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ARTICLE

Risk, uncertainty and the market: a rethinking of Islamic and Western finance

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Abstract
This paper aims at providing an account of the Islamic conception of *Gharar* in contrast to the current Western conceptualisation of risk, using the respective financial legal frameworks of both as the criterion. One of the more decisive stakes of the difference in approach between the Islamic and contemporary Western legal orders today concern the regulation of financial markets; specifically, the definitions of risk and uncertainty – crucial characteristics of modern economies – can be understood as preferentially related to specific features of Islamic law. In the end, according to Knight, money-creation processes are centred on uncertainty. Without uncertainty, there is no profit. This is why, although different at first sight, Islamic finance with its understanding of permissible *Gharar* and Western finance with its uncertainty-aversion trend have become more resilient, especially since the financial crisis (2007–2010).

Keywords: financial law; Islamic law; risk; uncertainty

1 Introduction

The *Shariah* Compliant Finance (SFC) industry has grown rapidly in the last twenty-five years and is mooted as a 'viable alternative' to the conventional model (Ahmed, 2009) in view of the financial crisis of 2008, which caused deep economic instability. Through unregulated and reckless lending practices (Bnayat, 2014) and flawed models of risk management, a temporary global collapse of the financial system occurred and an ongoing international recession ensued. Conversely, the Islamic financial system and its approach to risk are based upon the sources of Sharia (Cattelan, 2009), which promote a more ethically regulated model of 'risk, profit and loss sharing' premised upon ideas that financial transactions should ultimately engender greater 'responsibility, fairness and social justice' (Hassan and Kayed, 2009) among participants. The income-generation process does not become an end of itself, open to 'vanity' immorality and destructive behaviour; rather, it is a platform for the improvement of society as a whole.

Following an analysis in Section 2 of theories of risk and uncertainty in modern economies, Section 3 is dedicated to highlighting the causes of the financial crisis in order to point out the limitations of the conventional Western model. It will be posited that the traditional lender–borrower relationship based upon compound interest and market speculation was open to gross manipulation at multiple levels in the years leading up to the financial crisis. This led to the unethical and dangerous 'underpricing' of risk through mechanisms that were ultimately responsible for the economic meltdown and subsequent collapse of investment banks such as Lehman Brothers.

In Section 4, the theological basis of the Islamic financial model (Alasrag, 2010) and its various financial instruments will be discussed. These are based upon the agreed 'sources of Sharia'. The Islamic model seeks a more risk-averse path in financial transactions through promoting equity, participation and ownership. It permits certain contracts, but forbids the adoption of destructive risk strategies based on greed and uncertainty through clear prohibition of *Riba* (Usury), *Gharar* (Excessive

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Uncertainty) and *Maysir* (Speculation/Gambling). In other words, this section is devoted to outlining the essential distinction between conventional finance and Islamic models of financing.

Subsequently, Section 5 is comparing risk and uncertainty between Western societies and Islamic finance in order to outline limits and perspectives of such models. In this light, *Gharar* is seen as a permissible form of risk-taking and it is similar to the concept of uncertainty in Western societies when we think about impermissible *Gharar*. This means that, in Islamic law as well as in Western finance, the concept of profit seems to be connected to uncertainty. In other words, uncertainty underpins progress and social development by creating competition, and it is the first catalyst of profit. This idea is convened into Islamic finance, although the essential *harams* must be preserved. Nonetheless, the section shows two specific instances in banking and finance, namely the syndicated loans and the cryptocurrencies that are examined as forms of contamination of the classic *harams* of Islamic finance (see Section 4).

Finally, Section 6 will draw conclusions and consolidating remarks based on whether the Islamic model is truly a better system for the future through analysis of its 'performance, and vulnerabilities' (Ahmed, 2009) during and since the financial crisis. Indeed, it will be suggested that, while the orthodox Islamic financial model based upon the true teachings of the Qur'an and *Sunnah* is the ideal, the 'diluted' version that is in operation today has multiple weaknesses and its own potential for failure. This is because, in trying to adapt to the teachings of Islam and make the Islamic model fit the market, the Islamic jurists and Sharia boards have blurred the boundaries between Islamic and conventional finance to the extent that one could argue that, in many instances, Islamic finance is rapidly becoming an alternative form of conventional finance.

2 Risk and uncertainty in modern economies

The story of risk is a remarkable one (Bernstein, 1996). Indeed, the development of modern life has ultimately been facilitated by the study of risk (Zachman, 2014) and, as Giddens suggests, the open human control of nature has helped to colonise the future (Giddens, 1991). Although this sociological connotation of risk looks promising, I shall argue that, in economic terms, the architecture of the future is composed of uncertain events that are indeterminable and can therefore pave the way to a new characterisation of risk and uncertainty.

For this reason, this section deals with the concept from an economic point of view only, specifically with a new dimension of risk and uncertainty in relation to financial risk and contemporary financial markets that will be conceptualised as a complex system. This reflection leads to different conclusions based on economic theories as well as philosophical arguments concerning political economy. According to this view, the future becomes a controllable entity only when a pure risk perspective is in place, as opposed to the uncertainty that is part of free-market economies and is ungovernable and not classifiable.

2.1 The epistemology and ontology of risk

A philosophical dialogue on risk can be complex, especially from an epistemological point of view. If there is risk, something must be unknown or produce an unknown result. Hence, knowledge about risk is knowledge about lack of knowledge.

