actions to find an agreement situation. They will draw on objects and dispositive to justify their decision.

PS has several pillars on which the model is built. This section does not intent to widely discuss those principles⁹⁹ but rather present the dispute situations and the justifications gathered from informants. Grammar allows to have a model of justice by equivalence in positioning actor’s justifications when they are in dispute¹⁰⁰.

This model is not a fixed structure as empirical evidence allows us to build it continuously. It can be called a grammar of a contextual and *à posteriori* reality that helps to analyse the data. By first listening to informants’ discourse and justifications, we tend to avoid fixing *a priori* categories, allowing informants to express their justifications without imposing pre-conceived understanding of action. In order to define the grammar, the research proceeds in three steps: (1) hearing to the discourses of the informants (2) definition of the justifications found in the literature, based on Boltanski and Thevenot’s works, and (3) the outcome (*à posteriori* potential grammar congruence or not with the initial Boltanski and Thevenot grammar. This is thus based on the literature and from the empirical discursive justifications.

Another key element of this grammar is the concept of ‘scheme/ dispositive’ (Foucault, 1971). An author like Foucault defines this as a combination of discourses, institutions, laws, moral and philosophical considerations. In other words, the scheme/dispositive is the network between all these elements which are strategically linked by a balance of power (Agamben, 2006, p. 13).

Those schemes are linked to individuals (human beings) and form a subject. Many schemes can be found in a single individual which creates a unique subject. Agamben gives the following

⁹⁹ 1. Symmetry: same analysis approach for any input (rational or non-rational); 2. Plurality of worlds (diversity of rules and justifications); 3. Cognitive competences: actors moral is mobilised to make a judgement which enters in dispute with others; 4. Agreement grammar: where cognitive competences get along in a common set of constraints and rules in order to align the justifications; 5. Actants: Any people, group of people, object, dispositive symbols are considered as an actor.

¹⁰⁰ Literature refers to legitimate or in violence dispute. EG argue that the legitimate dispute can lead to a situation of Justice.

definition: “*I call dispositive everything which has, in a way or the other, the capability to capture, orient, determine, intercept, model, control, enhance actions, opinions and the discourses of the human beings*¹⁰¹”.

By giving non-living objects (a phone, a medal, literature, and a code of conduct, etc.) the power to interact with others’ rationale for actions, this concept gives more clarity for understanding the construction and justification rationale of an actor. Any organisation or society is subject to tensions caused by dispositive linked to a model of justifications. Agamben also states that those dispositive are deprived individuals of their freedom (by building artificial values and constraints). From there Agamben supports a desecration (profanation) of what has been objectivised in order to regain freedom¹⁰².

d. Equivalence principle and the dispute in justice

Another key principle in EG model is **the equivalence concept which leads the actors to make reference to a superior principle, a greatness that is above them.**

A situation between actors could be either in peace or in dispute. When ‘in peace’, agreement could be reached either naturally as both actors are naturally agreeing (in fairness) or in agape where actors are in love/attraction to the other and can accept the agreement without being rationally convinced. Both these forms are met without needing to reach an equivalence between them.

A situation in dispute could be also fixed either via violence (again, no equivalence is needed here as one imposes Their will on the other or in justice where an equivalence is found in terms of justifications. This is what EG model will focus on. EG model also discusses how we go from one regime of actions (agape, fairness, violence or justice) to another. However, this will not be tackled in this part.

Due to these tensions action logic, various actors’ justifications are mobilised when in dispute in order to reach a situation in justice via arguments that found equivalence in each other

¹⁰¹ « *J’appelle dispositif tout ce qui a, d’une manière ou d’une autre, la capacité de capturer, d’orienter, de déterminer, d’intercepter, de modeler, de contrôler et d’assurer les gestes, les conduites, les opinions et les discours des êtres vivants* » (Agamben, 2006, p. 31).

¹⁰² I will not enter further into this concept as I have decided to use it in order to make it clear that human beings and non-living objects have their own context, strategy, influence and ability to control their environment.

hierarchical superior principal scale (greatness/ grandeur). This process occurs in what the authors call a 'cité'.

e. From a 'cité'/polity to a 'monde'/world model

The EG 'cité'/monde (Polity/World) is here presented. As mentioned earlier, this model is used to (1) identify justifications from empirical findings (no *a priori* category) (2) try to attach the justifications to the existing grammar of the EG model, (3) discover potential justification gaps in the model, (4) determine what grammar applied to IF industry in Belgium. The justifications is gathered from the informants to verify if they are in line with the proposed grammar. From there a new grammar could be developed, *à posteriori* (Boltanski & Thévenot, De la justification. Les économies de la grandeur, 1991, p. 93). This is an essential step in order to understand reality and to adapt the model to what it offers in terms of singularity and specificity (historic-social contingencies).

A *cité* is based on five principles: (1) they share a common humanity, (2) a polity is composed of heterogeneous states of mind and positions; (3) there is equal dignity between the members (equal access to the 'grandeurs', (4) members are able to justify their actions, (5) happiness is a common and collective goal. Individuals refer to higher common principles. What matters to them is that common principles could vary in function of the context. A common goal/principle helps different actors to reach an agreement.

Each polity will provide its own answer to the questions below:

What makes sense ?	What is legitimate ?
What has a value ?	What allows us to give value to the decision?
What are the Relationship ?	What rules the relationship between individuals?
The decisions? What decision is made?	How do they allow to reach a state of 'grandeur'
What is evidence is there?	What cannot be contradicted ?
What is considered as a loss?	What is not allowed, and falls to a state of 'petitesse'

From there, the theoretical model identifies 6 contexts/*cit  * (extracted from literature):

World	Inspired	Market	Industrial	Civic	Domestic	Fame
<i>Author</i>	<i>La cit�� de Dieu – Saint Augustin</i>	<i>The wealth of Nations, Adam Smith</i>	<i>Saint Simon</i>	<i>Du contrat social – Rousseau</i>	<i>La politique – Bossuet</i>	<i>Le leviathan - Hobbes) :</i>
<i>What makes sense ?</i>	Creativity	Competition	Efficacy	Collectivist	Tradition	Opinion
<i>What has a value ?</i>	Genius	Price	Efficiency	Vote (majority)	Trust	Judgement
<i>What are the Relation ship ?</i>	Discovering , creating	Selling/Buying	Organising, controlling	Collection action	Politeness	Seduction, convincing
<i>The d��cision s ?</i>	A genius thought	Wealth	Tools, methods	Legal process	Legitimacy	Media
<i>What is the evidenc e ?</i>	Intuition	Money	Measure	Law	History	Success
<i>The loss ?</i>	Reality	Money servitude	Useless action	Individualism	Traitor	Banality
<i>Argume nt of 'Grande ur'</i>	Creator	The rich	Engineer/E xpert	Collective interest	The chief, ancient	Star
<i>What leads to 'Petitess e'</i>	The routine	The poor	Inefficient	Egoism	Anarchist	Anonymous

Figure 11 - BT World Summary

A justification will be taken from one of these 6 worlds, to create a primary model. A dispute may rise if two (or more) actors confront another person's arguments in the same world (which argument will be the '*grandeur*').

Later, Boltanski and Chiapello, in “*Le nouvel esprit du Capitalisme*” added a city of network, in order to support their main thesis that we need to find the: “*ideological changes that have accompanied the recent transformations of capitalism*¹⁰³”. They discussed moral justifications for capitalism. They call this: “*cité par projets*”. This ‘*cité*’ links moral and economic interest.

<i>What makes sense ?</i>	<i>What has value ?</i>	<i>What are the relationships ?</i>	<i>The decisions ?</i>	<i>What is the evidence</i>	<i>The loss ?</i>	<i>Argument of 'Grandeur' ?</i>	<i>What leads to 'Petitesse'</i>
Network	Participating	Connexion	Partnerships	Participation	Corruption	The chosen	The boosted

From the plurality ‘*cité*’ concept, the authors developed the extended concept of ‘*world*’ where objects and dispositive are actors that have an interactions and meanings in the reality of the context. This extension allows to go beyond a theoretical framework to a more pragmatic situation where different actors are involved. Object will be considered as a ‘*pragmatic support*’ on which actors will count when being in dispute situation.

This part will only focus on the dispute and the way to get out from it with compromise. Theory offers other ways out such as: relativization, arrangement. The two first types will not be covered here as they are not a rationale settlement of a situation whereas the compromise mobilizes arguments to overcome the critical tension between two worlds.

¹⁰³ Translation to English from the original version : « *changements idéologiques qui ont accompagnés les transformations récentes du capitalisme* ». (Boltanski & Chiapello, 1999, p. 35).

CHAPTER II. METHODOLOGY AND FINDINGS. THE CHALLENGES OF THE JUSTIFICATIONS MODEL TO THE TEST OF REALITY

6. Introduction. Islamic finance at the service of the capitalism?

This chapter gives the methodological framework and the on-field informants' inputs analysis. A grammar is thus identified when advisors are engaging into Islamic finance service proposals.

Sections 4 and 5 introduces the research design and methodology used.

As from section 6, the empirical research is shown. Limitations in each section are also presented. Those ones are not within the model itself but in the use that it is done from it: The qualitative data does not mobilise the entire model. Indeed, specific disputes and compromises situations were not sought but only justifications mobilized by the actors. Only the judgements and the 'grandeurs' of the different worlds are here identified. The focus is set on the legitimated position¹⁰⁴ the informants have with the norms and how they evaluate/ judge their choices and the ones of the others. From the findings and among multiple justifications to engage into IF industry, we observe a pre-eminence of justification linked to the Market world. Informants do not evoke religions as being a dominant driver to engage into Islamic finance. This is relatively marginal. This is what this chapter covers.

The objective of this chapter is to identify the grammar linked to actors' justifications. What are their normative references (laws, moral, habits...) they refer to when making decisions, especially in their engagement in IF? Ultimately, the justifications model focuses on the plurality of justifications and the question of agreement for a common objective in a compromise situation. A particular attention is given to specific 'grandeurs' from which actors position themselves in terms of justice: "*Legitimated relations compared to (...) generalities forms*"¹⁰⁵, in situations where tension exists (Nachi, 2006, pp. 37-44).

Interview transcriptions are listed in the Appendix 17 and can be found in a separated Compendium. For the convenience of the reader, they have been retrieved in a separated book

¹⁰⁴ In the sense of being grounded in reality.

¹⁰⁵ "*relations légitimées par rapports à des (...) formes de généralités*". Boltanski P. et Thévenot L. Op.cit. P.22.

of interviews. The relative volume of the interviews is linked to the nature of the questionnaire which is composed of sensitive information's about religion and ethics. Not all the content has been used for the empirical analysis. However, the whole interview content was necessary to bring the informant to answer to the problematic of the thesis. Consultation of the entire transcription is available upon request.

7. Research design. A qualitative and explorative method

- a. *Research hypothesis. Engaging in Islamic finance is not triggered by ethical reasons and capitalism answers to critics with this ethical finance*

Giving the conceptual discussion and the problematic raised so far, I intent to give a clarification on the engagement justification of the IF providers with the use of semi-guided interviews. My statement is that professional advisor's engagement into Islamic finance is not **only about an ethical motivation but mostly a Mer Market chant justification**. I also state that recent **IF developments** are more of an **answer from capitalism to critics** (about its non-ethical customs, unfair wealth distribution, lack of transparency...) **than just an alternative ethical solution**. In the lineage of an author such as André Comte-Sponville, my contribution claims that IF is mostly led by financial concerns rather than ethical/moral principles. For this purpose, in 'Le capitalisme est-il moral', André Comte-Sponville says: « *Ce n'est pas le devoir qui régit l'économie, c'est le marché. Le capitalisme, c'est le moins que l'on puisse le dire, ne fait pas exception. A ma question-titre : « le capitalisme est-il moral ? », ma réponse est donc : Non. Mais il faut bien sûr la préciser (je ne dis pas la nuancer) : le capitalisme n'est pas moral ; il n'est pas non plus immoral ; il est – mais alors totalement, radicalement, définitivement – amoral* » (Comte-Sponville, 2004, p. 82).

The official IF message claims to implement ethics in finance and that is the justification to contribute to it. My hypothesis says, on the one hand, that IF is certainly a finance with ethical tenets (from an ethical reconstruction – see chapter I, section 2) but it only exists to sustain the objective of an-amoral capitalism, in the sense of Comte-Sponville contribution (which does not depart from Weber thesis of initial '*affinités électives*' but rather focus on the objective itself of capitalism). On the other hand, I also state that engagement justification is not only ethical or inspired but coming from Market and civil EG worlds which necessarily lead to compromise between them. Considering IF as a purely ethical initiative is not apprehending the

phenomenon in its globality and ignoring the spirit of modern capitalism in its capacity of renewal with financial alternative, such as IF.

These 2 proposals may look antinomic but reflect more a complementary aspect: on one hand stating that IF is only about ethics is a wishful thinking and on the other hand finding an Islamic religious spirit that seems to be a driver for an alternative finance. Both these proposals lay in capitalistic system that seek an alternative route for profit regeneration.

The hereafter methodology and empirical findings will state if these positions can be sustained.

b. Methodological framework

The objective of this paragraph is to explain the methodological framework of the semi-guided interviews used in the qualitative research. The on-field research was not a long and calm river journey. Many travels around Belgium, France, Luxembourg, Morocco and in the UK were needed to cover as comprehensively as possible the IF phenomenon in Belgium. The theoretical construction and the empirical work are not built-in silo but jointly and complementary. Theory enlightened the field as much as the field enlightened the theory.

Not willing to commit to an *à priori* established EG grammar (analysis framework), analysis is started from a generalisation/ “*monter en généralités*” (Boltanski, 2009, p. 66) of the discourses themselves. In a data organisation phase, 4 different themes are explored. They are coded in a way to discover whether they are generalisations and see if a compromise¹⁰⁶ that can be reached when an “dispute/épreuves¹⁰⁷” happens.

Starting from the research question of what are the offered ethical justifications of Belgian and French¹⁰⁸ IF service providers and from all the gathered content, 4 temporary descriptive coding¹⁰⁹ themes have been labelled (1st step of coding) as follows:

- *What is their understanding of the justifications of IF providers?*

¹⁰⁶ EG identifies 4 solutions to get out from an épreuves/disagreement: (1) Both justifications are in the same world and it strengthen the position of the world (very stable situation), (2) Compromise where equivalences are found in different world (3) Local agreement where each party stays in own world. This agreement is weak in stability as it depends on the individuals and cannot be ‘monter en généralités’, and finally (4) Relativisation where nothing is really important (objects nor individuals) - this situation is extremely instable.

¹⁰⁷ In the sense of a potential conflicts between 2 justifications

¹⁰⁸ French experts as some of them are also mobilized to work and advise in Belgium.

¹⁰⁹ Strauss and Corbin call this phase the ‘open coding’. Later come the axial and selective coding.

- *What are their personal motivations for examining IF?*
- *What is their judgement of Ethics on IF?*
- *What is their position regarding the Riba rule?*

From this initial phase, comparison with an existing justifications grammar is done only *à posteriori*.

The methodology is structured around the work of De Ketele and Rogiers (De Ketele & Rogiers, 1996, p. 172), Paillé and Mucchielli (Mucchielli & Paillé, 2012) where semi-guided interviewed are run by themes and checkpoints (to make sure we stay within the topic's themes). This methodology allows to discover new knowledge and comprehension of a new phenomenon object in Belgium. This approach lays in a comprehensive interview methodology (Kaufmann, 1996) where description is sought more than immediate explicative research for root causes. This goes inductively as the understanding of the phenomenon goes back and forth between the field and the theory. This is particularly challenging as not always the same question can be asked to informants as conducting interviews may change from one informant to the other and as new questions raised between the first interview in January 2016 and the last one in June 2017. The on-field research is composed of 21 face-to-face semi-guided interviews.

The exploration phase has been conducted at the same time as the theoretical construction of my study object. An exploratory phase of the IF industry actors is led via an interview campaign. This back-and-forth process took place between the theory and the field has been developed through several months (January 2016 – June 2017). A comprehensive¹¹⁰ approach is here presented. It answers what is the engagement rationale mobilized when offering IF.

c. Guide and themes of questions: a continuous reshaping

Semi-guided interviews have been conducted with the use a guide and themes of questions. The elaboration of first interview guide started in 12/2015. This interview guide went through a couple of modification due to informants' input and additional theoretical contributions. Note that less than 5 versions have been amended. This is mainly explained by continuous personal learning curve and the back and forth between the theory and the on-field

¹¹⁰ In a Weberian sense: An understanding phase where we try to grasp the meaning given by an actor, an interpretative phase where we try to model the observation and a social fact explanation which detects the causality between the phenomenon.

research. The relative long duration between the first conducted interview (01/2016) and the last one (06/2017) is also an important factor for such evolution. The first interview took place in Belgium, January 2016. Interview guide has been thus: (1) Prepared¹¹¹; (2) Conducted¹¹²; (3) Analyzed¹¹³; (4) Reshaped¹¹⁴. Once the guide has been prepared, the practicalities to invite informants have been thought: E-mail, LinkedIn and phone calls have been taken to set meetings. Furthermore, my personal background and network helped to have a very high rate of response of people accepting to be part of the informant's sample.

The questionnaire was not communicated in advance as it was not intended to have interview to be prepared by root recitation. The bet of spontaneous answers to avoid apologetic positions towards IF has been taken. The guide of interview can be found in appendix 8 - Interview themes/guide.

Audio transcriptions have all been made by the author and students as from 07/2016 till 10/2017. Only selected verbatim can be found in the thesis. The entire transcription is available upon request. This decision has been made for comfort reading of the thesis and due to the non-direct relevancy of all material. All material is relevant but to obtain more accurate answers about sensitive topics such as religion of personal beliefs, we need to build the interview with more outgoing questions and answers.

For the +30 hours of recorded interviews and transcriptions, Weft QDA (also called as a CADAS, Computer Assisted Qualitative Data Analysis Software) has been used for the analysis. Themes, questions and answers have then been organised in an excel worksheet. Additional side notes about the interview's conditions, memos... are listed in a note pad document (Lejeune, 2010, pp. 15-32).

¹¹¹ Prepared: Reviewing the literature and finding connection between the research question and themes of the interview guide that I wanted to address.

¹¹² Conducted: I have submitted my guide of questions to a sample of informants to check its feasibility and clarity.

¹¹³ Analysed: The type of answers and the clarity of answers helped to refine and reshape the wording that I used for guide submitted to the informants.

¹¹⁴ Reshaped: based on the observations and analysis, I made new guide available to be submitted.

d. Semi-directive interviews protocol and progress

Nature of this research and the objectives were always disclosed at the beginning of the interviews. As many as possible open questions were asked to the informants. They were made comfortable by making the interview-environment open and trustworthy in order for them to answer the questions freely. This in turn created a space in which the informant is put at ease in order for them to answer the rather delicate questions related to ethics. Also, these questions were easy and straight forward in order to ease them into the more intimate/ethics related questions. Another challenge is to be open to new justifications, with personal theoretical bias, while at the same time digging into informant's justifications in order to clarify their ideas. When informants started to elaborate toward an object with no link with research, the challenge was to redirect them to the core study without creating an uncomfortable situation.

The scenario of the interviews was always conducted the same way: a brief presentation of the project, the anonymity usage, the authorization to record the interview, an introduction about the informant (studies, work...), their role in IF industry, what does it mean for them, their justification to engage...In function of the content, new themes were added to the current or future interviews.

The average length of an interview was 1 hour with a range from 35 min to 2 hours. Interview took place face-to-face or online using Skype.

Most of interviews went well regarding atmosphere and new themes generation. However, one interview was somewhat tense as the discourse was apologetic and the questions were interpreted as being polemic. Feeling the tension, I got back to more general questions. The content of that interview is fully transcribed in the compendium of interviews.

e. *Value of the research*

In order to evaluate the quality of this research, additional criteria need here to be met: credibility, conformability and saturation.

- Credibility

It gives the authenticity of the constructs (IF understanding) built by the author. In this context, my personal and professional background (working for ISFIN, an advisory organisation for IF markets) has allowed to become familiar with the field and to have access to primary informants. This factor could also be considered as a bias in the study as personal beliefs and religion may influence interpretations of the interviews. Without fully discarding this bias, it has to be kept in mind. To prevent from this bias, I tend to regularly differentiate between opinion and facts evidence from theory of field. Whereas personal opinion is a valuable driver to trigger a reflection, they could postulate any scientific facts. On the other hand, literature helps to ground the evidence into theory.

- Conformability

Where results are taken in a comprehensive posture (see previous section) in terms of informant input and not influenced by the researcher's *à priori* conceptions. Observations are the information that informants provide. I, however, underline that this criterion is difficult to reach as one's own subjective perspective necessarily interferes in the interview process. Exchanges and discussions with other researchers and external observers of this study is also a valuable contribution to test the arguments of the proposals.

- Saturation

Unlike quantitative studies, saturation in qualitative studies is not reached by the number of interviews conducted but by extensive understanding of a phenomenon¹¹⁵. A level of empirical saturation¹¹⁶ has been reached when most categories have been covered. It has been thereby decided to stop interviewing IF service providers as each new informant was giving the same themes and categories as the previous one.

¹¹⁵ For instance, EG has Gained a very high level of saturation in their model.

¹¹⁶ I did not cover a theoretical saturation where I explore all possible situations, I have a priori foreseen.

f. The informants: Heterogeneous categories

The sample has been defined in two sub-group: The first wave of informants that was wanted to be interview is due to their **experience, expertise and visibility on the IF industry**. Digging into the industry allowed to know who were the experts in the market. This has been namely done searching what were the business school or institute offering IF expertise (UCL, Solvay, Paris-Dauphine, Université of Strasbourg...). A second wave of informants had been defined thanks to referrals and a better knowledge of the existing actors in Belgium. **Tackling Belgium market, I realized that not only Belgian professional advisors were active in Belgium but also French actors (via counselling, marketing, legal advisory activities)**. The target group grew thus from only Belgian advisors to include French professional advisors but active in Belgium. This sample was chosen because they conformed to the feasibility criteria and because of their accessibility. The target group is composed of 21 service providers of IF: advisors, sharia scholars, lawyers, professors, etc. All those informants have an expertise related to the object of study. They share advisory for IF mechanisms and products.

The 21 Informant's names have been changed to keep them anonymous. Only a succinct contextualisation is here below given. Although names have been changed, contextual particularities have been kept. A European name gives an indication that the informant is non-Muslim¹¹⁷. The selected informants form a non-homogeneous category of people. This is due to their variation of age, academic background, gender and religion. This group is relevant due to his representativity of professional advisors in the IF industry (in the sense that this industry is not much developed in Belgium and the number of experts is pretty low whereas having selected 21 experts is an important figure compared to the available informants). All of them are the ones that give trend and expertise in IF in Belgium.

Daoud, Gamal, Farid, Larbi, Othman and Vanish are Male Muslims with a professional expertise in the private sectors. They are counsellors and advisors in Islamic finance affairs. They do know each other by expertise area but they don't know who participated in the interviews. Bernard, Noe, Sylvain and Julien are professional experts in IF and Thierry is an academic scholar. They are all non-Muslims.

¹¹⁷ I assume here a European name would not be a Muslim whereas in reality this is a case that occur.

Muslim informants also include Celjuk, Kamal, Tarik and Qays with a scholar academic background from European universities. Morad, Ryan and Unur have also academic background but from Muslim universities and are considered as religious scholars.

Female informants are Hajar, Iris and Petra who are non-Muslim advisors in IF.

The below table shows the most important social features of the informants, whilst keeping their anonymity. We see their alias, gender, age, religion, professional and academic backgrounds. The setup of the interview is also mentioned (face 2 face, SKYPE, personal office, phone Interviews):

Alias	Gender	Age	Academician or professional advisor	Interview setup	Religion
Daoud	Male	40-49	Professional	Skype interview	Muslim
Gamal	Male	30-39	Professional	Face to face	Muslim
Farid	Male	50-59	Professional	Face to face (Brussels)	Muslim
Larbi	Male	30-39	Professional	Face to face (Paris)	Muslim
Othman	Male	30-39	Professional	Face to face (Dubai)	Muslim
Vanish	Male	40-49	Professional	Face to face (Paris)	Muslim
Bernard	Male	40-49	Professional	Phone Interview	Christian
Noe	Male	40-49	Professional	Face to face (Luxembourg)	Christian
Sylvain	Male	40-49	Professional	Face to face (Paris)	Christian
Julien	Male	40-49	Professional	Face to face (Brussels)	Christian
Thierry	Male	50-59	Academician	Face to face (Brussels)	Christian
Celjuk	Male	30-39	Professional	Skype interview	Muslim
Kamal	Male	30-39	Academician	Face to face (Brussels)	Muslim
Tarik	Male	30-39	Professional	Face to face (Brussels)	Muslim
Qays	Male	30-39	Professional	Skype interview	Muslim
Morad	Male	40-49	Academician	Phone Interview	Muslim
Ryan	Male	30-39	Academician	Face to face (Brussels)	Muslim
Unur	Male	40-49	Academician	Skype interview	Muslim
Hajar	Female	30-39	Professional	Face to face (Brussels)	Muslim
Iris	Female	40-49	Professional	Face to face (Brussels)	Budhist
Petra	Female	30-39	Professional	Face to face (Luxembourg)	Christian

Table 25 - Table of informant

8. What are the justifications of IF service providers? A Market and Civic predominance

a. A majority of Market justification of the informant's proposal

To the question of “What are the perceptions of the justifications of IF service providers”, I processed into a funnel of questions during the interviews. From the first theme (justification of the IF providers) questions¹¹⁸ are formulated as follow:

- *What is your judgement on IF?*
- *What is your definition of IF?*
- *What is the difference, for you, between IF and conventional banking?*
- *How would you qualify the IF? What are its principles ?*

Those questions are selected as they are all tackling the main question which consists of understanding what are the main judgements on IF for those service providers.

The most important and recurrent justifications are lying in Market dimension. To prove this, verbatim have been extracted from the material. They are answering to the main themes and questions of the research. They are ordered by predominance.

The selected answers are transcribed here below (complete transcriptions are available in the compendium of interviews transcription) in their original language (French):

« Dans le montage financier élaboré, au final, on a des montages dans lesquels le taux (Authors's note: interest rate) est le même ou supérieur à ce que propose la finance conventionnelle, en le dépouillant de la sécurité que lui offre la FC par les assurances (...) beaucoup d'opportunistes au sein de la galaxie frériste, beaucoup se sont positionnés et pour avoir de l'audience au sein des banques et institutions, ils créent des associations, donc ils se proclament spécialistes en FI et mettent en place des organismes de certification mais tout ça c'est du business » - Celjuk

¹¹⁸ Guide of questions had to be amended through time due to informants different understanding of the questions. To make sure questions were clearly understood, phrasing or words needed to be adapted to their context.

This first extract *Celjuk* identifies clearly IF as being a pure business. He also briefly mentioned a political dimension (*'galaxie frériste'*) which he did not develop, although the further questioning he was asked. Another extract, from *Daoud* says:

« La pression est sur la vente et plus sur cette dette de l'autre côté (...) Le vrai fonctionnement d'une Banque islamique serait d'être promoteur immobilier : nous on achète des quartiers qu'on va rénover et qu'on va revendre et notre marge à nous est calculée entre le cout de la construction et le prix de vente. C'est là ta marge » – Daoud

The informant *Daoud* defines IF as being firstly a financial operation where cost, revenue and margin are the drivers of the transaction. Again, we have here a dimension linked to a business opportunity and not to any moral justification. *Iris* statement below goes in the same direction :

« L'économie musulmane est très intéressante parce qu'elle est vraiment libérale. Elle n'est pas capitaliste, elle est libérale, ce n'est pas la même chose. A : Qu'est-ce que tu entends par là ? I : Capitaliste, c'est celui qui donne l'importance, la prédominance au capital. Libéral c'est la liberté d'entreprendre (...) je dirais que la propriété est plutôt un flux c'est-à-dire qu'on doit entretenir ce qu'on a, on doit rendre des comptes, on doit, d'ailleurs le système de prélèvements, après quarante ans, on n'a plus rien, si on ne fait pas tourner la boutique, je dirais » – Iris

Iris defines IF as an entrepreneurial activity based on '*flux*' which refers to the flow activity of trading and exchanging goods and services.

« La FI est de la finance » – Othman

Othman is even clear about what he thinks about IF which is purely finance for him. Nothing in the discussion led him to present Islamic finance as something different from being just a financial mechanism. *Unur* statement below goes into the same direction as referring IF as being in a "*approche naturellement commerciale*":

« Une finance qui favorise les partages de risques et qui assure l'adossement de mécanismes financiers qui assure la connexion avec l'économie réelle (...) de rester toujours au service de l'intérêt commun même si elle est dans une dynamique et dans une approche naturellement commerciale » – Unur

« C'est une construction purement à mon avis marketing parce qu'à terme l'idée est d'arriver à des banques islamiques, à des prêts islamiques et donc on colle un label, exactement comme on l'a fait pour la viande, qui va s'accaparer une certaine clientèle » -

Ryan

Ryan goes further by associating a marketing dimension to the activity of IF which means to him that the objective is to capture a segment of customers to keep on generating profit (*'s'accaparer une certaine clientèle'*). This proposal is reflecting the thesis proposal which affirms that IF in Belgium serves commercial purposes.

« Le principe de propriété, l'islam n'a aucun complexe sur la notion de propriété, il n'y a aucun complexe sur le fait de l'être ou pas. Si tu es proprio, tu l'as reçu d'Allah. Le respect de la propriété, une caractéristique de l'islam, entraîne en tant que khalife de Allah » - Thierry

The informant *Thierry* define IF by mentioning the 'ownership' principle which allows and enhances individuals to own properties. We are not in one-way relationship or a donation but more in a trading opportunity. *Hajar* speaks out about the fact that IF is mocking conventional finance with the objective to have short term financial solutions:

« (...) imitation de produits de finance conventionnelle, surtout dans le monde de produits dérivés, voilà qui pour lever les liquidités, il faut qu'on contourne l'intérêt.

Donc on va faire un produit, bien on connaît le tawarruq, bal'aina qui sont finalement des produits dont le sens même, l'objet du contrat qui est l'or, comme on dit finalement, n'a pas beaucoup d'importance. Il permet juste de rendre le produit charia compliant mais au final, l'objectif est toujours le même, financer à court terme. » - Hajar

She also refers to the principle of entrepreneurship where risk and profit are shared between the different stakeholders:

« C'est fondamental qu'on garde cette perspective à long terme d'investissement, d'implication dans la société, dans le projet qu'on a financé via ces sukuk. (...) On ne peut pas prêter de l'argent et parce que moi, je suis géant, j'ai une position dominatrice parce que c'est

*moi qui apporte le financement, finalement, je transfère tous les risques vers l'entrepreneur.
Non, il faut vraiment que l'entrepreneur aie autant à perdre que celui a à perdre - Hajar*

Most of the informant's answers referred to business opportunities. There is an articulation/linkage between the theory and the on-field findings.

Those different abstracts came to the analysis with an important recurrence. It shows a dominance articulation with the Market dimensions to engage in IF. The informant's judgements lead us to the theoretical contribution of the EG model. It is either explicit such what Othman was saying or more related to the object and dispositive that are linked to it (Celjuk). Mobilised objects - « *aucun complexe sur la notion de propriété* » - as Thierry mentioned or dispositive such as the Celjuk perception about it - « *ils créent des associations, donc ils se proclament spécialistes en FI et mettent en place des organismes de certification mais tout ça c'est du business* » - all show a predominance of Market justification.

This former could be defined as "a *form of argument mobilized to value a point of view, defend a statement or an action, in order to show its well-founded nature*¹¹⁹".

These justifications relate the EG model nomenclature. In their model, **this major justification** refers to the **Market** world where **Business** to the informant means that the job of Islamic banks (as an object) should be a real estate company, focusing on sales. In this world, they refer to price of selling, to margin. IF is first and foremost a type of finance in itself with its rules and competitive objectives, before being Islamic. It is a marketing tool of global finance to immediately attract new market shares and to maximise individual wealth. Another aspect of this **Market** world lies in the **Trickery** and **Cosmetics justification** (which means changing wording or rephrasing a financial operation but conducting exactly the same operation. We can also call this a 'window-dressing' operation. An example of 'window dressing' will be presented in Part 3.

¹¹⁹ "une forme d'argumentation utilisée pour faire valoir un point de vue, défendre une assertion ou une action, pour en montrer le bien fondée" (Nachi, 2017, p. 37).

b. *Inspired world. A second justification perception about Islamic finance*

During the interviews, the informants also identified IF as an **ethics** for the people which have **religious tenets**. This justification came few times and is not dominant:

Tarik made it clear by associating a legal status to the actions of Islamic finance. What is recommended (*'recommandée'*), forbidden (*'interdite'*), compulsory (*'obligatoire'*). Although looking like legal justification, they refer to a theological reference. Informants are not referring to Law as such in a modern meaning but to a religious tenet. Informant Ryan goes in the same direction when mentioning *'juridisme'* as being a driver for this finance:

« La finance islamique c'est un terme évidemment qui au niveau scientifique c'est-à-dire quand on revient un petit peu au texte, et bien ça ne veut absolument rien dire. / Dans le sens où au niveau de la jurisprudence, on peut qualifier une action. Ici c'est la finance, ce n'est pas une action et l'islam ne qualifie que des actions c'est à dire que les transactions précises et ces transactions précises, nous en disons l'un des cinq qualificatifs suivants : on peut qualifier une action en disant d'elle, qu'elle est obligatoire ou alors qu'elle est illicite, interdite ou alors qu'elle est recommandée » – Tarik

« Ça ne se joue pas forcément sur l'éthique mais sur une forme de juridisme » - Ryan

Petra refers to a framework of rules from a religious inspiration where lays IF:

« C'est une façon de faire de la finance dans le respect d'un certain cadre de règles qui dérivent de la religion musulmane et de préceptes » – Petra

« Je la définis comme étant une finance a rahmatan al'alam, une miséricorde pour l'humanité / Pour moi, la finance islamique c'est un outil financier, qui doit être au service de l'humain dans le respect de, comment on va dire, dans le respect, au de-là de l'humanité, donc ce n'est pas uniquement l'humanité mais de respect de l'être vivant et de tout ce qu'il y a dans la nature. » - Farid

Farid depicted IF as a mercy for human kind given from God (*'ahmatan al'alam, une miséricorde pour l'humanité'*). He clearly expresses God as being a driver to engage in this finance. God, in his will, has provided an economy that will respect all beings (*'respect de*

l'être vivant et de tout ce qu'il y a dans la nature'). Gamal goes further by explaining that IF has its sources from religious scriptures

« Elle tire ses fondements à partir du Coran et de la Sunna (...) comme étant une finance un peu plus responsable, un peu plus éthique. » – Gamal

This second justification refers to the **Inspired** world where **Religion** for informants means that action is justified by passion to stay connected to divine inspiration by its holy books and sources. It involves promoting justice or equity to please its God/creator and its commands. No commercial value is sought. Another aspect of the **Inspired** world refers to the **Entrepreneurship** mindset where liberalism leads individuals to attain freedom, to be inspired by creativity, to launch a business and to take entrepreneur risks.

c. Civic world. A third justification

During the interviews, informants mentioned justifications linked to collective perspectives, legal processes, contract and jurisprudence. These justifications popped only a few times.

Sylvain refers to IF as being a finance that promotes a long-term vision which, *ipso facto*, ultimately focuses on the interest of the group.

« La Finance islamique qui vise le long terme. Je ne dis pas que la Finance islamique est antinomique avec le court terme mais elle prend garde de ce que j'appelle l'économie réelle »
- Sylvain

Vanish expresses the same vision with a clear position. For him IF principle is '*la solidarité*'.

La valeur de la FI est la solidarité » – Vanish

This third common justification is nothing different from the **Civic** world of the EG model. **Altruism/Solidarity** for informants means that Islamic finance is considered as a mercy for the

collective interest. It is at the service of human beings. It has a collectivist objective for humanity. It has implications for society. It is not thinking from an individualistic perspective. It promotes solidarity (*Vanish*). Another aspect of the **Civic** justification refers to the **Ethics** as explained by the informant as being an element of solidarity. This justification is often also linked to **Fairness, Law and Risk sharing** where people have equal access to grow in dignity and where profit and loss are shared with equity between the different stakeholders with the aim of serving the common interest.

d. Disputes and compromises between the Market, Civic and Inspired justifications to reach a situation in Justice. A Limitation to the findings

Finally, a strong feature of the EG model needs to be here discussed. Now that we have found these justifications, it is time to question whether these are in conflict and how those potential discrepancies (different justifications of what IF is) could be solved.

Informants employ various justifications from different worlds (Nachi, 2006). We can talk about dispute when informants are referring to the same world (litigation) or from different world (dispute). Those tensions are not the object of the empirical study as they are not practical (case studies) in my research but rather hypothetical in the sense that informants did not get into an argument with each other, using their justifications, to explain what IF is or should be. Informants were not confronted between their different justification neither practical dispute cases were picked up. The model is not used at its full power but this is a conscious and assumed orientation of the research. Indeed, we are not searching to discuss tensions within an established industry but to have a first level understanding of the reason to engage in IF. This is the reason why the BT model is here mobilized as it offers sufficient tools to understand actor's justification.

9. What are your personal motivations for examining IF? Domestic and Industrial justifications as major reasons to engage into IF

a. A predominance of Domestic justification

In this second phase, to understand personal motivations to engage in IF, 3 questions were asked:

- What are your personal reasons to engage into IF?
- What is the story between you and IF?
- What is your interest in IF?

That funnel of questions led to the main theme which consists of discovering what are personal reasons to engage in providing IF advisory. From those questions, the informants came up with a majority of justifications linked to **family and tradition**. A first illustration came with *Daoud* :

« Mon père ne prenait pas les intérêts mais j'ai découvert que plein d'autres pères ne prenaient pas les intérêts également » –Daoud

He expresses that his interest and understanding of what is IF comes from a behaviour that his father and many other fathers used to have: not collecting interest rate from their banking operations and savings (*'j'ai découvert que plein d'autres pères ne prenaient pas les intérêts également* '). When asked what were his reasons to engage in IF, *Farid* clearly mentions family reasons:

« C'est juste une raison familiale en fait. Parce que je suis, moi, je ne viens pas directement du Maroc. Je suis quasi-né ici, je suis arrivé ici à l'âge de deux ans. Et donc j'ai vécu avec ma famille qui est venu ici. Mon père qui est venu dans les années 60 en tant que travailleur ici.

Et comme beaucoup de maghrébins ou d'étrangers à l'époque, se pose la question de l'immobilier, de savoir, enfin, des enfants quoi. Se pose la question de l'achat à un moment ou à un autre. Donc mon père qui n'a pas fait d'études, était venu ici en tant que travailleur mais respectueux à ces fondements de ces principes de l'islam et notamment, même s'il n'en avait pas une connaissance de ce que c'est vraiment l'intérêt, l'usure, etc. Il savait que c'était quelque chose d'interdit et donc, c'est lui qui m'a mis sur, à la fin de mes études secondaires, sur la piste, il en avait entendu parler. » - Farid

Farid's father came up with questioning that made him think and raised interest in the matter. Tarik mentions family legacy:

*« On va dire que les savants musulmans, c'était un idéal chez nous au niveau de la famille » -
Tarik*

To conclude, the major justification to personally engage in IF refers to the Domestic world where informants justify their engagement for a family reason such as the ones that *Tarik* explains. They may take, for example what their own father (*As Daoud* and *Farid* mentioned) did or did not with regards to interest rate collection. Informants may also consider family tradition when making a decision. They may ask themselves how they are going to realise their long-term objective of acquiring a house. This may involve respecting the values, principles of the previous generations.

b. Industrial justification. A second personal engagement driver for engaging into IF

A **second important justification** refers to the **Industrial** world of EG model where **intellectual curiosity** is the driver to engage in IF. IF was an obscure matter and they wanted to scientifically understand the phenomenon beyond the religious aspect (*Gamal* and *Julien*), including the rationale behind it and how it works. Informants considered that process to be pure financial engineering. Informant's mention discovering new features to finance, academic interest and objects such final year thesis at university (*Othman*). This is here illustrated by *Gamal*:

*« Alors pourquoi ? Parce que c'est une question qui m'intéresse. A la base, la finance islamique pour moi c'était quelque chose de floue. Je ne savais pas ce que c'était » –
Gamal*

Where the topic of IF was something blurry, *Gamal* showed intellectual curiosity and wanted to discover what was behind the concept. Same rationale worked for *Julien* who wanted to go further the words of '*finance*' and '*Islam*':

« Moi, j'ai la faculté d'esprit de voir plus loin et de me dire au-delà d'islamique se cache différentes matières » - Julien

« Pour mon mémoire de fin d'étude j'avais travaillé sur une prévision d'une crise assez violente dans le monde de régulation. Plus je faisais de la finance de haut niveau plus j'ai été animé par l'envie de faire quelque chose d'assez alternatif en sortant, plus éthique qui se différenciait de la finance traditionnelle. » – Othman

Othman, where part of his motivation founds its roots in ethics, was more interested into the intellectual expertise that would differentiate from the conventional finance. He wanted to position himself into '*quelque chose d'assez alternatif*'. Petra showed great inspiration by the potential education and culture sharing with her Muslim colleagues:

« Le fait que ce soit quelque chose de différent, de nouveau et puis c'était l'occasion de travailler avec mes collègues musulmans sur des sujets qui les intéressaient aussi. Ils avaient à ce sujet aussi quelque chose à m'apporter par leur éducation, leur culture » –

Petra

Thierry positions his interest into a pure intellectual interest where expertise and engineering ('*ingénierie financière*') are key drivers.

« C'était purement intellectuel au départ. Le monde de l'ingénierie financière (...) on crée tous les ans 200 produits qui répondent à des besoins spécifiques dont une fois tous les deux ou trois ans un produit deviendra un standard qui chassera un autre standard » -

Thierry

His position reflects position we find in the literature in a more global level (Arshad, Lahsana, & Rizvi, 2014). Where IF has a proper logic and where practitioners from the conventional industry needs to understand both world (Sharia-compliant and conventional) to propose intellectual-robust and financially competitive products. Without giving any non-expressed intention to the informants, this intellectual articulation is kept to trigger a wider reflection on what we can consider as *window-dressing*. Where this notion is discussed in Part 4, only a succinct definition is here given: an operation which consists of mimicking conventional finance with Islamic finance instruments. The sole difference being the vocabulary used and asset structure whereas the outcome and the interest rate mechanism being the same (Baryalay & Rizvi, 2016).

c. *Civic and Market justifications*

A **third justification** refer to the **Civic** world. Those are the justifications where the informants refer to **collective solidarity** and **altruism**. Working for the group is the highest value. Participating in such mission is a proof of dignity. Informants may work and empathise with their colleague or partner in order to better live with them. IF is structured by texts and rules (objects and dispositive). Those justifications are mentioned by informants as **group** and **solidarity** as engagement. *Hajar* mentions it as:

« Apporter un mieux-être (...) c'est de travailler pour la communauté, vraiment (vers ou faire) du Sabi Lilah. C'est un problème énorme, que certaines personnes sont dans des situations très difficiles, qui veulent absolument contourner l'intérêt, qui s'endettent familièrement, qui sont dans des situations très compliquées » – Hajar

For her, it's a question of working for the community ('travailler pour la communauté') and bringing and added value to the great number.

