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Hybrid *Sukuk* for SMEs: Financing the Real Economy through Ethical Principles

Anass Patel

INTRODUCTION

After many years of practice in the capital markets, asset management, and structured financing, we came to the conclusion that there are two trends that are misleading our rational economic approach to banking and financing. On the one hand, banks, whether conventional or Islamic ones, tend to request more and more collateral or guarantees on their borrower regardless of the nature of the project to be financed, the quality of the underlying assets, and the track record of the entrepreneur-borrower. On the other hand, risk capital investors, who are more likely to take risks on the potential upside of the project with less focus on the credit history of the client, are getting involved only through more and more complex instruments; their engagements, which should supposedly be equity investments, are in practice acting more like debt instruments in the form of equity-like features such as subordinated or venture loans. This clear evolution of the financial market between "minimum risk taking" (loans with strict guarantees) and "upside-only risk sharing" (equity with debt security features) is putting a clear strain on the smaller economic players such as the small medium enterprises (SMEs), which are less capable of accessing vanilla types of financing due to their size and risk profile.

Many authors have written about the differences and issues raised by collateral-based debt or profit and loss sharing (PLS) contracts, mainly under the asymmetric information analysis framework.[1] But we believe that there has not been enough focus on the SMEs segment, which is a better image representation of the real economy in the modern world. While the debate has been hot on the nature of Islamic financial instruments, especially about the partnership format, and their resulting compatibility with the modern markets considering the lack of robust risk management systems and,

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alternative solutions. However, project or venture financing have been less covered in those debates.

To best illustrate the disconnect between collateral-based debt and upside-only risk capital, we would like to share our experience in the French economy, where we had to find an alternative to *riba*-based bank financing with an innovative structure that had to overcome this double challenge of "no risk-taking loans" or "no risk-sharing equity." Tax considerations aside, we believe that market participants do not have the right approach when considering the appropriate allocation of equity or debt towards SMEs/asset-backed projects finance.

The assumption behind this hybrid *sukuk* model is that when structuring an SME-specific *mudaraba*-based partnership financing instrument, transaction costs will become incrementally insignificant. This is considered only if they are used properly and at such a scale, through a program issuance, for example. As such, hybrid *sukuk* does provide a credible alternative to conventional loans, which are increasingly costly and inaccessible to smaller SMEs or entrepreneurs due to the credit crunch. For the importance of developing more equity-based contracts away from simple debt-based contracts, we refer to numerous works by eminent scholars.[2]

In a nutshell, the model is neither an equity partnership where the capital investors take most if not all power and upside gain, nor a pure collateral-based debt with a pre-defined interest rate disconnected to the performance of the project. However, it is a true value-sharing instrument between an entrepreneur (*mudarib*) with their expertise and business idea, and investors (*rab al maal*) committing to a participative debt funding component (*sak*) completely modeled on the business plan and potential value of the underlying assets, making it truly a risk-sharing transaction. It is not a win-lose situation as with the classical lender-to-borrower relationship, but a participative financing method dependent on the success of the project to generate the necessary cash flow. This cash flow, in turn, gives the entrepreneur the ability to grow and be successful with the performance shared with its capital partners (*sukuk* holders). Contrary to the proposal of Bacha to have an alignment of interest through equity-kicker, which raises some shari'a issues that are yet to be resolved, the innovation of this project resides in the contractual framework with a package of partnership instruments (participative loan with no collateral but a waterfall of sharing devices acting as the *mudaraba* contract) glued together under a *sukuk* scheme that makes the relationship established on true creation of valuable assets. In our project's case, the project consists of the creation of a new restaurant with tangible assets, branding, clientele, and the track record of the entrepreneurs, who were already successful in this business.

With this perspective, we suggest the following three assumptions based on the proposal developed in this study, which is premised on the pilot project at stake:

a) Bank loans are not adapted to SMEs situation;
b) The profit and loss sharing approach for SMEs financing can work; and
c) Hybrid structure in the form of participating *mudaraba sukuk* is a credible alternative.

The paper is organized into four sections. In the first section, we discuss the SMEs market in light of the 2008 crisis and the new Basel II regulation. We will also discuss some recent empirical analyses showing that SMEs are suffering the most in terms of access to financing due to some intrinsic determinants of their structure. In the second section, we introduce our analysis to accommodate PLS contracts to SMEs in France. Then we begin elaborating on the framework prototype developed in section three. We then conclude the paper in the last section with a comparative analysis of the most recent *mudaraba sukuk* issued by one of the largest investment banks in the Gulf region, the Saudi Hollandi Bank.