This means that our perception of reality is not infallible. There is always a margin of error. This erroneous perception is the first sign that we need to acknowledge the indeterminate nature of the world, but at the same time to see our own inability to figure out the exact features of a future event. In other words, we are not machines, but we do commit mistakes when we use our perceptive faculties. This is because we cannot possess a clear image of the future where every event or circumstance is classified, evaluated and therefore anticipated. In other words, the future reveals uncontrollable elements of unknowns that characterise, in this first analysis, the epistemology of risk in terms of lack of knowledge.

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For this reason, the next question necessarily centres on the ontology of risk. Hence, risk should be interpreted by questioning what risk is and then by saying what the relations and features of risk are. Risk is represented as an objective quality that is imminent and measurable through the laws of probability. Indeed, such an argument has been endorsed for centuries, especially in Western countries, from Fibonacci's *Liber Abaci* (1202), Cardano's *Liber de Ludo Aleae* (1525) and Galileo's *Sopra la Scoperta dei dadi* (1623) through the laws of probability framed, inter alia, by Pascal and Fermat (Bernstein, 1996) and, in particular, the science of statistics of Graunt, Petty and Halley, promoting the concept of insurance as a commercial tool in the eighteenth century. In other words, the story of risk was initiated by formalising its ontological meaning (a theory of being) based on an objective dimension under the laws of probability. Therefore, risk management is a revolutionary idea whereby the future, far from being the antagonist, mysterious fate or *voluntas dei*, becomes an opportunity to acquire wealth and establish favourable economic conditions.

Specifically, insofar as the story on risk is concerned, the subjective dimension of risk was introduced in 1731 by Daniel Bernoulli (Bernstein, 1996) with the concept of risk-taking, which linked risk with the essential figure of the risk-taker – a human being capable of facing the future and taking his chances against *voluntas dei*. The concept of risk-taking came to be seen as something that related not just to objective facts, but also to a subjective view concerning the desirability of the decision-making process. For this reason, in 1921, the twelve chapters of *Risk, Uncertainty and Profit* by Frank Knight developed a philosophical argument on risk instead of a pure economic theory on profit (Knight, 2014). Specifically, the subjective element of personal decisions has influenced thinkers to understand and theorise a possible methodology for the measurement of risk, and distinguish this latter from uncertainty as a personal belief. Furthermore, because risk cannot be prevented in any human activity, the conception of risk management has become a useful tool to identify risk in ontological terms, and consequently to influence the subjective decisions of the risk-taker in order – this time – to be uncertainty-averse.

2.2 Risk and uncertainty in financial markets

Theorising financial risk in philosophical terms has never been proposed before, but it is now a matter of compelling importance. According to Knight's *Risk, Uncertainty and Profit* (Knight, 2014), risk can be measured through a priori or statistical assumptions but, in financial markets, risk has to be approached from an actuarial point of view. From a pure statistical angle, a risk exists where it is statistically measurable and when probabilities can be estimated but, from an actuarial point of view, the economic consequences of these events are also important. When probability, capital and profitability are taken into account, then financial evaluation is requested.

Classical economics introduced the idea of the risk-taker in terms of *homo economicus*, namely the man who takes a rational decision to maximise its utility. The premise of this initial approach is based on perfect information (Knight, 2014) where competition does not play any significant role; it can be philosophically defined as a mechanical approach (Passet, 1984). In such a system, uncertainty is not even mentioned because every agent in the system possesses the same level of information and is capable of inferring the same data from a homogeneous class of instances. Hence, variables can be predicted and anticipated. Here, statistics or simply a priori probability as explained by Knight are superfluous; to reach a market equilibrium in which all participants possess the same level of information, there is no need to anticipate or classify instances in risk classes, because every risk class is composed of homogenous instances.

Homo economicus has become *homo stocasticus* – essentially the man who takes decisions in terms of probability and is especially influenced, in Bernoulli's view, by the desirability of choices. Thus, uncertainty is an important feature of an economic system in which competition also plays an important role and, in addition, uncertainty is considered to be the main catalyst of profit (Knight, 2014). This is the position of neoclassical as opposed to traditional economics, according to which

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uncertainty was reduced or eliminated through belief systems in which the unknowable became knowable by means of symbols, such as Adam Smith's 'invisible hand'.

For this reason, the next step is to introduce the environment in which the economic agent faces risks today. This paves the way for a new contemporary phenomenology of financial markets that can be defined as a complex system (Holland, 2014) dominated by risk and uncertainty, and especially by competition in terms of financial innovations and adaptability. This means that, in the contemporary phenomenology of financial markets, there is no central planner and competition serves the role of decentralised planning. If this image is imposed onto the broader economy, we come to the concept of the entrepreneur who faces risks and adapts his actions by answering risk with financial innovation. The entrepreneur becomes manager of the plan and, by taking responsibility, contributes to the money-creation process through engaging in uncertain activities (Knight, 2014).

In the end, disorder can be neutralised through information. Indeed, in economics, risk and uncertainty are also defined as information economics or informed economics.

Knight has provided the reader with a theoretical background that distinguishes between risk and uncertainty, but he has not been able to guide policy-makers in preventing future crises (Valdez and Molyneux, 2016). This is because financial risk is not only composed of its objective dimension in terms of an ontology realism, but is especially influenced by a subjective element that leads to a more complex dialogue on its essence, and that seems at first glance ungovernable. Therefore, the impossibility of measuring opinions and judgments has rendered the discourse on financial risk much more complex. Nonetheless, uncertainty in the market is a necessary connotation that cannot be eliminated and, one could say, does not pretend to govern or control. This is because money-creation processes based on profit are strictly dependent on uncertainty.