Finally, a **fourth justification** refers to the **Market** world where informants refer to a **business** they were looking for and from which they attract a new market share or for which they have been asked for consulting solutions. They have been approached as service providers and they answered to provide a commercial service. It is an opportunistic market that helps them to diversity their portfolio. Informants also referred to professional opportunities and **business** alternatives. *Noe* and *Iris* illustrate that with the business opportunities that came to them:

« C'est parce qu'on est venu me consulter pour ça. A : On t'a consulté pour ça ? I : Oui tout à fait. Parce qu'on m'a consulté pour des raisons fiscales et je me suis intéressée et puis ça, c'est fait comme ça. On avait organisé un séminaire. Et puis voilà, c'est comme ça que les choses se sont lancées et le sujet m'intéresse beaucoup (...) Donc c'est pour moi, sur le plan personnel, ça m'intéressait, j'ai voulu être ethnologue quand j'étais petite donc, tu vois ça rejaillit maintenant sur mon travail. Comme bouddhiste, c'est intéressant parce que c'est la relation d'éthique, dans les relations interreligieuses aussi » – Iris

« J'ai diversifié ma clientèle, notamment sur l'Afrique francophone, l'Afrique de l'Ouest et l'Afrique centrale et dans des pays qui ont une communauté musulmane, pour

notamment travailler des dossiers sur le financement de banque par différents types d'acteurs » – Noe

They both generated profit and business from this very specific niche of finance.

10. What is your judgement on the Ethics of Islamic finance? Between the Industrial and civic justifications

This section approaches the judgements of informants on the ethical dimension of IF. We will see that 2 types of justifications come off: Industrial and the civic justifications.

a. Industrial justifications predominance

To understand the judgement that informants have on IF and its ethical dimension, following questions were asked:

- Do you think IF is ethical?
- What is your definition of ethics?
- What ethics does IF bring?

All these questions answer to the main theme which consists to understand what is the judgement of informants on the ethical dimension of Islamic finance.

During the interviews, Informants' answers referred to ***useless, rational, responsible and efficient action***. The answers that came with the most recurrence are here selected. Celjuk has a very clear definition and understanding of what ethics and moral are. He associated IF as being an ethical finance that offers an additional dimension to the only financial part:

« Les deux (Authors's note : Moral and ethics) ont une étymologie similaire. Je suis très influencé par la distinction que Paul Ricoeur a faite entre les deux. Je renvoie la norme à deux dimensions différentes : la norme à une dimension collective, qui est de l'ordre de la position et qui est de l'ordre de ce que l'on doit faire : l'éthique, je la renvoie à la dimension individuelle et à la dimension optative, càd ce qu'il est préférable (...) Ce mot si on le traduit en arabe renvoie au bon comportement » - Celjuk

Tarik and Hajar refer to a responsibility ('une responsabilité en tant que musulman') and to a goal of life ('Un objectif de vie sur cette terre') :

« Alors maintenant, j'ai une responsabilité, j'ai une responsabilité en tant que musulman de me poser des questions » – Tarik

« Un objectif de vie sur cette terre. (...) Elle doit aller jusqu'à dans toute la chaîne de production de n'importe quel élément, de se dire voilà, d'où vient ce produit, d'où vient ce pull ou ce pantalon que j'ai acheté, est-ce que je peux acheter plus éthique ou pas. » – Hajar

Iris talks about a responsibility (in terms of the consequences of our actions) which leads us to the reflexion discussed in chapter I about "*l'éthique de responsabilité*" (Weber, 1963)

« On en est dépositaire et donc responsable » - Iris

Julien put in opposition Ethics and what is toxic. Assuming IF will not propose toxic assets. For him, being ethics means working rationally ('bon sens') :

« Il y a un bon sens à ne pas investir dans les produits toxiques, sans éthique, à avoir finalement des bulles financières complètement ahurissantes, folles » – Julien

Thus, this first justification refers to the **Industrial** world where ethics is a form of **rationale** that leads to an intellectual reflexion (*Celjuk, Julien*). It is the good sense that prevents us from carrying out harmful, unethical actions (*Tarik, Celjuk, Iris*).

b. Civic world as second justification on the judgement on ethics

Informants proposed justifications for ethics linked to the **collective interest action** and a **solidarity engagement**. *Kamal* and *Noe* referred to well-being of the group ("*bien-être de l'être humain*") and to values such as respect:

« Une économie qui sert à développer le bien-être de l'être humain et qui ne fonctionne pas juste pour lui-même pour engraisser » - Kamal

Notion des valeurs de respect, d'écoute. » – Noe

The preservation of the group welfare is also an element that came as an important feature of the ethical dimension of Islamic finance. This is proposed by *Ryan*:

« La préservation de l'intérêt général, le fait que tu apportes quelque chose de positif constamment au niveau des finances d'autrui, de la santé d'autrui, de la préservation de l'écosystème. » - Ryan

Sharing, equity, transparency, fairness are all elements that represents what ethics is for Islamic finance for the informants *Sylvain* and *Thierry*:

« L'éthique pour moi c'est que la règle de ce qu'on ne doit pas tirer d'avantage d'une des parties » - Sylvain

« Préservation, partage, mérite, utilité, transparence, conformité, éthique, matériel, immatériel » - Thierry

This second major justification of engagement and contextualisation refers to the **Civic** world of the EG model where informants define ethics as objects of **solidarity, responsibility** and justice. Informants illustrate this by the responsibility that each one has to the group - where ethics is there to preserve the well-being of the group. It is not there to make individual rich. It prevents prejudice and protect the weakest member of the group. Ethics is validated by legal ruling and texts. The aim is to fulfil the common general interest without taking advantage of any member of the society¹²⁰.

¹²⁰From disputes to compromises: whereas my paper does not discuss concrete dispute, hypothetical compromises with Civic world can be:

Industrial: The compromise between these two worlds comes with a high level of responsibility from the civic world that can be linked to the higher level of rationality that leads to a no-nonsense perception of ethics. In other words, Ethics is seen as a responsibility which leads to a greater efficiency in human activity, in this case IF. Objects and dispositive are groups that the IF advisory provides to make sure IF operates with rationality and without harmful instruments.

11. What is your position regarding the Riba interdiction?

a. Industrial justifications predominance

This section asked the informants about their judgement on the riba and its interdiction in Islamic finance. Knowing this principle is a supposed interdiction in IF, it was interesting to understand their position about it and how they deal with it between their own principles and its interdiction. From this them, 2 types of questions are submitted to the informants:

- What is your understanding of riba?
- How do you deal with the interdiction principle of interest rate in your financial operation?

To those questions, selected answers are mostly referring to **intellectual efficiency, expertise and method**. Those elements are typical from the industrial world. They have been selected in function of their recurrence. Firstly, we can refer to *Othman* position :

« Le fonctionnement de la banque aujourd'hui n'a rien avoir avec le contexte de la révélation et le riba du coran n'a rien avoir avec le prêt bancaire aujourd'hui. (...) Dans le montage financier élaboré, au final, on a des montages dans lesquels le taux est le même ou supérieur à ce que propose la finance conventionnelle » - Othman

To him, it's via an intellectual process that he can cope with working with Islamic finance without referring to any bias or potential interest rate issue. With this, he affirms that interest rate and riba have nothing to do. He does an intellectual interpretation that allow not to fall into a contradiction. For *Morad*, it goes even further, for him, consumers do not even understand what are the differences between a margin and an interest rate (*'différence entre le riba et une marge bénéficiaire'*):

« On n'y arrivera pas vous concoctez vos produits et vous venez les vendre et les gens, ils ne savent pas ce que c'est. Ils ne savent pas la différence entre le riba et une marge bénéficiaire. Et dès que vous parlez de profit, pour eux, c'est haram comme pour le riba. Donc s'il n'y a pas de pédagogie, c'est important, on n'y arrivera pas. Donc c'est du travail à long terme de pédagogie et quarante ans pour moi, c'est encore insuffisant. Tant qu'on a, tant que la finance islamique elle est encore quasi nulle part dans les cursus scolaires ». - Morad

Morad considers that IF and its principles are subjects to more intellectual effort and education.

It's because there is an effort on that aspect that he can cope with potential discrepancies. Furthermore, we also have Ryan proposal which also insists in the lack of intellectual expertise. He decided to invest his efforts into a problematic that was not clear for him. This was done in order to be aligned with his principles. He didn't let it be. He studied intellectually the topic so he could decide if it was complying with his principles:

« Quand j'y suis venu, c'était au niveau académique exclusivement. Je me m'y mis en me posant la question de savoir ce qu'est l'économie et la FI. Je n'en avais jamais entendu parler. La seule chose dont j'ai entendu parler, c'est riba égale haram. Tu finis sur le bucher.

Comment peut-on vivre son temps aujourd'hui si je n'ai pas accès à des solutions de financement qui sont dans le respect de mes valeurs. Est-ce que ça existe ? On me dit que oui dans le monde, que ce soit dans le Moyen-Orient ou en Asie mais concrètement là où je vis, il n'y en a pas. Donc je me suis dit ok on va aller faire une petite formation, en parler aux experts, etc. Sincèrement, au début je n'y comprenais rien du tout » - Ryan

Hajar also made her research in order not to stay stuck in an intellectual dead end. She investigated to end up to the conclusion that interest rate interdiction (riba) is what we currently call usury which is different from standard interest rate:

« Des économistes musulmans expliquent clairement à des théologiens ce qu'il se passe aujourd'hui. A partir de là, on compare la situation à l'époque du prophète au sujet du « ribah » : qu'est-ce qui posait problème et est-ce qu'on trouve dans les finances actuelles, un système qui est comparable au système de « riba ». Dans les maigres recherches que j'ai faites, j'ai pu voir que certains économistes musulmans différenciaient intérêt et usure, pour eux, « riba » c'était de l'usure, pas de l'intérêt » - Hajar

b. Civic justifications. A second type of judgement

From the extracts, some judgements referred to Legal and Law processes from Sharia law to establish the rules in favour of the collective interest. Those arguments are below :

« Le taux d'intérêt, toutes les religions, à priori, ont interdits, à un moment donné, les taux d'intérêts. Alors la religion avant qu'il n'y ait, je dirais la notion de santé public et la santé peut s'appliquer à la santé économique d'un pays, d'une tribu, d'une contrée, d'un peuple,

d'une famille, d'un être humain. La religion remplaçait cette notion de santé public ou de bien public.. (...). Un modèle où on partageait d'avantages les richesses et où l'Europe était la seule contrée au monde qui avait une classe moyenne très importante c'est-à-dire qu'il n'y avait pas beaucoup de pauvres, il n'y avait pas beaucoup de riches. Ce qu'on ne retrouvait pas en Amérique Latine, aux États-Unis, en Afrique, en Asie » - Larbi

Larbi refers to interest interdiction as a finance that has as purpose to social welfare and solidarity (*'partageait d'avantage les richesses'*) where collective interest comes first.

A project promoting collectivist benefit will be considered as an investment whereas a project only promoting an individual purpose will be considered as a loan. Thus, a riba operation. Tarik explains the operation and how the informant cope with it by using Sharia legal argumentation:

« La banque évidemment nous emprunte pas cette somme d'argent avec ce qu'ils appellent taux d'intérêts. Est-ce que cela c'est le riba tel que le décrit le Coran. Alors ma thèse c'est que c'est non. (...) C'est que je vais expliquer le riba conformément à ce que nous lisons dans les livres de jurisprudence depuis 1000 ans ... Et donc, le le riba il y a deux types de riba. Il y a le riba prêt et il y a le riba d'investissement. Le riba de prêt est le riba est le surplus obtenu par un prêt est illicite en islam de manière absolu c'est à dire qu'il n'y a aucune condition qui pourrait mettre en évidence que c'est quelque chose qui serait permis. Donc c'est haram de manière totale, de manière absolue. (...) Par contre, le prêt d'investissement, ça c'est différent. Le prêt et l'investissement, c'est quoi la différence, c'est le projet qui se trouve entre les deux. (...) D'accord, ça veut dire que si lorsqu'il y a un problème, la banque elle vient et elle prend mon bien en question qu'elle a hypothéqué et donc là, ça ne s'appelle pas prêt en jurisprudence. Pourquoi ? Parce que justement parce qu'il y a un projet entre moi et la banque. La banque elle finance, et donc c'est ça l'objectif de la banque, c'est de financer l'économie du pays. Et donc, lorsque nous sommes dans cette deuxième, dans ce deuxième cas, à ce moment-là, ça ne s'appelle plus prêt, ça s'appelle investissement.

» - Tarik

Tarik refers to a '*grandeur*' which goes beyond himself : the investment that represents the good of the collectivity (*'La banque elle finance, et donc c'est ça l'objectif de la banque, c'est de financer l'économie du pays'*) where the bank and the individual represent a society project. Furthermore, although religious references are more grounded in the inspired world, Tarik sounds in his argumentation to sets religious prescription to the level of the law : *« C'est que je*

vais expliquer le riba conformément à ce que nous lisons dans les livres de jurisprudence depuis 1000 ans ».

c. *Inspired. A marginal type of judgement*

Departing from the 2 major justifications, a third judgement appeared in the interviews. Some rationale referred to a transcendent driver with ‘loans for god’s sake’:

« L’interdiction du riba qui est interdit dans les religions et même dans la philosophie platonicienne pcq c’est un abus de position de force. En islam, le crédit n’est pas un moteur d’investissement, le crédit est une action de charité à but non lucratif, c’est vous prêtez à Dieu, il s’occupe de la récompense. Ce n’est pas le débiteur. Le crédit en islam est une charité, pas un business. La FC l’a transformé en moteur de l’économie » – Gamal

Gamal finds a way to deal with his principles by positioning this interdiction as a God directive. A loan should not money driven but to be pleasing God.

The final chapter opens the discussion about the findings on the regimes of justification given by the informants. Their reason to engage in IF, interest rate perception and their judgement on the ethics dimension of IF are analysed. Nothing being completely binary, reality of the field offers a variety of nuances that illustrate the multiple form that IF proposes.

Conclusion: Islamic finance. A dominance of Market justification for a capitalistic alternative source of revenue

The objective of this sociological part 2 is to contribute to the exploration of an alternative financial solution. Understanding the normative dimension of it is what has driven this entire part.

To reach such goal, the relation to the norm of Weber and the normative dimension of action from the EG theory are giving a theoretical framework to identify the Belgian professional advisors' reasons to engage into Islamic finance. Authors such as Eymard-Duvernay or Boltanski and Thévenot are giving important contributions to a complex domain where economy, personal judgements, moral are interconnected (Eymard-Duvernay, 2006). They show us how actors, given different backgrounds (cultural, educational) are engaging into an ethical finance, based on specific dispositive.

Findings show us that the ethical dimension of the action to engage into IF is not as dominant as we could have thought and based on the apologetic literature of IF. Findings also showed a complexity of the argumentations and the its different forms. Market dimension is key dimension to engage IF. The current contribution proposes an explanation to this predominance. Market justifications, whether we refer to interest rate interdiction, reason to engage in IF or judgments of ethics, come up with a great recurrence.

12. Islamic finance. A predominance of the Market justification

Pour étudier le marché halal, il ne faut pas commencer par les mosquées ”, Bergeaud-Blackler, 2017

The formulation from Florence Bergeaux-Blackler is here above used when she refers to the *halal* market (“*Pour étudier le marché halal, il ne faut pas commencer par les mosquées,*” (Bergeaud Blackler, 2017) Since IF is a sector of this market, the decision has been taken to understand it via the informants (interviewees) and not via the official institutional public message.

Within the plurality of justifications, the on-field findings showed a predominance of Market justifications to engage in IF in Belgium. This conclusion is in line with Comte-Sponville observation: “*But the economist does not need, to understand the FMCG market, to give his position on the religious legitimacy of food choices*¹²¹”. For IF, the rationale remains the same as most informants consider it as a business with rules and efficiency goals. The grammar identified in this part relates to distinctive justifications, but it doesn’t mean those are not linked or in opposition. We saw that with compromises, various engagements are met through ‘*grandeurs*’ and cooperation, within each one’s world of references. Departing from the simplistic view that associate Islamic finance to domestic or inspired justifications is what this paper is attempting to achieve. Such a confusion is what Pascal would call *ridiculous* (Pascal, 2015) in the sense that rationality differs in function of context. Referring to religious inspirations justifications when trying to convince a financial analyst has low chance to happen. Although a predominance of Market justifications, these reasons of engagement are combined with other registers which make Islamic finance a much more complex object. These differences are grounded in the different background and motivations of the informants that come from different area of culture (Muslim environment, academic or professional contexts...)

IF regime of justification has a predominance of Market justification whereas the engagement motivation from Inspired world (Passion to stay connected with to divine revelation, no commercial value sought, inner inspiration, something beyond tangible world...) leads us to think seriously about the criticism made to IF that claims that this finance is an economical lever for political objectives (collective solidarity, structured by collective convention and texts, sharia board committee...).

Whereas capitalism spirit has evolved in the last 40 years from a Market/domestic world to an industrial/civic world, it is legitimate to ask ourselves in what spirit lays contemporary IF. Where Boltanski and Chiapello discussed criticism about capitalism, we can ask ourselves if Islamic Finance answers to the criticism of the lack of sense/meaning made to capitalism and to the criticism linked to exploitation and poverty. Next section discusses potential role of IF in a political perspective.

¹²¹ Translation to English from the original version : “ *Mais l’économiste n’a pas besoin, pour comprendre le marché de l’alimentation, de se prononcer sur la légitimité religieuse de vos choix alimentaires*” (Comte-Sponville, 2004).

13. A justified criticism to Islamic finance: Is finance based on Islamic ethics contributing to an Islamisation/de-secularization of society?

From the initial pathway and rationale, a global question arises when we are questioning the roles, ambitions and what is at stake about Islamic finance in modern financial capitalism. In Muslim countries, in the early 19th, we witnessed a first 'traditional return' (also called revivalism) to a supposed genuine and original Islam (one of the first generation/*salaf* models). Among these socio-political tendencies, this paper focuses on the Neo-Revivalism¹²² movement that concentrated its efforts to resist the 'Westernization' of the *Umma/Muslim community*, implementing Islam as a self-sufficient way of life and rejecting any reinterpretation of the canonical references. Saeed writes: “*The most important neo-revivalist movements appeared in Egypt and the Indian subcontinent: the Muslim Brotherhood founded by the Egyptian reformer Hasan al-Banna (d. 1949), and the Jaama 'at Islami (Islamic Party) founded by the Pakistani scholar Abu al-'A'ala Maududi (d. 1979)*” (Saeed, 1996, pp. 5-8).

In the economic sphere, neo-revivalist scholars tried to resist the interest-based banking global system. From this perspective, innovative projects were set up: Their argument was that Islam in its canonical scriptures has the answers for all modern issues in the world.

With the creation of global organizations¹²³, IF started to be codified and implemented with new financial products. With the first Islamic banking conference in Dubai in 1979, we witnessed a brand-new creation of the Islamic banking sector.

Proponents of neo-revivalism thought it was important for people to return to an Islam that was refined and expurgated from Western interest-based practices. Hassan al-Banna, the Muslim Brotherhood founder in 1928, urged the Egyptian government to review its banking system based on interest and to create an alternative system based on the prohibition of usury and the organization of banks with this end in mind. The aim was to allow the government to provide a good example in this domain by relinquishing all interest due to its own specific undertakings, for instance in loan-granting banks, industrial loans, etc. This was the first justification for the development of IF. Through the theoretical elaboration, a proposal (IF contribution to ethical finance) points out a conflicting concern: the question of integrity. IF is fully embedded in the

¹²² Reformism.

¹²³ Majma' Al Buhuth Al-Islamiyya (1961 - Islamic Research Academy in Cairo);

Al Majma' Al Fiqhi Al-Islami (1962 - Muslim World League - MWL in Makkah);

Majma' Al Fiqh Al-Islamic (1969 - Organization of the Islamic Conference - OIC - in Jeddah).

conventional capitalistic economy. IF uses the codes and the mechanisms of the economy it condemns apart from some specific rules (interest rate interdiction, no speculation principle, etc.). This is questionable in the sense that IF claims to offer a different type of finance that conforms to 'Islamic ethics' while using the codes and mechanisms of conventional and secular finance. Scholars and experts respect the ban of *riba* on the one hand and provide operations structurally similar to this on the other hand. This trend is in line with a '*halalisation*' of all the industries (ranging from halal food, halal marketing, clothing, chemistry, etc.). Again, as Florence Bergeaud-Blackler (2017) mentioned in a recent contribution, there is a potential re-islamisation of secularised countries via economic and financial pillars. Some authors state that this is the pillar of the Islamist political stream coming from the Nahda revolution (Essir, 2016).

Another external factor determining the development of Islamic banking and, consequently, IF, is oil exploitation and the revenue generated from this by the Gulf Cooperation Council (GCC). This revenue has boosted a slow growing sector of young banks: Jarna'at Islami bank in India - 1969, the Nasser Social Bank Mit - 1971 and the Ghamr Savings Banks -63/67 in Egypt. In the petrodollar countries, the first Islamic banks were also created with the use of oil revenues: The Islamic Development Bank, the Faisal Islamic Banks of Bahrain, the Kuwait Finance House, the Dubai Islamic Bank, etc.

In '*Le nouvel esprit du capitalisme*' Boltanski and Thévenot discuss about the tryptic: capitalism, spirit of capitalism and the critics (where this is a gap between objective and concrete realisation). This problematic here leads us to two major questions about IF:

- Is IF used by capitalism to keep on generating profit or does it have its own justifications?
- How would the separation of spheres (religion, politics, economy...) in European countries be put in danger if we consider actively implementing religious references in our economies?

This double tension represents a real issue: on the one hand, in the financial industry IF actors have justifications for engagement which may be far from the ethical values that are Sylvain to be promoted by IF. On the other hand, contemporary IF institutions and recent development have been enhanced by the political revival movement in the 70's.

Also, European's countries have the tradition of separating religion from public affairs whereas IF proposes to implement religion in areas where it does not publicly interfere.

Given the findings and analysis, this process of the separation of spheres and rationalization is at the centre of modern European society's structuration. In the economic field, IF is incorporated in an area of capitalism that is long- and well-established where virtual finance overwhelms tangible asset- backed finance. This research proposal claims that engineered IF, within the conventional economy, is only a technical base product, achieving financial efficiency and return in line with conventional finance. As mentioned earlier, it is a '*financiarisation*¹²⁴ based on mathematics'.

From initial political drivers, IF has been enhanced in the 70's and recent capitalism development has integrated this alternative finance as a potential source for revenue generation. From here, I can reformulate the grammar of the IF engagement justifications. It has been built as a function of an external influence: political and it is now a tool for dominant capitalism to keep on generating profit. It has also been built by actors' justifications referring to Market, Civic and Inspired world '*grandeurs*. Isabelle Chappelliere illustrates this tension: " *Islamic economic theory, from precursors to contemporaries, seems to be more an ideologization or a moralization of the capitalist economy than a renewal of thought*¹²⁵ ». This statement can be nuanced by adding that IF is 'used' by dominant capitalism to maintain profit. Capitalistic economy allows us to observe some significant use of the halal finance (Islamic) industry:

- KT bank new Islamic bank opened in Germany in July 2015;
- The recent 'Sirop de Liège' Halal case in Belgium;
- The presence of a Halal corner in large supermarkets (Carrefour, Cora, etc.);
- Websites offering commercial halal tourism opportunities;
- The promotion of halal food for cats;
- A Belgian 'Halal Club' which regroups hundreds of Belgian companies selling halal products.

These operations lead to think that the economic field does not pay attention to such separation of the religious and secular fields. The economical capital within the economic field and within

¹²⁴ English translation has not been found. I define 'financiarisation' as the process to transform and relate any economical operation to mathematical algorithm and rational optimisation.

¹²⁵ Translation to English from original version : « La théorie économique islamique, des précurseurs aux contemporains, nous semble être davantage une idéologisation ou une moralisation de l'économie capitaliste qu'un renouveau de la pensée ». (Chappelliere, 2009).

other fields (political, social, religious, etc.) has a position that tends to dominate the cultural capital of other actors.

14. Interest of the study

In a young industry, multiple engagement justifications for providing IF advisory are here discovered. Such an industry, with its complexity and the variety of actors is an ideal object for analysis. Beyond only the homo-economicus rationality, other modes of engagement such as a creative mind-set, historical decision, solidarity, self-image,¹²⁶etc. are also engaged when actors make their decisions.

Capitalism imposes a grid of justifications and a grammar based on the Market world (economic rationality) which forces IF actors to find a compromise within their own world in order to justify providing IF advice. The question arises again as to whether it is IF that uses capitalism or is it capitalism that uses IF to capture alternative profits?

Findings give us an indication that capitalism and its various levers continue to generate profit and impose its justification on its actors. Referring to Florence Bergeaud Blackler in her study on the halal market, IF economic development is not a matter of religion but rather a matter of economic globalization. Her assumptions are here not refuted as observations and analysis tend to be a joint venture between neo-fundamentalism and neo-liberalism.

Further research could measure the impact of religiosity in the IF industry. This is what is proposed in complementary part 3 and 4 that will describe and measure IF indicators such as religiosity and financial performance.

Finally, the nature and the complexity of such objects that link social, economic, and psychological dimensions illustrates the importance for the management of the science discipline to open its field of research and its 'toolbox' to the different disciplines.

¹²⁶ Although we did not observe such justifications from the Opinion world in the research.

15. Limitations of the study

The research is limited in two main aspects: First of all, this part aimed to answer to the research question of:” *what are the offered ethical justifications of Belgian and French service providers of Islamic Finance*”. The importance of the Market justifications mobilised by the service providers of IF has been showed. The core contribution of using the EG justification theory is to manage the dispute moments and see how actors find common principles to reach a compromise in justice.

A first limitation comes from the nature of the research that did not operate concretely on actual disputes but this is assumed choice as the theory is mostly used to explore justifications to engage into Islamic advisory. A plurality of justifications has been observed, even for the same informant, provides many possibilities for peaceful dispute resolutions.

However, external stakeholders as seen in the previous section impose external Market justifications to all informants who wish to be involved in the IF industry. This tension is due to the imposition of an external merchant logic. The analysis of the external context allows us to know that this IF is not widespread in Europe and does not allow for much interaction between the actors as the market is potentially large and much of it is untapped. Actors are currently working in silo with not much interaction between each other. In the future we may see much more interaction between the actors and potential disputes may arise due to different motivations of engagement in IF and different judgements about what Ethics is. The requirement of a justification is high as a function of the contextual situation the informants are in. Without controversy there is no need to seek for an equivalence/mediation as there is no contact with the other informant. Such a situation is fair but does not use the full power of the EG model. This breach in the approach is known but the research tends first of all to be explorative as explained in the introduction of this sociological part.

A second limitation of the research comes from the fact that we only focused on a very specific group of the entire industry: French and Belgian service providers. It remains to be seen whether the conclusions from this analysis applies to other groups such as consumers, public authorities, and service providers in different geographical areas, etc. A non-involved in IF group could have also have been chosen to discuss the reasons for their non-engagement in IF and what IF means for them in terms of ethics. Their judgement and motivations could be in tension with the justifications of the informants that are in favour or doing IF advisory. The study is also limited in time as it gathered input from 2016 and 2017.

PART 3. DOES RELIGIOSITY HAVE AN INFLUENCE ON THE SMALL AND MEDIUM- SIZED ENTREPRISE MANAGERS' WILL TO USE ISLAMIC FINANCE LOANS? AN ECONOMIC APPROACH OF SMEs MANAGERS

Part 3 Abstract

Within the discipline of management science, this third part of the thesis is an economic study about Islamic finance.

Part three is an explicative quantitative firm-level survey that test SME managers willing to use IF credit, in function of their religiosity.

This survey assess to what extent are SMEs managers in need of alternative funding solutions and if they are open to Islamic finance funding solutions, given their religiosity? The tests conclude with an answer about the relevancy of offer Islamic finance solutions for SME stakeholders. Would a population with a high religiosity be more willing to consider IF implementation?

Keywords: Islamic finance, SME, religiosity

Introduction. SMEs needs

This part 3 introduction presents the motivations for studying conventional and IF loans for small and medium enterprises (SME) and the reason why would religiosity be a critical variable in the decision-making process.

A first motivation to study funding solutions for SMEs is the importance of the funding concerns for those companies and the importance of the SMEs in the economy of a country. The cost of credit represents a very high proportion of the cost of SME concerns and the profit and loss (P&L) analysis (Rahman, 2013, pp. 87-100) . Thanks to a multi-year report from UNIZO (De Unie van Zelfstandige Ondernemers), the Union of Independent Flemish entrepreneurs, UCM (Union des Classes moyennes in Wallonia and Brussels) and Graydon (a marketing solution provider), we can observe the evolution in financial health of SME in Belgium until 2014 (UNIZO, 2014). This report shows an increasing need for funding/credit solutions. SMEs are of huge importance in economy growth in Europe. Specifically, in Belgium, the turnover of SMEs is no less than 1/3 of the national outcome (Devnani, Gagliardi, Julius, Marzochhi, & Muller , 2016). Similar indicators (Bartelsman, Scarpetta, & Schivardi, 2003) are also relevant for the USA where SMEs are a strong economic power and labour creator (226% growth after 7 years of creation) whereas in Europe it is lower but still positive in terms of work creation (122% in Germany, 107% in France, etc.). The report also indicates that SMEs face a structural need for funding (Piette & Zachary, 2015). This need leads us to reflect about the gap between what SME actually need and what they have as their own resources. Whereas this debt is not considered as a structural failure (not negative), it has to find an answer. That debt is a need for funding. The idea in this research is to study what alternative offer, and particularly IF, could be desired and accepted by SME managers (Coulibaly, 2004).

A second motivation is drawn from the possibility to answer to the need of funding with alternative finance, namely Islamic finance. Would that decision be impacted by the religiosity of the credit decision-maker? Whereas society gets more and more away from religious considerations, would a finance based on religious tenets have a chance to be considered in Belgium. This assumption relays on the contributions of sociologists Liliane Voyé and Karel

Dobbelaere who say that religion and religiosity (how intensively a religion is practiced¹²⁷) is decreasing in intensity and number in Belgium (Dobbelaere & Voyé, 2012). Authors claim that Belgians are getting more and more away from Catholic beliefs and practices. Given this finding, it raises the curiosity about how a finance that claims to be based on religious pillars can be offered in a secularized environment like Belgium. An interesting finding from their study states that the younger generation (born after 1984) are less and less believers than their older generation. This is a continuous declining trend for more than 80 years.

Having a focus on IF is particularly critical as it is based on a religion which is widely discussed and criticized through European societies. Amiraux states” *Muslim are in population over-exposed on the media and invisible in the same time*¹²⁸”. Based on the ORELA 2017 report¹²⁹ which states that this specific religion does not have a good image in the media and Belgian society has a mitigated feeling about Islam and Muslims: “*In January 2017, the survey “« Noir, jaune, blues », organised by RTBF and the newspaper Le Soir revealed a strong hostility by the informants, towards “immigrants” and Muslim. Both categories tend, still, to be confused. Within the sample, 67% of the informants estimated they were “too many immigrants” in our society, 74% thought Islam is ‘not a tolerant’ religion*¹³⁰”. This observation gives religion and religiosity a critical stake for studying IF in Belgium as a finance based on religious tenets in a society where religion and religiosity have been decreasing for decades. This questioning lies in a more global picture of this research that tends to identify if Islamic finance has a relevant added-value (economic efficiency, ethical values promotion, political perspectives...) for its stakeholders.

This part 3 is structured in 3 chapters. In chapter I, rationale is framed with a literature review of theoretical concepts that are needed to build the problematic. An exploration is led to discover the extent to which religiosity (Hirschman E. C., 1983, pp. 131-170) influences this decision-making process. In the way that Hirschman studied Jewish consumer cultural behaviour in the USA (Hirschman A. , American Jewish ethnicity: its relationship to some selected aspects of consumer behaviour, 1981, pp. 102-110), we intend to explore the degree to which religiosity influences the will of Belgian SME managers to fund their company with ethical loans in general and IF loans in particular. Religiosity is defined here as an expression

¹²⁷ Concept is widely discussed in the next section.

¹²⁸ « Les musulmans sont une population à la fois surexposée médiatiquement et invisible » (Amiraux, 2012, pp. 141-157).

¹²⁹ Observatoire des Religions et de la Laïcité. ULB. 2018.

¹³⁰ « En janvier 2017, l'enquête « Noir, jaune, blues » organisée conjointement par la RTBF et le quotidien Le Soir a révélé une forte hostilité chez les sondés, tant à l'égard des « immigrés » que des musulmans, les deux catégories tendant d'ailleurs, toujours encore, à être confondues. Au sein de l'échantillon, 67 % des personnes estimaient qu'il y avait « trop d'immigrés dans notre société », 74 % pensaient que l'islam était une religion « pas tolérante » » (Nelis, Sagesser, & Schreiber, 2018, p. 8)

of one's religion which gives an orientation for the individual's ethical behaviour (Paolilo, Thomas, & Vitell, 2003, pp. 63-86). The originality of this part lies in the fact that there is little research on IF funding opportunities in Belgium, especially regarding the impact of religiosity on a manager's decision-making process.

In chapter II, concepts are operationalised for the research question and hypothesis: SME, Islamic finance and religiosity. The framework is set for the research question to determine whether religiosity has an impact on SME managers' will to fund with IF loans. The research design of the sampling and methodology are presented. A firm-level exploratory questionnaire on the willingness to fund with IF is administered to SME managers to understand their needs and rationale. The relatively small number of informants oblige us to take those results with cautious and to be nuanced when expressing our conclusions.

In chapter III, findings are gathered and presented from the empirical investigations and the general research hypothesis is tested.

Finally, a conclusion is proposed with a discussion about the IF potential offer in Belgium. Based on findings and evidences gathered from survey and literature, theoretical findings and managerial implications for SME managers are presented.

CHAPTER I. LITERATURE REVIEW of SMEs, ISLAMIC FINANCE AND RELIGIOSITY

In this chapter, a definition of the concepts that are used in part 3 is presented. Concepts of SME, its funders and its needs is discussed. Then a blueprint of what Islamic finance is given. Further, we go through a discussion of the concept of religion and its difference with the concept of religiosity. Finally, a brief overview of what is an ethical loan is given. These 4 elements are conceptual pillars for the empirical inquiry.

1. What is a SME and who are its funding stakeholders?

a. SME Definition

According to the European Commission recommendation (Commission, 2003, p. 36), a SME has three components:

- A headcount threshold: No more than 250 full time equivalent employees (FTEs);
- A turnover (VAT not included) under 50,000,000 EUR; and
- A total assets balance sheet under 43,000,000 EUR.

2014 Data	# SME <250 FTE's	% Growth from 2004 to 2014	Life duration < 10 years
Belgium	1,001.503	22%	46%
Flanders	591132	19%	46%
Wallonie	289,821	19%	45%
Brussels	120,550	25%	47%

Table 26 - SMEs growth from 2004 to 2014

Note that under the SME label we also have Small enterprises / '*Petites entreprises*' (10 to 49 FTEs) and Very small enterprises / '*Très petites entreprises*' (1 to 9FTE's) which have specific eligibility criteria.

In this research, it has been to only focus on SMEs of 1 to 49 employees (Very small and small enterprises) as the issues pertaining to a very small company of 1 employee may not generalized to a SME of 249 employees. In Belgium, the most widely used SME legal status is the *Personnes Physiques* (PP)/ individual enterprise form, which represents more than 50% of the SMEs (Biazzo, Bititci, & Garengo, 2005).

A company that respects the conditions of a SME but is a daughter company of a bigger/non-SME company is not considered to be a SME. In Belgium we also observe different legal status for the SME:

- Société anonyme (SA): at least 2 shareholders have invested their capital in the company. Mostly used by big companies but also by SMEs in some cases. A notary must write the company's articles of association, there is minimum capital requirement, an audit report, and its reports must be published at the National Bank of Belgium (NBB). The SA has its own legal status independent from the owner or shareholders. The tax regime is also lower than that of an individual entrepreneur. The equity minimum is fixed at 62,500 EUR;
- SPRL / Société privé à responsabilité limitée: composed by one or more individuals who do not bring capital into the company. It has its own debts, which are not linked to the owner (unless the capital at creation, within 3 years, is too low). The equity minimum is fixed at 6,200 EUR;
- SCRL (or SCRI) / Société coopérative à responsabilité limitée (or illimitée): a specific form of a commercial company where members have common goals but variable contributions;
- SNC / Société en nom collectif: a company created by managing partners (all decisions must be unanimous);
- SCS / Société en commandite simple: the appointed partners take care of the management of the company. The appointers are the money lenders but are not involved in the decision process;
- ASBL / Association sans but lucratif: at least three people who have a non-lucrative objective;

- PP / *Personne Physique*: an enterprise composed of a single self-employed individual. This is the most common type of SME in Belgium. There is no separation between the assets of the owner and those associated with his activity.

The employment rate is very high as 43% of actively working Belgians work in a SME (1,048,676). This represents 70% of the GDP originating from SMEs. Digging into the ONSS (Office Nationale de la Sécurité Sociale) 2014 data, we even observe that 72% of active Belgians (AB) work in the private sector, and 60% of the 72% work in SMEs. The number of workers in each sector is as follows:

- Employment level: 2,438,781 (Public + Private sectors)
- Public sector : 690,994
- Private sector: 1,747,793 (of which: 1,048,676 are in SME sector)

The needs of SMEs are of a different nature: They require account management, consulting services such as daily management (VISA cards, bank accounts), investments (Unit Trust / SICAV, etc.), insurance and other services such as leasing, employee benefits (alternative remuneration such as warrants, options, etc.), factoring, Mergers & Acquisitions(M&A), tax consultancy, and subsidiary management. I focus on an important need of SMEs: loans.

- Long term loans (for goods where the maturity of the loan will be equal to the depreciation duration): 59.2% of the most used form of loan given in Belgium in 2014¹³¹;
- Short term: financing a short-term exploitation cycle (stock, receivables, liquidity);
- Financing a guarantee (monthly rent caution);
- Financing tax anticipated reconciliation;
- Financing the 13th month and holiday payment.

Thus, an important constraint for SME is their need for funding. It can be explained partly by the supplier's number of days prior to paying invoices. The longer the duration is, the less cash the SME has to give away¹³². Therefore, it has no need to cash out for the period of the loan. Between 2005-2014, we observe that the payment period has gone from 45 days on average to 41. This means that SME need to pay their suppliers earlier, as there is more pressure from the

¹³¹ SPF Economie, P.M.E., Classes moyennes et Energie – Observatoire des PME. *Financement des PME 2014*.

¹³² This statement has to be contextualized in a positive interest rate financial environment. Current 2019 situation where interest rates are negative makes companies paying faster in order not pay interest to the bank. This reality changes SME's and supplier's behavior. This case is not studied in this Part 3.

suppliers. A 2015 SAFE report from the European Central Bank (European Central Bank, 2015) shows that even though access for funding is not the biggest concern for SMEs (for instance, tax on the workforce and qualified human resources are much more important), 31% of Belgian SMEs consider it to be an important concern. This situation comes from the difficulty accessing funding through traditional channels (banking loans).

It is also relevant to analyse the number of days client's take before paying the SME. This was 49 days in 2005 and it was reduced to 46 days in 2014. Taken into consideration what was said above, it is simple to deduce that on average SMEs have to pay their supplier prior to being paid by their customers. This initially puts the SMEs in a demand for money (also called working capital).

Funding from banks appears to be one of the most preferred tools of SMEs. This is a much easier tool than the capital market as it is more available to big companies (Diamond, 1984, pp. 393-414). It is particularly interesting to observe that SMEs (when not going bankrupt) keep long-term and unique relationships with a single bank and rarely change banks. This could also explain the lack of low pricing competition available for SME to use. From there several questions can be raised: What are the obstacles for SMEs' growth? Do SMEs have enough access to private equity (risky capital)? Are individual savings suitable for SME funding? Do SMEs have enough funding opportunities from banks?

Service or technological companies are the real engine of the economy (e.g., to encourage innovation, create jobs). However, such companies tend to have fewer physical collateral assets to hedge their risk and therefore will be less likely to get a bank loan. This is a paradoxical situation that SME currently face with the banking industry: SMEs are an important engine of the economy who have difficulties obtaining a loan. Financial needs are of course important but it would be simplistic to describe the needs of a SME as being only financial. Some general needs include :

- Structural barriers: governments can create artificial barriers that prevent new competitors from entering the market. Also, any kind of market distortion created by the state can constitute a structural barrier;
- The tax regime on the workforce (labour market rigidity);
- The buying power of the Belgian population;
- The nature of the competition;
- Finding new customers and keeping existing customers.

b. SME funders

In Belgium there are four main actors in the SME industry: the SME (as the loan taker), the private/public financial institutions (as the lender), the final customer (private or public) and the regulators (as the loan legal structurer and driver). In this context, this part focuses on the relationship between the SME and the private lender / financial institution.

Regarding the lender (public or private), we can differentiate between three main categories for funding SMEs. The first category of funders are the personal investors such as the owner/founder of the SME, his friends and/or family. The second category of funders are the public subsidiaries (regional and federal such as Sowalfin, mesuinvest, Sogepa, Région Wallone, BECI, FIT, etc.). They either provide a loan or they give guarantees. The third category of funders are private financial institutions such as banks and leasing operators. They provide short, middle and long-term loans (investments, factoring, cash, etc.). Finally, the fourth category of alternative private investors such as business angels, crowdfunding, private equities (also called venture capital), etc.