WHY ARE BANK LOANS NOT ADAPTED TO SMEs?

Before we start looking at the reasons why bank loans are not adapted to the needs of SMEs, let us first provide a general view of the SMEs market, especially some background in the French context.

SMEs MARKET ANALYSIS

In most modern economies, there is a large industry of venture capital with many quasi-equity instruments in different flavors (equity-link bonds or certificates, depending on US, UK, and European legislations) and there is a large practice of subordinated loans or, better put, participative loans, the latter having the flexibility of the former but with a remuneration partly or entirely tied to the performance of its underlying assets. Yet these instruments are not well developed or are not accessible to mainstream SMEs. This concern has been the subject of our research for practical solutions considering the potential market at stake—SMEs financing in France—outlined below.

The SMEs market is indeed a very strategic segment for the French economy in terms of value creation. According to the latest panorama to the SMEs sector,[3] SMEs account for nearly two thirds of employment (63%), more than half of total added value (53%), and a little over a third of real investment (34%). Many French academic studies[4] have discussed the challenges facing this vital market segment, which can be summarized into three main issues:

a) They are affected by a lack of equity even though they suffered less from the consequences of the 2008 financial crisis;
b) They have less access to financial markets for their financing needs, making their cost of capital more expensive; and
c) They suffer from a risk rating system that takes into account mainly their historical performance, which does not really reflect their potential growth and the robustness of the economic model.

The French *halal* food market is worth more than €5Bn in annual sales, growing by 15% over the last five years according to various local surveys.[5] It is possibly the foremost sector where Muslim entrepreneurs are flourishing due to their expertise in this market and their cultural proximity to the targeted consumers. Thanks to the new mode of consumption, the targeted consumers' eating habits have been developing greatly over the years.

Another powerful trend regarding SMEs and their economic development is related to the source of financing of lenders who are constrained by the work of the Basel II Committee. This new framework highlights a disconnect between risk analysis methods and basic modes of financing (secured financing) that supposedly favor smaller borrowers. Aubier and Cherbonnier[6] have looked at corporate access to banking loans and suggested increasing difficulties for smaller companies partly due to Basel II regulatory constraints. This new risk framework is introducing a deeper credit risk analysis that depends on the lender's size in order not to bias the analysis of its risk of default. This is especially true with the retail SMEs category.

If one wants to develop a specifically designed hybrid structure for SMEs, looking from conventional loan financing to capital risk and venture loan financing, it is very likely to end up with a so-called innovative structure that refers to Islamic principles based upon its core risk-sharing principles. Hybrid securities, whether as close as quasi-equity tranche (convertible shares) or in the form of debt instruments (convertible debt), play on two crucial dimensions of time and risk. In the context of Islamic finance, if one could take the best of both worlds and design a particular type of participative loan in the form of an asset-backed structure the remuneration of which depends mainly on the underlying profit, it shall present some strong appeal in response to the vast needs of SMEs, even more so for those with high growth potential (post initial seed capital phase).

Mudaraba financing is "really a hybrid," enumerating the similarities between the Islamic instrument and conventional equity from the *mudarib* side.[7] As Bacha states in his overview of *mudaraba* in his 1997 paper called "Adapting *Mudarabah* Financing to Contemporary Realities: A Proposed Financing Structure":

a) There are no "fixed" annual payments that are due (unlike interest);
b) Payments made to the Islamic banks come from profits, much like dividends—they need to be paid if and only if there are profits;
c) The Islamic bank cannot foreclose or take legal action if there are no profits and therefore nothing to be shared; and
d) Like equity, using *mudaraba* financing does not increase a firm's risk the way debt financing does through increased financial leverage.

On the other hand, Bacha continues, *mudaraba* financing can appear to the *mudarib* as a conventional debt for the following reasons:

a) It represents a "fixed" claim by the Islamic bank on his company, being the initial amount plus whatever accrued profits (losses) that are due to the bank; and
b) Like debt, *mudaraba* financing is terminal; that is, the arrangement can be ended either by mutual prior agreement or by one party. The *mudarib* can end the relationship by repaying the principal and accrued profits to the financier.

So, unlike equity, which represents an unlimited and perpetual claim, *mudaraba*, despite the features that make it seem like equity, represents a fixed and terminable claim, much like debt, hence the earlier argument that *mudaraba* is really a hybrid in the conventional sense.