3 The financial crisis (2007–2010) in the West and underpriced risk

The financial crisis (2007–2010) has been defined as 'the biggest crisis since the Great Depression' (Kokkoris and Olivares-Caminal, 2010, p. 90), although crises are seen as a recurrent feature of financial history (Kindleberger, 1996). It started pre-eminently as a mortgage-lending crisis in the US (Arnold, 2012), although the diffusion of speculative derivative contracts traded on over-the-counter (OTC) markets is identified as one of several causes (Stout, 2011). Specifically, derivatives traded on the OTC markets are still affected by a series of downsides and limits that have been correctly highlighted by Arias Barrera in terms of lack of proper supervision because of the difficulties in identifying a qualified regulator as well as a deficit in regulation based on a risk approach (Arias Barrera, 2018).

Triggers to the 2007–2010 financial crisis are complex, and they have additionally to be identified in the lack of financial regulation and monitoring together with correct pricing of financial risk that led to a fuelled credit bubble whose first fatal effects were seen in a collapse of the market for subprime mortgages in the US. Specifically, a subprime mortgage consists of a residential loan or mortgage issued to high-risk borrowers who face bankruptcy or have a late-payment history (i.e. they are subprime borrowers). Therefore, the rate of interest charged to those borrowers is higher than that of a prime mortgage. Nonetheless, at that time, lenders such as banks sold – through a system of securitisation (Demyanyk and Hemert, 2011) – their credit to investors who in turn became holders of asset-backed securities. In light of this, premiums paid on collateral (i.e. mortgages/loans) were attractive on returns for asset-backed holders due to the higher interest rate, but the effective repayment of the principal of the mortgage would have been convenient for high-risk borrowers only in the case of an increase in house prices. Nonetheless, between 2004 and 2006, house prices started to drop, but debt itself was not downgraded. As a result, defaults on subprime mortgages rose and triggered a devaluation in housing-related securities, causing losses to financial intermediaries, raising prices on insurance for default and reducing interbank lending (Elmeskov, 2009). Indeed, before the crisis, interbank lending, and lending activities generally, represented the main instrument for financing the investment activities of private-equity funds. Private-equity firms are a mixture of venture capital and management buyouts. Specifically, the European Private Equity and Venture Capital Association has highlighted that, in 2008, private-equity

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investments fell dramatically due to difficulties in obtaining bank loans to finance new deals (Valdez and Molyneux, 2016). Indeed, the economic crisis (2007–2010) was mainly perceived as a debt-securities crisis and contributed to a decline in private-equity operations, especially those with a high level of leverage. In other words, the possibility of obtaining new funds at low interest rates (where the interest rate has to be understood as the price paid for risky activities undertaken by virtue of lending) enhanced the opportunity for aggressive speculation focusing on high-risk investments. In addition to this, the lack of strict regulatory requirements or direct supervision of financial intermediaries in some measure facilitated this process.

When the crisis hit financial markets, the high reliance on debt securities (such as loans, bonds, etc.) diminished and financial panic started to rise. For instance, the notorious collapse in 2007 of one of the most important investment banks (Lehman Brothers) (Arnold, 2012) deteriorated further the economic conditions of the financial environment and gave rise to concerns in relation to moral hazard and the feasibility of bailout procedures (Lastra, 2015; Ayotte and Skeel, 2010). Hence, the new volatility of financial markets called into doubt whether Central Banks should have overseen financial stability as a whole, in addition to their traditional monetary-stability role (Davies and Green, 2010), although Central Banks were in a position to foresee the 2007–2010 financial crisis, due to the well-known phenomenon of high leverage and the underpricing of risk (Goodhart, 2009). The crisis led to a rethinking of the traditional role of Central Banks and the need for Central Banks to regulate banks (Goodhart, 1988) and other financial intermediaries (Valdez and Molyneux, 2016), as well as to focus their attention on international financial conglomerates, due to the possible spill-over effect and systemic risk that can be caused by their collapse (Lastra and Olivares-Caminal, 2009).

Furthermore, the crisis moved to the real economy, evolving into a recession and affecting households, businesses and jobs (Figlewski, 2009). Indeed, it has been noted that price fluctuations are likely to impact on the real economy because the housing market is also part of a ‘credit-fueled asset price bubble’ (Vague and Hockett, 2013, pp. 3–46) where prices can drop, but private-debt loads simply cannot. For this reason, private debt has been identified as one of the main triggers and indicators of failure cascades and detrimental spill-over effects.

Certainly, the world economy has been reshaped by the global nature of the current crisis that has manifested negative widespread effects on the whole economy (i.e. systemic risk and contagion) (Lastra, 2015) due to the internationalisation of financial markets (Tennekoon, 1991).

In particular, unlike previous crises that were seen as a successful test for the economy and were confined to certain sectors of financial markets, the 2007–2010 economic crisis stands apart due to its ‘super-bubble nature’ that involves every sector of the financial markets. As a result, financial markets still register a lack of confidence and efficiency. The economic effects of the current financial crisis are experienced on the side of investors in terms of confidence due to information asymmetry and agency-costs issues, whereas, on the side of managers and financial intermediaries, they are seen in terms of systemic risk and contagion due to moral-hazard concerns. Establishing a new legal and economic order, namely a new ‘paradigm’ in financial markets, has become a necessity where scepticism and distrust are present in each financial operation including – in particular – borrowings and bank or interbank lending.

In the end, it can be said that the current financial crisis is the welfare cost of underpriced private debt where the social consequences in terms of unemployment and human dignity have far overwhelmed the classic concerns of macroeconomic entities such as inflationary or deflationary processes.