Each of the categories of funders intervenes at different stages of the SME's life cycle. Below is a graph of the different categories of investors associated with the different stages:

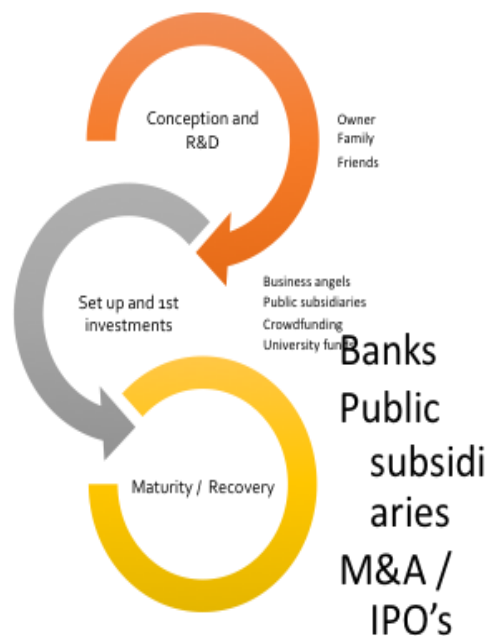


Figure 12 - SME life cycle and funding opportunities

In the figure above, we clearly observe that banks rarely fund a SME at the early stage of their development. The main sources for financing a start-up are auto-funding, crowdfunding or private funds. This is where the initial equity of the company will be generated. The additional funding can then be requested from banks and will generate a debt structure in the liabilities of the company.

c. SME's loan interest rate. Criteria of choice

From the discussion above we can identify several criteria that are taken into consideration when charging a loan interest rate to a SME. A bank will base its calculations on the requirements of a SME and on its own constraints. The criteria considered are:

- Existing and predicted default for a specific industry (nature of the SME);
- Competition in the banking sector in the country;
- The size of the SME;
- Bank cost of funding and by extension the general ECB rates (European Central Bank, 2015);
- The nature of the entire economy: stressed versus non-stressed economy (Holton & McCann, 2017). Holton and McCann showed how SME loans rates that are too high have reduced the demand for new loans and increased the load on those SMEs who still took out loans under the same interest rate. This resulted in a lower rate of general investment (demand for credit), lower profitability and growth;
- The maturity of the loan (short term vs. long term);
- The balance sheet structure of the SME;
- The SME's experience with loans (history of payments) - internal and external debts (ONSS, Tax, etc.);
- Degree of coverage (what is under mortgage or not);
- The nature of the loan: is it for Taxation purposes? A delay of payment purpose?
- The activity of the SME (transport, doctor...);
- The amount of the loan;
- The information asymmetry: the bank knows it does not have as much data as the credit taker.

From all these data, the bank has a specific rating for the loan. From there a subsidiary bank 'buys' money from their headquarters who buy themselves the money from the money market. The subsidiary bank will add a mark-up to get its commercial margin on the loan (Lannoy & Vanhaelst, 2016).

Note that given Bale III, there is a high pressure on the solvency of the banks: the ratio of Equity / Total asset should be high enough to consider a bank as not being risky. To have a high Equity, the reported profit or the Reserves should be high. An alternative is to diminish the total assets volume. The idea is to have less volume and lower margin on the loans.

For instance, if bank A makes loans of 1,000,000 EUR with only a 2% interest rate, and one of its client defaults on it, Bank A will have to make 50 more loans in order to recoup the loss (with no default to even that loss of 1.000.000): $50 * 2\%1.000.000 = 1.000.000$ EUR. This is not a very profitable and lucrative deal for Bank A as it is too risky.

The risk factor analysis is the key element of investment rationale. It is the main paradigm of thinking. This is why their paradigm is very different from a blue angel rationale: a bank will focus on the risk analysis and not on the outcome or potential profit analysis (for instance, a bank will rarely finance a R&D project). A potential solution to this concern is the development of mezzanine-debt instruments (this loan/capital funding will not be discussed in this paper as it is not much developed in Europe but could still offer an alternative way of funding for SMEs). From this situation, another paradoxical situation arises when banks do not want to have very profitable loans with SMEs but will weigh down the total assets and raise the burden on the Bale III solvency ratio.

Another perversity of the system is that a bank raises its rate in order to secure a margin and to prevent investing in risky SMEs, but this would also increase the probability of default (PD). It implies that, at a certain level, the curve/direction of the relationship between the loan interest rate and the bank profit turns around (Stiglitz & Weiss, 1981, pp. 393-410).

2. A blueprint of Islamic finance

a. Islamic Finance principles

IF is a social construct, historical, financial and legal reality for its actors. Its principles (as discussed in Part 2) can be summarized by three interdictions and two obligations¹³³:

- ❌ Interdiction of *riba* - interest rates;
- ❌ Interdiction of *maysir* (speculation, gambling) and *gharar* (excessive contractual uncertainty);
- ❌ Interdiction of investment in a non-authorized sector (alcohol, gambling, adult industry);
- ✅ Asset-backed finance: every transaction must be backed with a tangible underlying asset;
- ✅ Profit and loss sharing (PLS): That there must be a profit and loss sharing ratio between the stakeholders of any operation.

These principles show that Islamic banks cannot bear toxic assets nor any interest rate-based operations (credit default swap, etc.) nor any highly speculative products due to the *gharar* interdiction (Al-Sadr, 2017). It also prevents Islamic banks from investing in debt assets from other banks or governments. Major theoretical contributions can be found in Appendix 10 - Fundamental Islamic finance contributions.

b. Contemporary Islamic finance

In the late 20th century, we have witnessed an interest in the development of IF with state intervention in many Muslim countries. Many other official institutions have also been created in the late 1970s to early 1980s: the Faysal Islamic Bank in 1977, the Islamic Bank of Bahrain in 1979, and the International Association of Islamic Banks in 1977, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) in the 1990s. Several factors explain the need for a professional and Islamic banking offer: There have been increasing savings from GCCs who want to invest their money in Sharia compliant products in a revivalism of an Islamic way of living. Another factor is that after 9/11, many Islamic wealth

¹³³ Main actors of Islamic finance can be found in Appendix 13 - Islamic finance actors and their nature.

owners decided to repatriate their funds to their homeland, and especially to Islamic institutions. The International Monetary Fund forecasted in 2005 that there existed more than 300 Islamic financial institutions in the world with a 15% annual growth. This growth is implemented in the Muslim countries but also in non-Muslim countries via financial hubs such as the ones in London (Barclays and the Islamic Bank of Britain, called Al-Rayan today), Hong-Kong (HSBC), and Switzerland (UBS)¹³⁴.

In 2014, the Asset Under Management (AUM) was worth 2094 billion dollars. Those assets are geographically distributed as shown in the graph below:

<i>Assets by region</i>	<i>Banking assets</i>	<i>Sukuk outstanding</i>	<i>Islamic AuM</i>	<i>Takaful Contribution</i>	<i>TOTAL</i>	<i>% of total</i>
Asia	244.5	212.8	25.4	3.6	486.3	23.2
GCC	596.6	109.8	32.3	8.9	747.6	35.7
MENA (excl. GCC, incl. Iran)	728.0	17.3	0.5	7.9	753.7	36.0
Sub-Saharan Africa	22.2	1.6	1.6	0.7	26.1	1.2
Others	73.9	2.1	3.7	0.2	79.9	3.8
TOTAL USD	1665.2	343.6	63.5	21.3	2093.6	100.0
% of total	79.5	16.4	3.0	1.0		

Table 27 - IF Assets repartition by region

The IF industry is thus mainly concentrated in the Middle-East (+72%) and in Asia (+23%). We observe that the \$USD2000 billion \$USD volume market is a relatively low number in comparison to the whole financial industry (294000 billion \$USD in total assets). This represents 0.68% of the whole industry.

c. Islamic finance main contracts

In this section, a large panel of all the Islamic finance contracts and their equivalent in conventional finance is presented. A particular comparative attention is given to the general mechanism of interest rate alternative and to the profit and loss sharing ratio principle (A discussion about the interest rate mechanism can be found in Appendix 11 - Interest rates in a Keynesian and Weberian system):

¹³⁴ Industry structure can be found in Appendix 11 - IF industry structure and challenges.

Contracts	Description	Remarks // Conventional banking equivalent	PLS¹³⁵
Ijara	Islamic Lease - An investor purchases an asset and leases it to the borrower for fixed payments - May include an obligation for the lessee to buy the asset at the end of the duration.	The underlying asset remains in the ownership of the lessor until the end of maturity // Leasing	N/A
Istisna'a	Financial tool used for construction and manufacturing (the asset may not yet exist) - An investor finances the work in progress. At the end of maturity, the ownership of the construction is given to the borrower.	Debt-like instrument	N/A
Murabaha	Financial operation that consists of buying an asset and selling it to a final customer with a pre-agreed mark-up added to the original price. The asset is purchased from a third party and sold to a final customer on a deferred payment basis. If the customer goes bankrupt, the asset is sold in order to sell out the debt.	Debt-like instrument // Credit - Loan	N/A
Musharaka	A financial operation/project where a borrower (Mudarib) and investors (Rab al mal) invest capital in a joint venture.	Equity-like instrument // Capital-investment	Yes. PLS pro rata of the contributions
Commodity / Reverse Murabaha / Tawwaruqq	A final customer wants to raise capital. He asks an agent to spot buy a commodity from a seller. The commodity is sold with a mark-up on a deferred payment basis to the final customer who sells it back, on spot, to a commodity seller.	Debt-like instrument. A controversial tool among scholars.	N/A
Mudaraba	Similar to a Musharaka but limited to 2 counterparties	Equity-like instrument // Capital-investment	Yes. Profit shared by the bank and entrepreneur
Qard Hassan	Loan without interest	// Mutualist loan	N/A
Salam	Sales with deferred delivery	Buyer pays spot and receives the commodity later	N/A

Table 28 -Islamic finance main contracts

These instruments and contracts have a common core: the preservation of the public interest (namely *Maslaha*). They contrast with economic principles where only the individual's profit maximization is promoted. To illustrate this, El Gamal underlines the fact that the objective of the *riba* interdiction is to “protect, on the one hand, vulnerable individuals who are likely to

¹³⁵ Profit and Loss Principle.

fall into the cycle of over-indebtedness¹³⁶” and to protect humans from greed, on the other hand. It basically rephrases a Quran quote: “and ye devour the inheritance of the weak, with undistinguishing greediness, and ye love riches with much affection” (The Koran, 2005, p. 89:20). The same rationale holds for the *gharar* interdiction to « prevent individuals from being overexposed to financial risks or to the payment of an overvalued premium to eliminate existing risks¹³⁷ ». In the recent history of the IF industry, these products have been created and applied progressively as illustrated below:

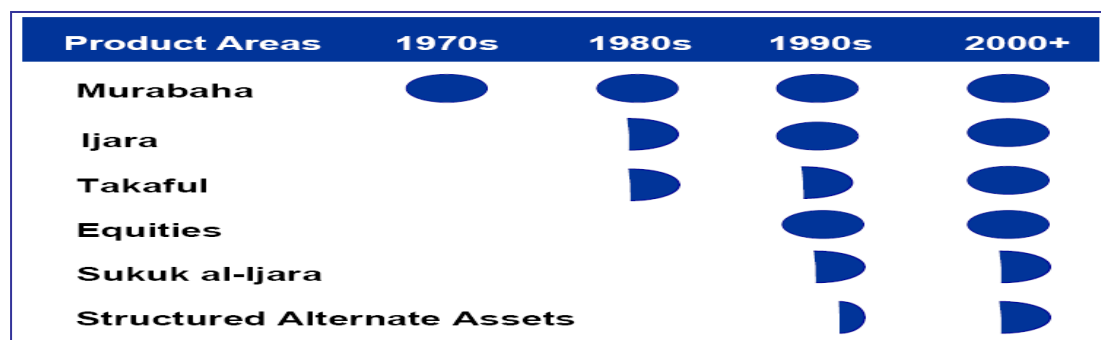


Figure 13 -Islamic finance innovation

d. A comparative practical case: Buying a house with a Murabaha or a conventional mortgage?

As we previously observed, Islamic banks are more inclined to offer debt-like products than partnerships (PLS ratio) operations¹³⁸ (Akkizidis & Khandelwal, 2008). Within that context, Murabaha is a common offered product. Where Musharaka/Mudaraba offer a variable PLS return, debt products such as Murabaha offer pre-determined margin for banks which tend to mitigate the risk for them¹³⁹. See below the similarities and difference between conventional mortgage and *murabaha*, in the different phases of the transaction:

¹³⁶ Translation to English from original version : « protège d'une part, les individus vulnérables qui sont susceptibles de tomber dans l'engrenage du surendettement ». (El-Gamal, 2009)

¹³⁷ Translation to English from original version : « Prévenir que les individus soient surexposés à des risques financiers ou au paiement d'une prime surévaluée visant à éliminer les risques existants ». (El-Gamal, 2009).

¹³⁸ These operations include risks especially on the deposit accounts potential money withdraws. This is not tackled in this Part 3.

¹³⁹ For a complete numerical example, I refer you to the sound contribution of Guillaume Polet (UCL, 2016) where he shows no economic differences between the two operations.

Phase	Conventional mortgage	Murabaha	=
<i>Price negotiation</i>	<i>Buyer agrees with house seller</i>	<i>Buyer agrees with house seller</i>	<i>YES</i>
Ownership - 1st contract	Buyer owns the house	Bank owns the house just before entering in a second contract	NO
Who pays the seller	Buyer pays the house with his money (received from the bank)	Banks pays the house*	NO
Promise to purchase	N/A	Buyer signs a promise to purchase**	NO
Amount to reimburse to the bank	Monthly payment formula between buyer and bank: price of the house + interest rate	Bank sells house to buyer (second contract): price of the house + margin	NO
<i>Maturity</i>	<i>Agreement between buyer and bank</i>	<i>Agreement between buyer and bank</i>	<i>YES</i>
Ownership - 2nd contract	N/A	Bank transfers the ownership to Buyer	NO
Final price paid by buyer	Price of the house + interest rate (Libor/Euribor)	Price of the house + margin (sharia scholar advisory + broker cost + double rights registration + risk for the bank)	NO
<i>Profit for the bank</i>	<i>Interest rate = margin</i>	<i>Interest rate = margin</i>	<i>YES</i>
The object of the transaction between bank and buyer	Money	House	NO
What does the buyer reimburse	Money	House	NO
<i>Insolvency risk</i>	<i>Bank can take the house</i>	<i>Bank can take the house</i>	<i>YES</i>
Operational risk	Low - Simple and standarized process	High - Multiple operations	NO
ALM	ST and LT rates can be variables	LT Margin are fixed on the asset side whereas ST rates impacts account holders' behaviors (Liabilities)	NO
Liquidity risk	Limited - securization is possible	Important - (due to the nature of the sub underlined asset = money)	NO
Market risk	Limited as operation is SPOT	High as operation is differed in time	NO

Table 29 - Comparative table between a conventional mortgage and a Murabaha

* To prevent risk from buyer not-buying the house, buyer signs a pledge which is equivalent to penalty if buyer doesn't want to buy the house anymore (usually 5-10% of the value)

**non-binding

Concrete financial operations show a price of Murabaha¹⁴⁰ equal or even more expensive¹⁴¹ than a conventional mortgage (all else being equal¹⁴²).

Finally, given the above analysis, we can conclude to the economical similarity of both operations. However, what differentiate them is the underlying asset (money/house), the securization opportunity, role of the bank (money lender/house seller), risks, defaults/discount of payments policies.

A belgian dead-end?

The Belgian association of banks state “*The credit institutions that are not a state member of the European Union are under the same rules as the credit Belgian-based institutions... the financial and banking Commission can... reject an agreement to the institution of a country that is not part of the EU if it estimates that the savers protection is not guaranteed... requires the creation of a Belgian-based law company*”¹⁴³. This precisely means that any bank operating Murabaha deal is forbidden in Belgium, on a legal perspective. Moreover, this transaction (forward sale where the margin is agreed upfront) implies a double registration rights costs (where the banks buy initially the good to sell it back to the final customer).

3. Religion or religiosity? A question of intensity

“Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs”

(Brundtland , 1987, p. 17)

The literature shows that religion is a key feature of an individual’s culture which influences his actions and values (Taylor, 1979), (Burnett & McDaniel, 1990, pp. 101-112) Referring to Voyé (UCL) and Dobbelaere (KUL), we observe that religion and religiosity are less and less predominant in Belgium (Dobbelaere & Voyé, 2012). This trend gives us the

¹⁴⁰ Polet G. *La finance islamique : principes de fonctionnement et comparaison entre Murabaha immobilier et prêt hypothécaire conventionnel*. Louvain School of Management, UCL. 2016. Prom. Devolder P.

¹⁴¹ <https://www.lavieeco.com/economie/enquete-le-cout-du-financement-des-banques-participatives-se-rencherit/> and <https://loanstreet.com.my/home-loan>

¹⁴² No upfront nor default payment. Discount principles due to upfront payment are possible. This is not studied in this Part 3.

¹⁴³ « *les succursales d'établissements de crédit ne relevant pas d'un Etat-membre de l'Union Européenne sont soumises aux mêmes règles que les établissements de crédit de droit belge ... La Commission Bancaire et Financière peut ... refuser un agrément à la succursale d'un pays ne faisant pas partie de l'UE si elle estime que la protection des épargnants ... requiert la création d'une société de droit belge*. In <https://www.febelfin.be/fr/association-belge-des-banques-et-des-societes-de-bourse-abb>

intuition that given the fact that IF is derived from religion, it should be less attractive to Belgian actors. Going beyond those opinions and testing concrete hypothesis is the objective of the next sections.

Where consumers' behaviours in decision making processes are affected (Gurhan & LaBarbera, 1997, pp. 71-97), it is particularly relevant to investigate what effect it may have on consumers' decisions. In our European context where secularization is at an advanced stage, it is a major concern to study what effect religion still has on individuals. I retain the definition of Terpstra and David: "*A socially shared set of beliefs, ideas and actions that relate to a reality that cannot be verified empirically yet is believed to affect the course of natural and human events*" (David & Terpstra, 1991).

The research studies impact of religiosity on the individual decision-making rationale. Throughout the literature we observe that there is no consensus on the definition of religiosity. Peterson illustrates the best such a plurality: "*it is hard to make any generalisation [concerning religiosity] that is universally valid*" (Peterson, 2001, pp. 5-19). Vitell and Paolillo define it as an expression of one's religion that orients an individual's ethical behaviour (Paolillo, Thomas, & Vitell, 2003).

From this general definition, religiosity can be expressed as the intensity of feeling that an individual has towards certain religious rituals and principles. These two concepts (religion and religiosity) should not be confused as "Religiosity is bound up with attitudes, behaviour and values, while religious affiliation is more like ethnicity, something that for most is part of their family, community or cultural heritage, rather than being chosen by them" (McAndrew & Voas, 2012). We could define religiosity with the frequency of attending temples (churches, mosques, etc.), prayers and religious reading; what individuals know about their own religion (credo); and their awareness of/feeling about their religion.

The impact of ethics in an actor's behavioural decisions is a key concern in relation to funding decisions. This influence is largely discussed in the literature (Ferrell & Skanners, 1998, pp. 103-109). The constructs of culture in general and of religion in particular have a significant weight in the decision-making process. Bartels, for instance, has introduced factors such as religion, patriotism, and customs in the decision-making construct (Bartels, 1967, pp. 20-26). For some authors, Protestant ethics has an impact on business and finance ethics in European and American countries (Bailly, 2012). However, religiosity has not been much studied in itself, as it is mainly included as a factor of culture (ethnicity, values, etc.). The religiosity of a society or an individual has a historical and deep influence on behaviours (taboos, sense of obligation,

principles, societal customs such as gay marriage, polygamy, family structures, abortion, what to eat/drink, etc.). The degree of religiosity will determine to what extent these societal principles or norms are respected. Hirschman discusses a couple of reasons why religiosity has not been sufficiently included in the cultural behavioural models: first, he mentions that discussing religion in a secularised society is a controversial topic (Hirschman A. , American Jewish ethnicity: its relationship to some selected aspects of consumer behaviour, 1981). Then he also argues that because religion is so pervasive, it is not easy to identify it as an independent, observable variable. For instance, Cutler noted that between 1956 and 1989, only 35 international research articles had a focus on religion and religiosity (Cutler , 1992). This number is low. My research aims to further investigate the impact of religiosity on individual behaviour, especially with regards to IF funding solutions.

In order to be more comprehensive, spiritual atheist or agnostic respondents who can be spiritual independently of a specific religion are also included in the rationale. **A spiritual individual is thus here -referring to a norms-based person.** Religiosity is taken lato sensu where it has several meanings (Parament, Scott, & Zinnbauer, 1999, pp. 549-564). Religiosity or spirituality is linked to a religion as such or to a body of values from an atheist or an agnostic perspective (Hubert , 2008, pp. 17-51).

4. Ethical loans

The object of the section is to give an introduction of what are ethical loans. For few years, ethics and companies' social responsibility are widely discussed. Since 2008 financial crisis, banking sector has been particularly facing such discussions. Ethical loans from the banks are also known as social, BIO, Green or sustainable loans. It implies social, environmental and cultural impacts of the loans. Referring to important authors' philosophy such as John Stuart Mill, a loan could be considered as ethical if it promotes happiness (Mill, 2008). The loan would thus imply an increase of overall happiness to a huge number of people. Aristotle would consider the behavior linked to the usage of the loan as ethics or not. If this one is fair and just, then the loan would be considered as ethical. Literature thus offers a variety of definitions.

Another precision about ethical loans is to nuance it with an external ethics and an internal perspective. An internal ethics of a loan is due to the nature of bank itself and how it treats its

employee and assure to maximize consumers satisfaction. This loan is reflected by the attitude of the bank toward its environment (nature, commuting policy...).

The internal ethics for loan is due to its external impact on the business (where it will invest its money gathered from the deposits).

In this part, an ethical loan is thus characterized by its sustainable nature, its social and environmental consequences. It will avoid non-sustainable projects and sectors such as military, highly speculative or gambling companies.

In Belgium, a bank like Triodos is offering a large panel of ethical loans to its customers. It indeed respects labor rights (internal ethics) and its investment policy are only targeting valuable environment and social projects 'external ethics).

CHAPTER II. METHODOLOGY AND RESEARCH

HYPOTHESIS: WHERE RELIGIOSITY INFLUENCES THE WILL TO USE ISLAMIC FINANCE LOANS

5. Research question: Is Islamic finance considered as an additional funding solution by SME's managers?

Although loan interest rates have diminished in the last 10 years, credit access has not become easier for SMEs. The Ernst & Young 2015 report on Wallonian SMEs mentions that the most common reason for reduced access to credit is the low capitalisation of these companies (14% equity only on the assets side), low credit ratings, and too few guarantees. From the funding perspective, SMEs have a *systemic funding gap*. From the consideration that Belgian SME managers consider needing additional funding, I am wondering if Islamic finance is considered as an additional funding solution by SME's managers' (Research Question 1 - RQ1) and we test if their religiosity¹⁴⁴ as an impact on the will to consider such solutions (Research Hypothesis 1 - RH1).

Authors argue that economically stressed countries are under tight pressure for funding where credit is rationed (Ferrando, Popov, & Udell, 2015). This results in an even stronger need for alternative funding. Harrison and Owen (2015) studied this issue in the UK environment by trying to highlight the role of alternative funding opportunities such as crowd funding or microfinance as a growing strategy (Harrison & Owen, 2015). This consideration is key when calculating companies' growth and their ability to create employment. Wright et al. highlight this concern as financial capital (here funding) is a key feature for significant growth capability (Hart, Roper, & Wright, 2015).

On another level, securitisation and funding alternatives are also proposed by IF advisors. Mechanisms for raising debts and financing companies are also proposed in this industry. A market like the Sukuk industry provides fixed-income instruments for financial institutions and fund seekers that are Sharia compliant. From 2001 to 2011 this industry has grown by 59. 9% (compound) on the primary market.

The major challenge for seeking funding is that it is relevant to consider IF instruments (asset-backed and risk sharing) as a potential solution. As observed earlier, the IF industry has had a

¹⁴⁴ Lato sensu as explained in the previous section (which encompass spirituality without necessarily having a link with a religion).

compound annual growth of 10%+ for a decade. Ozkan even mentioned that the IF banking industry grew by 16% in 2013 whereas conventional banking only grew by 0.6% (of the top 1000 global banks) (Ozkan, 2015). The question is how this exceptional growth could be an accessible solution to Belgian SME credit funding.

6. Research hypothesis (RH1): Religiosity influences the will to use Islamic finance loans

We explore to what extent religiosity or spirituality *latu sensu* (Hirschman A. , American Jewish ethnicity: its relationship to some selected aspects of consumer behaviour, 1981, pp. 102-110) has an influence on the decision-making process for ethical funding. As Hirschman did when she studied the American Jewish consumers, we try here to identify what relationship exists between a decision-making process and its link with a mental rationality (Jewish ethnicity for Hirschman). Some of her results effectively indicated that ethnicity was determinant in the consumer's decision process. From there, she concludes that norms based on ethnicity have an influence on consumption¹⁴⁵. The key limitation of the Hirschman study was that the sampling was limited to one region - NYC - USA, which is also where the largest Jewish population in the USA is found.

a. The Worthington Religious Commitment Inventory scale

In the way that Hirschman (studied Jewish consumer cultural behaviour in the USA, we intend to explore the degree to which religiosity influences whether Belgian SME managers will fund themselves with Ethical funds (whether they are Islamic or not). Religiosity is defined here as an expression of one's religion which orients an individual's ethical behaviour. For this purpose, I use the Worthington Religious Commitment Inventory-10 (RCI-10) metrics. This scale consists of 10 items that assess the level of religiosity of an individual, i.e., an individual's involvement in his religion. The RCI measures intrapersonal religious commitment (1, 3, 4, 5, 7, 8 items) and interpersonal commitment (2, 6, 9, 10 items). In this questionnaire a

¹⁴⁵ She also mentioned influencing features such as consumption information transfer, childhood information exposure, capacity for activating information and adult eagerness for information.

religious/spiritual person is supposed to “*adhere to his or her religious values, beliefs, and practices and use them in daily living*” (Hight, Wade, & Worthington, 2003, p. 85). This scale will be amended to measure the attitude of non-religious but spiritual agnostic or atheist people. Inferring a relationship (but not causality) from an empirical database (that I gather from the questionnaire) is what this article attempts to achieve. The idea here is to examine whether religiosity is related to the will to fund with IF products. We look for the distribution of the calculated IV (religiosity) and its relationship with the DV (willingness to fund with IF). The question we ask is, given a certain level of religiosity (high or low) is there a proportional tendency to fund with IF? Is there a significant difference in proportion between groups of different religiosities? If the main hypothesis is not rejected (i.e., the proportion to fund is the same in both groups), the conclusion is that proportion to fund is independent of religiosity. On the other hand, if H0 is rejected, we would show there is a relationship between the two linked variables. In other words, it raises the alternative hypothesis: **Religiosity influences the will for Islamic finance loan (Research hypothesis – RH1)?**

Is group A more willing to fund with IF loans than group B¹⁴⁶? The research hypothesis will be that “a group with high religiosity has a higher propensity to fund with IF than a group with low religiosity”.

Religiosity/spirituality is thus measured with the amended scale of Worthington. Each of the items are answered on a 5-point Likert scale, ranging from 1 = 'Not at all true of me' to 5 = 'totally true of me'. The items are:

1. I often read books and magazines about my faith/spirituality.
2. I make financial contributions to my religious or spiritual organization.
3. I spend time trying to grow in understanding of my faith/spirituality.
4. Religion or spirituality is especially important to me because it answers many questions about the meaning of life.
5. My religious or spiritual beliefs lie behind my whole approach to life.
6. I enjoy spending time with others of my religious/spiritual affiliation.
7. Religious or spiritual beliefs influence all my dealings in life.
8. It is important to me to spend periods of time in private religious thought and reflection.
9. I enjoy working in the activities of my religious / spiritual affiliation.

¹⁴⁶ A and B are from the same population.

10. I stay well informed about my local religious / spiritual group and have some influence in its decisions.

To determine who is highly religious/spiritual or not, I applied Worthington's cut-off (Hight, Wade, & Worthington, 2003) which indicates that a person with a religiosity score one standard deviation above the mean of the sample is high in religiosity¹⁴⁷ (Group A). Complete questionnaire can be found in Appendix 14 - Questionnaire submitted to SME managers.

Given the influence of religiosity on decision-making processes described in the literature, it is relevant to test if more religious individuals are more willing to fund themselves with IF products than less religious individuals. In other words, is there a relationship between the variables?

H0: I assume that the DV and IV are unrelated.
H0: $\eta_a = \eta_b$

Where η_a (Group A with high religiosity and propensity to fund with IF); η_b (Group B with low religiosity and propensity to fund with IF). Not rejecting H0 means that we do reject H1 but we cannot prove H0.

With the rejection of this H0, we would claim that there is a when religiosity is different between two groups, propensity to fund with IF is different.

H1: A group with high religiosity has a different propensity to use IF than a group with low religiosity¹⁴⁸.
H1: $\eta_a \neq \eta_b$

b. Test selection and Signification level

The research hypothesis has 2 groups (high and low religiosity) and the dependent variable is qualitative (propensity to fund with IF or not). We seek to compare these two groups to infer if there is a relationship between IV (religiosity) and DV (willingness to fund with IF). The variables are nominal and we have two samples. We use Chi-square test. We have chosen here a level of signification of $\alpha = 5\%$ which corresponds to the probability of rejecting H0

¹⁴⁷ Methodology is widely explained in the next section.

¹⁴⁸ Unlike t-test, H1 is bilateral and not unilateral.

when H0 is actually true (assuming that the propensity to fund with IF is not the same whereas they are actually the same¹⁴⁹).

c. Hypothesis rejection/acceptation

I compare the signification level ($\alpha=5\%$) with the probability of the obtained value ($p < \alpha$). If this p-value is lower, then I reject H0 and I accept H1 that states that religiosity has an impact on the decision-making process¹⁵⁰.

The prediction here is that a SME manager with a high level of religiosity or spirituality may be more willing to fund their company with IF products than a SME manager with a low level of religiosity/spirituality. This hypothesis finds its roots in the growing importance of religious concerns on a social/group level in European countries whereas individual religiosity has decreased in the last 40 years (Bréchon, 2008, pp. 21-41). This study appreciates the growth of secularization (which means less general religious influence) and the growth of individual religiosity. Other studies examine the influence of religiosity on consumer choices (in banking for instance). These studies emphasise the correlation between high religiosity and ethical-religion based decisions. These authors have shown the positive correlation of religiosity for banking solutions chosen in Malaysia.

7. Methodology: a research protocol based on a quantitative SME-level questionnaire

a. Research protocol and methodology. A Religious Commitment Inventory scale

In this section, the concepts are operationalised to measure their impact. Rather than being a behavioural experiment, this study represents explorative research on the unexplored IF field in Belgium. We administered a confirmatory quantitative firm-level survey to 113 SMEs managers in Belgium between June 2018 and August 2018 in order to assess the relevance of IF loans opportunities and the impact of religiosity on their will to consider such loans. The relatively small number of informants prevent us from a concluding generalisation but will give more incentive for further hypothesis. Managers have been approached online via

¹⁴⁹ A β type error is also possible if I do not reject H0 whereas I should have rejected it and accepted H1.

¹⁵⁰ I do not suppose the strength of that relationship.

databases, social media and via networking. The survey was programmed using the online questionnaire tool LimeSurvey (<https://www.limesurvey.org/>). The survey consisted of fact-based questions and took about 10 minutes to complete. A preliminary group has initially pre-tested it to validate its acceptability, timing and feasibility. Once confirmed and amended, the survey has been submitted to the sample. Out of the 113 respondents, 60 managers fully completed the survey. Responses were confidential and anonymous. The questionnaire can be found in the Appendix 14 - Questionnaire submitted to SME managers. Included in the survey are questions which are not immediately related to the core RQs but generic questions designed to make respondents more willing to answer more sensitive religious questions.

The RQ1 “*Are IF instruments considered as an additional funding solution by SME managers*” is descriptively answered from the submitted questionnaire. The RH1 is answered with a Chi-square independency test analysis.

The idea here is to divide the global population (group A and B) into two samples where the score in religiosity has been calculated using the Worthington scale. The maximum score is 50 (10 items each scoring between 1, the lowest degree of religiosity, to 5 the highest degree of religiosity).

We then split the responses into two groups/samples (A and B) based on their religiosity/spirituality scores:

- if score > mean + 1 standard deviation, then individual will be in the group with high religiosity, the group A.

We examine then whether group A which has a higher religiosity has the same propensity of funding with IF than group B with low religiosity (see section 2 for more details).

b. The Independent variable (IV)

Whereas we mention religiosity in the previous section, it's important to clarify that I am considering the effect of religiosity as a spiritual or value-based variable. We are not studying the effect of Islamic religiosity as such. This particular nuance is not the point I am trying to show in this paper. For my purpose, religiosity is measured with an amended RCI-scale. It gives a score in the religious commitment inventory scale (RCI-scale). The

respondent's items give an indicator which allows to classify their degree of religiosity/spirituality. On each item, the score (from 1 to 5; 1 being the lowest; 5 the strongest) is added to get a final score. Given theory and research reviews people with a higher religiosity score are considered more religious than an individual with a lower score. An individual considered as very religious will have a standard deviation (SD) higher than the mean of the sample. This is thus not an absolute indicator but a relative one. In other words, if religiosity score of an individual has 1 standard deviation above the mean of the sample, this individual will be considered as highly religious (example: if mean of the sample is 10 and SD is 2, a highly religious individual will have a 13 score in religiosity).

c. The Control variables

Age, religion and gender are taken as independent control variables described in the socio-demographic part of the survey. In order to discover relevant findings, we need to keep those 3 variables under control in order to properly test the main hypothesis of this part which consists of testing if SME managers who are high in religiosity/spirituality are more willing to fund their company with IF loans than managers with a lower level of religiosity.

The variable of gender is associated with inconsistent findings in the literature. Some research shows that gender influences religiosity (where males are more religious (Ferrell & Skinners, 1998)), whereas others have found that there is no relationship between the two (Ford & Richardson, 1994, pp. 205-211). In the literature, we can find assessments that women are more religious than men (Beit-Hallahmi, 2014) whereas other papers claim there is no such difference in gender (Sullins, 2006). This variable is kept under control in order to assess the impact of religiosity itself.

As for the variable of age, studies show that as people become older, they tend to pay more attention to ethical concerns (Wotruba, 2013). Argue, Johnson and White (1999) illustrated this conclusion in a panel of 1339 adult interviews in three different times in a span of 12 years (between 1980 and 1992). They concluded that age has a non-linear increase with religiosity (with the greater increase between ages 18 and 30).

Finally, the variable religion is widely studied in management science discipline to grasp its influence on the consumers behaviours (Siagh, 2003). Studies show the variable religion impacts the ethical decision as a personal feature. This specific variable will be studied in a sub-sample to compare the results of non-Muslim sample with a Muslim sample.

CHAPTER III. FINDINGS: WHERE THE DECISION-MAKING PROCESS IS INFLUENCED BY RESPONDENT'S RELIGIOSITY

8. Descriptive statistics

For RQ1, descriptive statistics¹⁵¹ give us the follow observations¹⁵²:

Considering funding your SME with ethical loans?

		Frequency	%	% Valid	% Cumulated
Valid	Yes	50	83.3	83.3	83.3
	No	10	16.7	16.7	100.0
	Total	60	100.0	100.0	

Table 30 - Willingness to fund SME with ethical loans

Considering funding your SME with IF loans?

		Frequency	%	% valid	% cumulated
Valid	Yes	22	36.7	36.7	36.7
	No	38	63.3	63.3	100.0
	Total	60	100.0	100.0	

Table 31 - Willingness to fund SME with IF loans

In conclusion, for the willing to fund, we observe:

	YES	NO
Ethical loans	83.3%	16.7%
IF loans	36.7%	63.3%

The primary observation is that 83.3% of respondents are open to fund with ethical loans where 36.7% are willing to fund with IF loans. This is a clear indication that SME managers do

¹⁵¹ Item of willingness to fund with IF products has been recoded as nominal qualitative question: are you willing to fund with IF: Yes (scale 4, 5) and No (scale 1, 2, 3).

¹⁵² Most of the descriptive statistics are Appendix 14 - Descriptive statistics on SMEs managers.

consider needing ethical loans to sustain their activity but this indication decreases when IF is offered. We can legitimately ask ourselves for what reasons is there a decrease in the desire to fund with IF when the need for funding still exists. This will not be studied in this paper.

For the observation for funding with IF, **we observe a 36.7% of respondents who answered YES**. This is a share market of almost 40% which also clearly indicates **an important interest for Islamic finance products**. This indication will be studied in the next section with its correlation with religiosity. This is the impact that the research hypothesis will test. Prior to dig into it, descriptive statistics are here described: sample (60 respondents) has a mean age of 44 years old (9,01 years spread). It is composed of 78.3% males (47) and 21.7% females (13).

Age

	N	Minimum	Maximum	Mean	SD
Respondent Age	60	28	65	44,00	9,018
N valid (list)	60				

Table 32 - Respondent age

Gender

		Frequency	%	% valid	% Cumulative
Valid	Male	47	78,3	78,3	78,3
	Female	13	21,7	21,7	100,0
	Total	60	100,0	100,0	

Table 33 - Respondent gender

9. Religiosity scores: Low and High religiosity groups

Religiosity scores and samples have been calculated with the RCI-10 item scale and it is shown as below:

Religiosity score

	N	Minimum	Maximum	Mean	SD
Full sample religiosity	60	10	50	21,58	12,820
N valid (list)	60				

Table 34 - Group religiosity

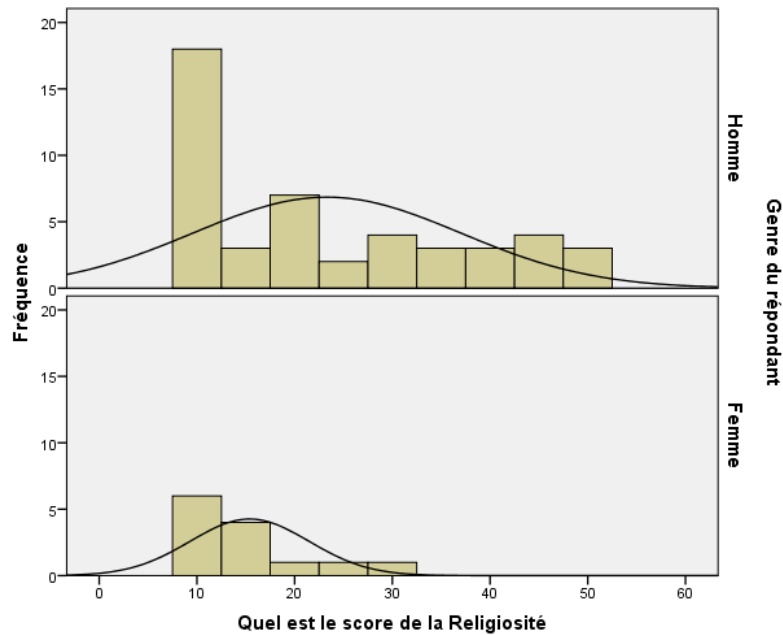


Figure 14 - Male and female religiosity score

We observe that religiosity scores for males and females have similar curves which shows that gender has no significant impact on the religiosity score:

- **Sample mean for religiosity is 21.58**
- **Standard deviation of the sample is 12.82**
- **High religiosity group (A) if: $X_i > \mu_{\text{sample}} + SD_{\text{sample}}$**
- **$X_i > 34.4$ which indicates that a respondent with a religiosity score above that level will be considered as being high in religiosity.** We have then here 21.7% (13 respondents) with a high level of religiosity (Group A) and 78.3% (47 respondents) with a low level of religiosity (Group B).

High/Low Religiosity Group

		Frequency	%	% valid	% cumulative
Valide	Group A_HIGH	13	21,7	21,7	21,7
	Group B_LOW	47	78,3	78,3	100,0
	Total	60	100,0	100,0	

Table 35 - High/Low religiosity Group

Once we have calculated those scores, we pay attention to the willingness to fund with ethical fund as a function of the religiosity group. We observe that respondents with high religiosity are strongly willing to invest in ethical funding. We observe that respondents with low

religiosity are also consider funding with ethical loans. This raises the question of the impact of religiosity on the will to fund with ethical loans.

Considering funding SME with an ethical loan * High/Low religiosity

Size		Religiosity		Total
		HIGH Group A	LOW Group B	
Considering ethical loans	YES	11	39	50
	NO	2	8	10
Total		13	47	60

Table 36 - Considering ethical loans vs High/Low religiosity Group

We use the same rationale for IF loans and religiosity. We obtain this following table:

Considering funding SME with an IF loan * High/Low religiosity

		Religiosity Group		Total
		HIGH Group A	LOW Group B	
Considering IF loans	YES	10	12	22
	NO	3	35	38
Total		13	47	60

Table 37 - Considering IF loans VS High/Low religiosity Group

We observe that the propensity is similar between ethical loans (table 10) and IF loans (table 11) for the group high in religiosity (11 and 10 YES for 2 and 3 NO) but inverted for the group low in religiosity (39 and 12 YES for 8 and 35 NO). Depending of the loans, low religiosity group B has different will.

10. Research hypothesis: Religiosity influences the decision-making process

Once we have presented these descriptive statistics, we tackle the main research hypothesis (RH1) with the inferential non-parametric test of Chi-squared¹⁵³ to examine whether religiosity (the nominal qualitative independent variable) may be related to the will to use IF loans (the nominal qualitative dependent variable¹⁵⁴):

Chi-squared tests

	Value	Degrees of freedom	Significance (bilateral)	Exact Sig. (bilateral)	Exact Sig. (unilateral)
Chi-2 - Pearson	11.581 ^a	60-1= 59	.001		
Continuity correction(b)	9.474	1	.002		
Likelihood ratio	11.412	1	.001		
Test exact - Fisher				.002	.001
Linear association	11.388	1	.001		
N valid	60				

Table 38 - Comparative/inferential analysis. Chi-Squared test

- Sample size in each group is A= 13; B= 47
- Chi-squared value¹⁵⁵= 11.581
- Alpha error =0.001
- Test result= 11.581
- Degree of freedom=59 (N-1)
- Signification level =0.001
- P-value is the alpha error (risk of committing a mistake by claiming that a difference in proportion between the two groups (A and B) exists when it does not.
- Significance level is here < 0.05
- Which means **I reject H0** and I conclude that there is a **significant difference between group A and B when they decide to fund with IF loans (H1 is true)**.
- Difference between the two groups is significant (chi-squared =11.581, df = 1, N=60, p<0.05). We can conclude that **religiosity influences the decision-making process**. IV and DV are related.

¹⁵³ This test will not give the strength of the link. Cramer V Test allows the effect size to be measured (0<V<1).

¹⁵⁴ The will to invest in IF is an ordinal variable that I transformed into a nominal variable in order to simplify the calculation and the interpretation.

¹⁵⁵ Test are conducted with SPSS 26.0.

As for the Internal validity and reliability, we can say that:

- Test bias: Respondents were not repeatedly questioned.
- Questionnaire bias: the survey was initially validated by researchers, students and a sample of SME actors to make sure that the questions were well formulated and understandable.
- Sample bias: 60+ respondents fully answered our online questionnaire which gives more representability. This research has not been replicated by another researcher.

Conclusion. Islamic finance potential growth in Belgium for highly religious SME managers

11. Islamic finance interest for Muslim managers only and highly religious managers

Within the management science discipline, this part studied the impact of religiosity on manager's will to fund with IF loans. It intends to confirm whether SME managers consider alternative funding solutions like IF loans and if that consideration is impacted or not by their level of religiosity. The importance of such a study is based on SME having an important economic role in Belgium (and many other countries). Preliminary observations showed that managers have a fundamental need for additional funding solutions but IF loans are not necessarily an option for them. Only people with high levels of religiosity consider such options. Then, it also appeared that Muslim managers have stronger levels of religiosity than non-Muslims have.