In theory, regarding SMEs in particular, the above should lead us to the examination of the scope of their financing needs and assess their ability to support quasi-equity financing and/or participative loans with the backdrop of a profit and loss sharing (PLS) contract. In practice, thanks to a pilot project (prototype) conducted in the food industry, we came up with an alternative financing method which allowed French Muslim entrepreneurs to launch a new food chain that benefited from a strong asset-backed structure with hybrid financing. This attracted individual and professional investors as *sukuk* holders who share the risks of the project.

Despite the benefits, conventional economists are adamant in arguing that debt-based contracts are preferable to PLS contracts because the lender only faces a credit default risk, thanks to the ex-ante fixed rate of return, rather than other issues related to the nature of the asset or the relationship with the borrower (asymmetric information to be detailed later). In other words, the debt contract has to be honored regardless of the state of nature, whereas the sharing contract is state-dependent. Debt has seniority over sharing contracts offering more security.[8]

Let us now observe a global view on collateral-based debt within the new capital regulation framework.

COLLATERAL IS NOT THE HOLY GRAIL OF RISK MITIGATION FOR BANKS

In a usual banking relationship between lenders and borrowers, a bank will first and foremost grant a loan to a corporate client depending on its historical financial strength, its credit rating, and through determining in some way the perspective of the potential growth of the company in the future. More often than not, the bank will request a guarantee or collateral to its client, in the form of cash collateral or on an existing asset guarantee/collateral, whether it belongs to the company (in its balance sheet) or its shareholders (their personal wealth). In this sense, it performs a normal assessment of the overall strengths and risks of the company's structure independent of the specific features of the project, meaning it does not rely on the nature of the assets/project being financed or the potential wealth generated by the project. That being said, we can see that banks are generally more concerned about the three main risk circles known as the credit risk, market risk, and operational risk.

Collaterals and guarantees are powerful tools for lenders to minimize asymmetric information, especially for conventional banks facing mainly adverse selection agency problems.[9] Better the quality of collateral, more favorable the terms offered by the financial institution to the borrower. According to Dairi, "the collateral is supposed to reduce the risk of the loan and also to proceed to recovery in the event that the borrower is defaulting on its payments."[10] Indeed, providing collateral or a guarantee is not only a pledge against default for the financial institution, but it is also a tool to reduce the informational opacity of small businesses. The lack of information might result in credit rationing or the extension of credit only on relatively unfavorable terms, especially in France.

But what collaterals and guarantees do not capture is the potential adequacy from the value creation to the strength of the project at stake. In a way, it is not meant to do so, since the commercial loans that need to be guaranteed are against the risk of default of the borrower and not from the specific project being financed. Indeed, most of the risk management practices in the finance industry are geared toward "credit risk" (i.e., the borrower risk profile; can he meet his payment obligations, regardless of external events) while focusing less on the "project/asset risk" (i.e., the robustness of the underlying asset financed; can they provide some components of economic robustness and diversification factors to influence the volatility of economic cycles). In other words, due to information asymmetry and moral hazard, bigger companies benefit from the increased odds of successfully taking out a loan from a bank (especially with large banks or investment banks). This is true despite the fact that these big businesses lack the advantages that new, highly specialized entrepreneurs demonstrate with their distinct competency in execution of their target projects. In addition, one could argue

that international banks tend to specialize their team vertically, in order to better appreciate the specifics of the industry in which their clients grow and sustain their relationships for this market. This captures a potential worst-case scenario for SMEs and entrepreneurs, as these types of banks are generally investment banks with high barriers at entry and are only affordable to larger organizations.

PROBABILITY OF DEFAULT IS CERTAINLY THE MOST IMPORTANT COMPONENT OF CREDIT RISK, BUT HOW CAN IT ADAPT TO SMALLER BUSINESS UNITS?