3.1 Financial risk in Western finance and its limits

In philosophical terms, economic methods and statistics related to the laws of probability have paved the way for activities of risk-taking, transfer and pooling (i.e. banking, investment, insurance, etc.) that constitute per se a source of legitimate profit in Western countries. In other words, risk management has become the new means of identifying risk, in ontological terms and specifically from a financial point of view.

The risk argument in finance is explained as the constant relationship that shapes the structure of financial markets between savers (i.e. lenders) and users (i.e. borrowers) (Valdez and Molyneux,

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2016). According to this understanding of the market, lenders are represented by individuals, companies or governments that have funds to invest in the business activities of users, otherwise known as borrowers. The financial market is the place where those opposite interests of lenders and borrowers are encountered and matched. Furthermore, these two categories of agents (lenders and borrowers) bear different types of risks and one could say they have different needs and perspectives in relation to risk.

Essentially, the main objective of any lender, or, better, of any investor, is to stay risk-averse and to evaluate through risk assessment the solvability of the borrower as well as its credibility (for this reason, the interest rate becomes the price paid for the level of risk that is borne by the lender, at least from a philosophical point of view, whereas, in a pragmatic view, the interest rate is the cost of the supply and demand of money). On the other hand, the borrower is an aggressive agent who pursues profit maximisation through risk-taking activities (such as the issuance of shares through initial public offers, issuance of bonds on the debt market, etc.). The risk assessment of the borrower and the interactions between those two categories of investors are facilitated by financial intermediaries (essentially, investment banks, hedge funds, mutual funds, etc.), which traditionally exercise the main function of absorbing and mitigating investment risk.

Therefore, the definition and study of the concepts of risk assessment, investment risk and financial risk become important in order to efficiently govern financial markets. Financial risk thus becomes a *status* of the world to be controlled and governed in order to enhance the investors' confidence and allow them to become risk-averse (D'Alvia, 2018). Indeed, risk assessment has also been defined in sociological terms as the most important activity for colonising the future (Giddens, 1991), but its proper functioning in contemporary financial markets is always limited by the acknowledgement of imperfect information and adverse selection in the market, so there is – as we pointed out in Section 2 – always an element of indeterminateness in reality and therefore, in our specific case, in financial markets. This is what I define as uncertainty in the market.

The tension between knowledge and risk is one that aims towards absolute knowledge, but it is irremediably destined to fail. In this section, the hendiadys of knowledge and risk is examined from an economic point of view in order to understand why the risk-taker in financial markets (the borrower, in the sense that we have explained before) is incapable of taking reasonable financial risks, and in particular why the classification of risks in finance might give rise to inefficient behaviours (i.e. moral hazard) and is subject to unresolvable limitations.

Insurance is the main economic model for colonising the future in sociological terms (Giddens, 1991) and, at the same time, for answering the principal question as to how far the world is intelligible. However, insurance – in pure economic terms – is the demand for protection against risks in order to hedge the positions of agents in the market. Indeed, the main aim of insurance is to distribute risks and set prices by virtue of classification (Abraham, 1986). Classification is a costly activity, both for the insurer in traditional common insurance and for a central clearing counterparty of derivatives in financial markets, that aims to diversify risks on the basis of different classes by means of risk assessment. This latter process is achieved through separating similar risks into different classes. Therefore, the necessary feature of any risk-classification system is the homogeneity of risk classes. Indeed, the more homogeneous the risk classes, the more effectively the price of the premium is settled.

This is translated in financial terms into the notorious phenomenon of underpricing of financial risk that was responsible for the emergence of spill-over effects and systemic risk in the 2007–2010 financial crisis. For this reason, a correct risk assessment is vital for the efficient functioning of financial markets, which can be achieved only through the distribution of risks and classification, albeit the main hurdle to such a result is the difficulty in identifying homogeneous instances in a risk class.

4 The Islamic financial system

Islam is a comprehensive way of life (Asad, 2003), which seeks to provide humanity with guidance on both its physical and spiritual needs. Guidelines are given for individual and collective conduct. Stipulations encompass five areas of life, including the requirements of Faith (*Iman'iyat/Aqeedah*),

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Worship (*Ibaa'dat*), Social Transactions (*Mua'sharaat*), Character (*Akh'laaq*) and Financial Transactions (*Mua'malat*). In the sphere of finance, the objective of Islamic economics is to strike a balance between the spiritual and the material needs and wishes of the human subject. An Islamic economy is guided by moral values engendering co-operation and mutually beneficial exchange. These guiding principles and prohibitions arise from an understanding of Sharia.

Sharia is said to mean the "Waterhole" or the "Way", yet one of the misconceptions is that it is a rigid and codified body of law. In fact, it consists of general rules and principles, which have been interpreted in the context of time and place via *Ijtihad* (Interpretation). The rules are derived from the primary sources, being Al-Qur'an, the holy book of Islam, as revealed to the Prophet *Muhammad* from whom Islamic adherents also accept *Hadith*, which are sayings and practices that were noted down and attributed to him by the first generations of *Sahaba* (namely, the Arabic term of companions denoting those followers of Islam who accepted faith during the life of the Prophet) in the first three centuries of Islamic history (Coulson, 2011). Sharia was then supplemented by *Qiyas* (Zubaida, 2005) – a process of reasoning that allows principles in the Qur'an to be extended to apply to new or novel cases. To this is added the principle of *Ijma*, which reflects the consensus reached by the Muslim community (*Ummah*) and, more specifically, Islamic jurists on an issue.