The prediction was that SME managers with a high religiosity are more willing to fund their company with IF products. The findings show that indeed this variable has a positive impact on IF use. Although the low number of informants does not allow to proceed with generalisation, we can assume that IF has a potential future in Belgium as long as managers with high religiosity are targeted. **The thesis states that within individuals with high religiosity, IF has a growth perspective in Belgium. This contribution is supported by the empirical findings showed in the previous section¹⁵⁶.** When only considering Muslim population, we observe within that population that is not a matter of religiosity but religion to use or not IF loans. 89% of Muslims are highly considering IF loans (whether they are religious or not). Again, those predictions are to be relativised and more considered as hypothesis than general conclusion.

The conclusion states that IF loans can be considered for population with high religiosity (whatever their religion) and for Muslim SMEs managers, whether their religiosity is high or not.

¹⁵⁶ This assumption should be nuanced and longitudinally studied as various studies (Dobbelaere & Voyé, 2012).

12. Theoretical contributions: Religiosity, an impasse to Islamic Finance growth in Belgium although a significant interest

To operationalise the concepts, the sample has been split into two groups based on whether they are high or low in religiosity. The findings of this study show that there is indeed a difference in willingness to fund with IF loan when religiosity varies.

Beyond an intuition that religiosity would have an effect on the willing to invest, we wanted to give an intelligible conclusion in a production of scientific knowledge. Results showed, on a high-level statistical analysis that: The high religiosity group want to invest more into IF products (positive impact). On the other hand, it makes no difference between high and low religiosity group when considering investing in ethical loans. It shows that when religiosity is low, whether managers will fund themselves with the products depends on the type of loan. Further studies should show whether the nature of a loan (Islamic or ethical) has an influence on funding amongst individuals who are low in religiosity. When religiosity is low, is there a third variable that explains differences in funding will between ethical loans and IF loans? Further research could investigate this concern.

Literature about IF funding solution is not a topic that is studied in-depth in Belgium and my empirical results show that 37% of the sample is considering the option to fund with IF loans, with no regards for religion). Although this is not a big number, it still represents almost 40% of the sample which is a relevant share. However, religiosity also appears to be very low amongst SME managers except for Muslim managers who seem to have a high level of religiosity. The same group is also more eager to fund with IF loans.

Another element of interest of the results is that whereas Ramadan fasting month or halal habits are widely practiced in Muslim communities in Belgium and France (Bergeaud Blackler, 2017). Islamic Finance services are not as widely sought or practiced by those communities. One could argue that Islamic finance is not a pillar of religion such as prayer, fasting, pilgrimage, etc. We would also mention a global lack of awareness within the Muslim communities about what is at stake with Islamic Finance. The former did not succeed to position itself as a fundamental pillar of the religion such as the halal-aspect did. Another potential explanation is the low-level of complexity of the operations and the immediate need that occur with halal food whereas

Islamic finance is a less immediate need (buying a house on a long-term run) and require much more financial expertise.

13. Practical/managerial implications. An additional study on a Muslim sample

a. The religion control variable: a significant Muslim sample

From the theoretical findings, we see that a majority of managers (63% - 38/60) does not want to fund with IF loans, regardless of their religiosity. **Which gives 37% (22/60) of managers willing to fund with IF loans.** This remains an important share.

Considering funding with IF loan * Your religion?

		Agnostic	Sunni Muslim	Chiite Muslim	Atheist	Catholic	Protestant	Other	Total
Considering IF loans	YES	2	9	0	7	4	0	0	22
	NO	6	0	1	11	18	1	1	38
Total		8	9	1	18	22	1	1	60

Table 39 - Considering funding SME with IF loans VS Religion

The majority of the group willing to fund with IF loans are Muslim (9/22). This leads us to state that: **(1) IF loans are relatively sought by SME managers (37%) and (2) those who are the most interested in such products are mostly Muslim, who also show the highest levels of religiosity (9/13 of the group A are Muslims).** This is illustrated in the table below:

Your religion * Religiosity

		Agnostic	Sunni Muslim	Chiite Muslim	Atheist	Catholic	Protestant	Other	Total
Religiosity	High Group A	0	8	1	1	2	0	1	13
	Low Group B	8	1	0	17	20	1	0	47
Total		8	9	1	18	22	1	1	60

Table 40 - Your religion VS religiosity

A managerial decision could be taken based on the 37% of the population and proposed IF to a large panel of SMEs managers. However, numbers indicate that a large proportion of managers

interested in those solutions are Muslims. Without entering into whether the degree of religiosity of SME managers is related to the nature of their religion, **we decided to lead an additional study on a more specific sample. We want to observe if the conclusions about religiosity impact on will to use IF loans are the same.** Indeed a 37% of the population is already interested in the IF solution. What would be that share for a specific Muslim sample? From 20 November 2019 to 30 November 2019, we conducted an online and paper survey (see methodology in section 7) from exclusively 55 Muslim SME managers. Results are shown below:

	N	Minimum	Maximum	Mean	Standard deviation
Religiosity	55	20	50	39,35	9,091
N valid (list)	55				

Table 41 - Group religiosity for Muslim manager's sample

- Sample religiosity mean is 39.35.
We observe that religiosity within this sample is much higher than the global population, religiosity (21.58)
- Standard deviation of the sample is 9.09
- High religiosity group (A) if: $X_i > \mu_{\text{sample}} + SD_{\text{sample}}$
- $X_i > 48.44$ which indicates that a respondent with a religiosity score above that level will be considered as being high in religiosity. We have then here 21.8% (12 respondents) with a high level of religiosity (Group A) and 78.2% (43 respondents) with a low level of religiosity (Group B). Those numbers are again very similar to the entire population numbers (21.7% / 78.3%):

		High_Religiosity			
		Frequency	%	% valid	% cumulative
Valid	HIGH Religiosity_Group A	12	21,8	21,8	21,8
	LOW Religiosity_Group B	43	78,2	78,2	100,0
	Total	55	100,0	100,0	

Table 42 - High/Low religiosity Group for Muslim managers

We test now if religiosity (nominal variable) of SME Muslim managers may be related to the decision-making process to consider IF loan solutions (nominal variable).

Muslim managers: Considering funding SME with an IF loan * High/Low religiosity

	Considering_IF_Loans solutions		Total
	No	Yes	
High Religiosity_Group A	0	12	12
Low Religiosity_Group B	6	37	43
Total	6	49	55

Table 43 - Muslim managers. Considering IF loans VS High/Low religiosity Group

We observe that a majority of the Muslim managers is considering IF loans solutions (49/55). Within that population, 12 Highly religious and 37 low religious are considering those options. Table 20 below gives an indication of the relationship between the DV (decision to fund) and the IV (religiosity), within the Muslim manager's sample:

Chi-squared tests

	Value	Degrees of freedom	Significance (bilateral)	Exact Sig. (bilateral)	Exact Sig. (unilateral)
Chi-2 - Pearson	1.879 ^a	1	.170		
Continuity correction(b)	.718	1	.397		
Likelihood ratio	3.153	1	.076		
Test exact - Fisher				.321	.210
Linear association	1.845	1	.174		
N valid	55				

Table 44 - comparative/inferential analysis. Chi-Squared test

- Sample size in each group is A= 12; B= 43
- Chi-squared value= 1.879
- Alpha error =0.001
- Test result= 1.879
- Degree of freedom=1 (N-1)
- Signification level =0.001

- P-value is the alpha error (risk of committing a mistake by claiming that a difference in proportion between the two groups (A and B) exists when it does not.
- Significance level (asymptotic in the table) is here > 0.05
- Which means **we can NOT reject H₀** and I conclude that there is a **NO significant difference between group A and B when they decide to fund with IF loans.**
- Difference between the two groups is NOT significant and may be explained by sampling (chi-squared = 1.879, df = 1, N=55, $p > 0.05$). IV and DV are non-related.

b. *The legal status variable*

Another variable of my study refers to the legal status of the SME.

Considering IF funding * SME legal status

		SPRL	PP	SA	SCS	SCRL	ASBL	Autre	Total
considering IF loans	YES	10	1	8	1	2	0	0	22
	NO	12	1	22	0	0	2	1	38
Total		22	2	30	1	2	2	1	60

Table 45 - SME legal status

We see that there is a significant propensity of small SMEs (SPRL – 10 and PP -1) considering funding with IF loans (45% willing, 11/24 against 55% not willing, 13/24). This indicates that IF loans provider should focus on group of lone professionals (PP) or SPRL companies.

We see two paths for further managerial development: the focus for IF loans providers should target either only on Muslim SME managers or more generic ethical funding loans, without a religious connotation, should be offered by financial institutions.

The next and final part of the thesis compares the financial performance of conventional financial institutions and the feasibility of them offering IF instruments with Islamic banks.

14. Limitations. External validity in question

The research is limited by several factors:

- **Timing:** This study has been conducted over a limited period of time (which increases internal validity) but does not make it longitudinal. We are studying a punctual decision and not a process of growth/development.
- **Who:** Sample is relatively limited by the number of respondents who have fully answered the survey (out of the 113 respondents, 60 managers fully completed the survey); Same remarks can be addressed to the second sample of managers which is also relatively small. Further research could focus on a larger group, still on a Belgium-level.
- **Where:** Sample is composed only of Brussels and Wallonian-based companies. Flanders is not covered. Furthermore, the conclusions are drawn from a Belgian population whereas data could be different if the studied population in a Muslim country. There is a cultural aspect which is not tackled in this study.

We also may run the risk that respondent may have different definitions of IF. This concern is partly covered by the definition given in the questionnaire.

PART 4. FINANCIAL PERFORMANCES **COMPARISON BETWEEN CONVENTIONAL** **AND ISLAMIC BANKS. A FINANCIAL** **APPROACH FOR SHAREHOLDERS**

Part 4 Abstract

Within the management science discipline, this fourth and final part of the thesis is a financial comparison between full-fledged Belgian conventional banks and Islamic banks.

After a discussion of the key concepts of Islamic banks and financial performance, CAMEL methodology and Sharpe ratios risk indicators are used to take into consideration the volatility factor. To complete the study on Islamic banks, Jensen's Alpha have been used to determine the excess return of the Islamic financial assets compared to expected return of the market.

The results help to determine if there is a financial interest for Belgian banks to offer IF solutions.

Keywords: Islamic banking, financial performance, CAMEL methodology, Sharpe ratio

Introduction. The couple risk/return comparisons

Islamic economy is a system where IF is a compartment of it (Khan, 2013). IF is the visible part of this Islamic Economy (Siagh, 2003). Where most research focus on the couple return/risk within conventional banks, we have decided to study Islamic banks and its financial comparison with conventional banks. In this environment Islamic banks (noted IB from this point on) have developed a panel of products where profits and risks depend on the nature of the contract established between the counterparties. This nature can be summarized as follows:

- PLS principle: where profit and loss are defined, *à priori*. From these principal products such as *Mudaraba* and *Musharaka*¹⁵⁷ are offered.
- Conventional commercial products: where the risk is linked to the loan taker capabilities of payment. From this risk, we have products such as *Mudaraba*, *Istisna*, *Ijara*, and *Salam*¹⁵⁸, etc.
- Charity products as socio-economic welfare tool such as *Zakat*, *Waqf* and *Qard Hassan*¹⁵⁹.

In the previous parts of the thesis, we studied service providers' understanding of IF alternative solution, consumers and SMEs need for IF as well as their ethical profile and religiosity impact on their decision. By contrast, this part focuses on the relevancy of the financial performance for IB and CB for shareholders. The objective of this part is to compare the financial performances for Belgian conventional banks (noted CB) and Islamic banks (Allouche & Laroche, 2005). The idea is to analyse if IB could offer an equivalent, better or worse financial performance as CB. For that purpose, my research question identifies and analyses where lays IB in the couple risk/return zone.

The motivation to conduct this study lies in the growing interest for the IF industry and the curiosity it raises within academics, economists and the media. Beyond the social inequalities' considerations (Sen, 1988), we intend to compare the financial performances between CB (conventional banks) and IB (Islamic banks).

¹⁵⁷ For definition of these products, see Part 2 and 3.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

This question is a part of the more global problematic of a thesis that is aiming at looking if it is relevant to have an IF proposal in Belgium. To tackle this concern, we focus this time on the value it could bring to shareholders (whereas previous parts discuss value for stakeholders such as consumers, SME's and professional advisors).

In chapter I, having widely discussed IF principles and contracts in the previous articles¹⁶⁰, we only describe here how IB and CB work. We also present the financial performance indicator (CAMEL ranking methodology) and the risk indicator we use in the research design: the Sharpe ratio.

In chapter II, we explain how my research question has been elaborated and the proposal we make: Shareholders have low financial interest to propose IF services within Belgian banks. Taking volatility into account, IF is not more financially interesting than CB. By nature, IF is expected to take less risk and thus it should profit less profit magnitude. Based on these theoretical pillars, we present the research design and a ranking methodology called CAMEL¹⁶¹ to analyse the financial performance of those banks. This method is a rating system that helps to rate financial institutions (here banks) with 5 ratios¹⁶². Further studies are then undertaken to incorporate the risk, via Sharpe ratios, and a market index benchmark, via Jensen's Alpha.

The studied sample cover a triangle of banks which is composed of: Belgian conventional banks, Islamic banks in the UK and conventional banks in the UK. These 3 categories of bank will help to reflect if a fourth category is relevant: Islamic banks in Belgium.

Chapter III presents the finding of the different ratios and indicators. We do not intend to demonstrate the potential expensiveness of IF products compared to conventional products. A focus on the financial performances of CB and IB is made. This research covers a timeframe of 5 years (between 2012-2017).

We finally conclude with a discussion of the results, their limitations and potential paths for investigation. The findings help to demonstrate the research proposal.

¹⁶⁰ Ibid.

¹⁶¹ "[Using CAMELS Ratings to Monitor Bank Conditions](#)", *FRBSF.org*. Page accessed on May 19, 2018.

¹⁶² Later Version of CAMEL uses 6 ratios (CAMELS).

CHAPTER I. LITERATURE REVIEW

This chapter aims to give a clear definition of the key concepts used in this part. Islamic banks and its challenges are here discussed. Then financial and risk indicators mobilised in the empirical work are presented.

1. Islamic banks. From old traditions to a contemporary industry

a. Origins

At the dawn of the Islamic revelation (7th century), financial operations such as deposits and loans were already operational and existing within the *Quraysh** tribes (As-Sarjani , 2014). In the Muslim empire we could find bankers (named *sarafeen**) who were primitive forms of banking clerks during the Abbasid period (750-1258). The caliphates developed peace and security within the empire and a legal system to sustain economic growth. In that context, new financial operations were created (*Murabaha*, *Musharaka*, *Salam*¹⁶³, etc.) and other commercial papers such as promissory notes, bills of exchange and written obligations (*hawala*), etc.

As from the 18th century, with the slow fall of the Muslim empire, the influence of those bankers (but not yet institutionalised banks) started to decrease and Western practices were adopted in the banking system of the Muslim world.

In the period (1918-1963) where CB activities were considered either as *halal* or not *halal* but necessary¹⁶⁴, the Muslim revival movement¹⁶⁵ wanted to create a system based on Islamic principles. As from 1963, they finally decided to have a fully *halal* proposal with the launch of very first modern IB in Egypt in 1963, called '*Mit Ghamr*'.

After a decade of lull due to the bankruptcy of the bank, new initiatives began to rise with the Dubai Islamic Bank (DIB, 1975), the Islamic Bank of Development (IBD, 1975), the Kuwait Finance House (KFH, 1977) and the Qatar Islamic Bank (QIB, 1982).

¹⁶³ See next section for more details.

¹⁶⁴ Meaning tolerated.

¹⁶⁵ Al-Afghani, Muhammad Abduh...

Today we count more than 300 Islamic Finance Institutions (IFI) in Muslim and non-Muslim countries. Banks are either full-fledged Islamic or have only an Islamic window offering IF products (HSBC, City group, etc.).

b. Contemporary Islamic Banks in the industry

Whereas Sudan and Iran have fully integrated their banking system into an Islamic banking paradigm we find hundreds of full fledged or Islamic windows across the globe.

- The CIBAFI association (2001) is composed of 114 council members from each of the Muslim countries. It represents the IF industry and promotes co-operation between its members.

CIBAFI represents the Islamic financial services industry globally, defending and promoting its role, consolidating cooperation among its members and with other institutions with similar interests and objectives

- The Faisal Islamic Bank of Egypt (1977) and in Sudan (1976) are historical retail banks created with the support of the Saudi prince.
- The Islamic Financial Services Board (IFSB) provides standards for industry stability.
- AAOIFI¹⁶⁶ (1990) provides audit and accounting tools for the IB and financial institutions.
- The Tabung Haji (1962) is considered the first 'Islamic finance proposal' in Asia with interest-free bank accounts.
- In general, in Asia we find Islamic banks in the Maldives, Malaysia (16), Philippines (1), Singapore (1), Azerbaijan (2), etc.
- In Africa, the IB industry is also found in Algeria (2), Kenya (2), Tunisia (1), Mauretania (1), Gambia (1), etc.
- In the Middle-East, as mentioned earlier, the Mit Ghamr¹⁶⁷ was the first IB. Also, we can find IF in Bahrain (24), Jordan (3), Lebanon (4), Qatar (3), KSA (4), etc.

¹⁶⁶ Audit and Accounting Organisation for Islamic Financial Institutions. See www.aaofii.com

¹⁶⁷ In 1967, it got merged with conventional national bank.

- We also find IF institutions in North America but their presence is uncommon¹⁶⁸
- In Europe, the first initiatives were launched in the 1970s in Luxembourg (Islamic Banking System International Holding). We find other initiatives in Switzerland (i.e., the Dar Al-Mal Al-Islamic Trust established in 1981), and the Islamic Bank of Britain (IBB, full-fledged bank called Al Rayan today) was set up in 2004. We observe a huge geographical growth and in terms of assets under management (AUM).

c. *IB objectives and structure*

In 1979 the International Association of Islamic Banks (IAIB), stated that the characteristics and objectives of an IB are:

- Gather deposits ;
- Work under Sharia principles;
- Promote a solidary society ;
- Enhance wealth sharing (Alharbi, 2015, pp. 12-25).

Contrary to CB, IB does not use Central banks as a tool for credit operations¹⁶⁹. IB needs first to use their own deposits¹⁷⁰ received from their customers (Causse-Broquet, 2012) . A means to remunerate their depositors lays on the PLS¹⁷¹. This is a Profit and Loss Sharing principle that defines upfront the proportionality of shared profits and losses resulted from the activities of the company.

Aside to the conventional governance committee, an IB will have a Sharia Board Committee (SBC¹⁷²) which will give its rulings¹⁷³ regarding the contract and financial operations. These SBCs are led by Sharia scholars who give their opinions in the domain of *Fiqh Mu'amalat*¹⁷⁴. We are conscious that the SBCs are subject to criticism linked to their supposed independency and the 'fatwa shopping' concern. This will not be tackled in the thesis.

¹⁶⁸ Lariba Whittier Bank, Amana Funds...

¹⁶⁹ Depending on the country legal framework.

¹⁷⁰ Which creates a huge liquidity concern. This is not the object of this part.

¹⁷¹ This concept is widely discussed in the part 2.

¹⁷² Double governance principle in an Islamic finance. Beside the executive board, we have a Sharia and ethics board that gives authorisation to issue Islamic finance assets.

¹⁷³ Fatawa (sg. Fatwa).

¹⁷⁴ Jurisprudence of human actions.

From these starting observations we observe, given its structure and principles, the banking relationship with its counterpart is fundamentally different between IB and CB. Intermediation in CB involves a lender/borrower relationship whereas an IB involves a partnership where profit and loss will be divided as a function of the risk engaged (El-Gamal, 2009). For such purposes, IB have developed Unrestricted Investment Accounts (URIA) and Restricted Investment accounts (RIA). In URIA, IB have the right to invest in any place and in any business (sharia-compliant) and then to divide the profit with the account holder. In an RIA scheme, IB has limitations that are agreed upon with the bank's account holder.

Here below is a comparison of the balance sheets structure of IB and CB:

Conventional Banks			Islamic Banks	
Assets	Liabilities		Assets	Liabilities
Fixed assets	Equity		Fixed assets	Equity
Investments	Deposits		Stock (Murabaha)	Provision for investment risk
Account receivables			Investment notes	Provision for revenue
Financial notes	Financial Debts		Investments in capital risk (Musharaka)	PLS deposits (UIA and RUIA)
Cash			Investments Mudaraba	Deposits (Wadiah)
Other assets			Investment Leasing Ijara	Financial Debts
			Goods to receive Salam	
			Free credit Qard hassan	
			Cash	
			Other assets	

Table 46 - IB vs CB balance sheet structure

We clearly observe here the two kinds of deposits mentioned earlier: the PLS accounts (RUIA and UIA) and the low return standard deposit account (*Wadiah*).

d. What risks are facing Islamic banks

IB face high risks in terms of credit risk due to the way it operates. Those risks are due to the PLS principle, the impossibility to extend the maturity of loans, the non-availability of hedging interest-based securities¹⁷⁵, etc. Most of the operations are short term which also diminish the risk diversification of the portfolio (Metcalf & Titard, 1977, pp. 553-555).

¹⁷⁵ However, the International Islamic Financial Standard (IIFS) has recently allowed hedging securities on interest rate or currency.

On the other hand, interest-rate risk is not a threat to IB as their operations are not based on interest-rates.¹⁷⁶

IB face market risk because of the underlying asset of the contract they initiate (Murabaha, Ijara deals, etc.). If the underlying asset value is cheaper at maturity than its Spot price¹⁷⁷, the bank will have suffered a loss. Price variation has an immediate effect on their balance.

On the operational level, there is also a risk due to the non-standardisation of the products, the management complexity and the lack of qualified human resources, etc.

Among all those risks, liquidity risk (Jaara & Shamieh, 2017, pp. 16-26) is the greatest one that an IB can have. When customers all want to withdraw their money at the same time, the liquidity of the bank could be highly at risk. In theory the bank cannot resort to refunding via inter banking and the monetary market.

2. Financial performances. Camel ranking and Sharpe ratio

a. State of the Art of existing financial measures

Financial performance is a measure of how well a firm is doing. In other words, how its assets are used and how they generate profit (Daillak, Duran, Longley, & Wagner, 1995). It is computed according to a defined period of time and it is mainly used to compare several institutions¹⁷⁸. As Kaufman said: “*measuring throughout is the first step toward improving*” (Kaufman J. , 2010). Most of the time this measurement is taken as an aggregate of items (revenue, cash flow, etc.).

These aggregates are then used to make decisions by different stakeholders such as investors, management, public authorities, employees, banks, etc. Annual reports include balance sheets (assets and liabilities, short term and long term, nature of the assets/liabilities, etc.) and income statements (revenues and charges) which give the profit margin. From these reports, the cash flow statement reconciles the cash flow with the net income.

¹⁷⁶ Although margins are fixed on interest rate official standard (LIBOR e.g.)

¹⁷⁷ Current price of an asset at which it can be immediately sold/bought and delivered.

¹⁷⁸ <https://www.investopedia.com/terms/f/financialperformance.asp>

Studying these financial data gives an indication of the firm's policies and operations in terms of efficiency (McWilliams & Siegel, 1997, pp. 265–273).

Companies can perform an initial financial review with:

- A working capital analysis (current assets/current liabilities) indicates if the company has enough short-term assets to cover short term liability (short term debt). A ratio between 1.2 and 2 is considered as a good working capital (Dess & Robinson, 1984). A ratio with less than 1 could have liquidity concerns¹⁷⁹.
- A cash flow analysis: Balance of the cash in and out.
- A cost analysis: cost under continuous check.

From there, financial measures (Jones, Corporate board structure and performance: variations in the incidence of shareholder lawsuits, 1986, pp. 345-359) can be assessed:

- Profitability: Capacity to generate profit from the activity;
- Operating expenses margin: Overheads are taken into account but tax and interest are not taken into account. We call this measure the EBIT margin;
- Gross profit margin: money made on a sale when all direct costs have been deducted;
- Net profit margin. Same as the gross profit margin but here all direct and indirect costs (prorate) have been taken into account.

Finally, accounting ratios are calculated to measure performance:

- Solvency: LT debt/assets and equity = financial stability.
- Liquidity: Capacity to pay short term financial obligations.
- Efficiency: How well we use our assets (e.g., stock roll out).

The extensive list of different ratios and indicators makes it difficult to draw a clear typology. Depending on what the stakeholder wants to analyse, one indicator will be more suitable than another¹⁸⁰.

¹⁷⁹ A ratio above could raise the question of the poor efficiency use of the asset.

¹⁸⁰ The object of this part is not to compare relevancy of these various indicators.

A state of art, under the form of a summary table of accounting measures and financial performance is presented below:

Categories	Variables	Contributors
Profitability	Full return	Verschoor, 1998; Graves and Waddock, 1999.
	Return on Equity (ROE)	Bowman and Haire, 1975; Waddock and Graves, 1997; Pava and Krausz, 1996; Griffin and Mahon, 1997; Balabanis, Hugh and Jonathan, 1998; Moore, 2001
	Sales performances	Waddock and Graves 1997; McGuire and al., 1988; Griffin and Mahon, 1997, Preston & O'Bannon, 1997
	Return on Investment	Preston and O'Bannon (1997)
	Profit	Verschoor (1998); Stanwick and Stanwick (1998)
	Net Margin	Verschoor (1998)
Assets	Return on assets (ROA)	McGuire and al. (1988); O'Neil and al. (1989); Waddock
		Graves (1997); Pava and Krausz (1996)
		Kohers (2002) ; Seifert et al. (2003).
Growth	Sales growth/TO	Verschoor (1998); Moore (2001); Ruf and al. (2001)

Table 47 - Financial performance measures

b. State of the Art of Islamic finance performance measurements

Today's Islamic finance literature is extensive. Academicians and professionals' experts have produced contributions that help to discuss and to empirically measure the financial performance of Islamic finance. Here below a contemporary review literature of recent Islamic finance developments, notably in risk and financial performances:

Title	Date	Authors	Topic	Conclusions and contributions
On the Sustainable Development Goals and the Role of Islamic Finance	2015	Jos Verbeek and Farida Aboulmagd	Growth factors of Islamic finance	Growth opportunities of Islamic finance via sustainable economy > supported by the supply and retail - Mitigated demand from institutions and public authorities. Dynamism of this industry needs to be enhanced by governments especially for sustainable development economy
Risk Management via Takaful from a Perspective of Maqasid of Shariah	2012	Syahida Abdullah	Takaful as a Risk management tool	Takaful can be considered as a strong asset when Sharia Maqasid principle, notably human dignity is respected
Why Economists (and Economies) Should Love Islamic Finance	2015	Willem Buiters and Ebrahim Rahbari	Bad impact of "equitisation of excessive debt" and the need for risk-based external financing assets	Debt is a poor investment instrument in an uncertain world (distortions by policy makers, asymmetry and lack of information are variables that are mitigated with Islamic finance)
Financial contracts, risk and performance of Islamic banking	2008	Anjum Siddiqui	Risk assesement of Islamic finance	Where Central banks liquidity support helps Islamic banks to diminish their liquidity and credit risks, especially in a long-term perspective
Developing Islamic finance in the framework of maqasid al-Shari'ah	2013	Mohamed Ladlin	Ethics principles of Islamic Finance	Author shows that, by respecting 3 specific Maqasid/principles of Sharia, wealth circulation, fair and transparent financial practices and justice are contributing to economic efficiency.
Risk and return characteristics of Islamic equity funds	2011	Raphie Hayat and Roman Kraeussl	Difference between Islamic a conventional equity funds	Study the risk and return of a sample of 145 Islamic equities over 2000-2009. Results show that Islamic equities are not used at their top potential and that managers can approve their performance
Islamic Mutual Funds' Financial Performance and International Investment Style: Evidence from 20 Countries	2011	G.F. Hoepner, Hussain Rammal and Michael Rezac	Islamic institutions performances	Islamic institutions realise their better performance (than conventional) when they are in a Muslim context

Islamic banking: Interest-free or interest-based?	2009	Beng Chong and Ming-Hua Liu	Discussion on interest-free principle withing Islamic banking	In Malaysia, respecting interest-free banking is very rare. Most of the accounts are interest-based and do not respect PLS principles. Low regulation.
Systemic Risk of Conventional and Islamic Banks: Comparison with Graphical Network Models	2016	Shatha Hashim and Paolo Giudici	Comparison between risk in conventional and Islamic banks	Banking systems react differently during financial crisis
Sukuk vs. conventional bonds: A stock market perspective	2013	Christophe Godlewski, Rima Turk and Laurent Weill	Sukuk announcement discussion	Conventional bond issues announcements have no impact on stock market. But negative impact on stock market when sukuk announcement. Why > Excess Sukuk demand > less attraction for lower quality companies
La finance islamique	2012	Kaouther Jouaber Snoussi	Presentations and questions over Islamic finance	Discussion on risk and asset management between the theoretical and practical applications.
Principles of Islamic Finance and Principles of Corporate Social Responsibility: What Convergence?	2018	Simona Franzoni and Asma Ait Allali	CSR economy and Islamic finance	Sustainable economy and Islamic finance have convergent goals and means
Impact of Islamic Finance on Economic Growth: An Empirical Analysis of Muslim Countries	2020	Syeda Arooj Naz and Saqib Gulzar	GDP and Islamic finance	Correlation between Islamic finance and GDP growth, in the long run
The Compatibility of Cryptocurrencies and Islamic Finance	2018	Fait Muedini	Cryptocurrencies and Islamic finance	Compatibility between Bitcoin, cryptocurrencies and Islamic finance
Islamic Finance: An Entrepreneurial Management Perspective	2016	Vanessa Ratten, Hussain Rammal and Veland Ramadini	Entrepreneurship and Islamic finance	Findings show that Islamic finance promote entrepreneurial work

Table 48 - Islamic finance Literature Review

c. *CAMEL ranking methodology: aggregated financial indicators*

CAMEL ranking methodology was created in 1979 by the US FED to help stakeholders to have a clear view of the health of the banking industry, based on their balance sheets. It is a useful tool for studying IB and CB performance. **CAMEL ranking gives a ranking from 1 to have 5 of a given company. The closest to 1 is this ranking, the better the financial situation of the company is.** It allows then to compare the CAMEL ranking between companies. This ranking is computed from 5 aggregated indicators. **A numerical example is given in the empirical study to show how the indicators have been retrieved.**

The main reason to use this ratio in this part is to give a financial ranking between conventional and non-conventional (Islamic finance) banks in order to assess their relevancy to be implemented in Belgium.

Those 5 indicators are (Dzeawuni & Tanko, 2008):

1. **Capital adequacy:** measure of a bank's available capital expressed as a function of the risk-weighted credit exposure;
2. **Asset quality:** as loans have the highest default risk, inefficient loans have a low ratio of asset quality;
3. **Management quality:** measure management capability to properly react to financial stress;
4. **Earnings (profit) :** ROA;
5. **Liquidity:** (ROE) measure of the interest rate risk sensitivity (availability of the asset to be converted into cash).

A key outcome from the CAMEL analysis, beside performance, is that the results help to predict bankruptcy due to the indicators¹⁸¹. The reasons for this are multiple: Ratios reflect each significant financial indicator for a bank. It is also a useful supervisory tool that allows internal management policies to be adopted¹⁸².

¹⁸¹ The literature also finds standard tools like ROA (Return on asset); ROE (return on Equity); NIM (Net interest margin). We found all those indicators are relevant but CAMEL offers more indicators and its 30 years of use is a testament to its soundness.

¹⁸² A sixth factor has been recently added to the ratios. This one takes into account interest rate, foreign exchange and market risk. I will not use this recent add-on in this part.

The review of literature below shows CAMEL ranking methodology is used in many cases:

YEAR	Contributors	Study	Capital	Asset Quality	Management	Earnings	Liquidity
2011	Dincer, H., Gencer, G., Orhan, N., & Sahinbas, K.	A Performance Evaluation of the Turkish Banking Sector after the Global Crisis via CAMEL S Ratios	Equity to (Loan + Market + Principle Amount Subject to Operational Risk) / Equity to Total Assets/ Equity to (Deposit + Non deposit Sources)	Financial Assets to Assets/ Loans and Receivables to Assets /Permanent Assets to Assets	Interest expenses to total expenses /interest incomes to total incomes/ total incomes to total expenses	Net Profit to Total Assets /Net Profit to Equity	Liquid assets to Assets/liquid assets to short term liabilities
2013	Rozzani, N., & Rahman, R. A.	Camels and performance evaluation of banks in Malaysia: conventional versus Islamic	Earning to assets	NPL	Staff costs to assets	ROA/ROE	Net loans to (deposits and short-term financing)/ Short-term liquid assets to deposits and financing
2014	Venkatesh, D., & Suresh, C.	Comparative Performance Evaluation of Selected Commercial Banks in Kingdom of Bahrain Using CAMEL S Method.	CAR/Equity to assets/ Net capital to facilities/Capital to short-term funding/ Capital to debt	Loan loss reserve to gross loans/ Loan loss provisions to net interest revenue/ impaired loans to equity	Noncurrent loans to equity/Non-operation items to net income/Equity to asset/Operating profit to total risk weighted asset	Rate margin/ cost of assets minus interest income divided by average assets/	Receivables from other banks divided by debt to other banks/

Table 49 - CAMEL literature review (Rostami, 2015)

After the recent financial crisis, it is relevant to compute and to compare the financial results of banks to assess their performances. Those aggregated indicators help to compare the performance of IB and CB banks and liquidity constraints. The objective of the study is to

check if it would be useful for shareholders to start offering IF products, on a purely financial level¹⁸³. In this research, the 5 indicators from the CAMEL ranking methodology are calculated for the 3 chosen samples.

Evaluation criteria

With the calculation of the different ratio that composed this methodology, we can extract the following ranking:

- 1 = Excellent performance;
- 2 = Satisfactory with weaknesses that can be fixed without huge investment;
- 3 = Fair but weaknesses should be immediately fixed;
- 4 = Poor performance;
- 5 = Very bad performance / high probability of failure.

From those 5 indicators, an average is made to give a global score on how good/bad this bank/industry is doing. Ultimately, this helps to compare the different industries (conventional and Islamic).

This can be summarised as below (Majhitiya & Pattani, 2010):

Ratio's ranking					
	1 (Excellent)	2	3	4	5 (poor performance)
Capital Adequacy/Solvency	>11%	8-11%	4-8%	1-4%	<1%
Asset Quality	<1.5%	1.5-3.5%	3.5-7%	7-9.5%	>9.5%
Management Efficiency	<25%	26-30%	31-38%	39-45%	>46%
Earnings (ROA)	>1.5%	1.25-1.5%	1.01-1.25%	0.75%-1%	<0.75%
Earnings (ROE)	>22%	17-21.99%	10-16.99%	7-9.99%	<6.99%
Liquidity	<60%	60-65%	65-70%	70-80%	>80%

Table 50- CAMEL ratios ranking

¹⁸³ Reputational or image risks are here not covered.

A first evaluation showed that CAMEL ranking methodology ranking was limited due to its limited consideration to the volatility ratio.

Study is completed with Sharpe ratio indicators that takes into account risk premium (or excess risk) and the volatility.

d. Sharpe ratio. How a portfolio creates value while controlling its risk

This ratio describes how much excess return we get for extra volatility when we hold a risky asset – i.e., the return we can get by accepting to hold additional risk. In other words, we measure the return as a function of the risk. This is computed from the sigma (also called the standard deviation) of an asset. From the Sigma¹⁸⁴, we have the **Sharpe ratio** which has been created by the American Nobel prize winner William Forsyth Sharpe. It is calculated as:

$$(R_p - R_f) / \sigma = S_r$$

Where R_p means Return of the portfolio (or CAGR¹⁸⁵)

R_f means the risk-free portfolio return (or risk free-rate as OLO10)

σ means **sigma** of the portfolio (annual risk)

S_r means Sharpe ratio

Sharpe ratio is important as it gives more indication than a simple annual return rate (questioning if the high return is it due to investment skill or to higher risk taken or a boom in the market). For instance, a product with a 20% return is not necessarily financially better than a product with a 10% return as the risk has not been taken into account. The reason why the risk should also be taken into account is because it reflects a better vision of how the product is doing, given the amount of risk taken. The Sharpe ratio is thus used as a risk-adjusted return that gives us an indication of performance, given the risk. This formula also indicates that the higher the standard deviation - volatility is, the smaller the Sharpe ratio will be. This indicates that a highly volatility product¹⁸⁶ will be less financially interesting, all else being equal. A

¹⁸⁴ Sigma is calculated by taking the square root of the variance:

$$\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \mu)^2}$$

¹⁸⁵ Compound Annual Growth Rate.

¹⁸⁶ A negative ratio means risk-free rate is better than the return of the portfolio (or return of portfolio is itself negative).

numerical example of a portfolio who has 22% return; where risk-free is 2% and the sigma is 20% will give us a Sharpe ratio of $(22\%-2\%)/20\% = 1$. This indicates a good performance of the asset; given its risks. A 22% return is already a high return. A Sharpe ratio of 2 would have meant to have a return of 42% which is extremely high; all else being equal.

Alternatively, we could have used the Treynor ratio which is similar to the Sharpe ratio. A difference between the two is that the Treynor ratio uses the portfolio Beta as a denominator instead of the standard deviation. Concretely, it means that this ratio measures the relative volatility linked to a reference index and not to the portfolio volatility itself. This is precisely the reason why the Sharpe ratio is used and not Treynor as what interests us is more the quality and nature of the risk associated with the return of the portfolio. IF assumes to have a return with low/no risky assets which is an assumption that we assess in this part.

e. Jensen's Alpha. Risk-adjusted financial performance

To complete the study, we decided, in this section, to consider Jensen's alpha (Jensen, 1968) as a risk-adjusted return measurement to evaluate the asset performance (or a portfolio) against a benchmark. It is a linear regression calculation between benchmark returns (as the 'x' variable) and the asset return (as the 'y' variable). Alpha will be the interception point where the best option crosses the y-axis. Its formula is:

$$(R_p - R_f) = \alpha_p + \beta_p(R_m - R_f)$$

Where

α_p = portfolio Jensen's alpha;

β_p = portfolio beta;

R_p = portfolio expected return;

R_f = risk-free rate;

R_m = market return.

Beta¹⁸⁷ is a ratio between the covariance of the portfolio return R_p and the market return R_m , by the variance of the return of the market R_m . $Beta = (Cov(R_p, R_m))/Var(R_m)$. Beta is the slope in the linear regression.

Alpha helps to determine if the return of the asset performs better than market estimation based on the BETA. An Alpha = 0 means thus that the return of the asset is matching with the return of the market. Investor would tend to consider for investment an Alpha that is > 0 (thus positive).

- If Alpha = 0 and Beta = 1; the return of the asset equals the performance of the market.
- If Alpha = 0 and the Beta > 1 ; the return of asset overperform the market.

Alpha allows then to observe how the asset perform compared to the market estimation, based on BETA. Alpha can also be explained as being the portion of the excess return that is not explained by the risk.

This indicator will help to evaluate how the different banks are performing, although they have different risk. They will be computed with the benchmark of their own industry (UK FTSE and BEL 20) and with their own risk-free rate bond, per year.

Next chapter II covers the research design. The methodology and the samples are presented.

¹⁸⁷ Beta calculates the correlation between the security and the market. When the Beta value is above 1, it means that its price will theoretically move more than the market.

CHAPTER II. RESEARCH QUESTION AND DESIGN.

FINANCIAL PERFORMANCES COMPARISON BETWEEN CB AND IB

This chapter steps into the empirical framework of the research. the research question, the data sample and the methodology are presented.

3. Research question and hypothesis: CB financial performances are different from IB financial performance

In principle, CB generates profit on debt whereas IB is expected to generate their profit on the PLS ratio. This former system seems, in theory, more stable (Hassoune, 2003 , pp. 277-297) as it is not subject to interest rate fluctuations. This part will precisely examine this assumption. Whereas other authors underline the liquidity issues of IB due to its reluctance to fund via interest rate mechanism (Ben Jeddia & Hamza, 2010), the study has here another ambition. Liquidity risk¹⁸⁸ is such that fundamental financial performance is at stake. Such a potential liquidity shortage exposure leads to an increased level of liabilities management. However, my Research question examines if the financial performance of IB equal that of CB. My research uses CAMEL ranking and Sharpe ratio indicators to assess if it is financially relevant for shareholders to have an IF offer in Belgium. Volatility measures the range of variation of the price of an asset. Traditionally, the risk goes up when the volatility goes up (in other words when the variance goes up (Febrian & Herwany, 2013). This classical alternative is cornerstone of conventional finance where risk/return evolve the same direction:

		Level of Risk	
		High	Low
Return	High	A : Conventional Banking - Arbitrage	B : Exceptional positive zone
	Low	C: High Risk zone > Bankruptcy	D : Conventional Banking - Arbitrage

¹⁸⁸ Islamic Financial Services Board defines it as: "Potential loss to IIFS arising from their inability either to meet their obligation or to fund increases in assets as they fall due without incurring unacceptable costs or losses" (IFSB, 2012:5).

A and D zones are conventional arbitrage areas where we will find assets and banks. We will see if, taking into account the volatility factor, IF has similar zones (A and D) as in conventional banking or whether it lays specifically more in one zone (C) or in zone (D). Findings show if equity-based solutions in Islamic banking are equally performing as debt-based solutions in CB.

The literature provides various positions comparing the financial performance of IB and CB. Authors such as Rashwan assume that IB performed better before the 2008 crisis (Rashwan, 2010) whereas Ariff and Hassan state that there is no difference in financial performance before or after the crisis of 2008 (zone A and D) (Ariff & Shamser, 2008). On the other hand, authors such as Alam used the Sharpe ratio to study equity in both CB and IB industries (Alam, 2013, pp. 27-36). He observed IB equity performed better than CB equity during credit crunch periods whereas CB equity performed better than IB equity in expansion periods. The research hypothesis is that CB financial performance is different from IB financial performance. This difference being a result from a higher volatility in IB. **From this hypothesis, we assume that higher volatility leads to a higher return (such as in conventional banking - zone A and D). However, results will show if we stand in the expected zone A or D or we stand in exceptional zone C that leads to bankruptcy or in zone B that shows an exceptional positive performance.**

4. Research Design. A quantitative enterprise-level comparison

In this section, we present my quantitative enterprise-level based methodology. We have decided to lead a document analysis on the financial statements and annual reports of a sample of banks in Belgium and in England.

We tend here to explain the similarity in financial performance between three samples of banks during a 5-year non-crisis time frame:

1. Conventional Belgian banks
2. Conventional English banks
3. Islamic English banks

Actually, all these 3 samples analysis, on a shareholder perspective, lead us to have a reflexion on a potential new type of bank in Belgium: *An Islamic Belgian bank*.