In the context of banking regulation, probability of default (PD) is essential to the approaches foreseen by both Basel II and the Capital Requirements Directive (CRD), and is therefore the main determinant of capital reserves for banks. To understand how the risk elements interact in those capital reserve frameworks, we shall refer to the work of Ayadi and Resti[11] with particular reference to their comparison of the Basel impact on SMEs financing. According to Ayadi and Resti, "PD must be computed over a one-year risk horizon, accounting for possible deteriorations in the borrower's creditworthiness in the medium to long term. It is therefore a rather dynamic risk element and should not be taken for granted once and for all."[12]

The two authors further summarize the impact of such risk analysis for SMEs in the following points:

a) A SME can have a PD within a category or a class, for instance, between 0.01% and 10%;
b) The exposure at default (EAD) will range in general between 50% and 100% of the loan. Default often occurs soon after lending. The lower the outstanding loan, the less frequently default occurs; and
c) Loss given default (LGD) most commonly fluctuates between 20% and 100%. The worst scenario is that the bank/financial institution does not recover any of the defaulted amounts, and hence, the recovery rate is 0 and the LGD is 100%. In the best scenario, recovery rate will reach 80% of the principal outstanding; hence the LGD will be reduced to 20%.

Ayadi and Resti continue to explain how "The expected loss is a simple multiplication of PD X LGD X EAD. In conjunction with the maturity estimate of the exposure (*m*) and the diversification coefficient (*rho*), these risk parameters are used to determine capital for both economic capital and Basel II regulatory capital models. Risk weights and capital requirements would be determined by a combination of a bank, providing the quantitative inputs, and the supervisor, providing the formulas."[13]

With all the new banking regulations under the Basel framework, banks will have to develop deeper relationships with their smaller clients, as they will have to classify their portfolios into categories of risk with probability of default (PD) and the potential income impact (loss given default measure).

Interestingly enough, this may propel participative loan financing. Participative loans contain clauses and conditions under which the lender participates in the revenues of the assets. The level of participation may be calculated from the gross revenues, operating income, net income, or net cash flows of the assets. This type of financing tends to trigger other types of risk that will be discussed later.

A collateral-based (*riba*) contract creates an explicit mapping between the compensation and the input of capital. There is a disconnect between the time when the bank has to screen and allocate its capital, with potential adverse selection issues, and the lifespan of the financing contract where the borrower is tied to a lock structure with legal obligations toward its debt payments.[14] In contrast, Pressley and Sessions believe that the "incentive compatibility requires the manager to set inefficiently low levels of capital investment in bad states of the world, whilst leaving him free to set effort at the individually optimal first best level in all states. If *riba* is prohibited then the return to investors cannot be tied to the level of their capital investment and alternative compensatory arrangements will be required."

On the contrary, Pressley and Sessions state that *mudaraba* financing "ties compensation to the outcome of the project. *Mudaraba* therefore allows the contract to directly control the manager's incentive to exert effort, since this effort affects the relationship between capital investment and the outcome of the project. Under a *mudaraba* contract the manager is free to choose the individually optimal level of investment in each state contingent on his contractually specified level of effort. Such a contract permits a mean-variance improvement in capital investment—average investment is increased whilst inefficiently large fluctuations around this level are reduced."

Here we can observe, theoretically, that *mudaraba* adapts well to SME financing, but in practice there are other challenges to overcome, such as the screening phase by the financier.

NEED FOR BETTER SMEs RATING TOOLS

As stated by Ayadi and Resti, rating an SME "involves applying a statistical system that multiplies a series of descriptive ratios by a set of coefficients, which results in a certain value (a rating or score). This value allows for comparison between SMEs, establishing a sort of risk gradient: the higher the value is, the higher the probability of default. The value corresponds to a determined risk category, and this risk category is associated with a PD. Therefore, to analyze the impact of a certain rating system, one must look at

the precise set of ratios used, which should be adapted to the environment at stake."[15]

In the context of Islamic banking, it is clear that all of the above must be applied carefully. This application depends on the nature of the instrument involved, and the nature and the timespan of the relationship, whether it be short to medium debt or longer-term equity-based financing.

Adapting rating tools to SMEs, especially within the context of shari'a-compliant projects, is something yet to be developed, especially in non-Muslim countries. Both from a macro-economic standpoint and from a micro level, all this depends on the parties involved, the usage of the Islamic contracts, the risk profile, its robustness in the local legal system, and other potential frictions that may occur due to the scarcity of shari'a-compliant projects (Islamic assets count for only 1% of the global market).

One alternative to collateral-based debt with a uniform grid of risk rating analysis is to refer to new works being conducted over behaviors and psychology. Indeed, new psychometric testing tools are being developed[16] current experiences such as crowd sourcing and crowd funding (with online portals such as Zopa, Babyloan, FriendsClear, etc.) are opening new avenues in terms of risk sharing.