4.1 Islamic finance

The origins of Islamic finance itself can be traced back over 1,400 years to the time of the Prophet *Muhammad* with further developments in the Muslim world throughout the middle ages (Zaher and Hassan, 2001). However, the recent and modern use of the terms 'Islamic financial system' or 'Islamic finance' took root in the mid-1970s with the launch of Islamic banks in Saudi Arabia and the UAE (Hussain *et al*., 2015). Bahrain and Malaysia have followed suit as the main areas of rapid and aggressive growth throughout the 1990s. The Islamic-finance industry now has over $2 trillion in assets and is growing. Even during this period, there were over 100 financial institutions in forty-five countries undertaking some form of Islamic finance (Iqbal, 1997). It is fair to say that it has since become a booming industry.

The main aim of the Islamic financial system is to ensure greater justice in society, as mentioned in the Holy Qur'an: 'O you believe! Stand out firmly for justice, as witnesses to Allah, even against yourselves, or your parents, or your kin, and whether it be (against) rich or poor, for Allah can best protect both' (*Surah* 4, verse 35). Later, the concept of justice is reiterated in the verse 'Be just, that is closest to the awareness of God' (*Surah* 57, verse 25) and, to this end, Islamic-finance models take a preventative approach to risk so as to protect individuals and assets.

The main principles underlying risk management in Sharia are that profit must come from legitimate trade and asset-based investment. This rules out the possibility of using money to make further money without any corresponding effort, as is the case with 'interest-based loans' in the conventionally based model. Interestingly, the only reference to loans is a 'benevolent' form that is repaid free of charge, called *Qard al Hasan*. Investments are encouraged to be for more than just pure return of profit and projects are selected that benefit the wider community. Fundamentally, the risk of a venture is also to be shared between both contracting parties, while all harmful or forbidden activities (*Haram*) as stipulated in the Qur'an are not permitted and include any trade in alcohol, pork, tobacco and pornography. One of the main issues to consider in addition to the prohibition of interest and speculation is the concept of uncertainty, or *Gharar*. It is the approach to uncertainty that marks the major difference in terms of our discussion between the two models but, at the same time, characterises both systems in terms of complexity, and therefore makes them closer and resilient.

4.1.1 Gharar

According to Sookhdeo (2008), Islamic finance is not that relevant to the essential practices of Sharia law. More controversially, he has stated that applying Sharia law in finance is neither Islamic nor

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efficient. Others have argued, more persuasively, that Islamic finance is, in fact, an integral part of Sharia law. Although it does not address finance in its modern form, Sharia law does incorporate general principles governing the economic behaviour of Islamic society and specific instruments regulating classic commercial transactions (Aldohni, 2015). Indeed, throughout history, Islamic banking has gone through different phases of development with time required to transfer Islamic banking principles from the theoretical to the practical domain (Sookhdeo, 2008).

Facilitated to a large extent by the export of oil from Muslim states, Islamic finance and banking have seen a huge growth in recent years (Latif, 2013). As a result, Western institutions and governments have been keen to ensure that they are part of the economic growth, and so have introduced Islamic finance and banking into their systems (Aldohni, 2015; Visser, 2014). This phenomenon has perhaps been a contributing factor in bringing Sharia law and Islamic finance to the forefront of comparative study, discussion and viable applicability.

Islamic scholars have found general rules governing economic activities in the Qur'an and within the *Sunnah* and, on that basis, a doctrine of fairness in commercial dealings has been established. There are four components in this doctrine, namely the prohibition of *Riba* (usury) (Khan and Mirakhor, 1992), *Gharar* (uncertainty), *Qimar* (gambling) and the encouragement of *Taa'won* (mutual co-operation) (Sookhdeo, 2008).

Gharar, literally translated, means uncertainty, hazard, chance or risk,[1] although there are a number of interpretations of what *Gharar* means in practice. Indeed, it can refer to a lack of knowledge itself or to a contracting party's lack of knowledge (Balala, 2014). However, this broad interpretation needs to be defined and narrowed. In particular, the concept of *Gharar* is connected both to the concept of legal uncertainty and to uncertainty itself in economic terms. In this meaning, the concept of *Gharar* is linked to the concept of risk. It is – as it will be further explained – a pure form of risk, in accordance with Knight's thesis, which defines uncertainty, as opposed to risk, as an unmeasurable form of hazard. With the moral aim of ensuring that contracting parties are clear on what they are agreeing to and understand their rights and obligations, *Gharar* is not permissible when there is an unknown outcome in an exchange. Indeed, it has been noted that contracts are forbidden under conditions of excessive uncertainty and unacceptable levels of risk (Aldohni, 2015). In this context, it is