An additional period of time between 2007 and 2009 is also considered in order to evaluate the impact of a global financial crisis on the volatility and the financial performances of IB and CB during a financial crisis.

Reports and statements have been gathered from June to January 2020. They are mostly electronic versions which are found on official website.

During the data collection phase some difficulties were encountered especially with IB, to find reports for the period of interest. A couple of E-mails have been sent to ask for these reports which were finally obtained after chasing them for a couple of weeks. Concomitantly, the extraction and the analysis of the data on excel tool have started.

5. Sample: Islamic and conventional banks in Belgium

a. Banks selection criteria from 2013-2017

In order to test the research hypothesis and to remain consistent with the research scope sample, 3 panel of banks have been chosen based on the following three criteria:

- In a European (non-Muslim) context¹⁸⁹;
- Approximately similar size in assets under management (AUM);
- Having a retail activity (not only corporate nor investment banking);
- A representativity criteria: those banks have been selected in function of their shares on their market. That share is calculated in function of their total assets value in the balance sheet.

For conventional banks, we have chosen 6 Banks based in Belgium: KBC, Fortis BNP Paribas, ING, Beobank, Belfius and AXA. Alternatively, 6 other conventional banks are chosen in the UK: HSCB, Barclays, Royal bank of Scotland, Standard Chartered, Lloyds and Schroders.

For the Islamic banks, we have chosen 6 IB based in the UK (the country where we find the most IB¹⁹⁰): Al Rayan, Qatar Islamic Bank (QIB), Bank of London and the Middle East

¹⁸⁹A KSA IB doing retail has not the same reality than an IB based in the UK. This is the reason why only European-based bank have been chosen as being based in a non-Muslim environment.

¹⁹⁰ Another study could also compare performance of banks situated in Luxembourg, Germany, and France.

(BLME), Ameen Islamic Banking (United Bank UK), Gatehouse Bank and ADIB (Abu Dhabi Islamic Bank).

The period of study is between 2013 – 2017¹⁹¹ (a 5-year timeframe). An additional period from 2007 to 2009 has been added in order to identify the financial crisis has an impact on the former conclusions.

b. Conventional banks in Belgium

- **KBC bank.** Was created in 1998. It has been formed with an ABA Belgian insurance and two large Belgian banks (Kredietbank and CERA Bank).
- **BNP Paribas Fortis.** It is a limited liability bank in Belgium which has made a 1.9 billion€ NET profit in 2017. The bank covers both Corporate and Retail banking within the group of BNP Paribas Group. 13443 employees serve the 3.5 million customers in Belgium. The partnership with Ag insurances strengthens their position in the banc-assurance field.
- **ING.** With a presence in more than 40 countries, Ing group has 37.4 million of customers and employs (54000). They offer a full digital banking services for retail and wholesale customers (corporate and financial institution). They are market leaders in the Netherlands, Belgium and Luxembourg.
- **Beobank Belgium.** This bank is part of the Credit Mutuel Nord Europe which is composed of a Belgian and a French entity. It offers retail and corporate banking as well as insurance services. It has 1,6 million customers for 4438 employees for 42,19 billion consolidated assets. Belgium has 65 branches which offer credit solutions for local customers. 99,42% of its activity in Belgium is retail banking.
- **Belfius.** It is a Belgian banking and insurance group. It is fully owned by the Federal Holding and Investment Company (FHIC) – Its Balance sheet is €160 billion.

¹⁹¹ Note that markets being different (UK vs BEL), the risk-free rate will be different between conventional and Islamic banks.

- **Axa Bank Belgium.** This bank is part of the group AXA. It is specialised in banking and insurance services with 100+million customers and employs 160000 employees across 62 countries. It has 800000 clients in Belgium and 850 employees. They are specialised in retail, wealth management and SME's credit solutions.

We also decided to give a relative weight of each bank in comparison to their position on the on the Belgian market and within the sample. Assets balance sheets are used for this purpose¹⁹²:

	Total balance sheet (in million €)	% share within the sample
BNP Fortis	277646	31.29%
KBC	256322	28.88%
Belfius	167959	18.93%
ING	151817	17.11%
Axa	27316	3.08%
Beobank	6402	0.72%
Total Sample	887462	
Total Market	1236946	
Representativity of the sample within the Belgian market	71.75%	

Table 51 - Sample Distribution in the banking Belgian market

c. Conventional banks in England

- **HSBC.** Initially created in Hong-Kong by British entrepreneurs, this international bank has its HQ in London. Having more than 60 million customers. Most of its activity is in the retail business (50.3 %).
- **Barclays.** Founded in 1896 and part of the top BIG 5 banks in the UK. Active in more than 60 countries and employs more than 100.000 people. Bank is going under poor results for the last 5 years.

¹⁹²//www.febelfin.be/fr/chiffres

- **Royal Bank of Scotland.** Founded in 1727, biggest British bank, second in the European market and fifth in the world in terms of stock capitalisation. During the 2008 crisis, RBS fall into deep trouble due to its CDS management.
- **Standard Chartered.** Listed on the FTSE 100 on the London stock exchange, it has a large network of banks all over the world. It mostly generates its profit from Asia-pacific region (up to 65%). The bank, as the whole industry, went through several waves of restructuration these last decade.
- **Lloyds.** Bank born from the fusion of Lloyds TSB and Halifax-Bank of Scotland. It almost went to bankruptcy in 2008. British government had to inject money in a nationalisation process of the bank. It has more than 20% of the retail mortgage market
- **Schroders.** Founded in 1804, Schroders has £421.4 billion UAM. Its main customers are retail, private investors, authorities...Its HQ is also in London.

Representativity in the entire UK banks market in 2017¹⁹³ is:

	Market share of total assets in the United Kingdom in 2017
HSBC	24.82%
Barclays	14.37%
Lloyds	10.30%
Royal Bank of Scotland	9.36%
Standard Chartered	6.22%
Shroders	<5%

Table 52 - Sample distribution in the banking UK market.

d. Islamic banks in England

- **Al Rayan bank.** Its former name is Islamic Bank of Britain and it is the oldest Sharia compliant bank in the UK. It was created in 2004 and provides IF products and services to 85000 customers. It is a subsidiary of MAR - Masraf Al Rayan which is a Qatari bank.

¹⁹³ <https://www.statista.com/statistics>

- **Qatar Islamic Bank.** This bank is the first Islamic bank created in Qatar in 1982. It represents a major player in the Qatari IF market (42%). QIB-UK is the British subsidiary which was established in 2008. Its main focus is the Qatari consumers and British companies (corporate and SME).
- **Bank of London and the Middle East.** This financial institution is a House of London and The Middle East (HLME) bank created in 2007. It offers services as real estate, wealth management, treasury and corporate banking.
- **Ameen Islamic Banking.** It is a United Bank UK daughter company that provides Sharia-compliant products. It was formed in 2001 (merge of UK branches of NBPakistan and United Bank Limited). It provides retail, trade finance...
- **Gatehouse Bank.** This bank is part of the gatehouse group. It offers Sharia compliant banking services in the UK. They offer retail services for B2B and B2C markets. Sheikh Nizam Yaqouby is part of its Sharia scholar board.
- **ADIB.** This bank is based in the UK and is part of the group Abu Dhabi Islamic Bank which was established in 1997. It mainly provides products and service in accordance with Sharia principles to individual customers.

Those banks are selected in function of their share in the market in terms of total assets¹⁹⁴.

Market share of total assets for Islamic Banks in the United Kingdom in 2017	Total assets (in £)	Relative Weight
Qatar Islamic Bank	5477963	38.74%
Ameen Islamic Bank*	5400359	38.19%
Al Rayan Bank	1806308	12.77%
Bank of London and The Middle East	1025888	7.26%
Gatehouse Bank	280526	1.98%
ADIB	149294	1.06%
Total of the Sample	14140338	100.00%
*Numbers for 2016 ; 2017 N/A		

Table 53 – Market share distribution of total assets for Islamic Banks in the United Kingdom in 2017

¹⁹⁴ <https://www.globalbankingandfinance.com/list-of-islamic-banks-in-the-united-kingdom/>

The next chapter discusses the findings gathered from the field with the uses of the CAMEL ranking methodology and the Sharp ratios. This chapter gives us the arbitrage area where IB and CB are standing. It will thus give evidences to confirm or reject our hypothesis.

CHAPTER III. FINDINGS

This chapter shows empirical results of aggregated and financial indicators from 2013 to 2017. All individual and specific financial statements ratios are in the *appendix 16 – CAMEL, ROI, Premium and Sharpe ratios Tables*.

Section 1 discusses CAMEL rankings. Section 2 covers the Sharpe ratio analysis. To study this one, we had to compute and present the risk premium and the volatility for each bank. Section 3 presents Jensen's Alpha findings.

6. Performance results: CAMEL ranking

a. CAMEL rankings comparison between industries. Absolute values

After the calculation of each bank's CAMEL¹⁹⁵, we use Majithiya and Pattani CAMEL ranking to rate the performance of each bank, per year (Majithiya & Pattani, 2010). A ranking '1' means a top performance, a '5' ranking means a very poor financial performance. From financial reports and statements. A reminder of how the indicators have been computed is here given:

- Solvency: total equity/total asset;
- Asset quality: provision on loans/total loans;
- Management: total investment/total deposit;
- Yield of return: net result/total asset;
- Liquidity: net result/total equity.

¹⁹⁵ See appendix 15 for individual indicators.

	2013	2014	2015	2016	2017
	CB BEL CAMEL				
KBC	4*	3.4	2.8	3.2	3.2
Fortis	2.8	2.8	2.8	3	2.6
ING	2.8	2.4	2.2	2.2	2
Beobank	3.4	2.8	3	2.8	2.8
Belfius	4	3.8	3.8	3.8	3.6
AXA	3	3.2	3.2	2.8	3
Industry Average	3.33	3.07	2.97	2.97	2.87
	CB UK CAMEL				
HSBC	3.4	3.6	3.4	3.8	3.4
Barclays	1.6	1.6	1.4	1.4	1.4
RBS	4	4	4.2	4.2	3.6
Standard Chartered	3.6	3.6	3.8	3.2	3.2
Lloyds	3.4	3.6	3.6	3.6	3.6
Schroders	2.8	2.8	2.6	2.6	2.8
Industry Average	3.13	3.20	3.17	3.13	3.00
	IB UK CAMEL				
Al Rayan	4	3.75	3.25	4	4.5
QIB	2.65	2.6	2.6	2.8	2.6
BLME	2.8	3	3.2	3.4	2.6
Ameen Islamic	2.6	2.2	1.2	1.8	1.95
Gatehouse	3.75	3	4	3	4
ADIB	4	4	4	4	4
Industry Average	3.30	3.09	3.04	3.17	3.28

Table 54 - CAMEL financial performance ranking over years for IB and CB in UK and BEL

***Note that a score close to ‘1’ is performing better than a score close to ‘5’.**

Graphically, the 3-industry aggregated indicators are shown as below:

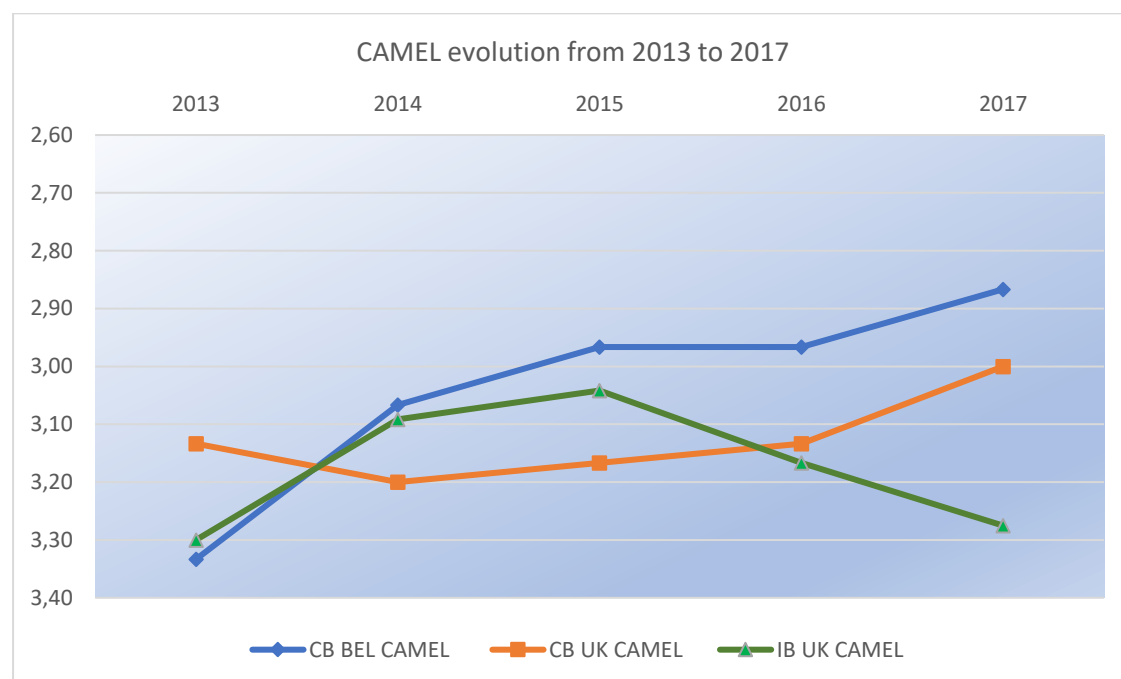


Figure 15 - CAMEL financial performance aggregated ranking over 5 years for all industries

Obviously CAMEL aggregated indicators lead us to think that, since 2015, IB banks have a decreasing growth financial performance whereas conventional bank keeps on increasing. Absolute value of the indicator indicate that IB sector evolves within a fair but average performance whereas CB grow to a above average performance.

Indicators in the UK and in Bel are relatively similar and grow in the same direction since 2014. Yet this 1st level analysis does not take into account the risk factor which may lead us to wrong conclusion. Next section tackles this issue.

b. CAMEL comparisons. Relative values in function of their market shares

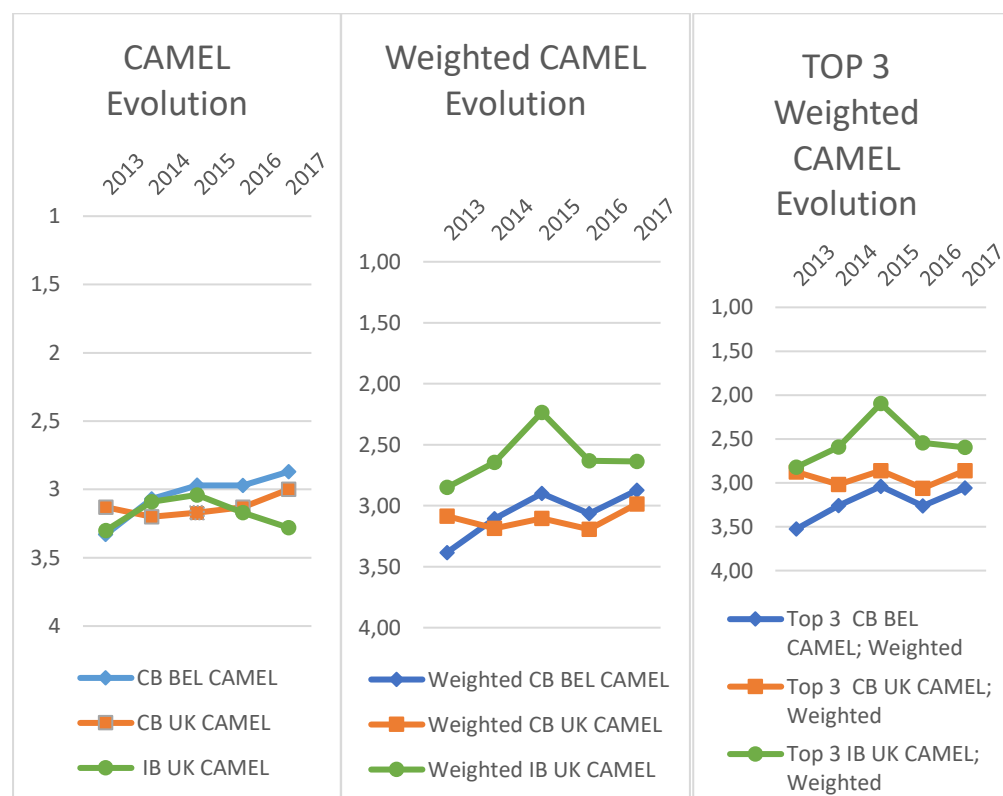
In this section, a ponderation by total assets is taken in order to mitigate the potential variation from from total asset of each banks. This allows to gather a better view on the reality of the markets (low volume assets has thus less impact than a high volume assets bank). For calculation purposes we used the 2017 weight repartition that we have applied to years 2013 to 2017. Below table shows the average CAMEL per year with 3 lines. Line A gives the average

indicator per year for an industry; Line B gives the average indicator per year for industry, in function of the weight for each bank; Line C gives the average indicator per year for the Top 3 industry (3 biggest weight).

Industry averages	2013	2014	2015	2016	2017
CB BEL CAMEL	3.33	3.07	2.97	2.97	2.87
CB UK CAMEL	3.13	3.2	3.17	3.13	3
IB UK CAMEL	3.3	3.09	3.04	3.17	3.28
Weighted CB BEL CAMEL	3.38	3.11	2.90	3.06	2.87
Weighted CB UK CAMEL	3.09	3.19	3.10	3.19	2.99
Weighted IB UK CAMEL	2.85	2.65	2.23	2.63	2.64
Top 3 CB BEL CAMEL; Weighted	3.53	3.26	3.04	3.26	3.06
Top 3 CB UK CAMEL; Weighted	2.88	3.02	2.86	3.06	2.86
Top 3 IB UK CAMEL; Weighted	2.82	2.59	2.10	2.55	2.59

Table 55 - Industry weighted average

Graphically, it shows as below



As a conclusion, when CAMEL are not weighted and not in TOP 3 organisation, we observe that:

- CB BEL are better performing over time than CB UK and IB UK;
- IB UK are underperforming compared to CB BEL;
- IB UK performance in 2016 and 2017 are in a negative trend;
- CB UK performance growth is stable over time, but lower than CB BEL;
- Absolute values between the 3 industries are relatively similar. Not much difference.

When CAMEL are weighted (in function of relative weight in their market), we observe that:

- IB UK are better performing over time than CB UK and CB BEL;
- IB UK had a better peak growth in 2015 than CB UK and CB BEL;
- CB BEL are better performing than CB UK.

When CAMEL are top 3 weighted banks in industry, we observe that:

- Again, IB UK are better performing over time than CB UK and CB BEL;
- CB UK are better performing than CB BEL.

If we stop our investigation here, we would say that IB are better performing and more interesting than CB. This would be confusing when taking a investment decision based on those sole numbers. For this reason, we need to take into account the immediate variable linked ot return : **Risk**

7. Risk analysis: Sharpe ratio

In order to calculate the Sharpe ratio, 2 elements are needed:

- The **Premium** which is the *Return of the asset* minus the *risk-free rate bond*
- The **volatility (sigma)**

a. *Premium and Return on Equity (ROE)*

Below, an asset return indicator (here the return on equity) has been calculated over 5 years for CB and IB. ROE is calculated as: NET Result/Total Equity. This ratio allows to show the capacity of the company to generate revenue from its equity without taking into account other sources of funding (such as debt). It is particularly interesting as IB funding structure is not supposed to use debt funding as a leverage:

	2013	2014	2015	2016	2017
	CB BEL ROE				
KBC	9.00%	14.00%	22.00%	18.00%	17.00%
Fortis	5.13%	8.19%	10.72%	10.50%	10.41%
Ing	6.86%	6.85%	8.35%	9.30%	9.81%
Beobank	6.72%	5.83%	5.84%	5.94%	6.36%
Belfius	6.10%	6.00%	6.30%	6.40%	7.00%
AXA	-1.53%	-4.29%	2.32%	8.37%	3.56%
Industry Average	5.38%	6.10%	9.26%	9.75%	9.02%
	CB UK ROE				
HSBC	9.58%	7.35%	7.64%	1.89%	6.00%
Barclays	0.84%	-0.26%	-0.60%	2.27%	-2.91%
RBS	-14.86%	-5.22%	-0.22%	-13.30%	-0.12%
Standard Chartered	8.82%	5.64%	-4.75%	-0.55%	2.62%
Lloyds	4.91%	3.78%	4.22%	3.40%	3.55%
Schroders	5.73%	6.95%	5.72%	5.69%	5.94%
Industry Average	2.50%	3.04%	2.00%	-0.10%	2.51%
	IB UK ROE				
Al Rayan	-5.42%	11.74%	9.12%	7.97%	4.25%
QIB	NC	5.22%	3.72%	-7.22%	3.26%
BLME	2.03%	0.88%	-2.59%	-9.76%	1.55%
Ameen Islamic	-7.72%	6.43%	17.28%	8.73%	NA
Gatehouse	1.44%	4.26%	-2.71%	5.17%	-1.08%
ADIB	-6.48%	-16.99%	-9.79%	-9.18%	-9.26%
Industry Average	-3.23%	1.92%	2.51%	-0.72%	-0.26%

Table 56 - ROE over years for IB and CB

We observe that over 5 years, ROE for IB is lower than CB, especially with Belgium conventional banks. Results between IB and CB in UK market are closer but still IB is having lower results than CB (except in 2015). In terms of value, ROE for IB is close to 0 and even negative for some years (2013, 2016, 2017).

Risk-free rate bond

To compute the Belgian risk-free bond, I used the OLO-10 over 10 years. To compute the UK risk free bond, I used the GLIT-10 over 10 years¹⁹⁶.

	Risk free OLO/GLIT – 10 years									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OLO -10	4.42%	3.88%	3.47%	4.25%	2.93%	2.42%	1.60%	0.82%	0.40%	0.71%
GLIT -10	4.43%	3.60%	3.46%	2.98%	1.82%	2.35%	2.45%	1.80%	1.18%	1.21%
GLIT -10	4.43%	3.60%	3.46%	2.98%	1.82%	2.35%	2.45%	1.80%	1.18%	1.21%

Table 57 - OLO-10 years in Belgium and GLIT -10 in UK.

Premium

Finally, the aggregated risk Premium is computed as an average Return of the assets minus the risk-free rate bond, per year.

	2013	2014	2015	2016	2017
CB BEL PREMIUM	2.96%	4.50%	8.44%	9.35%	8.31%
CB UK PREMIUM	0.15%	0.59%	0.20%	-1.28%	1.30%
IB BEL PREMIUM	-5.58%	-0.53%	0.71%	-1.90%	-1.47%

Table 58 - Premium over 5 years for IB and CB industries

Graphically, on an aggregated level for all industries, premium is shown as below:

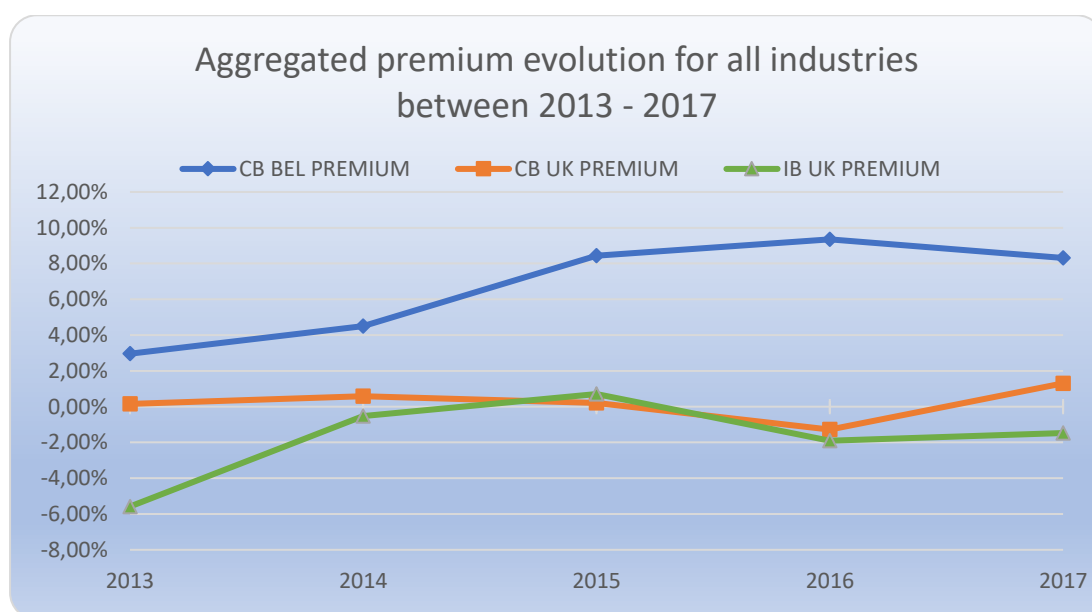


Figure 16 - Aggregated Premium over 5 years for all industries

¹⁹⁶ <https://www.bloomberg.com>

We observe that IB Risk premium is 80% of time (over 5 years) lower than CB premium. Asset from conventional banking is more interesting, on a pure return level (excluding risk factor). We also observe that premium for IB is mostly negative which indicates that the risk-free asset offered in the UK market is much more interesting to invest in than an IB portfolio. Again, Belgium premium performance is much higher. Furthermore, if we compare IB UK premium and CB BEL premium the difference is even bigger. This is also due to a lower risk-free rate offered in on the Belgium market (1.19% in BEL Versus 1.80% in UK on a 5 average in the UK) which makes a bigger difference.

b. Volatility (Sigma)

The banks aggregated sigma is here presented. This is computed using the standard deviation formula for the ROE, on a 10 years' timeframe (2008-2017):

	2008 - 2017
	CB BEL VOLATILITY
KBC	6.97%
Fortis	8.15%
Ing	3.31%
Beobank	1.96%
Belfius	15.47%
AXA	8.20%
Industry Average	7.34%
	CB UK VOLATILITY
HSBC	2.51%
Barclays	4.08%
RBS	9.45%
Standard Chartered	7.11%
Lloyds	4.45%
Schroders	4.71%
Industry Average	5.38%
	IB UK VOLATILITY
Al Rayan	21.97%
QIB	5.76%
BLME	3.93%
Ameen Islamic	5.19%
Gatehouse	1.95%
ADIB	6.77%
Industry Average	7.59%

Table 59 - Volatility over 10 years for IB and CB

Graphically, it shows as below:

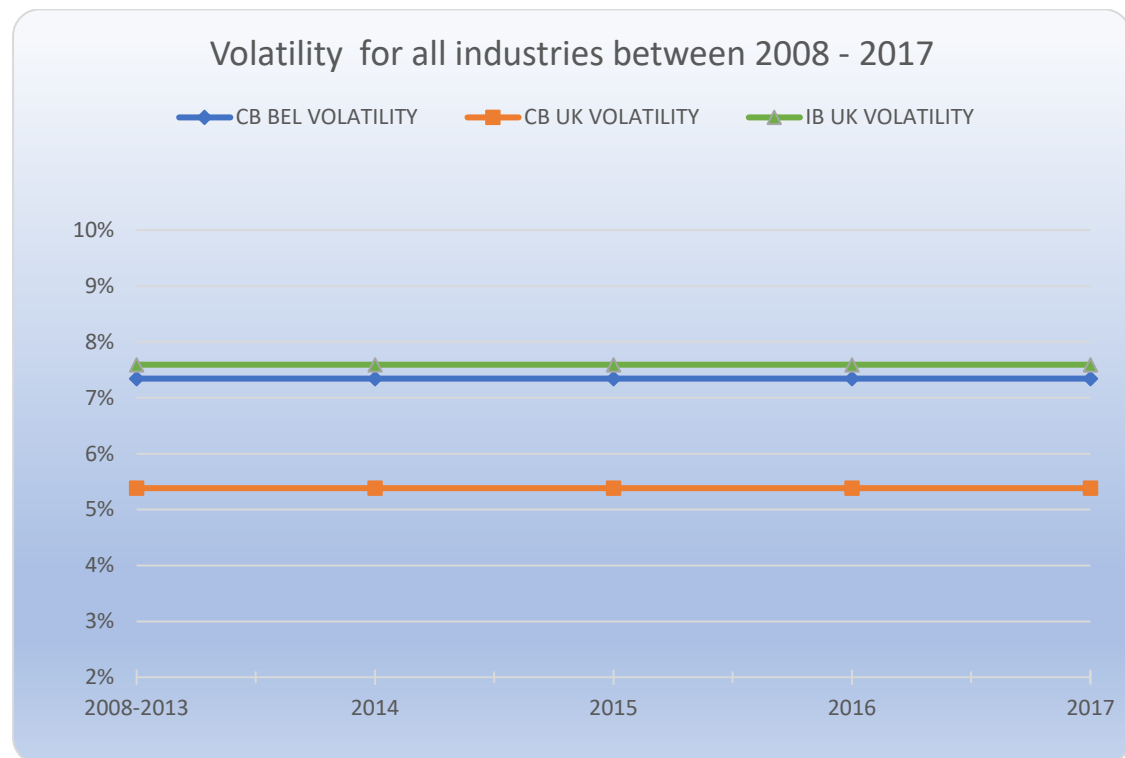


Figure 17 - Volatility between 2008 and 2017 for all industries

We observe much more volatility in the IB industry (+/- 2% per year) than in the CB in UK. Belgian banks show volatility during that period. Those results are close to the volatility for the UK Islamic banks. UK Conventional banks showed a very light volatility.

c. Sharpe ratio

Reason we decided to use this ratio is linked to the dissatisfaction raised from the use of CAMEL ranking methodology. Adding volatility factor in the rationale helps to have a better understanding of how an asset is performing, given its risk. This rationale allows to decide to invest in portfolio A or B or a market-risk free asset. From there, Sharpe ratios from 2013 to 2017 are:

	2013	2014	2015	2016	2017
	CB BEL Sharpe Ratio				
KBC	0.94	1.78	3.04	2.53	2.34
Fortis	0.33	3.05	4.07	4.17	4.09
Ing	1.34	1.58	2.28	2.69	2.75
Beobank	2.19	2.16	2.56	2.82	2.88
Belfius	0.24	0.28	0.35	0.39	0.41
AXA	-0.48	-0.72	0.18	0.97	0.35
Industry Average	0.76	1.36	2.08	2.26	2.14
	CB UK Sharpe Ratio				
HSBC	2.88	1.95	2.33	0.28	1.91
Barclays	-0.37	-0.67	-0.59	0.27	-1.01
RBS	-1.82	-0.81	-0.21	-1.53	-0.14
Standard Chartered	0.91	0.45	-0.92	-0.24	0.20
Lloyds	0.58	0.30	0.55	0.50	0.53
Schroders	0.72	0.95	0.83	0.96	1.01
Industry Average	0.48	0.36	0.33	0.04	0.41
	IB UK Sharpe Ratio				
Al Rayan	-0.35	0.42	0.33	0.31	0.14
QIB	N/A	0.48	0.33	-1.46	0.36
BLME	-0.08	-0.40	-1.12	-2.79	0.09
Ameen Islamic	-1.94	0.77	2.98	1.45	N/A
Gatehouse	-0.47	0.93	-2.32	2.05	-1.18
ADIB	-1.30	-2.87	-1.71	-1.53	-1.55
Industry Average	-0.83	-0.11	-0.25	-0.33	-0.43

Table 60 - Sharpe ratio from 2013 to 2017

Graphically, on an aggregated level, it shows as below:

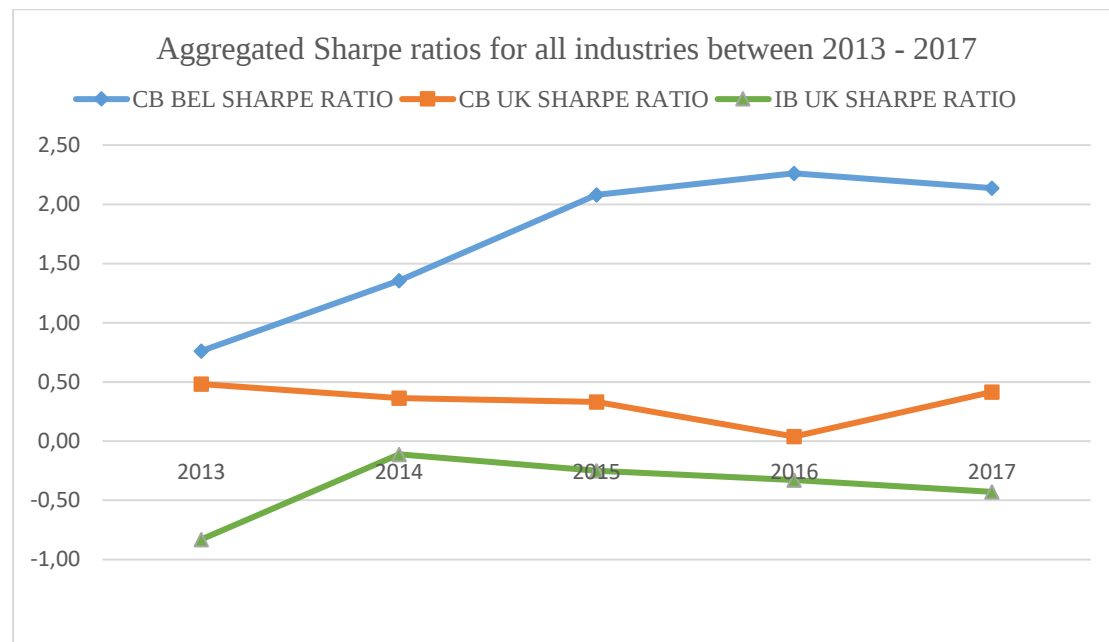


Figure 18 -Sharpe ratios between 2013 and 2017 for all industries

On the Sharpe ratio level, we mostly observe negative values for the IB industry in the UK from 2013 to 2017. Those ratios are slightly positive for the UK market and above 3 in average in the Belgian market:

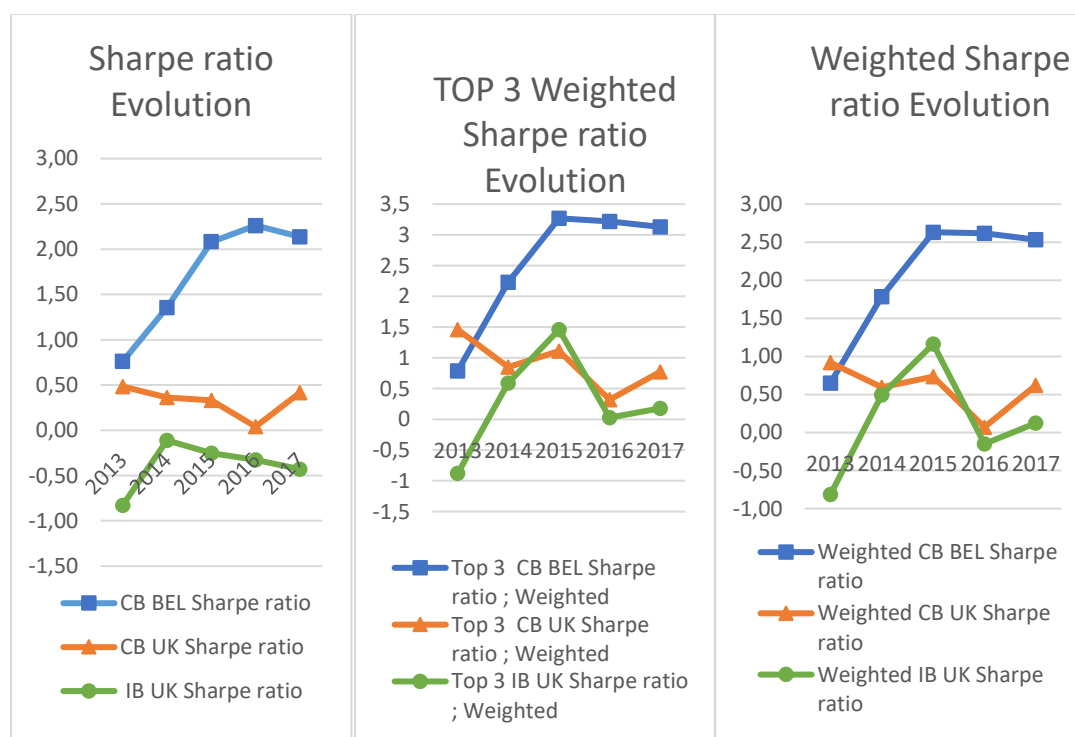
- CB BEL: asset performance is exceptionally good;
- CB UK: asset performance has a good performance (above risk-free rate);
- IB UK: risk-free rate is better than the return;

d. Weighted Sharpe ratio

As we did for the CAMEL indicators, we decided to weight those ratios in function of the relative weight of each bank. The indicative year for weighting has been selected to 2017.

	2013	2014	2015	2016	2017
CB BEL Sharpe ratio	0.76	1.36	2.08	2.26	2.14
CB UK Sharpe ratio	0.48	0.36	0.33	0.04	0.42
IB UK Sharpe ratio	-0.83	-0.11	-0.25	-0.33	-0.43
	2013	2014	2015	2016	2017
Weighted CB BEL Sharpe ratio	0.65	1.79	2.63	2.62	2.54
Weighted CB UK Sharpe ratio	0.92	0.60	0.73	0.07	0.62
Weighted IB UK Sharpe ratio	-0.81	0.49	1.16	-0.15	0.12
	2013	2014	2015	2016	2017
Top 3 CB BEL Sharpe ratio; Weighted	0.79	2.23	3.27	3.22	3.13
Top 3 CB UK Sharpe ratio; Weighted	1.46	0.85	1.11	0.32	0.77
Top 3 IB UK Sharpe ratio; Weighted	-0.88	0.59	1.46	0.03	0.18

Graphically, it shows as



To conclude with the numbers and graphically, when Share ratios are not weighted and not in TOP 3 organisation, we observe that:

- CB BEL are better performing over time than CB UK and IB UK
- CB UK are better performing than IB UK

When Sharpe ratios are weighted (in function of relative weight in their market), we observe that:

- CB BEL are better performing over time than CB UK and IB UK
- In 2013 – 2014, CB UK are better performing than UB UK
- As from 2015, CB UK and IB UK have relatively performing the same. With an exeptional better performance of the UB UK in 2015. This does not allow to establish further conclusions as results are not significant at this stage. A discussion on the aggregated indciators and ratios is discussed in the next section.

When CB BEL CAMEL are top 3 banks in industry, we observe that the same conclusions as the when they are only weighted with their relative share in the market.

e. Discussion on the aggregated indicators. The excellent Belgian banks Sharpe ratio

In this final section, the aggregated results in four sections are presented:

- CAMEL ranking
- Risk premium
- Volatility
- Sharpe ratios

From these findings, we observe that **CAMEL ranking is generally showing a better result in conventional banking industry than in the Islamic banking.** This leads us to think this industry has not performed equally with conventional banking.

A closer look on the **risk premium indicators of each industries shows a drastic superiority in CB Risk premium** whereas **IB premium is either negative or close to 0.**

On the volatility level, risk is much higher in the IB industry. In general, 2 times more elevated.

As for the Sharpe ratio, it shows a **lower performance** for most years in the IB industry. The only year that was better for IB UK than CB UK is in 2015. Otherwise, performance of CB (BEL and UK) is doing better. Belgium banks have in general an excellent performance, UK banks good ones and IB low/poor performances. To conclude, on an aggregated level, we can observe:

	Is IB doing better than CB	CAMEL	Weighted CAMEL	Premium	Volatility	Sharpe ratio	Weighted Sharpe ratio
2013	CB BEL	YES	YES	NO	NO	NO	NO
	CB UK	NO	YES	NO	NO	NO	NO
2014	CB BEL	NO	YES	NO	NO	NO	NO
	CB UK	YES	YES	NO	NO	NO	NO
2015	CB BEL	NO	YES	NO	NO	NO	NO
	CB UK	YES	YES	<u>YES</u>	NO	NO	<u>YES</u>
2016	CB BEL	NO	YES	NO	NO	NO	NO
	CB UK	NO	YES	NO	NO	NO	NO
2017	CB BEL	NO	YES	NO	NO	NO	NO
	CB UK	NO	YES	NO	NO	NO	NO

Year 2015 shows a very specific phenomenon regarding the performances of IB UK that were better than CB UK. This could be partly explained by a better premium for Islamic banking in the UK in 2015. Further reasons and explanation for such variation in 2015 is not tackled in this study.

8. Jensen's Alpha performance measure

After having computed all ratios and risk premium for the different market, we thought it was also relevant to compute Jensen's Alpha because to the risk nature of the different market¹⁹⁷. A reminder on the formula is:

$$(R_p - R_f) = \alpha_P + \beta_P(R_m - R_f)$$

¹⁹⁷ Whereas Jensen measure returns compared to a market/index benchmark, Sharpe ratio measures the amount of risk associated to specific returns.

For Belgium market, we selected the BEL 20 market index (R_m) for each year between 2008 to 2017. The BEL 20 is a weighted index, listed on Euronext, that reflects the performance of the 20 biggest capitalisations in Belgium. It is a performance indicator the belgian stock market (See appendix 18 and 19 for the details). As for the risk-free rate (R_f), we selected the OLO 10 years, for each year.

For the UK market, we selected the FTSE 100 market index (also known as ‘Footsie’) for each year between 2008 to 2017. It follows the performance evolution of 100 biggest capitalisations in the UK market. As for the risk-free rate, we selected the UK 10-year government bond (See the appendix 20 for the details), for each year between 2008 to 2017.

Each banks returns have been retrieved from our previous calculations in section 6 and 7.

Table below shows the results obtained for conventional banks in the UK and in Belgium and for Islamic banks, from 2008 to 2017:

BLME	AMEEN	GATEHOUSE	AL RAYYAN	QIB	ADIB
-3,09%	4,64%	-1,00%	-12,24%	-0,18%	-11,60%
Standard	Lloyds	Schroders	HSBC	Barclays	RBS
3,14%	-0,07%	5,97%	3,94%	-0,06%	3,23%
KBC	Fortis	ING	BeoBank	Belfius	Axa
10,14%	1,91%	4,38%	2,27%	0,52%	1,58%

Table 61- Alpha Jensen, from 2008 to 2017

We observe that the Islamic sample of banks have inferior performances compared to their industry index benchmarks (detailed numbers are available in appendixes 18, 19 and 20). This is mainly due to limited liquidity resources, high double governance costs (financial governance, diversification and sharia board advisors cost¹⁹⁸). Without excluding Islamic finance as a potential alternative solution, this index performance benchmark gives another element that strengthen the position sustained thanks the Sharpe ratios. However, this statement needs here to be again nuanced and this is for 2 main reasons: firstly, the sample are again relatively small and secondly, we are discussing about Islamic banks in a Western country. Authors studied equity funds in Muslim environment and found different outcomes (Hayat & Kraeussl, 2008, pp. 189-203), namely positive Sharpes and Alpha’s.