From all the research works on the subject, we can summarize that SME financing is facing the following three major challenges in the context of agency problems:

a) The cost of financing is higher than average large corporations that have access to cheaper capital in the market or better facility conditions with the non-retail banks.
b) The structure of their balance sheet—a higher proportion of working capital than fixed assets—does not allow great flexibility for the lender to apply the usual collateral and guarantees other than personal assets.
c) The risk rating system works mainly on the supposed robustness of the borrower itself rather than the projects or assets being financed. This system provides analysis tools geared toward the risk of default of the borrower, which make them more favorable to companies providing longer historical records with smooth life cycles rather than SMEs, though Basel regulation should offer more precision in the details of parameters taken into account.

On this last point, Aubier has looked at Basel II impact on SME financing and concludes that there is a positive impact. Indeed, Basel II introduced a deeper credit risk analysis depending on the lender's size in order not to bias the analysis of its risk of default, especially with the retail SME category.[17] One of the reasons this works positively is the diversification effect of the loans portfolio for the lender, since the SME loans and their underlying assets are not correlated to its other loans and obligations. Going further, we

anticipate that SME financing will be more complex to handle by existing banks as their risk culture is not geared toward understanding the intricacies of the project being financed, but only the credit risk of the borrower. This is one of the reasons why we would encourage SMEs and their financial advisors to move toward more equity-like products or PLS contracts, which offer alternative dimensions of risk and performance to the lender/investor.

To conclude at this point, it is safe to say that bank loans are not appropriate to SMEs' needs and the risk-profiling techniques operated over these small structures, lacking historical records and guarantees, does not work. As such, it is a good challenge to turn to alternative methods of financing, not dependent on the collateral offered by the borrower but favoring asset-backing structure, which provides the financiers with better access to the performance of the underlying asset and if need be to its ownership in case of default.

We shall now examine how profit and loss sharing techniques in the form of hybrid structures, a mixture of equity and debt instruments, can present sustainable alternatives for SMEs.

THE PROFIT AND LOSS SHARING (PLS) APPROACH FOR SME FINANCING

The literature on Islamic sharing contracts applicable to smaller companies is not as prolific as for large corporate entities. Indeed, most of the authors have looked at determinants that impact generic agency problems between principal and agent (the *rab-al-mal* and the *mudarib*).

It is not our objective here to do an extensive review of the literature but, in essence, most of the publications in this area allow us drawing the following summaries:

a) *Mudaraba* techniques trigger agency issues, which are regarded as the most important tools and which involve two or more parties entering into a contract with capital and entrepreneurship to undertake a joint venture (trade, business, manufacturing, etc.) to share the profit according to a predetermined ratio;[18]
b) The use of a *mudaraba* (prevalent alternative method of financier remuneration) will, under certain conditions, lead to an enhanced level of capital investment on account of the ability of *mudaraba* to act as an efficient revelation device (Presley and Sessions, 2002);
c) Traditional theories of intermediation are based on transaction costs and asymmetric information, but the literature's emphasis on the role of intermediaries as reducing the frictions of transaction costs and asymmetric information is probably too strong;[19]
d) Debt contracts expand the set of projects funded and improve social welfare;[20]

e) A variable return scheme has a higher monitoring cost;[21]
f) When markets are perfect and complete, the allocation of resources is Pareto efficient and there is no scope for intermediaries to improve welfare;[22]
g) Ex-ante information limitations (project quality and incentive of under-reporting) explain severity of asymmetric information;23 and
h) Profit sharing ratio can be used as a screening device to avoid the adverse selection problem of *mudaraba* and to improve the profitability of a venture.[24]

In this section, we will see how these theories apply to our SME context and if we can look at alternative ways of contracting in order to overcome these issues.

IS RISKY AND COMMUNITY-BASED CAPITAL THE ONLY OPTION FOR THE MUSLIM-LED SMEs?

Going back to our pilot experience, we noticed the following situation in the French market. We had French Muslim entrepreneurs who had been successful in launching new food concepts, one as a fast food mini-chain (four units) and the other as French traditional *halal* restaurants (two main units and a state-of-the-art catering facility. The way they achieved this growth was mainly using their own equity, getting some friends and families involved in the company setup, with no real governance framework. They ended up raising some no-interest-bearing loans for working capital purposes. Once we discovered the value they created with such basic financial instruments, we discussed the potential of raising equity from a larger pool of investors and tapping into institutional funds and venture capitalists. But quickly, in the analysis, we understood that their management structure and their financials would not fit into what those institutions would require both in terms of governance and ownership, with the consequence of capital dilution and loss of control for the entrepreneurs. The latter were clearly in the sole position of leading the business thanks again to their agility and proximity to the clients and their unique mix of know-how and expertise in their local markets, without which financiers' ownership control would have derailed the dynamics of this specific business.