[1]According to the *Financial Times Lexicon*, *Gharar* means 'risk, uncertainty or hazard', available at http://lexicon.ft.com/term?term=gharar (accessed 29 April 2020). In particular, the Arabic word for *Gharar* is ررغ, which means risk in its etymology; see Bin Lambak (2013). Although there is no verse in the Holy Qur'an that proscribes *Gharar*, vanity is forbidden in two Islamic verses that are usually connected to the prohibition of *Gharar*. The first one is under the Holy Qur'an, *Surah* 2, verse 188: 'وَلَا تَأْكُلُوا أَمْوَالَكُم بَيْنَكُم بِالْبَاطِلِ وَتُدْلُوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِّنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنتُمْ تَعْلَمُونَ'. Verse 188 has been translated by the Islamic scholars Dr Muhammad Taqui-ud-Din Al-Hilali and Dr Muhammad Muhsin Khan as follows: 'And eat up not one another's property unjustly (in any illegal way e.g. stealing, robbing, deceiving, etc.), nor give bribery to the rulers (judges before presenting your cases) that you may knowingly eat up a part of the property of others sinfully', translation of the meanings of the Noble Qur'an in the English language, p. 39. Furthermore, the other verse of the Holy Qur'an that concerns *Gharar* is the *Surah* 4, verse 29: 'ا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا أَمْوَالَكُم بَيْنَكُم بِالْبَاطِلِ إِلَّا أَن تَكُونَ تِجَارَةً عَن تَرَاضٍ مِّنكُمْ وَلَا تَقْتُلُوا أَنفُسَكُمْ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا'. Verse 29 has been translated always by the same Islamic scholars, Dr Muhammad Taqui-ud-Din Al-Hilali and Dr Muhammad Muhsin Khan, as follows: 'O you believe! Eat not up your property among yourselves unjustly except it be a trade amongst you, by mutual consent. And do not kill yourselves (nor kill one another). Surely, Allah is Most Merciful to you', translation of the meanings of the Noble Qur'an in the English language, p. 112. For an interpretation of these verses in terms of *Gharar* prohibitions; see Al-Saati (2003). Finally, on the possible definitions of *Gharar*, see also Al-Ameen Siddiq Al-Dhareer (1997, p. 10). Indeed, Al-Dhareer divides *Gharar* in jurisprudential terms into three main definitions: '[F]irst, *Gharar* applies exclusively to cases of doubtfulness or uncertainty as in the case of not knowing whether something will take place or not. This excludes the unknown. The definition by Ibn Abidin is a case in point: "*Gharar* is uncertainty over the existence of the subject matter of sale"; second, *Gharar* applies only to the unknown, to the exclusion of the doubtful. This view is adopted by the *Zahiri* school alone. Thus, according to Ibn Hazm: "*Gharar* in sales occurs when the purchaser does not know what he has bought and the seller does not know what he has sold"; third, a combination of the two categories above; *Gharar* here covers both the unknown and the doubtful, as exemplified by the definition proposed by Al-Sarakhsy: "*Gharar* obtains where consequences are concealed". This is the view favoured by most jurisprudents. I have opted for this last definition because of its more exhaustive coverage of the jurisprudential elements collated under *Gharar*.'

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important to clarify that *Shari'a* law with reference to *Gharar* does not usually go beyond the contract to ascertain what is in the minds of contracting parties. This means therefore that *Gharar* is not about deception, nor is it about taking a risk in decision-making (Iqbal and Llewellyn, 2002).

However, the reality is that, with commercial contracts, there will always be some element of risk and uncertainty (Aldohni, 2015). Some *Gharar* is, therefore, acceptable, as it will not always be possible to eliminate uncertainty totally from exchange contracts (Hassan and Lewis, 2007). Due to the prohibition of *Gharar* and, therefore, of risk-taking, contracting parties look to find risk-sharing solutions (Akhter, 2010) (e.g. the *Takaful*) instead of risk-trading tools (D'Alvia, 2017). To this end, the risk of a commercial transaction is admissible only if all the contracting parties share the same level of acceptable risk within a transaction (Ahmed, 2010).

Gharar in Islamic finance is not without issues, primarily because there is no universal agreement among Muslim jurists as to what degree of legal uncertainty is acceptable in commercial transactions. *Gharar* is therefore a matter of interpretation, which in itself can cause issues (Nehad and Khanfar, 2016). In an attempt to counter such issues, learned scholars are generally relied upon to distinguish between contracts containing minor *Gharar* (allowed) and contracts containing substantial *Gharar* (forbidden and therefore void) (Balala, 2014).

4.2 The permissible financial instruments

Islam is not against the acquisition of wealth and Islamic finance offers alternative instruments through which participants can engage in ventures. The foundation of these instruments is either a profit-loss (PLS), nonprofit-loss (NPLS) or fee-based product (Hussain *et al*., 2015) and a commitment to be compliant with Sharia principles (risk aversion) that underlies the Islamic approach encouraging participation, ownership and equity, as explained above.

Murabaha (Hussain *et al*., 2015) is a form of NPLS finance in which the bank purchases the item and agrees to sell it back to the customer with a fixed profit (deferred payment). The bank is protected as the client can pay in instalments. This allows the bank and the customer to avoid the payment or receipt of interest. *Ijara* is a form of NPLS lease financing in which the bank will purchase the item for the customer and then lease it over a period at an agreed amount with the bank owning the asset and trying to make a return on what is termed 'rental payments'. The Islamic mortgage is a good example of the *Ijara* contract wherein the bank purchases the property and rents or leases it to back to the customer (Ullah and Karaghouli, 2017). The customer makes payments to ensure the bank does not face a default situation and is also responsible for any other premiums and, once the rental payments are concluded and the asset purchased outright, the bank will transfer the title to the owner. This method protects both the bank from default and, through a fixed rate of rental payments, ensures a transparent and stable path for borrowers.

Mudaraba (PLS) is akin to equity finance: the bank and the borrower (*Mudarib*) share in the profits of a venture but the bank provides the capital while the borrower brings the expertise. The eventual share of profits is settled by way of the initial agreement. The losses are borne entirely by the lender.

Musharaka (PLS) is the most authentic form of Islamic finance, where contracts are joint-venture or investment-partnership agreements in which both invest money into a project and decide to share in any profits in agreed amounts. Both parties can, therefore, be remunerated according to the amount of effort and capital they invest in a project and losses can similarly be borne according to this measure.

Sukuk is a form of debt finance or bond. However, unlike the conventional model, *Sukuk* does not allow the payment of interest so the holder must have a proprietary interest in the assets seeking finance. By providing the capital, the *Sukuk* provider will get a share in the income made by the asset.