Zooming on our findings, we observe a systematic negative or below value in comparison to the Alpha’s for the conventional banks. Islamic banks show a negative excess return compared

¹⁹⁸ See part 2.

to the market benchmark (FTSE 100 for the UK market). In other words, most of the Islamic banks are under performing in regards to the market where they are active. Only Ameen bank is realising an active and positive performance compared to the benchmark. This exception will not be discussed in this thesis.

Conclusion. Islamic banks financial volatility performances give a mitigated investment interest for its shareholders

9. Research proposal. High risk, low return

Within a global IF problematic which aims at looking if there is a relevant added value for its different stakeholders to engage in IF industry, we have decided to look at it from the point of view of the shareholder and to question if it makes financial sense to engage in IF services. We made the research proposal that IB have no better financial performance (using Sharpe ratio and Jensen's Alpha) than conventional banks. Such assertion is built notably on the volatility factor which makes a mitigated interest to offer IF services. Where high volatility of IB should bring a high return, observations have shown a high-risk level and a low return. This observation is expressed in better Sharpe ratios in the CB sectors.

To empirically study financial performance of a financial institution, we needed to gather the balance sheets, income, cash flow and change in equity statements (Salhuteru & Wattimena, 2015), Beta's and Alpha's. From there, 3 types of indicators could help us to find out the financial performance of an institution:

- Returns
- Volatility (risk)
- Correlation

We have chosen to **focus on Returns and volatility of CB and IB**. Correlation is not covered in this thesis. Further research needs to be made on that topic. Given these 2 indicators, we have thus 4 scenarios:

		Level of Risk	
		High	Low
Return	High	A : Conventional Banking - Arbitrage	B : Exceptional positive zone
	Low	C: High Risk zone > Bankruptcy	D : Conventional Banking - Arbitrage

Table 62 -Return/risk matrix

- A: High risk and high return: Arbitrage zone >>> This is where we find Conventional banking
- D: Low risk and low return: Arbitrage zone >>> This is where we find Conventional banking. This is also where we should find Islamic banking. Given its low-risk philosophy, it should generate lower revenue.
- **C: High risk but low return. Bankruptcy zone.**
- B: Low risk but high return: Some IB defenders claim to be in that extraordinary / Ideal zone (Hasan, 1985, pp. 13-29).

Our findings show that IB does not lay in the conventional Zone A **but shows a lower risk with a lower return level (conventional D zone)**. Due to low diversity of funding solutions (deposits or equity), low leverage opportunities (as it is supposed to work with no debt structure), no inter banking funding opportunities, IB does not generate more return than CB in Belgium and in the UK (but in 2015 for the UK). In the same time, its aggregated volatility during period 2013-2017 is much higher than in conventional banks. Those results are also confirmed by the additional findings we got from the Jensen's Alpha analysis that are confirming the same trends.

Do these initial analyses immediately eliminate IB from the equation? To this remark, 3 proposals nuance the answer.

First of all, the sample size does not allow us to make a generalisation as it is relatively small. Without taking its importance and indication for further study, it is impossible at this stage to propose a scientific conclusion, based on this limited sample.

Secondly, when we focused on the abnormal return to market index (Jensen's Alpha), we observed that in some rare cases, IB showed a better performance regarding their market than conventional banks. It's too early to draw generalist conclusions but these specific cases will be taken into consideration into our general conclusions.

And thirdly, eliminating IB because it's not profitable would mean that the only goal of IB is to make profit. Is it its only goal? Answer is Yes and No. If we refer to the shareholder's financial perspective then there is interest in offering such solutions. However, we also need to refer to 4 IB missions:

- Collect deposits;
- Work under Sharia principles¹⁹⁹;
- Promote a solidary society;
- Enhance wealth sharing;

We observe that more than just realising profit, it also needs to promote a solidary society, within Muslim communities and goals. These social goals are wishful thinking in a global industry where each stakeholder seeks for own financial profit. If we only focus on the financial efficiency, we would ask ourselves on how to reach a break-even equilibrium in this IB industry? This goes through a complete ALM structure analysis. On the retail market, we observe worldwide PSIA account (deposits under PLS principle) are the big part of the liabilities (+50% for ADIB and QIB). This ratio is difficult to obtain in a non-Muslim market. This is due to the scarcity of the demand and the nature of the market. IB should change its marketing orientation and try to attract a non-Muslim population, assuming this one could be interested in such services. Another solution would be to consider a larger part of debt funding which is less costly than equity/deposits funds. Regarding assets, IB already work mainly with non-PLS offer but more with Murabaha structure. This mechanism would expose the IB industry to higher risk as the PLS principle implies to bear higher risk to the money lender... here the PSIA account holder and not debt issuer (another bank, Central bank...)

This fourth part contributes to show the mitigated financial performance of IB compared to CB. Using CAMEL and especially Sharpe ratio allowed us to see this empirical evidence. From there, it is legitimate to ask ourselves what are the reasons behind it: first of all, we observe that although promoting a joint venture and partnership way of working, IB do have to be competitive and start to offer much more debt-like contract such as the Murabaha instead of partnership structure. These mechanisms are however limited due to the limited liquidity available via the PSIA accounts (Profit Sharing investment accounts) in IB. This is definitely a dilemma that IB have not decided on yet: either being a fully debt-based structure (CB like) with credit risk, interest rate risk and default risk or being an equity-based structure (venture capital like) with equity risk, valuation and market risk. For the moment, IB is being very pragmatic by positioning themselves as an equity-based industry while offering debt-like

¹⁹⁹ For instance, weapon industry is not covered by IF. A question would be to study how the financial performance of such industry is. If that industry is performing well, IF does not tap an industry that could generate higher profit. This will not be tackled in this part.

products such as Murabaha to generate liquidity. This evolution creates tension within IF industry as the more conservative banks accuse the most innovative Malaysian banks of window dressing operations for interest-based operations such as the Murabaha.

The position sustained in this thesis is to say that contemporary IF is still a young industry and should try to offer an immediate answer to many concerns that have been developed in the previous part. The IF industry has many areas of apprehensions and improvements. It still searching for its path in a world where political, social and economic context are triggering tensions. De facto, the 100% reserve banking promoted by the equity-based banking gives a limitation to the growth and gives a serious criticism to capitalism lure for profit. The symmetry mapping between the real economy and the financial world makes a more stable world but also diminish the double-digit growth. Credit offer is thus limited and replaced by trading equity and partnerships between capital owners and entrepreneurs.

Finally, it's important to note that given their structure, role and products, IB and CB are real different industries. They do not have the same goal and role in the financial operations. Again, these analyses are only valid for this specific sample (in a non-Muslim European retail environment). Realities could be different in the Middle-East which can explain the continuous double-digit growth in that industry for the past years now. This discussion leads us to state that IF, with our current observations, would not be a long-term solution in a non-Muslim retail environment such as Belgium and this is mainly due to its structure, role, goals and lack of leverage.

10. What financial performances during the 2007-2009 financial crisis?

As return and risk are different for both conventional and Islamic industries, we have decided to lead an additional financial risk and return study for the period between 2007 and 2009. I picked this period as it includes a pre-period and a post period of the 2008 crisis.

First of all, it's important to explain that I have firstly picked a sample of only 3 major banks to study the financial performances between 2007 – 2009. Reason for that is the some of the Islamic banks studied in 2017 did not exist in 2007. Those banks were not on the market of just

freshly born financial institutions. Second of all, the ones that I have picked are major market leaders in 2017 that were already existing in 2007.

This first sub section studies non-weighted indicators whereas second section studies TOP 3 and weighted indicators. Finally, a third sub-section makes a comparison between the weighted and non-weighted indicators.

a. Non-weighted CAMEL and Sharpe ratios during 2007-2009 financial crisis

Three banks within all industries have been here selected for the sub study: Fortis, Belfius and ING in belgium and HSBC, Barclays and RBS for the conventional banking. Al Rayan, BLME and QIB for Islamic banking.

The objective is to see if there is a variation during that period in function of the crisis. We observed in a steady non-crisis period that CB Share ratio was much more interesting than IB's. Is the situation different in a crisis period (Astitou, 2015) ? In which zone of the risk/return matrix stands each industry, year by year.

ROE and Volatility Evolution between 2007 and 2009 for all industries are shown as below:

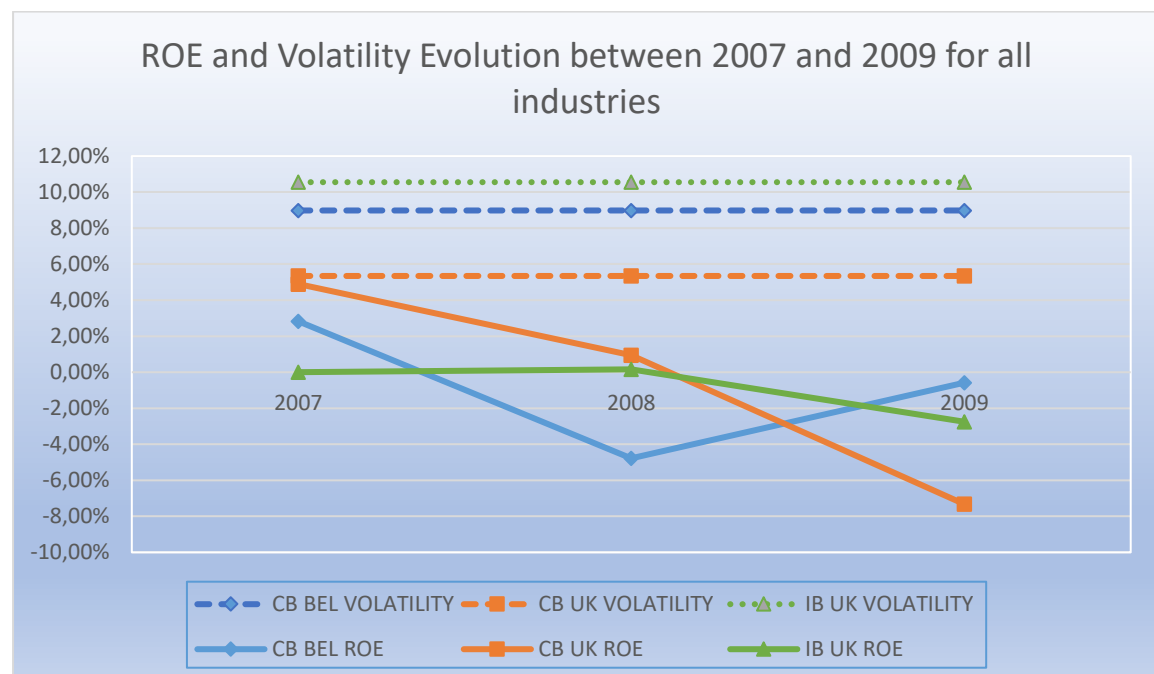


Figure 19 - Financial performance indicators for CB and IB between 2007 to 2009

ROE for CB experienced a dramatic decrease during the crisis but recovered to after the crisis (2009) in UK whereas IB suffered a much slighter decrease in 2008 (but could not recover as its ROE kept on decreasing in 2009).

CAMEL evolution is showed as below:

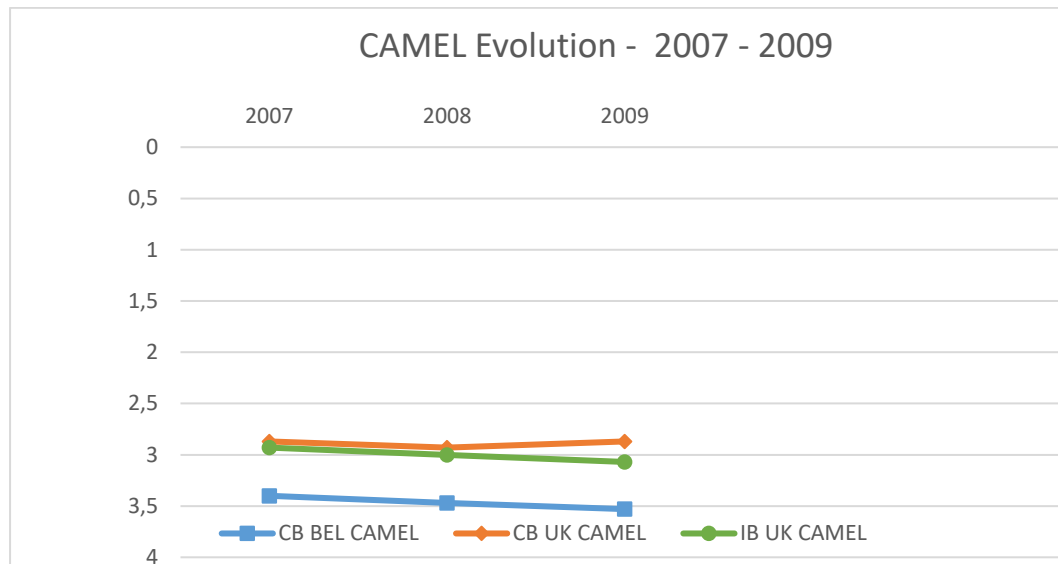


Figure 20 - CAMEL Evolution from 2007 to 2009

We observe that:

- All industries have average CAMEL performances;
- CB UK are doing better performance overtime than IB UK and CB BEL;
- IB UK CAMEL performance are better than CB BEL CAMEL performance, overtime.

Again, CAMEL does not reflect volatility and may lead to wrong conclusion in regards to the findings between CB in Belgium and IB in the UK.

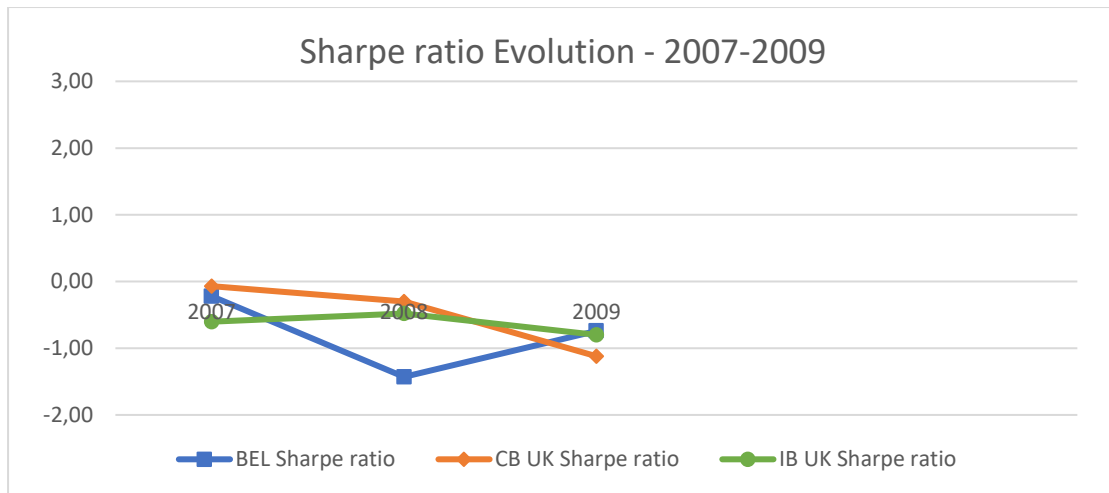


Figure 21 - Sharpe ratio Evolution between 2007 and 2009

For Sharpe ratios, we observe that:

- All Sharpe are below 0 or close to 0;
- Sharpe CB UK are better than IB UK and CB BEL;
- Magnitude variation of Sharpe IB UK are less than CB UK and CB BEL;
- Sharpe CB BEL decreases heavily during the crisis before growing after 2009.

Whether volatility should be controlled and lower than CB, IB shows high level of volatility. On the return level, we observe a better result for IB during the crisis for CB BEL (2008) and the year after (2009) for CB UK.

As for the research question, we can conclude that in 2007 (just before the crisis), IB were in the critical zone C where the risk is high and the return lower than in CB BEL and UK. In 2008 and 2009, situation is still not positive but more stable. The drop in return is less important and shows a stronger control. Although situation in BEL gets better, IB keeps on declining, proof of a lower resilience after crisis.

		Level of Risk	
		High	Low
Return	High	A : Conventional Banking - Arbitrage	B : Exceptional positive zone
	Low	C: High Risk zone > Bankruptcy	D : Conventional Banking - Arbitrage

Table 63 - Return/risk matrix

These observations give a bit of nuance to my initial thesis which claim that IB have no better financial performance compared to CB. Although this proposal seems verified by our empirical evidences, **we observe that during a crisis period, those Sharpe ratio indicators seem to get closer to each other.** The after-crisis period shows a drastic recovery for CB BEL and a continuous drop for IB UK and IB UK.

These conclusions regarding return/risk indicators during the crisis period can be explained with the exclusion of risky and highly speculative assets from IB portfolio. Sharia-Compliant banks showed a better resilience during the 2008 crisis but showed that their numbers kept going down in 2009. This is explained with the global integration of IB in the global economy, the relatively big usage of credit-like solution such as Murabaha products, the debt leverage inexistence in IB whereas CB have been widely refunded with credit solutions.

b. Weighted Camel and Sharpe ratios in function of their market shares during 2007-2009 financial crisis

In this section, we decide to have a ponderation by total assets in order to mitigate the potential variation from from total asset of each banks. This allows to gather a better view on the reality of the markets (low volume assets has thus less impact than a high volume assets bank). For calculation purposes we used the 2017 weight repartition that we have applied to years 2007 to 2009. Graphically, it shows as below:

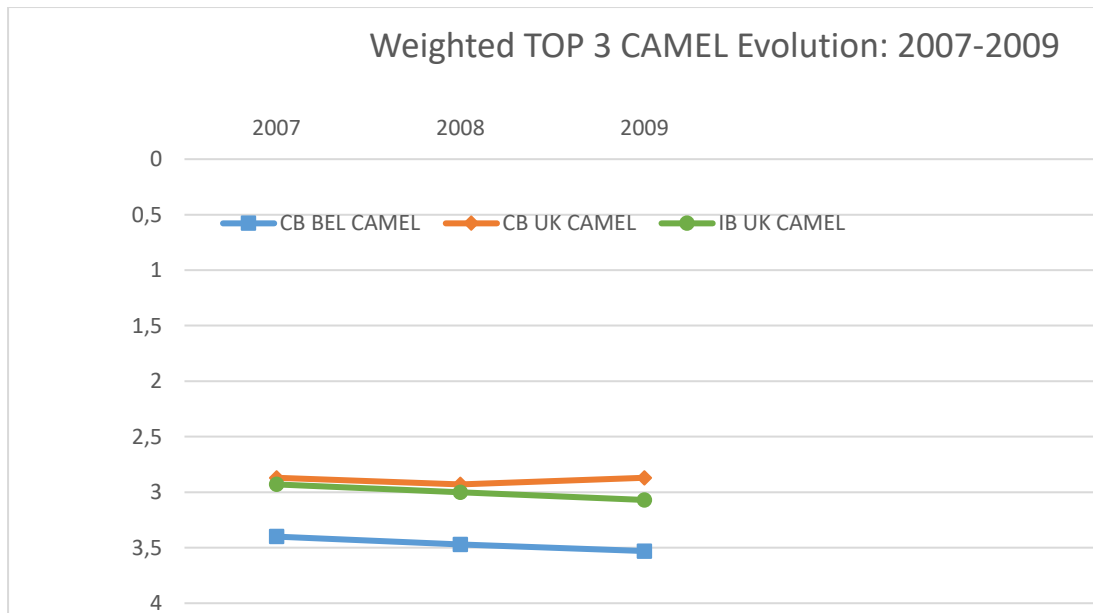


Figure 22 - Weighted TOP 3 CAMEL Evolution

We observe very similar performances with the non-weighted indicators :

- All industries have average CAMEL performances (close to 3);
- CB UK are doing better performance overtime than IB UK and CB BEL;
- IB UK CAMEL performance are better than CB BEL CAMEL performance, overtime.

As for the Sharpe ratio, graphically we see:

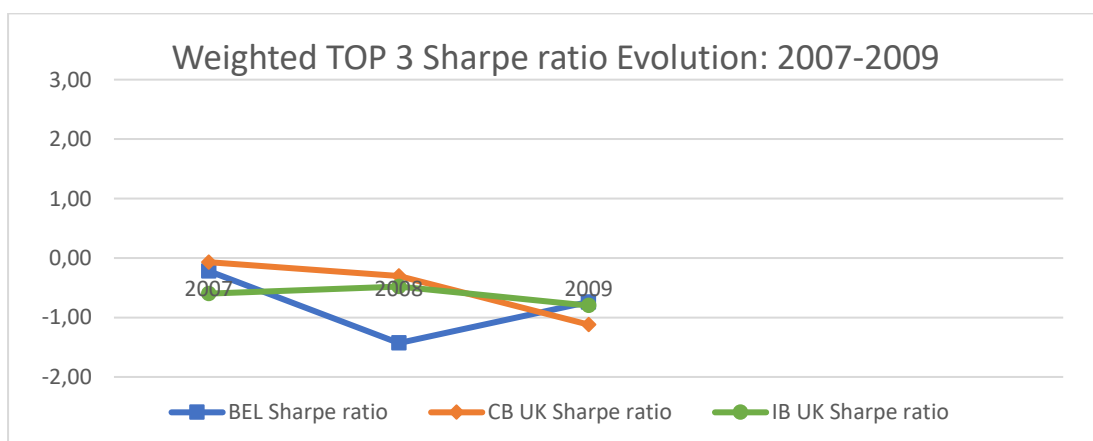


Figure 23 - Weighted TOP 3 Sharpe ratio between 2007 -2009

We observe that very similar performances with the non-weighted indicators:

- All Sharpe are below 0 or close to 0;
- Sharpe CB UK are better than IB UK and CB BEL;
- Magnitude variation of Sharpe IB UK are less than CB UK and CB BEL;
- Sharpe CB BEL decreases heavily during the crisis before growing after 2009.

c. Discussion on the weighted indicators. CAMEL and Sharpe ratios

Finally, we can compare aggregated indicators, weighted and non-weighted. Numbers are shown in the tables below:

	2007	2008	2009
CB BEL CAMEL	3.4	3.47	3.53
CB UK CAMEL	2.87	2.93	2.87
IB UK CAMEL	2.93	3	3.07
CB BEL Sharpe ratio	-0.22	-1.43	-0.74
CB UK Sharpe ratio	-0.07	-0.30	-1.12
IB UK Sharpe ratio	-0.60	-0.48	-0.80

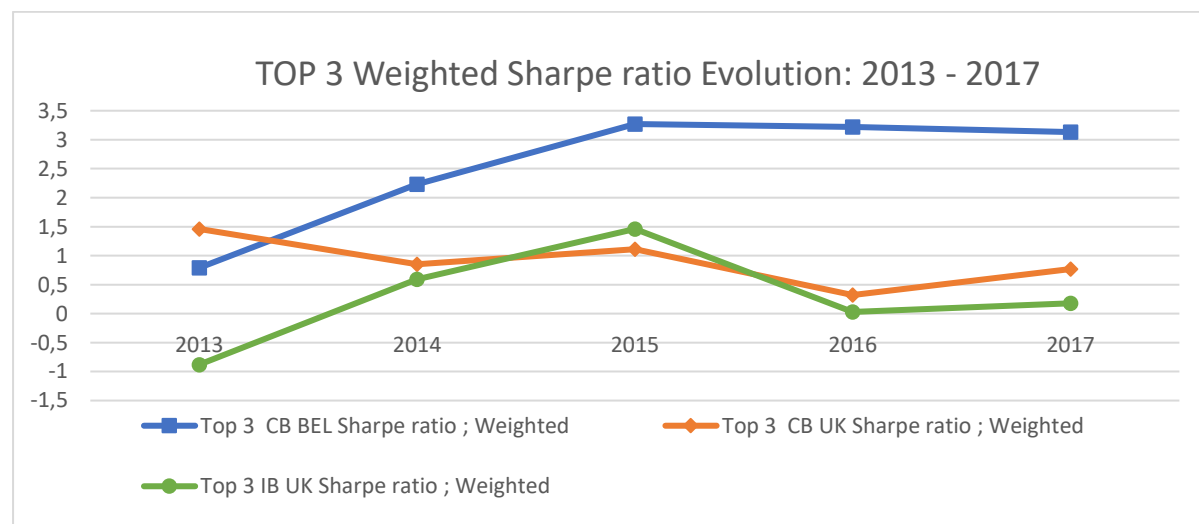
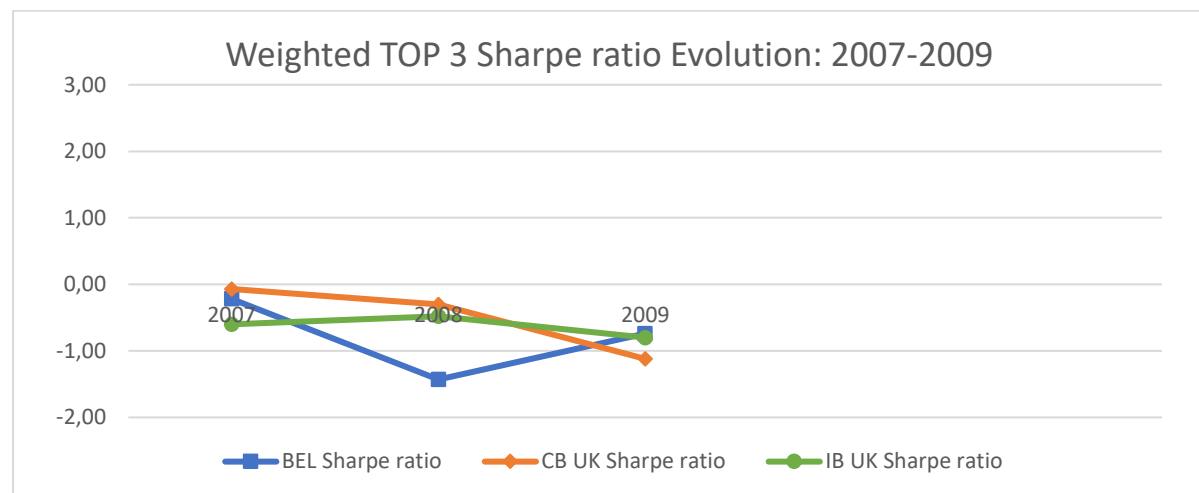
Table 64 - Non-weighted TOP 3 CAMEL and Sharpe ratios

And weighted TOP 3:

	2007	2008	2009
Weighted CB BEL CAMEL	3.37	3.47	3.60
Weighted CB UK CAMEL	2.86	3.01	2.97
Weighted IB UK CAMEL	2.91	3.06	3.20
Weighted CB BEL Sharpe ratio	-0.15	-1.56	-0.77
Weighted CB UK Sharpe ratio	-0.11	-0.05	-0.70
Weighted IB UK Sharpe ratio	-0.60	-0.45	-0.87

Table 65 - Weighted TOP 3 CAMEL and Sharpe ratios

Graphically, we see those results as below:



When we compare non-weighted and weighted TOP 3 CAMEL and ratio Sharpe, we observe that:

- CAMEL performances and Sharpe indicators are not-significantly much different. TOP 3 leaders and relative weight are well representing the sample;
- On the Sharpe ratios level, we can observe that, crisis hit severely Sharpe ratios in general, what ever the industry;
- However, CB BEL experienced a bigger impact with a decrease to -1,56 SR in mid-2008 before growing up to -0,77 SR in 2009 at the exit of the crisis;

- We can also observe that CB BEL Sharpe ratio were more impacted by the 2008 crisis (in comparison with pre-crisis period, 2007) whereas UK banking industry (IB and CB) grew/decreased with similar variation;
- In non crisis period, like in 2013-107 (Chapter III. Section 7), shows that the relation risk/return is more interesting in the Belgian market;
- Sharpe ratios for IB banks are following UK CB industry trend. IB ALM nature is not perceived as sufficiently significant to depart from the global UK banking industry.

11. Theoretical contributions and managerial implications

This part examined the potential financial added value of a financial system based on religious tenets. Besides moral interdictions, the principles interest rate interdiction and the profit and loss (PLS) / risk sharing system seemed the most interesting and measurable to be compared with conventional structures.

After a review of literature of IF principles, CAMEL financial performance metrics, Sharpe ratio and Jensen's Alpha, I presented a methodology based on measurable comparison between CB and IB over a 5 years non-crisis period. Those findings have been later completed by another 3 years pre, during and post 2008 crisis to examine if results were different.

Thanks to the Sharpe ratios and Alpha's, the findings of the empirical evidence sustain **the core proposal that states IB lays in a higher volatility and low return close to C zone (meaning close to bankruptcy)**. Those IB are in between this C - zone and a low risk/low return D - zone. IB are not better financially performing than CB and this is mainly due to their assets/liquidity structure, within our European non-Muslim environment.

	2013	2014	2015	2016	2017
CB BEL Sharpe ratio	0.76	1.36	2.08	2.26	2.14
CB UK Sharpe ratio	0.48	0.36	0.33	0.04	0.42
IB UK Sharpe ratio	-0.83	-0.11	-0.25	-0.33	-0.43
	2013	2014	2015	2016	2017
Weighted CB BEL Sharpe ratio	0.65	1.79	2.63	2.62	2.54
Weighted CB UK Sharpe ratio	0.92	0.60	0.73	0.07	0.62
Weighted IB UK Sharpe ratio	-0.81	0.49	1.16	-0.15	0.12
	2013	2014	2015	2016	2017
Top 3 CB BEL Sharpe ratio; Weighted	0.79	2.23	3.27	3.22	3.13
Top 3 CB UK Sharpe ratio; Weighted	1.46	0.85	1.11	0.32	0.77
Top 3 IB UK Sharpe ratio; Weighted	-0.88	0.59	1.46	0.03	0.18

Table 66 - Sharpe ratios between 2013 - 2017

While some research promotes IB as a low-risk finance because of the PLS system (Khan, 2013) with a better resilience to crisis, other Research (Kuran, 2004) showed those banks were more exposed to risk due to the non-standardisation of their products and the lack of available liquidity. Our findings go in that direction with the nuance that this happens in a non-crisis period and that effect is rather limited in the crisis period. This will need to be further investigated with other crisis to test if the results are similar or not.

In addition to the conventional risk, IB faces also the constraints from the Sharia board that can approve an IF operation but the same product can be disapproved by another Sharia board. That is what we can call a Sharia compliance risk²⁰⁰. This factor increases the uncertainty and the return volatility which damages even more the financial indicators.

The findings show that IB institutions need to have a deep thinking and strategy adaptation prior to tap a non-Muslim European market such as Belgium. IF industry cannot claim to have a religious authority nor a hierarchy that would set the industry standards (Unlike Christianity which has the Vatican bank). The retail market is rather small, and education/information is not spread sufficiently. On a regulatory level, the Belgium market has still some regulations (as the double imposition on a double Sales operation during a Murabaha deal) that need to be tackled to give some price competition to the IB services.

²⁰⁰ Operation bears no interest rate, end investment is legally authorised (halal), gharar free...

12. Limitations of the study and future research

The limits of the study are methodological and empirical. On the methodological level, we observe that CAMEL study is basing its calculation on loans and ALM studies which are not similar for IB and CB. My choice to use CAMEL methodology is questionable as we are using same ratios for different ALM structure. And as expected, results were much different between the two banking sectors. However, using a Sharpe ratio and Jensen's Alpha allowed to give a more accurate picture of the markets by linking return rationale to its volatility and to a benchmark index. CB suggest a model where when risk is high, potential profit is high and when risk is low, potential profit is low. Any other situations are under arbitrage of management. As for the IB, we observe that the statement that it can generate high profit with low risk is not a standard model (as the CB risk/return model). Another limitation is that we only focus on return and risk without tackling the correlation of the portfolio. This is to be studies in further research.

On the empirical level, beside the difficulty to find consistent and qualitative financial statements, the nature of the financial reports within both markets (CB and IB) force us to reconsider the performance indicators we can/want to use when studying returns and risk. By nature, their structure is different and not every indicator from the industry (CAMEL for instance) is relevant to compare these markets. Management science pay attention to such differences and manage investment decision with complementary ratios, especially when nature of the business is structured differently.

Finally, this part 4 studied the shareholder's perspective in Belgium. Tapping the market with investment banking or with a single product could also be analysed in further studies.

Longitudinal research could show the indicators evolution before, during after a specific crisis or financial market perturbation.

GENERAL CONCLUSIONS

This general conclusion summarizes the contributions to the field of management science. It gives an answer to the stakes set in the introduction. It finally presents the limitations of the conclusions and potential avenues for future investigation.

An investigation has been led on the elements of answer that Islamic finance proposes to the retail demand and offer in Belgium. The response's originality sustains the argument that there is a mitigated interest to implement retail Islamic finance in Belgium and that IF is not be seen as outside of capitalism but as an alternative branch within the global financial capitalism.

1. Mixed growing perspectives for retail Islamic finance in Belgium: evidences from the field

Before discussing each contribution at the light of the general research question, we present here a recapitulative table of the research questions, the variables, the methodology, the sample and the findings of each part. All the elements are here shown without entering into details. All accurate data and explanations can be retrieved in each part of the thesis. The objective here is to give a summary of the approach used in all parts in order to come up with the general conclusions.

<i>Part</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Demand/Offer	Retail Demand	Professional Offer	Corporate Demand	Corporate Offer
Question	<i>Are Belgian retail consumers taking ethical behavior into consideration when examining Islamic finance loans solutions?"</i>	<i>What are the ethical justifications offered by Belgian and French service providers of Islamic finance?</i>	<i>Does religiosity have an influence on the small and medium-size enterprise managers' will to use Islamic finance loans?</i>	<i>Are the financial performances of Islamic Banks equal that of Conventional Banks</i>
Variable	Ethics Profile	Justifications	SME Managers Religiosity	Return/Risk
Who	124 retail belgian consumers	21 Belgian and French advisors	60 SME managers and 55 SME Muslim managers	12 Belgian and United Kingdom Banks + 6 Islamic banks
Method	Quantitative EPQ Online Questionnaire (non-representative sample)	Semi-guided Interviews	Firm-level exploratory Online Questionnaire -	Financial reports comparisons - documents
Theoretical model / Tests	Chi-squared statistical hypothesis tests	Boltanski-Thevenot pragmatic model	Chi-squared statistical hypothesis tests	CAMEL ranking methodology and Sharpe ratio
Results/Discussion	• Consumers are interested in IF solutions (69.4% of the sample); • Having this interest is not scientifically impacted by the ethical profile of the consumers; • Ethics is not an associated variable linked to Islamic finance (it sometimes have negative perception) • Additional study on a Muslim population showed no significant difference in results with the mix-population. Muslim ethics profile has no significant impact on the interest for IF. • While sample has an interest (69,4%) in IF and ethics has no impact on that interest, consumers still consider ethics as an important variable in their decision-making process no impact of ethics (35,5%of the sample considers it as 1st or 2nd criteria of choice.	• IF engagement comes mostly from Market justifications; • Religious or ethical tenets are driver to engage in IF but they are not dominant; • Unlike Halal industry developments, IF industry contributes to answer to capitalism critics. To prove that, we observe similar financial mechanisms, a dominance of debt-like products, market justifications leading the growth, relative mistrust about interest rate interdiction; • Recent IF development occur within a trend of revival (see part II) of Islam on other areas such as politics, society, etc.	• Depending on the level or religiosity (intensity of the religion practices), managers will decide to fund with IF loans; • There is a demand perspective for managers when considering alternative funding solutions. This demand will depend on the level of religiosity of the managers; • In an additional sub-study on Muslim managers population only, religiosity has no impact on the willingness to fund with IF loans. Whatever the religiosity, it exists an important demand for such solutions. The key, here, is the religion itself.	• Conventional banks lay in standard return/risk zone of arbitrage A and D; • Islamic banks lay mostly in Zone D: low risk/low return which comes close to the Zone C: High risk/low return (see below); • Only 2015 showed a better performance for Islamic Banks UK than Conventional Banks UK. Otherwise, performances of CB UK and BEL UK are always doing better (BEL CB have excellent performances). • During and post crisis (2008), IB experience a smoother decrease in Sharpe ratios than CB banks. 2009 showed a huge recovery for CB whereas IB grew slowly. These results show that in crisis period, low risk structures, whether Islamic or not; are less impacted by risk volatility.

a. *Retail Consumers. Where consumer ethical type has a low impact on the interest for Islamic finance*

Findings in part 1 expose the limited interest of retail consumers to have an Islamic finance offer in Belgium. This question is approached from the point of view of ethics, as a rationale for actions (Ricoeur, 1984) . Part 1 conclusions can be summarized as:

- Consumers are interested in IF solutions (69.4% of the sample);
- While that sample has an interest in IF, ethics has no major impact on that interest. However, consumers still consider ethics as an important variable in their decision-making process (35,5%of the sample considers it as 1st or 2nd criteria of choice²⁰¹);
- Having this interest is not conclusively impacted by the ethical profile of the consumers;
- Ethics is not an associated variable linked to Islamic finance (IF may have a negative image in some context);
- Additional study on a Muslim population showed no significant difference in results with the mix-population. Muslim ethics profile has no significant impact on the interest for IF;
- Samples are not big enough to draw general conclusions but rather hypothesis.

Two considerations lead to reflect on how IF could be considered by a part of its users: (1) Islamic finance can be more costly than conventional loans. Studies (Berrebi, Ledoux, Marchand , & Mérieux, 1995) show that generally cost of loan remain in the top 2 main criteria for choosing finance solutions. And, (2) IF is not immediately associated with ethics by the sample of the retail Belgian consumers that have been interrogated. Most of the informants from the retail detail sample associate Islamic finance with religion (in terms of normative references of do's and don'ts) and not to a code of ethics, as explained above. We gave the line of thought that this could be partly be explained by the lack of information about this finance (78.2% of the sample claim to have not enough information about it). This proposal find it echo in many articles that point out the lack of awareness and information about this alternative finance (Cheteni, 2014).

²⁰¹ Cost of loan comes first for 46,8% of the sample.

These findings help to give an element of answer to the research question which asks the relevance of having an IF proposal in Belgium. It does not explain it all but it gives an indication about the potential interest for that finance. There is indeed an interest from the retail consumers but that interest does not encompass ethics as a dimension of IF. Sample analysis showed the interest for IF as an alternative solution but not because it is an ethical finance. The association with the word 'Islamic' seems to damage the interest for it. The point is to say that IF seem to be associated with the word 'Islam' but that word does not refer to ethics, per se. Consumers interrogated did not make spontaneously that connection²⁰². This is an assumption that hasn't been proved in the thesis but would deserve further developments.

b. Professional advisors. Where Islamic finance is not only driven by an inspired engagement logic but by multiple justifications

What does IF represent for its professional advisors and how can different engagement justifications co-exist in this new industry? Given the nature of decision-making process and its dimension linked to norms, we decided to work with a sociological angle on the agents' actions. This part has mobilized the justification model of Boltanski and Thevenot. In a nutshell, a part of this model helps to figure out the underlying justification of individuals to engage into actions and interactions. The initial questions led to discover that, within the plurality of justifications, there is a predominance of Market justifications to engage in IF in Belgium. In other words, professional advisors inquired are mostly engaging into IF for economic and business purposes.

Most of the motivation to engage in IF are with professional and business purposes. Findings and further analysis led to attach this recent development as an alternative answer to global capitalism critics (Boltanski & Chiapello, 1999). This allows capitalist groups to keep capturing and generating profit (Bergeaud Blackler, 2017). This is an important contribution that we want to emphasize here: interrogated professionals are giving reason to engage into IF that depart from ethics or solidarity purposes but stay within a market lexical field.

²⁰² Next section discusses the managerial implication and utility of a fine-tuned proposal for the Belgian market.

This sociological part does not intent to simplify reality to assume that IF is only of Market or Inspired (religious) justifications. Reality is way more complex.

Part 2 findings can be summarized as:

- IF engagement comes mostly from Market justifications;
- Religious or ethical tenets are driver to engage in IF but they are not dominant;
- Unlike *Halal* industry developments, IF industry contributes to answer to capitalism critics. To prove that, we observe similar financial mechanisms, a dominance of debt-like products, market justifications leading the growth, relative mistrust about interest rate interdiction;
- Recent IF development occur within a trend of revival (see part 2) of Islam on other areas such as politics, society, etc.

The last element seems to be relevant to the discussion about IF implementation in Belgium. Can we talk about ethics or religious tenets for the professional advisors? How this finance is an original finance or it is just another form of '*halalisation*' of an industry (here finance)?

We observe that industries such as FMCG, clothing and marketing already have *halal* label for economic, political and religious reasons (Haenni, 2005). Those potential reasons are not discussed in this thesis but authors like Patrick Haenni or Florence Bergeaud-Blackler give interesting possible lines of approach of such phenomenon of offering halal labels to several industries. Our research tries to understand if we can position IF as a similar answer to this trend. For this specific reason, we discovered that engineered IF within the conventional economy looks like a very similar technique-based product which achieves financial efficiency and return in line with conventional finance. This is what the Murabaha²⁰³/conventional mortgage comparison has showed in the part 4 of the thesis. IF seems not to depart from conventional finance. Another potential explanation lays in the fact that most IF professionals come from the conventional industry where they re-use techniques learnt in their previous experience. IF speaks the same language as the conventional economy which helps its acceptance and incorporation.

This rationale leads to an internal tension: how engagement from an inspired/religious regime of justification can deal with a market regime of justification? In plurality of rationales,

²⁰³ Loan based product widely explain in part 4.

management needs to understand the underlying drivers to decide to enter/implement into a new market such as Belgium. More details are given in the next section about the managerial implications.

- c. *SME's managers. Where religiosity's correlation with Islamic finance solutions leads to a growth impasse in a secularized environment*

The part 3 tried to answer to the question “*Does religiosity have an influence on the small and medium-size enterprise managers' will to use Islamic finance loans?*”. The religiosity has been defined as an individual intensity in following rituals in his religion. For that purpose, Jones' Model has been mobilized and explained. On a mix-group of managers (Muslim and non-Muslims), we observed that:

- Depending on the level of religiosity²⁰⁴ (namely intensity of the religious practices), managers will decide to fund with IF loans;
- There is a demand perspective for SME managers when considering alternative funding solutions. This demand for Islamic finance loans will depend on the level of religiosity of the managers;
- In an additional sub-study on Muslim managers population only, religiosity has no impact on the willingness to fund with IF loans. Whatever the religiosity, it exists an important demand for such solutions. The most important variable, here, is the religion itself.

Findings highlight a systemic contradiction that dampens enthusiasm for IF implementation: religiosity has an impact on the decision to consider IF loan but in the same time, religiosity is decreasing in Belgium (Dobbelaere & Voyé, 2012). Yes, we do have an implementation opportunity but, in the same time, studies show that the Belgian market has a decreasing trend in religiosity. Based on those conclusions, we would think there is not much opportunity to have it implemented in Belgium. Our rationale led to dig deeper and to reflect on the religiosity within a Muslim population sampling.