It was quite easy to understand that for such potential projects with great growth prospects (i.e., double digit growth figures anticipated by many market analysis firms), we would not be able to apply usual financing methods either from the banking sector or from institutional investment funds.

What we needed to do then was move away from conventional loans and from fixed return financing instruments such as *murabaha* (cost plus margin debt financing) or *wakala* (fixed fee based financing in the diverse form of contracts or mandates) structure. We had to investigate the partnership-based

contracts at the core principles of Islamic finance while making sure that both the entrepreneurs and the investors in France would be satisfied with such risk-sharing alternatives.

For such reasons, we decided to explore PLS techniques and go to intermediate solutions from equity capital to senior loan financing by leveraging what Islamic finance encourages investors to do, i.e., participative structures, and what the French commercial law offers as the best alternative. We initially came across what is called participative loans (*prêts participatifs*), a not-so-used instrument that had been established in the French context in the 80s when the state had to inject more money into the economy and led by example by taking a subordinated position to private companies or public representative state bodies.

As confirmed by the literature, the *mudaraba* contract is a profit-sharing financial instrument that is neither a financial liability nor an equity instrument. Unlike equity instruments, *mudaraba* contracts are redeemable at maturity or at the initiative of their holders, but (usually) not without the prior consent of the financier.[25] On the other hand, unlike debt instruments as referred to by Archer et al. (1998), investment accounts are not a liability of the bank because they share in the profits generated from their funds, and also bear their share of any losses incurred. Thus, they have a claim on the financier’s earnings or assets that ranks *pari passu* with that of the shareholders.

In our case—that of growing SMEs with entrepreneurs who could offer their track record, honesty, and business potential for new projects in the real economy—*mudaraba* setup was the way forward. But *mudaraba* contracts, strictly speaking, pose many issues as seen before in terms of agency problems and in terms of enforcement with applicable local legislation. As such, we wanted to stick to the PLS value proposition using the *mudaraba* structure but in a more flexible way in order to attract financiers concerned about lack of information as discussed before. To achieve this, we decided to provide more visibility into the structure through a *sukuk* structure issued by a dedicated vehicle setup for the sake of the project with its own governance and monitoring tools with the help of an external shari‘a asset manager. This is the reason why we decided to investigate a little more about hybrid instruments and their practice in the financial world.

HYBRID SECURITIES FROM THE CONVENTIONAL ARENA TO THE ISLAMIC WORLD

Hybrid securities are a form of securities that combine elements of debt and equity at the same time. As stated in the financial literature, they are a popular

method for companies to raise funds by issuing a form of hybrid debt that has both debt and equity features. The most common forms are converting preference shares and convertible notes, although there are many variations, to replicate the price movements to the ordinary shares of the issuer. Hybrid securities offer the investor an alternative asset class to the traditional fixed income securities based on interest payments with the opportunity to enhance the performance. The key to these investments is the quality of the underlying asset, which will be reflected by the credit rating and the financial abilities of the company to repay its payment obligations through the interest as well as the capital on maturity or conversion. Moreover, they do offer a lower after-tax cost of capital to the issuer, while at the same time they are a less expensive form of accessing capital than equity markets, which draw much capital dilution for issuers. It is probably an indication of the level of sophistication of our modern markets that hybrid securities, traditionally used in the wholesale end of the market, have found growing acceptance by retail investors, thanks to disintermediation platforms among other things.

On the other side, hybrid securities are beneficial to investors because they provide investors with protection during bankruptcy as compared to common stock. That is, hybrid investors are eligible to be paid before common stockholders in bankruptcy cases. Consequently, hybrid securities generally provide a higher rate of return than typical debt instruments, though they are not treated as speculative instruments or high yield bonds. Although there is a risk element attached to these securities, the risk is usually diminished if the securities are held to maturity. At maturity a hybrid may convert to ordinary share, cash, or a mixture of both.