Critics of Islamic finance note that the above methods all effectively find an alternative means of cash flow, which would have fallen into the realms of interest payment in the conventional model. The distinction, however, is that the amount of profit is based upon an asset transaction as opposed to

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interest on money provided. There is a fundamental shift in the approach, which is designed to avoid injustice and moral bankruptcy, where those who create the risk avoid the penalty and unjustly enrich themselves (Aldohni, 2015). This was of course one of the major criticisms of the bankers who were held responsible for the financial crash (Ahmed, 2010).

4.3 The Islamic model's resilience to the financial crisis

Islamic financial institutions were largely said to have avoided the first-hand impact of the crisis, as *Gharar* stipulations had prevented them from investing in the subprime risk-ridden elements of the real-estate sector (Hussain *et al*., 2015). The risk-sharing models of finance that were asset-based and opposed risk transfer ensured that excessive leverage tactics were avoided. However, the interdependence of the global financial system meant that they were not immune to the secondary effects (Ahmed, 2010). Despite holding significantly more 'capital and liquidity buffers', empirical studies have shown that the Islamic system was actually no more stable than the conventional because there was a fall in equity due to overinvestment in the real-estate sector given its overreliance on asset-based products (Hussain *et al*., 2015). The sector also suffered a sharp fall in the value of *Sukuk* as uncertainties in the global market adversely impacted this instrument.

Admittedly, three main concerns for Islamic finance include the fact that it is still in a 'state of infancy' where the future trajectory and its ability to survive any future crisis will depend on it being able to produce its own intermediary markets and alternatives. Second, the Islamic-finance system would be solidified were it an actual part of an overall Sharia-based society in which political, educational, religious and economic institutions worked in tandem. Islamic markets are not performing at optimum levels in isolation and need to be part of an integrated religious framework. Third, the lack of uniformity of the fatwas arising from different schools of thought means there are as many Sharia boards as there are institutions, despite recent attempts to centralise. The variety of juristic opinion and the complexity of the instruments being produced create further risk of 'Sharia non-compliance' and potential conflicts in contracts in cross-jurisdictional transactions – which brings us to the final point about Islamic finance morphing into a form that is no different from that of the conventional.

5 Risk and uncertainty: Islamic finance vis-à-vis Western finance

Islamic-finance proponents have argued that following the principles of SFC would have averted the crisis. Indeed, the study of the financial crisis in the West outlined in Section 3 has shown that the causes of the financial crisis (2007–2010) were centred on a deregulated environment, risky lending activities and the use of untested new products. In particular, if the subjectivity of financial risk is intelligible but not knowable due to its necessarily unknowable feature, the future, at least in the contemporary phenomenology of financial markets, it is no more perceived as an opportunity, but as something that is feared and must be controlled. Indeed, in the West since the collapse of Lehman Brothers in 2008 and the start of the 2007–2010 global economic crisis, uncertainty aversion has dominated the markets, but the management and correct pricing of risk in its objective dimension are still vital for governing markets (Borio and Zhu, 2008). Indeed, the figure of the risk-taker, namely the investor in financial markets, has shifted to the figure of the speculator, who, through his second-guessing, influences the choices of other speculators[2] and can contribute to a potential mispricing of the negotiated financial assets.

As a result, the figure of the risk-taker, who sees the future as an opportunity, has shifted to an uncertainty-aversion paradigm, by means of which I shall term the contemporary phenomenology of financial markets, where their subjectivity has superseded and overwhelmed the objective realism

[2]This at least in the understanding of Keynes, who has imagined financial markets as a beauty contest in which judges are not concentrated on selecting the most beautiful girl, but they are focused on second-guessing the opinions of other judges. Therefore, in the same way, in financial markets, speculators try second-guessing the opinions of other speculators.

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of their own ontology. Indeed, the figure of the speculator has contributed to the current financial crisis, while, on the other hand, supervisors, financial regulators and financial institutions cannot be blamed for their actions, insofar as they are inside the disaster-myopia discourse (Guttentag and Herring, 1986).

Within this discourse, a close analysis of the Islamic-finance industry indicates that a similar situation is brewing. Indeed, Islamic finance has been criticised for its lack of a clear regulatory structure. In a bid to create Islamic versions of the conventional products, the Islamic jurists are presently being too flexible with the true teachings of Islam. They are legitimising the creation of a complex financial instrument that would ultimately operate in the same way as their conventional counterparts.

For instance, I would like to highlight the practical case of Fintech in which Islamic finance and traditional finance are converging. In October 2019, Daniel Ahmed raised $2.5 million from wealthy Gulf investors to create a Sharia-compliant cryptocurrency (Cornish, 2019). Indeed, cryptocurrencies represent a possible challenge to Islamic finance because they are financial instruments that are not asset-based and they are mainly focused on virtual money, whose value depends on the level of the offer and demand for cryptocurrencies. However, Fintech represents a big industry and a new market that Islamic entrepreneurs are trying to access through a 'softer' application of Islamic principles. By contrast, under a strict application of *Gharar*, cryptocurrencies shall be prohibited due to their uncertain value and immateriality.