Indeed, the proposal, stating that there is no much interest to implement IF (as religiosity is decreasing in Belgium), needs to be nuanced as it exists a demand within the Muslim

²⁰⁴ Concept widely discussed in part 3.

community, independently of their level of religiosity. This is what the on-field study has showed.

Another element of interest is how IF is perceived by the Muslim sample. Whereas orthodox and *halal-based* behaviour is widely spread within that Muslim population in Belgium. Activities such as Ramadan fasting month, *halal* food consumption... (Bergeaud Blackler, 2017), IF has not reached that level of orthodoxy in Belgium. The latter did not succeed to position itself as a fundamental pillar of the religion such as the other *halal* customs did. One could also argue that IF is not a pillar of religion such as prayer, fasting, pilgrimage, etc (Ibn Anas, 2018). This proposal can be however mitigated. Indeed, *halal* food is not either one of the 5 pillars of the Muslim religion (pillars being the attestation of faith, prayer, fasting, charity and pilgrimage). Another explanation resided in the immediate temporality and effect of halal food. Indeed, food can be immediately consumed by the individuals and come for a need, on the spot. On the other hand, IF is a less immediate need (buying a house is a long-term project) and require much more financial expertise (thus time to be implemented, resource to allocate...)

d. Banks. Where assets structure and a low risk/low return profile would lead to a little interest in implementing Islamic finance solutions

A final part 4 discussed how relevant it would be for Belgian banks to offer IF solutions. A comparison is made with the financial performances with UK banks²⁰⁵ that are actually offering those products. The purpose was to find which zone of the return/profit matrix the findings occupy:

	High Risk	Low Risk
High Return	A	B
Low Return	C	D

Evidences shows:

- Conventional banks lay in standard return/risk zone of arbitrage A and D;

²⁰⁵ There are no Belgian banks offering such solutions at this stage (30-01-2021).

- Islamic banks lay mostly in Zone D: low risk/low return which comes close to the Zone C: High risk/low return (see below);
- IF Sharpe ratios are close to 0 whereas CB²⁰⁶ have 2- or 3-times better Sharpe;
- Jensen's Alpha for those banks and timeframes propose better performance for conventional banks, in general.
- Thus, no financial profitability to propose IF services from conventional banks (this is due to the volatility factor linked to the loans structure and nature);
- Only 2015 showed a better performance for IB UK than CB UK²⁰⁷. Otherwise, performances of CB UK and BEL UK are always doing better (BEL CB have excellent performances).
- During and post crisis (2008), IB experience a smoother decrease in Sharpe ratios than CB banks. 2009 showed a huge recovery for CB whereas IB grew slowly. These results show that in crisis period, low risk structures, whether Islamic or not (Altunbas, Manganelli, & Marques-Ibanez, 2011), are less impacted by risk volatility.

IF (or also called Sharia-Compliant) banks experienced a better resilience during the 2008 crisis but showed their number keep going down in 2009. This is explained by the integration of IB in the global economy, the relatively extensive usage of credit-like solution such as *murabaha* products, and the debt leverage inexistence in IB whereas CB have been widely refunded with credit solutions. These funding opportunity products have been studied in part 4. We ended up with the conclusions that this product was more expensive than the conventional mortgage solution.

The ALM (assets and liabilities management) nature and structure of IF banks' balance sheets give an ROE (Return on Equity) that is much less profitable than the ROE of the conventional banks.

On the risk level, Sharpe ratio is always negative for IB during the 2013-2017 period which indicates that a shareholder has a better interest in investing in a risk-free bond than in an IB stocks. Sharpe ratio of CB shows positive number which indicates a good portfolio performance.

²⁰⁶ Conventional Banks.

²⁰⁷ Reasons for this extra-ordinary result are not tackled in the research.

These elements (nature of the balance sheet, ROE, Sharpe ratios) can be explained by a low diversity of the funding solutions in Islamic finance, the inter-banking funding opportunities, the poor standardization (whereas efforts are made via the AAOIFI, IILM²⁰⁸) and the local implementation with countries national laws (Ercanbrack, 2019) that could prevent IF solutions to be competitive (Abdullah & Yaacob, 2012).

Despite their wishful desire to offer an IF based on joint ventures and partnership, IB needs to be competitive and has no other choice than offering more debt-like contract such as the *Murabaha* instead of partnership structure. Especially in this global capitalistic context that imposes its standards and competitiveness. IF funding is constrained by the limited liquidity available via the PSIA (Profit Sharing investment accounts) in IB. ALM structure analysis provides evidence that PSIA account (deposits under PLS principle) are the main part of the liabilities (+50% for ADIB and QIB) in Islamic finance industry. This ratio is impossible in a non-Muslim market where debt is the cornerstone of the transactions. This is definitely a dilemma that IB have not decided on yet: either being a fully debt-based structure (CB like) with credit risk, interest rate risk and default risk or being an equity-based structure (venture capital like) with equity risk, valuation and market risk.

Do these facts automatically eliminate IB implementation in Belgium from the equation? That would mean that the only goal of IB is to make profit. Is it its only goal? Answer is again more nuanced. We refer to 4 IB missions²⁰⁹. We saw that more than just realising profit, Islamic finance aims to promote a solidary society. Again, this is a wishful thought which raise the dilemma of how long can a bank stay solidary, without being beneficiary. Considering this situation in a strictly economic context, it will not be sustainable for long.

In addition to the conventional risk, IB faces also the constraints from the Sharia board governance that can approve an IF operation, but the same product can be disapproved by another Sharia board. That is what we can call a Sharia compliance risk. This factor increases the uncertainty and the return volatility which damages even more the financial indicators.

Next section is departing from those results and discussions that showed the poor growth opportunity to implement retail IF in Belgium. It also proposes routes for developments with potential managerial actions.

²⁰⁸ International Islamic Liquidity Management which helps to facilitate cross-border operations.

²⁰⁹ Collect deposits, respecting Sharia principles, promote solidarity, wealth sharing.

2. Originality, practical contributions to management science and limitations: between tensions and avenues to foster Islamic finance

a. Islamic finance as a limited alternative answer within capitalism

While the research started from studying what is IF and how it can be implemented in Belgium, the qualitative and quantitative findings led us to an unsuspected thesis: *Islamic finance does not seem to be an alternative finance aside to conventional finance but it looks like a finance within conventional finance*. From there, literature review and other research showed how other *halal* industries are also expressions of capitalism.

The thesis proposes that, in its scope of expertise, IF have similarities in its rationale with conventional finance. On the field, it looks like an expression of conventional financial capitalism that keeps on generating and capturing profits. Findings showed that, whereas individuals may have interest in ethics, the financial considerations (cost of a loan, opportunity to find alternative source of funding) are primary factors of the decision-making process for stakeholders that we have questioned. On the shelf of financial offers, IF lays in the ray of ethical finance. Consumers and suppliers are free to use it upon their needs.

Without entering into a judgemental position, we can now get back to our initial question: *is there any room to implement retail Islamic finance in Belgium?* From there, it's legitimate to wonder how successful are other countries where Islamic finance is implemented. Without being a comparative study between Belgium and the UK, we have made a focus on the UK for 2 significant reasons: (1) this market has already been studied in my empirical research in part 4 and (2) UK is also a non-majority Muslim population country just like Belgium. From there, it is legitimate to ask ourselves how can we explain the relative success in the UK?

First of all, we observe that this country has the most educational and financial institutions in Europe that deal with Islamic finance. Awareness and communication are widely spread over the country. It is even considered as one the most attractive country where to study (Osborne, 2013). Specifically, the UK are the leaders in Western countries in research papers and educations in IF. In Belgium, there is no financial institution offering such solutions and no university providing with Islamic finance education²¹⁰.

²¹⁰ Only few punctual certifications and seminars were organised in the last years.

On the political level, previous UK Prime Minister, David Cameron, gave a push to IF development with the will to have the UK as a prime HUB for Islamic finance industry²¹¹. Whether government is Conservative or Labour, the prime interest is the development of the economic success of the country (Belouafi & Chachi, 2014). The pragmatism and the Calvinist-Protestantism culture could also be factors for such developments. This correlation has been discussed in part 2.

On the legal level, the political drive goes along with regulations and the increasing number of law firms that have an Islamic window or speciality in the UK. Belouafi and Chachi mention in their article: *“The Flexibility of the Legal System and the Nature of the Adopted Regulatory Framework. With regard to flexibility, it is noted that the existence of trust laws and equity principles under the British common law has given the UK government enough room to deal with the ownership matters that arise in the structures of most of IF instruments”*. (Belouafi & Chachi, 2014). That expertise is very rare in Belgium. To our knowledge, only the law firm Afschrift is offering such expertise and there is no regulator initiative that goes into that direction.

Another factor of difference that can explain this difference between Belgium and the UK is that the long-existence and presence of IF initiatives in the UK since the late 70's, especially the actions led by Muslim communities²¹².

On the financial level, the City London financial place offers a wide array of flexibility in conventional and Islamic finance. Creativity and agility (in the sense of reactivity to a demand) is part of the day-to-day activities. On the financial regulation side, the Financial Service Authority (FSA) is providing a simple and unique body of rules that regulate IF developments. It allows to have a standardized approach on the market and its practices.

²¹¹ <https://wief.org/press-release/malaysian-companies-take-centrestage-9th-world-islamic-economic-forum-london/>

²¹² www.mcb.org.uk

b. Limitations of the thesis

This thesis stated a problematic, discovered new features, answered some questions but it also showed its research limitations.

First of all, we want to point out the relative size of the different samples. Indeed, the relative number of respondents in part 1, 3 and 4 is small. In the era of big data in quantitative research, my samples of banks, consumers and professionals' advisors are limited. Given the relatively small size of the sample, we can hardly define that our proxy sample would represent a larger scale in Belgium population. External validity is also questionable here: we picked a sample where Sunni Muslim population is overrepresented. This exploratory research thus has a limited scope for generalisation. However, without being exhaustive, those results are useful to engage into a preliminary discussion of a phenomenon in Belgium that is not very known and relatively new in Belgium.

Another limitation comes from the fact that we mobilized a theoretical model of justification to understand professional advisor's engagement drivers and not to cover potential disputes. This limitation is justified by the fact that parts of the model were unnecessary for this research. The former is not a goal by itself but a tool that we can mobilize we need it. In the same study, we only interviewed French and Belgian the professional advisors. We led a qualitative exploration for professional advisors whereas we led quantitative exploration with the consumers in part 1 and 2. Leading extensive semi-directed interview with retails consumers could be a relevant path for further research.

On the SME level, we limited my sample to very small enterprises (up to 49 people) whereas the European Union definition of SME refers to businesses sized up to 249 FTE (Full time Equivalent). Note that SME's have been selected due to the fact they are core drivers of the Belgian economy (see part 3) and their main need is for funding solutions. We can thus legitimately wonder if religiosity results and its impact on manager, within a bigger structure, would have the same significant impact. Study has been made once, in a limited period of time. Furthermore, my sample is composed only of managers of Brussels and Wallonian-based companies. Flanders is not covered. There is a cultural aspect which is not tackled in this study, both for companies and customers. The relative short time span (administered from 4th till 28th of January 2019) of the survey give the soundness that no external factors may have impacted

the answers of the informants (internal validity is respected). However, a longitudinal survey could have allowed to have more robust results.

On the methodological level, the questionnaires for part 1 and 3 have been carried online which de facto excludes consumers that are not actively using their computer and/or E-mails. A paper or phone-based interview could have allowed to reach another type of representative sample (informants that have no or limited access to computers). Another element is that we observe that CAMEL ranking study is basing its calculation on loans and ALM reports. However, those structures are not equivalent between IB and CB. We faced a difficulty to compare numbers that are not comparable. This has been partly tackled thanks to the use of Sharpe ratio and Jensen's Alpha that allowed to give a more accurate picture of the markets by linking return rationale to its volatility²¹³. CB suggest a model where when risk is high, potential profit is high and when risk is low, potential profit is low. Any other situations are under arbitrage of management. As for the IB, we observe that the statement that it can generate high profit with low risk is not a standard model (as the CB risk/return model).

c. Pragmatic potential developments for Belgium

Findings and discussions showed low or poor perspectives for IF implementation. How management can amend this offer to tap into the right sample? We indeed observed two main elements: IF doesn't seem, *per se*, considered as link to ethics, on the demand side and Islamic finance does not seem to be financially interesting to be proposed on the offer side. Context, findings and analysis seem not to set IF in a favourable environment and this may remain a still-born solution in Belgium if it is offered as such. Given the results of the thesis, what could be the conditions proposed in Belgium to foster that implementation?

On the offer side in Belgium, politics and regulators are not positioning IF as funding opportunity for the retail and public investments. Therefore, no legal structure is offered to sustain the offer in Belgium. Double taxation on Sales operations (as discussed in part 4) is a

²¹³ Another limitation is that I only focus on return and risk without tackling the correlation (in the sense of measuring the statistical intensity link between an IF asset portfolio and its risk). This is to be studied in further research.

huge weight on Islamic finance pricing. Belgium is also not offering Belgian Sharia scholars with strong financial background who could apply the double governance principle.

On a regulatory level, the Belgium market has some regulations (as the double imposition on a double Sales operation during a *Murabaha* deal) that need to be tackled to give a reasonable competitive pricing to IB solutions. This is a concern that has been solved by the FSA in the UK but remains a serious limitation to IF growth in a Belgian context.

The religious scholars we met have a serious knowledge in religious affairs but a limited or non-existent knowledge in financial affairs. Belgium doesn't offer any framework or favourable policy to promote IF offer.

Furthermore, given that most justifications to engage in the IF industry are Market based²¹⁴, Islamic finance remains an industry within the homo-economicus rationality. This means that those solutions need to be financially optimal for the consumers and the suppliers. On a financial perspective, my thesis sustains that IF has indeed a normative dimension, like conventional capitalism has a *spirit* from religion (Weber, 1965), but the Market engagement (see part 2) makes it a business more than an ethics. IF does have a '*spirit*' but it is aligned and incorporated in the financial capitalism. Results also showed that full-fledged Islamic banks are having difficulties to compete with conventional banks. Instead of considering a full range of services, a bank could decide to offer one specific product (Murabaha of *Ijarah*) to tap into a specific market group. Results show that IB institutions need to have a well thought out strategy to adapt to non-Muslim European markets...such as Belgium. IF industry cannot claim to have a religious authority nor a hierarchy that would set the industry standards (Unlike Christianity which has the Vatican bank). In Belgium, the retail market is rather small and education/information is not spread sufficiently.

On a global perspective, Islamic Banks are being very pragmatic by positioning themselves as an equity-based industry while offering debt-like products such as *murabaha* to generate liquidity. This evolution creates tension within the IF industry. For instance, we can observe that the most conservative banks are accusing the most innovative Malaysian or Iranian banks of window dressing operations for interest-based operations with the overuse of *Murabaha* solutions (Zandi, 2012). IF is still a young industry which has many areas of apprehensions

²¹⁴ Among multiple other engagement justifications (civic, inspired...).

and room for improvements. It is still searching for its path in a world where political, social and economic context are triggering tensions. De facto, the 100% reserve (equity based) Islamic banking sets a systemic limitation to its growth.

On the demand side in Belgium, consumers are not considering IF as an ethical finance. Like for the offer side, there is no public authorities' initiatives that enhance awareness and education about IF, unlike the UK. Consumers are mostly do not see it as an ethical based funding proposal. The only way to keep this proposal relevant is to specifically target the Muslim (Sunni) population which relatively reduces the reach (assuming that a large portion of Muslim population would embrace such solution, which has yet to be proven²¹⁵).

On a communication and marketing side, Belgium media and coverage about Muslim affairs is mitigated. We observe a lack of clarity and sometimes a poor image associated with everything linked to Islam (Jacobs, Torrekens, & Vanparys, 2013). IF does not depart from this perception. However, most of the studied sample (69,4%) showed interest in those funding solutions. This is a first field of work where communication (about IF), media coverage (on TV, Newspapers...) and awareness (people understanding of what Islam and Islamic finance are) need to be strengthened. This also means better cooperation between the marketing; product management and financial teams is the path for success for a niche industry such as the IF industry.

On an administrative perspective, we observed that there is a significant propensity (45%) of small SMEs (SPRL²¹⁶ and PP) considering funding with IF loans. This indicates that IF loans provider (bankers or financial institutions), on top of the communication, marketing, media coverage and financial requirements, have an interesting growth opportunity with the retail individuals, loan professionals (PP) and SPRL companies.

²¹⁵ A survey from ADEFI was available online but it is no more available at this date (30-01-2021). A copy of the data and the results that I obtained from that survey showed a majority interest in IF.

²¹⁶ Limited Liabilities Companies.

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Glossary

- *Sharia law: Islamic law (for economic, social, political, personal matters)*
- *Quran: Holy book in Islam (//Bible)*
- *Ijtihad: effort of interpretation of the Quran*
- *Murabaha: Islamic financing instrument where the buyer and seller agree to the cost and the margin (mark-up) of this asset*
- *Sharia board: double governance system composed of Sharia scholars*
- *Sunna: Prophetic tradition*
- *Ijma: Consensus process for decision-making*
- *Qiyas: Rationale by analogy*
- *Fitna: Trouble caused by a disagreement*
- *Hadiths: Stories gathered in the Sunna*
- *Riba: Interest rate*
- *Maysir: Speculation principle*
- *Gharar: Excessive uncertainty*
- *Quraysh: Tribes that were living in Mekka city in the late antiquity*
- *Sarafeen: Bankers*
- *Akhlaq: Islamic ethics*
- *Kalam: Philosophical theology*

Appendix

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Appendix 1 -Review literature of Sharia Law

I give here below some of the interpretations made of the Sharia Law concept:

Author	Books/ articles	Methodology	Findings and conclusions
Mohammed El Shakankiri	<i>Loi divine, Loi humaine et droit dans l'histoire juridique de l'Islam</i>	Discussion	God law is linked to the Torah law (how human beings should act) and not the Roman law. Human law is a legal law (roman meaning); Tension between Sharia law and Fiqh (law established by the doctrine) because everything comes from God even then human law (is there any real delegation from God to human).
Mohammed BenKheira	<i>L'amour de la Loi, Essai sur la normativité en Islam</i>	Critical discussion on the original texts	Anthropological approach of Islam. Willingness of the actors to subscribe to Law via symbolic acts as a sign of identity
Eirini Kakoulidou	<i>The Background and the Formation of the Four Schools of Islamic Law</i>	Discussion	Association between law and religion through the fiqh principle through the four schools of interpretation and the possibility of divergence in interpretations
Wael B. Hallaq	<i>A History of Islamic Legal theories</i>	Essay	Introduction of Al Shafi'i contribution in Islamic Fiqh with the addition of Qiyas (human rational analogy) to the Ijma principle. He emphasis here the human contribution to God's law
Joseph Schacht	<i>An Introduction to Islamic Law</i>	Essay	An historical evolution and a discussion on the Hanafi legal school (through Halabi works). The evolution of the legal structures toward a 'modernism' state (revival)
Ignaz Goldziher	<i>Le Dogme et la Loi de l'Islam</i>	Essay	Islam as a historical, sociological and psychological phenomenon and as a comprehensive object. Dogmatic and legal evolution of the Islamic legal corpus > Orientalism (fixed vision of Islam)
Malek Bennabi	<i>Le phénomène coranique</i>	Critical essay	Modernist approach for a civilisation process of Sharia law in Muslim countries. He goes beyond the simple opposition between religion and science.
Abd Al-Wahhab Khallaf	<i>Ilm Ousoul Al-Fiqh</i>	Essay	Various sources of Islamic Law and their differences in Fiqh

Appendix 2- Ibn Abd AlWahid Khallaf methodology

Unlike a conservative approach where no Ijtihad is possible (we can identify many other streams such as the *Mu'tazilites*, *Wahhabism* and some form of *Salafism*²¹⁷). Khallaf set the foundations for a new modern *usul al fiqh* (sources of jurisprudence). He expresses, the same as Al-Shatibi prior to him, that Sharia's purpose is to guarantee and promote a general *Maslaha*. In his methodology, Khallaf insists on the various source (*usul*) for *fiqh* elaboration. One of these sources is the '*urf*' (the usage, the custom). Based on that, his method says that as '*urf*' is changing and evolving, *Maslaha* evolves and changes depending on its context. For example: "(...) if an illicit form of contract, such as life insurance, happens to become widespread in a particular society, then need and necessity - elements of *Maslaha* - will have to outweigh the imperatives [for instance. *Gharar* - uncertainty in the contract - interdiction] of the revealed text"²¹⁸. To him, "objectives should always have priority over means"²¹⁹. Another key element of my approach is to work with an inductive approach to what Sharia is: my different premises of what Sharia is could be true by definition (as being adequate to what reality is offering). The law extracted from Quran and Sunna, Sharia law, has different expressions, given its location and period²²⁰. For instance, law regarding alcohol has evolved with its context and application²²¹. One may say that it has evolved because a new verse has been revealed (by abrogation principle). The one verse replacing the other. We should refute²²² this statement as Quran itself states: "And if thy LORD pleased, he would have made all men of one religion: but they shall not cease to differ among themselves, unless those on whom thy LORD shall have

²¹⁷ Those streams will not be the subject of my research. See fully detailed work of Claude Salamé, *Le courant rationalisant et le courant littéraliste : Dans les fondements de la théologie dialectique et ses grandes écoles*, Bulletin d'études orientales, Institut Français du Proche-Orient T. 31, (1979), pp. 269-285.

²¹⁸ This example is relevant as insurance life insurance such as applied in western countries implies a part of uncertainty in the contract (e.g. we don't know when the insurance taker will pass away so we cannot predict which premium will be paid or not to the insurance company).

²¹⁹ Khalaf A., *Masadir al Tashiri al islami fi ma la Nassa fih* (The origins of Islamic legislation When there is no Direct Text, 3rd ed., Kuwait, 1972, p.141.

²²⁰ Referring to Quran (5: 91): "O true believers, surely wine, and lots, and images, and divining arrows, are an abomination of the work of Satan; therefore, avoid them that ye may prosper ". We observe here a strict interdiction of intoxicants (alcohol namely). One should know that this interdiction law has not always been in application as in early ages of Quran revelation, Alcohol was not banned but only unadvised. Interdiction came when a prayer did not know the meaning of what he was saying in a prayer, as he was drunk, he made obvious mistakes in the recitation and was not able to be humble during the prayer. In the early ages of Quran revelation, Alcohol interdiction was limited not to arrive drunk at prayers. Wine having even a certain utility." They will ask thee concerning wine and lots. Answer, in both there is great sin, and also some things of use unto men; but their sinfulness is greater than their use."(Quran 2:219)." A bit later, wine consumption was fully forbidden because it provoked drunkenness. This disappears when arriving to heaven where its consumption is even allowed: " O true believers, come not to prayers when ye are drunk, until ye understand what ye say; nor when ye are polluted by emission of seed, unless ye be travelling on the road, until ye wash yourselves. (Quran 4:43)"

²²¹ A Sunna reference states: The Prophet said: God has forbidden to sell Alcohol and the dead animals (*mayta*), pork and the idols." in al-Bukhârî, n° 2121, Muslim, n° 1581.

²²² *Ikhtilâf* (disagreement) and *moukhâlafa* (divergence).

mercy: and unto this hath he created them; for the word of thy LORD shall be fulfilled, when he said, Verily I will fill hell altogether with genii and men²²³". In early ages of Islam, divergence was common and respected. "Divergence within the community is a benediction for the humankind"²²⁴ says Hâfidh al-Bayhaqî (Chafi'I school and a Hadith expert). Another Hadith states that Omar Ibnou Adbi al Aziz used to say: "I would hate companions would not diverge between each other, if they wouldn't diverge, it would be no freedom for us"²²⁵. History of the Islamic civilization shows us that Sharia Law has been and is still applied in various ways²²⁶ and that divergence occurred even at the period of the prophet revelation itself. Sharia law concept is an important concept to understand when willing to study IF and its social implications.

Appendix 3 - Ijtihad and Sharia law methodology of Wael B. Hallaq

Hallaq also works on another very important feature of Sharia and its Ijtihad: who is entitle or has the legitimacy to do Ijtihad? To answer that question, he refers to: "*the four most important juristic roles that dominated Islamic legal culture, namely, the qadi, the mufti, the author-jurist and the professor. These roles rarely stood independently of each other, for a jurist may combine two, three or the entire set of roles, let alone other subsidiary ones*" (Hallaq, 2001, p.32). These roles being themselves a product of the society that lead them to develop their own ethos. For instance, Hallaq is naming Kamal al-DIn Ibn al-Zamalikana (d. 1326) who has had all of these functions and was a leader of the Syrian Shafi'ism. Even though the amount of necessary knowledge and complexity may have been less demanding than what we experience today, we can observe that a pluri-disciplinary and polyvalent characteristics were the guarantee of an efficient, legitimate and contextual Ijtihad. Examples are numerous and Hallaq has led comprehensive researches about this. We can even consider a reflexive "Ijtihad on the Ijtihad concept". Many authors have provided with different definitions:

Author	Ijtihad comprehension	References
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²²³ Quran, Surat Hūd (11 :118).

²²⁴ Hâfidh al-Bayhaqî, in his book " *al-Madkhalou 'Ilâ s-Sounani l-Koubrâ*".

²²⁵ Al-Bayhaqî et Badrou d-Dîn az-Zarkachî.

²²⁶ http://www.lemonde.fr/idees/article/2012/01/09/la-charia-une-realite-plurielle_1627463_3232.html

“Shafi’i (d.204/819)	“Ijtihâd consists of analogy (qiyas)”	(Shafi’i, 1940:477)
Ibn Hazm (d.456/1064)	“Ijtihâd means to investigate the provisions of God just considering the Quran and the Sunna”	(Ibn Hazm, n.d.:41)
Abû Ishâk Shirâzî (d.476/1083)	“Ijtihâd is more general then analogy because it means to endeavour with intense effort to achieve the judgment”	(Shirâzî, 1988:123)
Gazzali (d.505/1111):	“It means, spending utmost power by mujtahids in the way of learning the provisions of religion”	(Gazzali, 1937: II/101)
Mustafa al-Shalabî:	“Ijtihâd means, to endeavour for extracting the religious rulings from the signs, meanings and expressions of sacred texts”	(Al-Shalabî, 1947:11)”

*Ijtihad reflexive approach*²²⁷

Hallaq identifies four main periods of Sharia law Ijtihad²²⁸:

- Pre-classical: 8th to 10th century (Shafi’i);
- Classical: 10th to 12th century (Ibn Hazm, Abû Ishâk Shirâzî, Gazzali);
- Post-classical: 12th to 1st half of 19th century (Mustafa al-Shalabî, Al-Shatibi);
- Modern: Second half of the 19th to 20th century.

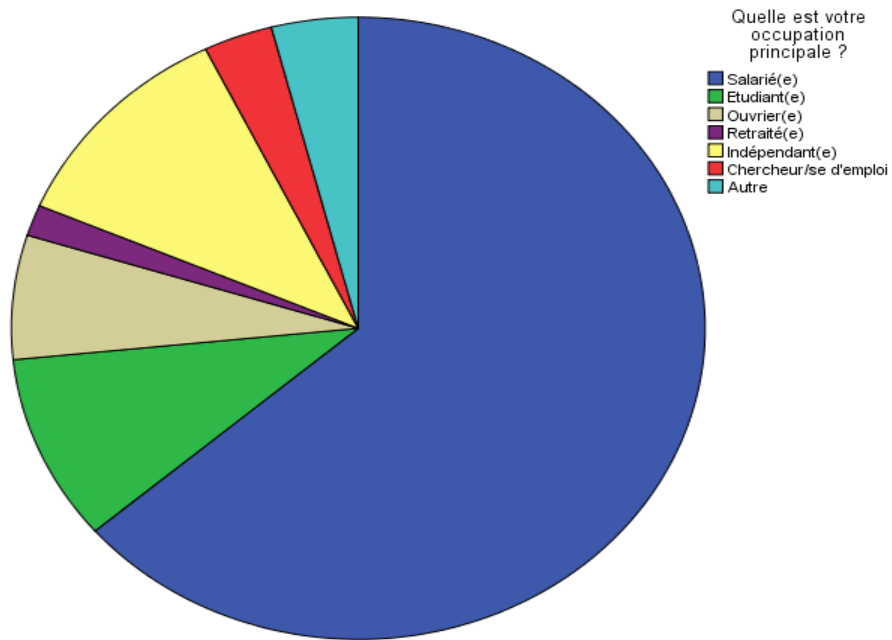
The initial era of Ijtihad was made in the pre-classical period where major madhab (school of interpretations) was created. From there, we observe that during the first 3-4 centuries after Islamic revelation, the Islamic world acknowledged a great volume a pluralism and fiqh divergence (Ja’farite for the duodecimans Shiite, Iraqi’s Hanafi - d.767 - Hijazi Malikite – d.795), Egyptian Shafiite - d.820, Hanbali – d.855) – All these schools of interpretation had their own methodology when having to solve an issue when no text was available.

Al Shafi’i (Founder of the Shafi’i school, d.820) has set up the normative rules (in his major contribution, Al-Risala - Epistle) of Usul al fiqh in this first era. He established the rules and methods to follow, to interpret and formulate new laws. He is the symbol of a period of theory formation. In the first two periods many efforts were also made on reasoning and legal structuration.

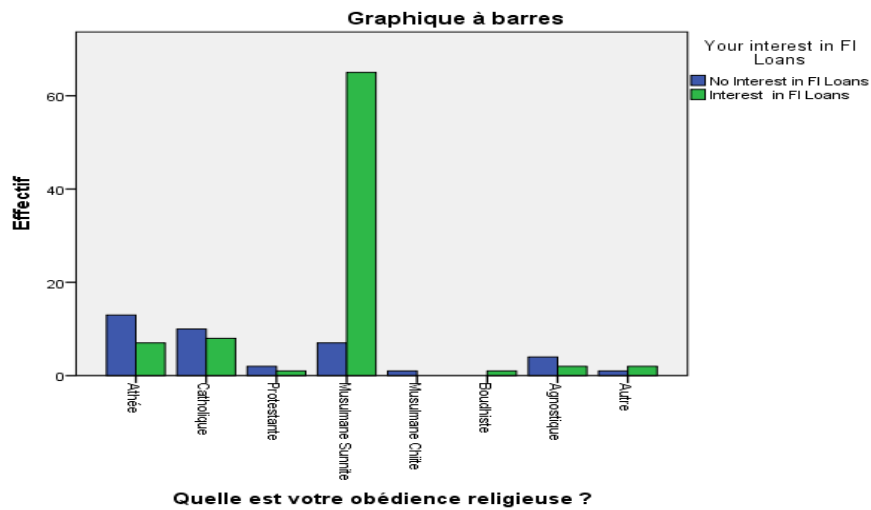
²²⁷Kesgin S., *A critical analysis of the Schacht’s argument and contemporary debates on the legal reasoning throughout the history of Islamic Jurisprudence*, The Journal of International Social Research, Vol.4 : 19, 2011.P. 162.

²²⁸ Hallaq W.B., *A History of Islamic Legal Theories: An Introduction to the Sunni Usul Al-Fiqh*, Broché, 1999.

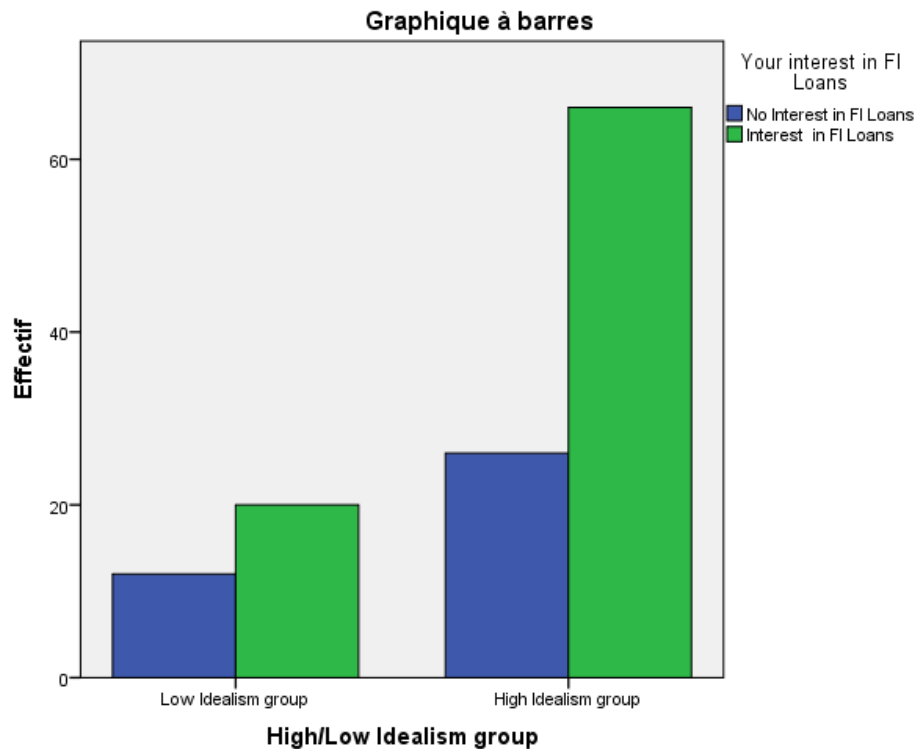
Appendix 4 - Descriptive statistics



Main occupation



Interest in FI, given your religion



Interest in FI, given the idealism score

Appendix 5 - Online-based Questionnaire

Part I

These socio-demographic questions are encoded in Limesurvey tool.

Part II

This EPQ questionnaire has been translated in French in the tool.

The Ethics Position Questionnaire

Please indicate if you agree or disagree with the following items. Each represents a commonly held opinion and there are no right or wrong answers. We are interested in your reaction to such matters of opinion. Rate your reaction to each statement by writing a number to the left of each statement where: 1 = completely disagree 2 = slightly disagree 3 = neither agree nor disagree 4 = slightly agree 5 = completely agree

1. People should make certain that their actions never intentionally harm another even to a small degree.
2. Risks to another should never be tolerated, irrespective of how small the risks might be.

3. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.
4. One should never psychologically or physically harm another person.
5. One should not perform an action which might in any way threaten the dignity and welfare of another individual.
6. If an action could harm an innocent other, then it should not be done.
7. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.
8. The dignity and welfare of the people should be the most important concern in any society.
9. It is never necessary to sacrifice the welfare of others.
10. Moral behaviours are actions that closely match ideals of the most “perfect” action.
11. There are no ethical principles that are so important that they should be a part of any code of ethics.
12. What is ethical varies from one situation and society to another.
13. Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person.
14. Different types of morality cannot be compared as to “rightness.”
15. Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.
16. Moral standards are simply personal rules that indicate how a person should behave, and are not be applied in making judgments of others.
17. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.
18. Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustment.
19. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.
20. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.

Appendix 6 - Literature review of the CSR contributions

Authors	Year	CSR	Contributions on ethics
Barnard	1938	Economic, legal, social concerns are important contextual aspects for an individual.	Morality is a construct of the sum of personal actions.
Simon	1945	Companies must be responsible of social values.	To survive, a firm needs to adapt its goals to consumer values.
Drucker	1954	Management decisions must take into consideration the impact of its policy on the whole society (Public responsibility).	Morality to Ethics in action.
Andrews	1971	Firms should explicitly support society through their policy.	Firms should also define ethical principles in their core DNA and not only financial concerns.
Freeman	1984	Company goals must satisfy various stakeholders.	Ethics is necessary but not sufficient to define what we stand for.

Appendix 7 - What is a discourse

A discourse could be either considered as words expressed by its author or as a whole message including words and its context. In most cases, a discourse is pluri-phrasal. From there we can list some inherent characteristics of a discourse: language, logical construction, psychology, sociological stakes, philosophy, communication theory, etc.

In the literature, authors define this concept with various nuances:

- Benveniste (1966):” *toute énonciation supposant un locuteur et un auditeur, et chez le premier l’intention d’influencer l’autre en quelque manière*” / « *Any speech assuming a speaker and a listener, with the speaker intending to influence the other in some way.*”
- David Nunan (1993):” *In the case of the discourse analyst, the ultimate aim of this analytical work is both to show and to interpret the relationship between these regularities and patterns in language and meanings and purposes expressed through discourse*”.
- Mainguenau (2004) defines four types of discourses : (i) an institutionalized type with standardized features (administrative documents, commercial marketing), (ii) standardized communication with space for individual customizations (News on TV, touristic guides, etc.), (iii) non-standardized communication within a contextual scheme (a football journalist will talk about football in his media and will start talking about eye-surgery for instance); and finally (iv) where the author can deliberately write a short story but calls it a novel. He uses codes of his own experience.
- Roulet, Filiettaz and Grobet (2001) : ”*Le discours ne peut être défini comme une unité linguistique, mais qu’il résulte de la combinaison d’informations linguistiques et situationnelles*”. / « *Discourse cannot be defined as a linguistic unity, but results from the combination of linguistic and situational information* ».

In conclusion, a discourse is composed by these principles:

- A geographical/temporal context ;
- The intention of the sender to influence the listener;
- A discourse’s theme ;
- Common knowledge between the sender and the recipient (culture, education, etc.).

From there, a discourse can have several dimensions/objectives:

- Polemical: realities are to be built from already constructed realities;
- Didactical/informative: the sender teaches the recipient a reality they did not know;
- Pedagogic: the sender uses techniques (repetition, tones) to strengthen the reception;
- Prescriptive: the sender gives advice for behaviour in specific situations;
- Dialogical: it is addressed to someone (present or away).

Proposal n°1: Ethics is important for IF actors

- Personal position towards ethics in finance.
- Personal belief: How close to Islamic Ethics do the actors need to be to work in an IF environment.
- Position towards conventional ethics.
- Position towards Islamic ethics applied to finance.
- Islamic ethics 'instrumentalisation'.

Proposal n°2: Ethics in IF would contribute to more Ethics in global economy

- The perception of Islamic ethics in practice.
- Attention to IE (Islamic Ethics) applied to finance.
- Conciliation between theoretical and applied IE.

Proposal n°3: IF is mocking conventional finance

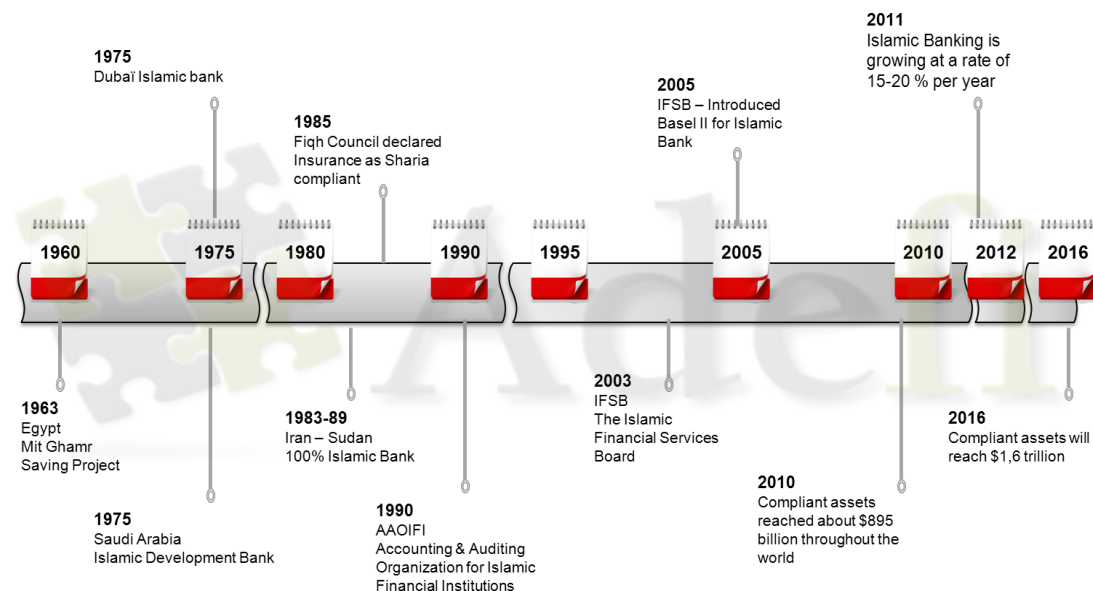
- Given actors' professional background, what is their IF understanding.
- From which point should an activity be considered as speculative (Maysir)?
When a legal risk does become illegal? Who defines it?
- What is an equitable profit sharing?

Proposal n°4: IF is only a technical finance based on Sharia regulation

- How IF treats the monopolistic revenues or the revenues linked to distortion such as government subsidies, taxes or quota. This goes against the fair value of a product.
- Predetermined interest rate is forbidden (nominal interest rate) in IF; when we have inflation, the real interest rate could be negative which favours the customer - does the customer need to share its extra revenue (due to inflation) with the bank?

Appendix 9 - Contemporary Islamic finance

In the late 20th century, we have witnessed an interest in the development of Islamic finance with state interventionism in many Muslim countries. Many other official institutions have also been created in the late 1970s and early 1980s: the Faysal Islamic Bank in 1977, Islamic Bank of Bahrain in 1979, the International Association of Islamic Banks in 1977, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) in 1990's. Several factors explain this need for a professional and Islamic banking offer: we have experienced more and more savings from GCC's who wanted to invest their money into Sharia compliant products in a revivalism of an Islamic way of living. Another factor is that after 9/11, many Islamic wealth owners decided to repatriate their funds to their homeland and especially to Islamic institutions. The International Monetary Fund forecasted in 2005 that there were more than 300 Islamic financial institutions in the world with a 15% annual growth. This growth is implemented in Muslim countries but also in non-Muslim countries via financial hubs such as the ones in London (Barclays and the Islamic Bank of Britain, called Al-Rayan today), Hong-Kong (HSBC), and Switzerland (UBS). The figure below depicts the evolution of Islamic finance in the world:



Milestones of Islamic finance

Appendix 10 - Fundamental Islamic finance contributions

I list here some of the fundamental readings and sources of knowledge when referring to the IF literature. For clarity, they are presented in the table below according to author 's name, book title, author background, and some of their principal contributions:

For fundamental understanding:

Mohammed Obaidullah	Islamic Financial Services (2005)	PhD from Utkal University (India)	An Islamic model is presented. There is an evaluation of conventional products with real-life illustrations.
Munawar Iqbal and Mabid Al-Jarhi	Islamic Banking: Answers to Some Frequently Asked Questions (2001)	PhD in Economics from Simon Fraser University	This study tries to answer all the questions one could ask on the Islamic banking system.
Mohammad Nejatullah Siddiqi	Riba, Bank Interest and the Rationale of its Prohibition (2004)	PhD from Aligarh Muslim University (India)	Explanation of the interest rate interdiction mechanism and the rationale for starting from Canopic scriptures.
Muhammad Taqi Usmani	An Introduction to Islamic Finance (1998)	Islamic scholar specialised in Fiqh and hadiths at Dar-al-Uloom in Pakistan	Contextualisation of IF in a counter movement against Western countries for a re-islamisation of the society.