In our globalized economies, the main attraction toward hybrid securities is their tax treatment, as what has been developed in Luxembourg, for example, one of the European financial hubs that develops advance financial instruments for the markets including shari‘a-compliant instruments for Islamic investors. Below are the different financial instruments offered in Luxembourg:

a) Simple bonds
b) Profit participative bonds
c) Convertible bonds
d) Equity/participant bonds
e) Equity loans
f) Tracker-certificate
g) Preferred equity certificates (PEC)
h) Convertible preferred equity certificates (CPEC)

They can easily be mapped out as illustrated in Table 1 below, showing the width of these hybrid securities from end to end, from equity to bond.

Table 1. Spectrum of hybrid securities

		Convertible preferred			Convertible debt			
Instrument	Shares	Mandatory convertible	Convertible preferred	Hybrid preferred security	Convertible debt	Premium/ discount convertible debt	Zero coupon convertible debt	Bond
Conversion probability	Certain	Certain/high		High/medium		Medium	Low	Zero

Source: "Luxembourg Vehicles for Islamic Finance," Luxembourg in Finance's brochure

Islamic finance specialists would probably argue that one can structure similar instruments in a shari'a-compliant manner, but the economic rationale is biased, as this would tend to replicate conventional techniques in an Islamic wrap. On the other hand, the idea is to reflect on Islamic ethics and principles and build a suitable alternative from this base. This has been the challenge of our project in the specific context of French law.

APPLYING PROFIT AND LOSS SHARING (PLS) TECHNIQUES IN THE FRENCH SYSTEM

The principle of profit and loss sharing, being a consequence of the prohibition of *riba*, is one of the key distinguishing features between Islamic and conventional finance. In Islamic finance, instead of lending money with an (usually fixed) interest rate, the parties will form a partnership and share the profits and losses "according to a formula that reflects their respective levels of participation."[26] This basic principle of PLS also exists in the French law as described thus:

a) Firstly, similar to the *mudaraba* and *musharaka* structures, a partner in a French company is entitled to part of the profits and has to contribute to losses (Art. 1844-1 of the French Civil Code).[27] Secondly, the participative loan, which is governed by Articles L313-13 through L313-20 of the French Monetary and Financial Code, is also similar to these two Islamic finance contracts. Indeed, at the crossroads of long-term loans and stockholdings, the participative loan is a credit agreement by which an authorized body provides financial assistance to a company. Its uniqueness lies in two distinctive features:

i) If the borrower's company is put into liquidation or receivership, the lender agrees to be ranked for repayment only after all of the borrower's secured and unsecured creditors; and

ii) The lender charges a fixed fee (legally called interest but not necessarily understood as *riba*), usually increased by a profit-sharing system.[28]

b) Secondly, in addition to the participative loan, French law includes participative securities (*titres participatifs*). Addressed in Article L228–36 of the French Commercial Code, participating securities are debt securities of undefined duration. They are redeemable only in the event of the company's winding-up. For this reason, they are considered "quasi equity." This has some advantage to the issuer, as he can strengthen his (quasi) equity without changing shareholders or the control power. Reflecting the duality of such securities, the compensation of underwriters must include both a fixed component and a variable one.[29]

c) Moreover, Islamic finance requires that every financing should be backed by a tangible asset. This principle, which reinforces the potential of Islamic finance in terms of stability and risk management, is also present in French law; for example, the shares of mutual funds, representing co-ownership of the underlying debt. These mutual funds, governed by Article L214-43 and subsequent ones of the French Monetary and Financial Code, are a co-ownership, without legal personality, whose sole purpose is to acquire debt held by credit institutions or the Deposit and Consignment Office (*Caisse des Dépôts et Consignations*), in order to issue shares representing such debts. The shares of the mutual funds are securities.

From all these findings in French law, we were tempted to innovate with a small SME fund in the form of a mutual fund wrapper, which would grant participative loans to SMEs based on a very selective origination process and financial discipline in terms of risk-return analysis. But quickly, we were facing the mounting complexity of such a structure, requiring special authorization from the French regulators, not only at the vehicle level but also regarding all sorts of requirements in terms of shareholders, governance, and the management company. All put together, we then decided to launch an ad hoc project vehicle to prove the business case and the market appetite for such equitable instruments in the form of a *mudaraba sukuk*.