In the same way, syndicated loans can show the convergence of Islamic finance to Western financial models (Ballantyne, 1996). Under this financing structure, Western models as well as Islamic models seem closer due to the fact that the same commercial considerations are taken into account once the syndication occurs. For instance, lenders mitigate the exposure by sharing the borrower's credit risk, diversify their loan portfolios because they are only taking a portion of each loan transaction and the borrower is entitled to more capital than it may otherwise have been if it had had only one lender. On the other hand, Islamic loan syndication faces the limit that the borrower cannot invest in products and services that are *haram*, such as tobacco products. Furthermore, the prohibitions of *Riba*, *Gharar* and *Maisir* shall be respected, and the Sharia committees of the lenders must approve the investment of the borrower as a legit one. However, it is not unusual for a borrower to do a tranche of Islamic financing and a tranche of conventional debt in order to find the upside of Islamic finance (Ahmed, 2010, pp. 310–311). In this light, conventional finance is seen as a sort of 'sweetener' to provide borrowers with incentives to select Islamic-finance financings that are linked to conventional banks.

For these reasons, the industry has been attacked by the orthodox Islamic community as legitimising the forbidden (*Haram*) through tricks of reasoning that are deceptive or contrary to the spirit of Sharia by promoting products that are not at heart based on the PLS models. Indeed, as an influential scholar noted, the practice of Islamic finance appears to be gradually moving towards that of conventional banking (Ahmed, 2010, pp. 318–319) and, in doing so, it is losing potentially the trust of Muslims.

6 Conclusions

This paper has illustrated two different financial systems, namely Islamic finance and Western finance.

Although it is true that there is an urgent need for Islamic finance to return to its Sharia-based commitment to social improvement and to refrain from the single-minded 'pursuit of profits' largely responsible for the financial crash in the Western system, the remarkable role of uncertainty in both financial systems cannot be denied. Indeed, although improvements can be made by returning trust in Islamic finance through a centralising body, which authenticates Sharia-compliant products, the remarkable quality of uncertainty in the view of Knight sheds a new light on financial markets that opens a completely new discussion.

Indeed, in this light, the recognition of Islamic finance as resilient to Western finance can be misleading because, essentially, the discourse should be turned on its head. Indeed, as explained

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above and in Section 3, nowadays, it is the Western financial model that is promoting uncertainty-aversion approaches to regulation and the market. Therefore, one could say that, under the uncertainty paradigm, both Islamic and Western financial systems are starting to share the same objective, namely to avoid and control uncertainty. Furthermore, these two financial systems also share the paradox of financial markets whereby uncertainty is the main ratio for efficient functioning of the economy, and its avoidance can only limit profit itself.

Nonetheless, in the case of Islamic finance, a further quality of uncertainty is justified and implemented at least theoretically in the learning of Sharia. Indeed, we have said that, without uncertainty, there is no profit. Hence, the permissible *Gharar* is a self-evident sign of this understanding in which Islamic finance aims at limiting transactions that take into account excessive *Gharar* for the parties, but does not negate the existence of uncertainty *tout court*, otherwise there will be no profit at all. This is an uncertainty-aversion paradigm that aims at controlling uncertainty, but there is still a real difference from Western finance and it is enshrined in the modalities of making profit under Islamic law.

Nonetheless, justification for the idea of uncertainty aversion is controversial because, according to Knight's theory, profit is connected to uncertainty, and complex systems such as financial markets cannot exist without uncertainty. Without uncertainty, there is no profit. Indeed, any money-creation process, rather than being undermined by uncertainty, is underpinned by it. Therefore, a new economy characterised by uncertainty aversion, such as is being proposed today by financial regulators and governments in the West, can be translated, in the worst possible scenario, into a considerable diminution, or indeed full elimination, of profit. Indeed, in Knight's words:

> 'the only "risk" which leads to a profit is a unique uncertainty resulting from an exercise of ultimate responsibility which in its very nature cannot be insured nor capitalized nor salaried. Profit arises out of the inherent, absolute unpredictability of things, out of the sheer brute fact that the results of human activity cannot be anticipated and then only in so far as even a probability calculation in regard to them is impossible and meaningless. The receipt of profit in a particular case may be argued to be the result of superior judgement. But it is judgement of judgement, especially one's own judgement, and in an individual case there is no way of telling good judgement from good luck, and a succession of cases sufficient to evaluate the judgement or determine its probable value transforms the profit into a wage.' (Knight, 2014, p. 310)

This is the paradox of modern economies. On the one hand, they blame uncertainty due to the indeterminacies of the decisions of the speculator and for its mysterious character that prevents them from measuring it but, on the other hand, the elimination or diminution of uncertainty inside free markets can irreversibly contribute to the diminishing of progress and innovation. Without uncertainty, there is no competition and, without competition, there is no adaptability of the system. Indeed, it seems that the contemporary phenomenology of financial markets can benefit from finding a spontaneous order by allowing the functioning of a free-market structure beyond financial-regulation concerns.

To this end, under Islamic finance, uncertainty is always counterbalanced by responsibility. Indeed, the parties of a transaction can take permissible *Gharar*, but always in respect of their responsibilities by virtue of not taking advantage one of the other. In philosophical terms, it is this expression of Sharia that most resembles Knight's theory on uncertainty, which the West has still not fully understood and/or implemented. Indeed, in the West, we still aim at transferring responsibilities rather than assuming them. For instance, the derivatives in this sense can be conceptualised not merely as a form of hedging between parties, but as a form of transfer of responsibilities. For this reason, Islamic finance should turn back to a full implementation of its perfect classical theory of *Gharar* that found its most intense expression in the Qur'an. However, such intention is purely sentimental and it is unlikely to be implemented in a post-crisis world that is intensely globalised. As a result, only in this imaginative reconceptualisation of *Gharar* in its original meaning does SCF constitute the most virtuous way of

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understanding financial markets and preserving their contemporary phenomenology towards a more ethical form of finance, and one could say towards a sustainable generation of profits.

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