Fahim Khan	Islamic Futures and Their Markets with Special Reference to Their Role in Developing Rural Financial Markets (1995)	PhD in Economics from Boston University	This work discusses why conventional futures assets are un-Islamic. How do we structure those markets with Islamic norms? How beneficial would that restructuration be?
Lachemi Siagh	L'islam et le Monde des Affaires	PhD from HEC Montreal	Discussion on the impact of Islam on religious economic actions with a focus on the normative aspects of business affairs.
Jacques Charbonnier	Islam : Droit, Finance et Assurance	PhD at Jean Moulin - Lyon3	Demonstration of the moral foundations of Islamic banks.
Mahmoud El-Gamal	Islamic Finance: Law, Economics and Practice	PhD from Rice University (Texas)	Legal, economic, financial and practical considerations of IF.

Appendix 11 - Interest rates in a Keynesian and Weberian system

Understanding interest rates is a fundamental feature when analyzing risk and uncertainty management. Keynes (1936) considers that interest rates: *“cannot be a return to saving or waiting as such. For if a man hoards his savings in cash, (...) the rate of interest is the reward for parting with liquidity for a specified period. For the rate of interest is, in itself; nothing more than the inverse proportion between a sum of money and what can be obtained for parting with control over the money in exchange for a debt for a stated period of time”* and as it *“is a measure of the unwillingness of those who possess money to part with their liquid control over it”*. When talking about credit in a capitalist economy, it is necessary to define the loan interest rate. Interest rates exist in multiple forms (inter-banking, bonds, monetary markets, etc.) that establish a relationship between money lenders and borrowers. Different factors help to

influence these rates (loan maturity, risk profile of the SME, tax regime of the assets, etc.). A classic interest rate definition from von Böhm-Bawerk (1890) claims: "*It is generally possible for anyone who owns capital to obtain it from it a permanent net income, called interest (...) it owes its existence to no personal activity of the capitalist, and flows in to him even where he has not moved a finger in its making*". Based on von Böhm-Bawerk's theory of the interest rate, Weber considers a positive interest rate as the explanatory factor of a lower marginal value of future goods compared to current goods. For this reason, economical actors are ready to pay a positive interest rate to get the good today and not at day +1. Still, we observe that the interest rate is composed of many factors but constantly reoccurs: the maturity or the time horizon of the loan. Time remuneration is essential when trying to understand *riba* interdiction.

The interest rate in a classical and neoclassical paradigm relies on two key features: Marginal Efficiency of Capital (MEC) and time preference (i.e., the inclination of a consumer towards current consumption (expenditure) over future consumption):

PV (present value) = $R_n / (1 + r)^n$, where n is the number of years considered and R_n is the net return.

$C_k = R_n (1 + MEC)^n$, where C_k is the capital outlays/capex (or investment).

Therefore, to invest, a necessary condition is: $PV > C_k$, which is $MEC > r$. In other words, the MEC needs to be higher than the rate of interest for the transaction to be considered as an investment.

The credit form/ asset structure (bond, swap, loan, etc.) is based on the loan maturity and the premium risk (composed of the object of the loan and the quality of the borrower). They are both essential factors when discussing interest rates associated with the risk. Keynes has stated that: "*And the current rate of interest depends, as we have seen, not on the strength of the desire to hold wealth, but on the strengths of the desires to hold it in liquid and in illiquid forms respectively, coupled with the amount of the supply of wealth in the one form relatively to the supply of it in the other*".

Appendix 12 - IF industry structure and challenges

The IF industry has slowly developed in parallel to the political development in Arab/Muslim countries. From the late 1950s where many Muslim countries attained political independence, Malaysia and Egypt were the pioneers in IF innovation (63 and 67). In 1974, the Islamic Bank of Development (IBD) was created. In the 1980s new products and innovation started to feed the market. Iran, Sudan and Pakistan decided to change their entire financial system into a sharia-compliant one. In the 1990s global non-Islamic institutions started to get interested and involved in IF (HSBC, Citi group, Islamic Windows, etc.). Although there was global enthusiasm for IF and willingness to invest into this niche sector, the banking industry suffers from some challenges that prevented her from fully taking over.

Among others, we can mention:

- Too many banks were created, with insufficient disintermediation.
- Takaful insurance is under-exploited.
- Liquidity issues: money does not circulate quickly and the cost of funding is rather high.
- Global political instability has led countries to be more cautious about investing in the IF industry.
- Merchant banking is not well developed in the IF industry.
- Lack of global integration. Although there are standard organisations, the market remains mostly local or regional.
- Lack of Sharia standardisation: many IF products that are accepted in Malaysia are not accepted in the GCC.
- There are not enough Sharia scholars available.
- Murabaha products are the most used financial product, but at the same time, the most controversial as they are very similar to debt-like products based on the interest rate mechanism.
- There are more than 300 Islamic banks in the world, in 75 countries (representing 2/3 of businesses in the GCC).
- Malaysia leads the market in terms of financial engineering.

Appendix 13 - Islamic finance actors and their nature

Throughout modern IF history, the industry has tried to standardize its financial institutions. A few of these institutions are presented below. They have been selected in terms of their maturity and importance in the industry:

- Audit and Accounting Organization for Islamic Finance Institutions (AAOIFI). This organisation, created in 1991, is based in Bahrain. It benchmarks accounting standards (known as financial accounting standards - FAS). It enhances transparency and harmonization in the industry.
- International Islamic Financial Market (IIFM). This market, created in 2001, is based in Bahrain, and develops capital and money markets. It focuses on the standardization of contracts.
- General Council for Islamic Banks and Financial Institutions (GCIBFI/CIBAFI). This council, created in 2001, is based in Bahrain. Its purpose is to promote industry.
- Islamic Financial Services Board (IFSB). Created in 2002, this institution is based in Malaysia. It provides industry standard-setting and conducts research.
- Liquidity Management Centre (LMC). This centre was created in 2002 and is based in Bahrain. It is an Islamic inter-banking market and secondary market for Sharia-compliant financial assets.
- Islamic International Rating Agency (IIRA). This agency was created in 2005 and is based in Bahrain.

If we focus on IF across different countries, we observe varying situations:

- The UK: The UK has been carrying out IF activities since 1980 and launched the first full service IF banks in Europe. It is a leading hub for Islamic funds, and hosts several Islamic banks (QIB, BLME, Gatehouse Bank, EIIB) They also have a strong authorities pull/influence (double taxation abolition in 2004). The UK also lunch the first European Sukuk (25 July 2014).
- Italy: Italy has planned to launch a “Mediterranean Partnership Fund” in partnership with Arab and Islamic development banks, with some Sharia-compliant products.

- Ireland: Ireland has a comprehensive and Sharia-friendly tax regime. They have implemented a specific tax code for Islamic financial assets. They host more than 20% of Islamic funds outside the Middle East.
- Luxembourg: This was the first country to host a takaful company (Sharia-compliant insurance), in 1983 (Solidarity Takaful). Since 2002, 16 Sukuk have been listed on the Lux Stock Exchange. In 2009, the Central Bank of Luxembourg was the first European central bank to be part of the IFSB. It has a strong interest in attracting Islamic funds. The AUM is worth \$USD5billion\$USD.
- Malaysia: This country established Haji Tabung Savings (money saved for pilgrimage) in 1967. In 1983, regulators created a new legal framework specific to Islamic Banks. Malaysia has the biggest local Sukuk market in the world (over \$USD35b. \$USD in stock). There are more than 14 active Islamic banks in the country.
- Indonesia: the retail market has a huge potential but seems not to be very dynamic.
- Turkey: Turkey has four Islamic banks considered to be “participative”. Three of them come from the GCC (Kuveyt Turk Katilim Bankai held by Kuwait Finance House, Albraka Turk Katilim Bankasi held by the Albraka Banking Group and Turkiye Finans Katilim Bankasi held by The National Commercial Bank). This market has the double advantage of having a huge retail market and close proximity to the corporate GCC market.
- Saudi Arabia: Saudi Arabia has three Islamic banks, which represent more than 25% of the local market share. All their new retail services (institutions, financial products, etc.) are Sharia-Compliant.
- Bahrain: This country has 28 Islamic banks. They represent only 7% of the local bank market share. Bahrain is a regional Hub for IF development.
- Kuwait: Kuwait has 3 Islamic banks, representing 28% of the local market share.
- Morocco: The government is somewhat reluctant to implement any form of Islamisation. The Central Bank has authorized 3 products to be sold in the conventional banks: Murabaha, Ijara, and Musharaka. New participative banks with Islamic finance rules have been authorized.
- Libya: Initiatives have been launched prior to the civil war but there have been no recent developments.
- Sudan: There are 22 Islamic banks and more than \$USD10 billion AUM.

We can also list major actors such as the Islamic banks:

- Historical Islamic banks: Al Rajhi bank (first bank in Saudi Arabia), Kuwait Finance House, Dubai Islamic Bank, Abu Dhabi Islamic Bank, Bahrain Islamic Bank, Shamil Bank.
- Recent Islamized banks: Sharjah Islamic banks, Emirates Islamic Bank, Kuwait International Bank, Dubai Bank.
- New Islamic banks: Islamic Bank of Britain (now Al-Rayan), European Islamic Investment Bank, Boubyan Bank.

Finally, we can mention some of the important sharia scholars such as:

- Sheikh Nizam Yaquby (Bahrain): advises Abu Dhabi Islamic Bank, BNP Paribas, AAOIFI
- Mufti Muhammad Taqi Usmani (Pakistan): advises many international institutions such as the Bahrain Monetary Agency and Islamic Corporation for the Development of the Private Sector (IDB).
- Sheikh Abdul Sattar Abu Ghuddah (Syria): a member of Sharia Board at Abu Dhabi Islamic Bank, Jordan Islamic Bank, Qatar, Islamic Bank, etc.
- Dr. Daud Baker (Malaysia): Sharia advisor at Central Bank of Malaysia, Oasis Asset Management (South Africa), AAOIFI, Dow Jones Islamic Index, etc.
- Sheikh Yusuf Talal DeLorenzo (USA): Sharia advisor at Fiqh Council of North America, DJII, Sharia Capital Inc., Tahabi Ijara Fund, etc. He wrote: *“A Compendium of Legal Opinions on the Operations of Islamic Banks”* (1996). A three-volume book with English translations of fatawa issued by Sharia scholars.
- Dr. Mohamed A. Elgari (Saudi Arabia): member of the Citi Islamic Investment Group, Saudi American Bank, etc.
- Mufti Hassan Kaleem (Pakistan): specialist in takaful operations. Works for Deloitte, Bank al-Baraka (Algeria).
- Sheikh Abdel-Rahman Ibn Saleh Al-Atram (Saudi Arabia): chairman for the Sharia Board of Al-Rajhi Investment Corporation (Saudi Arabia).

Appendix 14 - Questionnaire submitted to SME managers

University Research Questionnaire on SME funding solutions.

Research led by Allaa Ridouan, PhD researcher at Université Catholique de Louvain.

This Questionnaire is a Research Survey in the framework of a university thesis on religiosity and SME funding.

Objective: Religiosity influence on the decision-making process

Confidentiality and anonymity are guaranteed for the results publication.

Thank you.

The aim of this survey is to assess to what extent do small and medium-sized enterprises in Belgium need additional funding?

Please take a few minutes to answer the following survey questions by ticking (v) the proposal which corresponds to you the most, the findings of this survey are purely used for academic purposes and the answers you provide will be kept confidential. Thank you for your precious time!

1. Funding needs (type of credit, balance sheet structure, volume of credit, etc.):

- In the last 10 years, have you taken a SME loan out at the bank?
- If yes, for what type of project: buying equipment, taxation, salary payment, counter cash, company car, new office, etc.?
- What is, on average, the duration of your credit (< 1 year; 5 years, etc.) for your equipment, taxation, salary payment, counter cash, company car, new office, etc.?
- Do you intend to take out a new bank loan for your SME in the coming year?
- For what type of project: buying equipment, taxation, salary payment, counter cash, company car, and new office, other?
- Intention to get a loan: For what reasons would you not take out a loan: no need for a loan, not enough financial stability, cost of credit is too expensive, religious reasons, personal ethical reasons?
- Do you have enough funding opportunities?

2. Funding criteria

- What are the criteria you consider for your funding? Please classify by order from 1 to 5 the following criteria (1 being the most important, 5 the less important): Cost of credit, personal ethical reasons, duration of the credit, amount to borrow, accessibility of the credit.
- Do you need an additional funding solution for your SME?

3. Consideration of ethical funding (Willingness to invest in such products, knowledge about such products):

- Do you know about ethical loan solutions?
- Would you invest in ethical loan solutions?
- Would you accept to pay for ethical funding if that funding is more expensive than conventional funding? Assuming a credit of 1000€/month, would you accept to pay a surplus cost of a maximum of 1%? 3% 5% 10% 20%? not willing to pay any surplus cost - whatever the cost – not willing to invest in ethical funding
- For what purpose would you would invest in such ethical products: buying equipment, taxation, salary payment, counter cash, company car, new office, etc.?
- Comments:

4. Islamic finance instruments as ethical funding solutions (knowledge about it, notoriety, decision process, etc.):

- Do you know about Islamic Finance?
- Is receiving or paying interest on credit a concern for you?
- Are Islamic finance instruments a potential additional funding solution for your SME?
- Would you invest in Islamic finance products if it was cheaper than conventional credit?
- If not, for what reasons?

- Would you invest in Islamic finance products if it corresponds with your personal ethical beliefs?
- If not, for what reasons?
- Would you like to know more about Islamic finance products?
- Would you accept to pay for Islamic finance funding if that funding is more expensive than conventional funding? Assuming a credit of 1000€/month, would you accept to pay a surplus cost of a maximum of 1%? 3% 5% 10% 20% - not willing to pay any surplus cost - whatever the cost - not willing to invest in IF product
- For what purpose would you invest in such Islamic finance products: buying equipment, taxation, salary payment, counter cash, company car, new office, etc.?
- Comments:

5. The influence of religiosity on decision-making processes?

- I often read books and magazines about my faith/spirituality.
- I make financial contributions to my religious or spiritual organization.
- I spend time trying to grow in understanding of my faith/spirituality.
- Religion or spirituality is especially important to me because it answers many questions about the meaning of life.
- My religious or spiritual beliefs lie behind my whole approach to life.
- I enjoy spending time with others of my religious/spiritual affiliation.
- Religious or spiritual beliefs influence all my dealings in life.
- It is important to me to spend periods of time in private religious thought and reflection.
- I enjoy working in the activities of my religious / spiritual affiliation.
- I keep well informed about my local religious / spiritual group and have some influence in its decisions.

Could you please answer to these below questions?

	Sample size	%		Sample size	%
Respondent gender			Respondent Religion		
Female			Atheist		
Male			Jewish		
			Catholic		
Region SME			Orthodox		
Brussels			Protestant		
Flanders			Muslim Chiite		
Wallonia			Muslim Sunni		
			Budhist		
Exporting SME			Agnostic		
YES			SME legal status		
NO			PP		
Number of employees			SA		
Years operational of the SME			SPRL		
How many years has your company been operational			SCRL/SCRI		
Activity of the company	Construction, retail, finance, real estate...		SNC		
Respondent's age			SCS		
What is your age ?			ASBL		
			Other		
Banking customs					
How many banks accounts do you have?					
Do you have a savings account?					

What is your average monthly turnover?					
Could you indicate the banks you have an account with (BNP Paribas, ING, Belfius, Argenta, Citibank, Chaabi, Attijariwafa Axa, KBC/CBC, La Poste, Deutsche Bank, others)					
Where do you invest your cash surplus (life insurance, current account, pension plan, stocks, etc.)?					
How much of your surplus do you invest into savings per month (< 1000€; < 2000€)?					
What are the objectives of your savings (provision, investments, retirement, additional revenue, taxation optimisation, ethical investment, do not save);					
Are you happy with your conventional funding solutions so far?					

Would you like to receive the results of this research? If please indicate your Email address.

Appendix 15 - Descriptive statistics on SMEs managers

SME Legal status

		Frequency	%	% valid	% Cumulated
Valide	SPRL	22	36,7	36,7	36,7
	PP	2	3,3	3,3	40,0
	SA	30	50,0	50,0	90,0
	SCS	1	1,7	1,7	91,7
	SCRL/SCRI	2	3,3	3,3	95,0
	ASBL	2	3,3	3,3	98,3
	Autre	1	1,7	1,7	100,0
	Total	60	100,0	100,0	

SME years of existence

	N	Minimum	Maximum	Average	SD
Depuis combien d'années votre PME existe-t-elle ?	60	1	200	28,40	35,494
N valide (liste)	60				

Religion

		Frequency	%	% valid	% cumulated
Valide	Agnostique	8	13,3	13,3	13,3
	Musulman Sunnite	9	15,0	15,0	28,3
	Musulman Chiite	1	1,7	1,7	30,0
	Athée	18	30,0	30,0	60,0
	Catholique	22	36,7	36,7	96,7
	Protestant	1	1,7	1,7	98,3
	Autre	1	1,7	1,7	100,0
	Total	60	100,0	100,0	

Does your SME internationally export

		Frequency	%	% valid	% cumulated
Valide	Oui	42	70,0	70,0	70,0
	Non	18	30,0	30,0	100,0
	Total	60	100,0	100,0	

SME activity sector

		Frequency	%	% valid	% cumulated
Valide	Conseil	9	15,0	15,0	15,0
	Construction	12	20,0	20,0	35,0
	ICT	3	5,0	5,0	40,0
	Médical	5	8,3	8,3	48,3
	Service	13	21,7	21,7	70,0
	Autre	18	30,0	30,0	100,0
	Total	60	100,0	100,0	

Appendix 16 – CAMEL, ROI, Premium and Sharpe ratios Tables from 2013 to 2017 for CB BEL, CB UK and IB UK

	2013	2014	2015	2016	2017
	CB BEL CAMEL				
KBC	4	3,4	2,8	3,2	3,2
Fortis	2,8	2,8	2,8	3	2,6
Ing	2,8	2,4	2,2	2,2	2
Beobank	3,4	2,8	3	2,8	2,8
Belfius	4	3,8	3,8	3,8	3,6
AXA	3	3,2	3,2	2,8	3
Average	3,33	3,07	2,97	2,97	2,87
	CB UK CAMEL				
HSBC	3,4	3,6	3,4	3,8	3,4
Barclays	1,6	1,6	1,4	1,4	1,4
RBS	4	4	4,2	4,2	3,6
Standard Chartered	3,6	3,6	3,8	3,2	3,2
Lloyds	3,4	3,6	3,6	3,6	3,6
Schroders	2,8	2,8	2,6	2,6	2,8
Average	3,13	3,20	3,17	3,13	3,00
	IB UK CAMEL				
Al Rayan	4	3,75	3,25	4	4,5
QIB	2,65	2,6	2,6	2,8	2,6
BLME	2,8	3	3,2	3,4	2,6
Ameen Islamic	2,6	2,2	1,2	1,8	1,95
Gatehouse	3,75	3	4	3	4
ADIB	4	4	4	4	4
Average	3,30	3,09	3,04	3,17	3,28

ROE from 2013 to 2017 for CB BEL, CB UK and IB UK

	2013	2014	2015	2016	2017
	CB BEL ROE				
KBC	9,00%	14,00%	22,00%	18,00%	17,00%
Fortis	5,13%	8,19%	10,72%	10,50%	10,41%
Ing	6,86%	6,85%	8,35%	9,30%	9,81%
Beobank	6,72%	5,83%	5,84%	5,94%	6,36%
Belfius	6,10%	6,00%	6,30%	6,40%	7,00%
AXA	-1,53%	-4,29%	2,32%	8,37%	3,56%
Average	5,38%	6,10%	9,26%	9,75%	9,02%
	CB UK ROE				
HSBC	9,58%	7,35%	7,64%	1,89%	6,00%
Barclays	0,84%	-0,26%	-0,60%	2,27%	-2,91%
RBS	-14,86%	-5,22%	-0,22%	13,30%	-0,12%
Standard Chartered	8,82%	5,64%	-4,75%	-0,55%	2,62%
Lloyds	4,91%	3,78%	4,22%	3,40%	3,55%
Schroders	5,73%	6,95%	5,72%	5,69%	5,94%
Average	2,50%	3,04%	2,00%	-0,10%	2,51%
	IB UK ROE				
Al Rayan	-5,42%	11,74%	9,12%	7,97%	4,25%
QIB	NC	5,22%	3,72%	-7,22%	3,26%
BLME	2,03%	0,88%	-2,59%	-9,76%	1,55%
Ameen Islamic	-7,72%	6,43%	17,28%	8,73%	NA
Gatehouse	1,44%	4,26%	-2,71%	5,17%	-1,08%
ADIB	-6,48%	-16,99%	-9,79%	-9,18%	-9,26%
Average	-3,23%	1,92%	2,51%	-0,72%	-0,26%

PREMIUM from 2013 to 2017 for CB BEL, CB UK and IB UK

	2013	2014	2015	2016	2017
CB BEL PREMIUM					
KBC	6,58%	12,40%	21,18%	17,60%	16,29%
Fortis	2,71%	6,59%	9,90%	10,10%	9,70%
ING	4,44%	5,25%	7,53%	8,90%	9,10%
Beobank	4,30%	4,23%	5,02%	5,54%	5,65%
Belfius	3,68%	4,40%	5,48%	6,00%	6,29%
AXA	-3,95%	-5,89%	1,50%	7,97%	2,85%
Average	2,96%	4,50%	8,44%	9,35%	8,31%
CB UK PREMIUM					
HSBC	7,23%	4,90%	5,84%	0,71%	4,79%
Barclays	-1,51%	-2,71%	-2,40%	1,09%	-4,12%
RBS	-17,21%	-7,67%	-2,02%	-14,48%	-1,33%
Standard Chartered	6,47%	3,19%	-6,55%	-1,73%	1,41%
Lloyds	2,56%	1,33%	2,42%	2,22%	2,34%
Schroders	3,38%	4,50%	3,92%	4,51%	4,73%
Average	0,15%	0,59%	0,20%	-1,28%	1,30%
IB BEL PREMIUM					
Al Rayan	-7,77%	9,29%	7,32%	6,79%	3,04%
QIB	N/A	2,77%	1,92%	-8,40%	2,05%
BLME	-0,32%	-1,57%	-4,39%	-10,94%	0,34%
Ameen Islamic	-10,07%	3,98%	15,48%	7,55%	N/A
Gatehouse	-0,91%	1,81%	-4,51%	3,99%	-2,29%
ADIB	-8,83%	-19,44%	-	-10,36%	-10,47%
Average	-5,58%	-0,53%	0,71%	-1,90%	-1,47%

VOLATILITY from 2008 to 2017 for CB BEL, CB UK and IB UK

	2008 - 2017
	CB BEL VOLATILITY
KBC	6,97%
Fortis	8,15%
ING	3,31%
Beobank	1,96%
Belfius	15,47%
AXA	8,20%
Average	7,34%
	CB UK VOLATILITY
HSBC	2,51%
Barclays	4,08%
RBS	9,45%
Standard Chartered	7,11%
Lloyds	4,45%
Schroders	4,71%
Average	5,38%
	IB UK VOLATILITY
Al Rayan	21,97%
QIB	5,76%
BLME	3,93%
Ameen Islamic	5,19%
Gatehouse	1,95%
ADIB	6,77%
Average	7,59%

SHARPE RATIO from 2013 to 2017 for CB BEL, CB UK and IB UK

	2013	2014	2015	2016	2017
CB BEL Sharpe Ratio					
KBC	0,94	1,78	3,04	2,53	2,34
Fortis	0,33	3,05	4,07	4,17	4,09
Ing	1,34	1,58	2,28	2,69	2,75
Beobank	2,19	2,16	2,56	2,82	2,88
Belfius	0,24	0,28	0,35	0,39	0,41
AXA	-	-	-	-	-
Average	0,48	0,72	0,18	0,97	0,35
CB UK Sharpe Ratio					
HSBC	2,88	1,95	2,33	0,28	1,91
Barclays	-	-	-	-	-
RBS	0,37	0,67	0,59	0,27	1,01
Standard Chartered	-	-	-	-	-
Lloyds	1,82	0,81	0,21	1,53	0,14
Schroders	0,91	0,45	0,92	0,24	0,20
Average	0,58	0,30	0,55	0,50	0,53
IB UK Sharpe Ratio					
Al Rayan	0,72	0,95	0,83	0,96	1,01
QIB	0,48	0,36	0,33	0,04	0,41
BLME	-	-	-	-	-
Ameen Islamic	0,35	0,42	0,33	0,31	0,14
Gatehouse	N/A	0,48	0,33	1,46	0,36
ADIB	-	-	-	-	-
Average	0,08	0,40	1,12	2,79	0,09
IB UK Sharpe Ratio					
Al Rayan	-	-	-	-	-
QIB	1,94	0,77	2,98	1,45	N/A
BLME	-	-	-	-	-
Ameen Islamic	0,47	0,93	2,32	2,05	1,18
Gatehouse	-	-	-	-	-
ADIB	1,30	2,87	1,71	1,53	1,55
Average	-	-	-	-	-
Average	0,83	0,11	0,25	0,33	0,43

RISK FREE OLO/GLIT from 2008 to 2017 for CB BEL, CB UK and IB UK

Risk free OLO/Glit										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OLO -10	4,42%	3,88%	3,47%	4,25%	2,93%	2,42%	1,60%	0,82%	0,40%	0,71%
GLIT -10	4,43%	3,60%	3,46%	2,98%	1,82%	2,35%	2,45%	1,80%	1,18%	1,21%
GLIT - 10	4,43%	3,60%	3,46%	2,98%	1,82%	2,35%	2,45%	1,80%	1,18%	1,21%

2007-2008 CRISIS

	2007	2008	2009		2007	2008	2009
CB BEL CAMEL				CB BEL ROE			
Fortis	3,20	3,40	3,80	Fortis	5,26%	-13,57%	-3,60%
Belfius	4,00	4,00	4,00	Belfius	1,93%	-1,71%	0,71%
ING	3,00	3,00	2,80	ING	1,30%	0,94%	1,16%
Average	3,40	3,47	3,53	Average	2,83%	-4,78%	-0,58%
CB UK CAMEL				CB UK ROE			
HSBC	3,00	3,40	3,40	HSBC	4,56%	5,66%	2,70%
Barclays	2,40	2,20	2,20	Barclays	4,64%	3,29%	6,21%
RBS	3,20	3,20	3,00	RBS	5,48%	-6,13%	-30,87%
Average	2,87	2,93	2,87	Average	4,89%	0,94%	-7,32%
IB UK CAMEL				IB UK ROE			
Al Rayan	2,60	2,80	2,80	Al Rayan	-2,79%	-3,12%	-4,79%
BLME	3,20	3,40	3,80	BLME	0,10%	1,30%	-4,92%
QIB	3,00	2,80	2,60	QIB	2,70%	2,30%	1,47%
Average	2,93	3,00	3,07	Average	0,00%	0,16%	-2,75%

	2007	2008	2009		2008 - 2017		2007	2008	2009
	CB BEL PREMIUM				CB BEL VOLATILITY		CB BEL Sharpe Ratio		
Fortis	0,91%	-	-7,48%	Fortis	8,15%	Fortis	0,11	-2,21	-0,92
Belfius	-	-3,48%	-3,19%	Belfius	15,47%	Belfius	-0,17	-0,22	-0,21
ING	1,95%	-6,13%	-3,64%	ING	3,31%	ING	-0,59	-1,85	-1,10
Average	1,21%	-9,20%	-4,77%	Average	8,98%	Average	-0,22	-1,43	-0,74
	CB UK PREMIUM				CB UK VOLATILITY		CB UK SHARPE RATIO		
HSBC	0,44%	1,23%	-0,90%	HSBC	2,51%	HSBC	-0,18	0,49	-0,36
Barlays	0,36%	-1,14%	2,61%	Barlays	4,08%	Barlays	-0,09	-0,28	0,64
RBS	0,48%	-	-	RBS	9,45%	RBS	0,05	-1,12	-3,65
Average	0,11%	-3,49%	10,92%	Average	5,34%	Average	-0,07	-0,30	-1,12
	IB UK PREMIUM				IB UK VOLATILITY		IB UK SHARPE RATIO		
Al Rayan	-	-7,55%	-8,39%	Al Rayan	21,97%	Al Rayan	-0,35	-0,34	-0,38
BLME	4,90%	-3,13%	-8,52%	BLME	5,76%	BLME	-0,85	-0,54	-1,48
QIB	2,30%	-2,13%	-2,13%	QIB	3,93%	QIB	-0,59	-0,54	-0,54
Average	5,00%	-4,27%	-6,35%	Average	10,55%	Average	-0,60	-0,48	-0,80

Appendix 17 - List of the transcribed Interviews in the separated Compendium

Interview transcriptions is listed below. For the convenience of the reader, they have been retrieved in a separated book of interviews. The relative volume of the interviews is linked to the nature of the questionnaire which sensible information's about religion and ethics. Not all the content has been used for the empirical analysis. However, the whole interview content was necessary to bring the informant to answer to the problematic of the thesis.

Interview 1 - B - KDP - 04-20-17
Interview 2 - C - Om - 27-04-17
Interview 3 - D - AD - 08-07-17
Interview 4 - E - AT -04-06-16
Interview 5 - F - MB - 24-01-17
Interview 6 - G - FT - 12-07-17
Interview 7 - H - IK - 04-20-17
Interview 8 - I - IW - 25-01 -17
Interview 9 - J -LM - 24-01 -17
Interview 10 - K - MP - 16-05-17
Interview 11 - L - RH - 28-04-17
Interview 12 - M - TBG - 08-09-17
Interview 13 - N - JBS - 30-05-17
Interview 14 - O - KM - 08-07-17
Interview 15 - P - FS - 24-08-17
Interview 16 - Q - YH - 30-04-17
Interview 17 - R - HG - 09-05-17
Interview 18 - S - DD - 05-05-17
Interview 19 - T - MD - 02-03-17
Interview 20 - U - BOS - 12-07-17
Interview 21 - V - ZA - 28-04-17

Appendix 18 – Calculation of the Excess returns, Excess Market returns, Beta and Alpha of CB BEL from 2008 to 2017

	Beobank					Belfius					Axa				
	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
2008	0,14%	-53,76%	4,42%	-4,28%	-58,18%	-1,71%	-53,76%	4,42%	-6,13%	-58,18%	-0,79%	-53,76%	4,42%	-5,21%	-58,18%
2009	3,46%	31,59%	3,88%	-0,42%	27,71%	0,71%	31,59%	3,88%	-3,17%	27,71%	-1,14%	31,59%	3,88%	-5,02%	27,71%
2010	4,05%	2,67%	3,47%	0,58%	-0,80%	12,44%	2,67%	3,47%	8,97%	-0,80%	5,90%	2,67%	3,47%	2,43%	-0,80%
2011	4,21%	-19,20%	4,25%	-0,04%	-23,45%	-19,70%	-19,20%	4,25%	-23,95%	-23,45%	9,40%	-19,20%	4,25%	5,15%	-23,45%
2012	5,55%	18,83%	2,93%	2,62%	15,90%	7,78%	18,83%	2,93%	4,85%	15,90%	8,70%	18,83%	2,93%	5,77%	15,90%
2013	6,72%	18,10%	2,42%	4,30%	15,68%	6,10%	18,10%	2,42%	3,68%	15,68%	8,90%	18,10%	2,42%	6,48%	15,68%
2014	5,83%	12,36%	1,60%	4,23%	10,76%	6,00%	12,36%	1,60%	4,40%	10,76%	-4,29%	12,36%	1,60%	-5,89%	10,76%
2015	5,84%	12,63%	0,82%	5,02%	11,81%	6,30%	12,63%	0,82%	5,48%	11,81%	2,32%	12,63%	0,82%	1,50%	11,81%
2016	5,94%	-2,54%	0,40%	5,54%	-2,94%	6,40%	-2,54%	0,40%	6,00%	-2,94%	8,37%	-2,54%	0,40%	7,97%	-2,94%
2017	6,36%	10,30%	0,71%	5,65%	9,59%	7,00%	10,30%	0,71%	6,29%	9,59%	3,56%	10,30%	0,71%	2,85%	9,59%
	KBC					Fortis					ING				
	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (BEL 20)	Rf (OLO 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
2008	16,00%	-53,76%	4,42%	11,58%	-58,18%	-13,57%	-53,76%	4,42%	-17,99%	-58,18%	0,94%	-53,76%	4,42%	-3,48%	-58,18%
2009	16,00%	31,59%	3,88%	12,12%	27,71%	-3,60%	31,59%	3,88%	-7,48%	27,71%	1,16%	31,59%	3,88%	-2,72%	27,71%
2010	11,00%	2,67%	3,47%	7,53%	-0,80%	12,96%	2,67%	3,47%	9,49%	-0,80%	10,20%	2,67%	3,47%	6,73%	-0,80%
2011	5,00%	-19,20%	4,25%	0,75%	-23,45%	1,66%	-19,20%	4,25%	-2,59%	-23,45%	8,63%	-19,20%	4,25%	4,38%	-23,45%
2012	-1,60%	18,83%	2,93%	-4,53%	15,90%	2,87%	18,83%	2,93%	-0,06%	15,90%	6,97%	18,83%	2,93%	4,04%	15,90%
2013	9,00%	18,10%	2,42%	6,58%	15,68%	5,13%	18,10%	2,42%	2,71%	15,68%	6,86%	18,10%	2,42%	4,44%	15,68%
2014	14,00%	12,36%	1,60%	12,40%	10,76%	8,19%	12,36%	1,60%	6,59%	10,76%	6,85%	12,36%	1,60%	5,25%	10,76%
2015	22,00%	12,63%	0,82%	21,18%	11,81%	10,72%	12,63%	0,82%	9,90%	11,81%	8,35%	12,63%	0,82%	7,53%	11,81%
2016	18,00%	-2,54%	0,40%	17,60%	-2,94%	10,50%	-2,54%	0,40%	10,10%	-2,94%	9,30%	-2,54%	0,40%	8,90%	-2,94%
2017	17,00%	10,30%	0,71%	16,29%	9,59%	10,41%	10,30%	0,71%	9,70%	9,59%	9,81%	10,30%	0,71%	9,10%	9,59%
2008-2017	KBC	Fortis	ING	Beobank	Belfius	Axa									
Beta	0,017	0,211	0,060	0,086	0,200	0,033									
Alpha	10,14%	1,91%	4,38%	2,27%	0,52%	1,58%									

Appendix 19 - Calculation of the Excess returns, Excess Market returns, Beta and Alpha of CB UK from 2008 to 2017

	HSBC					Barclays					RBS				
	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
2008	5.66%	-31.33%	4.43%	1.23%	-35.76%	3.29%	-31.33%	4.43%	-1.14%	-35.76%	-6.13%	-31.33%	4.43%	-10.56%	-35.76%
2009	2.70%	22.07%	3.60%	-0.90%	18.47%	6.21%	22.07%	3.60%	2.61%	18.47%	-30.07%	22.07%	3.60%	-34.47%	18.47%
2010	9.14%	9.00%	3.46%	5.68%	5.54%	6.66%	9.00%	3.46%	3.20%	5.54%	-1.46%	9.00%	3.46%	-4.92%	5.54%
2011	7.37%	-5.55%	2.98%	4.39%	-8.53%	10.10%	-5.55%	2.98%	7.12%	-8.53%	-2.63%	-5.55%	2.98%	-5.61%	-8.53%
2012	7.40%	5.84%	1.82%	5.58%	4.02%	-0.80%	5.84%	1.82%	-2.62%	4.02%	10.98%	5.84%	1.82%	9.16%	4.02%
2013	9.58%	14.43%	2.35%	7.23%	12.08%	0.84%	14.43%	2.35%	-1.51%	12.08%	12.00%	14.43%	2.35%	9.65%	12.08%
2014	7.35%	3.73%	2.45%	4.90%	1.28%	-0.26%	3.73%	2.45%	-2.71%	1.28%	22.29%	3.73%	2.45%	19.84%	1.28%
2015	7.64%	-4.45%	1.80%	5.84%	-6.25%	-0.60%	-4.45%	1.80%	-2.40%	-6.25%	18.76%	-4.45%	1.80%	16.96%	-6.25%
2016	1.89%	13.85%	1.18%	0.71%	12.67%	2.27%	13.85%	1.18%	1.09%	12.67%	18.94%	13.85%	1.18%	17.76%	12.67%
2017	6.00%	7.63%	1.21%	4.79%	6.42%	-2.91%	7.63%	1.21%	-4.12%	6.42%	16.27%	7.63%	1.21%	15.06%	6.42%
	Standard					Lloyds					Schroders				
	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
2008	-2.60%	-31.33%	4.43%	-7.03%	-35.76%	8.22%	-31.33%	4.43%	3.79%	-35.76%	4.37%	-31.33%	4.43%	-0.06%	-35.76%
2009	14.14%	22.07%	3.60%	10.74%	18.47%	6.53%	22.07%	3.60%	2.93%	18.47%	5.76%	22.07%	3.60%	2.16%	18.47%
2010	14.79%	9.00%	3.46%	11.33%	5.54%	-0.68%	9.00%	3.46%	-4.15%	5.54%	17.29%	9.00%	3.46%	13.83%	5.54%
2011	7.92%	-5.55%	2.98%	4.94%	-8.53%	-6.07%	-5.55%	2.98%	-9.05%	-8.53%	15.52%	-5.55%	2.98%	12.54%	-8.53%
2012	13.26%	5.84%	1.82%	11.44%	4.02%	-3.24%	5.84%	1.82%	-5.06%	4.02%	12.52%	5.84%	1.82%	10.70%	4.02%
2013	8.82%	14.43%	2.35%	6.47%	12.08%	4.91%	14.43%	2.35%	2.56%	12.08%	5.79%	14.43%	2.35%	3.38%	12.08%
2014	5.64%	3.73%	2.45%	3.19%	1.28%	3.78%	3.73%	2.45%	1.33%	1.28%	6.95%	3.73%	2.45%	4.50%	1.28%
2015	-4.75%	-4.45%	1.80%	-6.55%	-6.25%	4.22%	-4.45%	1.80%	2.42%	-6.25%	5.71%	-4.45%	1.80%	3.92%	-6.25%
2016	-0.55%	13.85%	1.18%	-1.73%	12.67%	3.40%	13.85%	1.18%	2.22%	12.67%	5.69%	13.85%	1.18%	4.51%	12.67%
2017	2.62%	7.63%	1.21%	1.41%	6.42%	3.55%	7.63%	1.21%	2.34%	6.42%	5.94%	7.63%	1.21%	4.73%	6.42%
2008-2017	Standard	Lloyds	Schroders	HSBC	Barclays	RBS									
Beta	0.280	0.007	0.049	0.006	0.008	0.058									
Alpha	3.14%	-0.07%	5.97%	3.94%	-0.06%	3.23%									

Appendix 20 - Calculation of the Excess returns, Excess Market returns, Beta and Alpha of IB UK from 2008 to 2017

AL RAYYAN					QIB					ADIB				
Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
2008	-3.12%	-24.38%	4.43%	-7.55%	-29.01%	2.30%	0.16%	4.43%	-2.13%	-4.27%	0.16%	4.43%	4.43%	-4.27%
2009	-4.79%	-6.43%	3.60%	-8.39%	-10.03%	1.47%	-2.75%	3.60%	-2.13%	-6.35%	-2.75%	3.60%	3.60%	-6.35%
2010	-31.01%	25.04%	3.46%	-34.47%	21.58%	14.62%	-5.11%	3.46%	11.16%	-8.57%	-5.11%	3.46%	3.46%	-8.57%
2011	-32.72%	12.99%	2.98%	-35.70%	10.01%	9.46%	-15.66%	2.98%	6.48%	-18.64%	-15.66%	2.98%	2.98%	-18.64%
2012	-34.84%	-3.09%	1.82%	-36.66%	-4.91%	8.63%	-6.14%	1.82%	6.81%	-7.96%	-6.14%	1.82%	-10.92%	-7.96%
2013	-5.42%	10.47%	2.33%	-7.77%	8.12%	5.22%	-1.82%	2.33%	2.87%	-4.17%	-1.82%	2.33%	2.33%	-4.17%
2014	11.74%	3.73%	2.45%	9.29%	1.28%	5.22%	1.92%	2.45%	2.77%	-0.53%	1.92%	2.45%	-19.44%	-0.53%
2015	9.12%	3.67%	1.80%	7.32%	1.87%	3.72%	2.51%	1.80%	1.92%	0.71%	2.51%	1.80%	-11.59%	0.71%
2016	7.97%	-9.87%	1.18%	6.79%	-11.03%	-7.22%	-0.72%	1.18%	-8.40%	-1.90%	-0.72%	1.18%	-10.36%	-1.90%
2017	4.25%	17.41%	1.21%	3.04%	16.20%	3.26%	1.24%	1.21%	2.03%	0.03%	1.24%	1.21%	-10.47%	0.03%
BLME					AMEEN					GATHEHOUSE				
Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return	Rp	Rm (FTSE100)	Rf (GILT 10)	Rp-Rf or Excess return	Rm-Rf or Excess market return
2008	1.30%	0.16%	4.43%	-3.13%	-4.27%		0.16%	4.43%	-4.43%	-4.27%		0.16%	4.43%	-4.27%
2009	-1.92%	-2.75%	3.60%	-8.52%	-6.35%		-2.75%	3.60%	-3.60%	-6.35%		-2.75%	3.60%	-6.35%
2010	1.06%	-5.11%	3.46%	-2.40%	-8.57%		-5.11%	3.46%	-3.46%	-8.57%		-5.11%	3.46%	-8.57%
2011	-3.73%	-15.66%	2.98%	-6.71%	-18.64%		-15.66%	2.98%	-2.98%	-18.64%		-15.66%	2.98%	-18.64%
2012	1.90%	-6.14%	1.82%	0.08%	-7.96%		-6.14%	1.82%	-1.82%	-7.96%		-6.14%	1.82%	-7.96%
2013	2.03%	-1.82%	2.33%	-0.32%	-4.17%		-1.82%	2.33%	-10.07%	-4.17%		-1.82%	2.33%	-4.17%
2014	0.88%	1.92%	2.45%	-1.57%	-0.53%		1.92%	2.45%	3.98%	-0.53%		1.92%	2.45%	-0.53%
2015	-2.59%	2.51%	1.80%	-4.39%	0.71%		2.51%	1.80%	15.48%	0.71%		2.51%	1.80%	0.71%
2016	-9.69%	-0.72%	1.18%	-10.94%	-1.90%		-0.72%	1.18%	7.55%	-1.90%		-0.72%	1.18%	-1.90%
2017	1.55%	1.24%	1.21%	0.34%	0.03%		1.24%	1.21%	7.52%	0.03%		1.24%	1.21%	0.03%
2008-2017					2008-2017					2008-2017				
BLME					AMEEN					GATHEHOUSE				
Beta					0.129					0.107				
Alpha					-3.090%					-1.000%				