In fairness, contracts, whether in a conventional or Islamic law context, provide the framework for a complex set of interactions between the parties to economic relationships. As reminded by Sarker (2000), the "agency problem" is an important determinant of reward-sharing in a production process which may be solved through efficiency attained in allocation of resources and putting a package of incentives in reward-sharing structure."[30] The goal is to reduce the impact of such agency problems with its numerical aspect being "transaction cost" as described by the famous Jensen and Meckling four categories including monitoring, bonding, structuring, and

residual loss costs. Drilling down on these costs in our case, it covers end-to-end aspects of the transaction, screening, allocating, and monitoring costs. Some would argue that bankruptcy costs in debt contracts are similar to monitoring costs in PLS structures, but this is not essential for our case.[31]

In our appreciation of the French market dynamics, we think it is important that complex and engineered shari'a-compliant products are nurtured locally and are justified by local demand. Providing Islamic finance products for the French SMEs market is a perfect example of a long-term challenge that, in the first step, needs to address the right financing contracts but at the same time anticipate its winding-up issues. Exploiting the depth of the Islamic finance market is not just a promise but a necessity nowadays, especially for real economy needs, being commercial or professional loans, in the momentum of true asset-backed securities (ABS), thanks to the growth of the *sukuk* market.

In fact, most Islamic finance players agree with Sarker's position, viewing *sukuk* as a way to "grant the investor a share of the underlying asset or business venture along with the cash flows and risk commensurate with such ownership. Investors should note that, while all conventional ABS (based on the cash flow only, disconnected to the ownership of the asset) may not be *sukuk*, a true asset-backed *sukuk* should be accessible to the vast universe of conventional ABS investors and not just Muslims."

A CREDIBLE ALTERNATIVE: HYBRID STRUCTURE IN THE FORM OF PARTICIPATING *SUKUK* (*MUDARABA*)

Asset-Based vs. Asset-Backed: Is There a Difference from a Risk Pricing Perspective?

Sukuk are a combination of "nominate contracts," including *mudaraba, salam, ijara*, and *musharaka*. They can be structured in different ways in order to obtain a fixed income instrument or an equity-type product. While there are fourteen types of *sukuk* specified by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), only *ijara* and *murabaha* (non-tradable) have formed the volume of the issuance thus far. To summarize, *sukuk* are notes or certificates that represent ownership of a pool of underlying assets; hence, *sukuk* holders should be entitled to the ongoing cash flows and proceeds of sales from those assets. *Sukuk* are not a completely new asset class requiring different financial analysis tools, but rather these securities employ existing financial engineering techniques to create 'asset-backed' or securitization structures that are also shari'a-compliant.

If we refer to Moody's analysis for such structures, *sukuk* fall under two categories:

a) Asset-backed *sukuk*, for which the ratings are primarily dependent on a risk analysis of the assets; and
b) Unsecured (repurchase) *sukuk*, for which ratings are primarily dependent on the riskiness of the borrower/sponsor/originator/lessee.

According to Moody's analysis, due to the nature of *sukuk*, all transactions are likely to involve a set of underlying assets. Both parties—the issuer and the investors—share the risks in the transaction. Where investors enjoy asset-backing, they benefit from some form of security or lien over the assets, and are therefore in a preferential position over other unsecured creditors. In other words, in the event that the issuer were to default or become insolvent, the *sukuk* holders would be able to recover their exposure by taking control of, and ultimately realizing the value from, the underlying asset(s). In such a case, the transaction may achieve a higher rating, compared to the unsecured issuer rating of the originator, subject to certain conditions.

"Where the transaction is asset-based (which has been the case for the vast majority of *sukuk* so far), the originator undertakes to repurchase the assets from the issuer at maturity of the *sukuk*, or upon a pre-defined early termination event, for an amount equal to the principal repayment. In such a repurchase undertaking, the true market value of the underlying asset (or asset portfolio) is irrelevant to the *sukuk* holders, as the amount is defined to be equivalent to the notes. In this case, investors in *sukuk* rely wholly on the originator's creditworthiness for repayment. This class of *sukuk* is identical to unsecured lending from a risk perspective and hence attracts a similar capital charge."

According to Patel many of the current *sukuk* are essentially a sale and leaseback or *ijara* structure with lease payments providing regular income stream. In such structures, the originator seeking financing "sells" the asset to the *sukuk* special purpose vehicle (SPV) for a value equal to the financing provided, then the SPV leases it back to the originator. Lease payments provide the fixed income stream, which may be indexed to a benchmark. The underlying asset can be a single asset or a portfolio of assets. *Sukuk* principal repayments can be bullet or amortizing, but the critical difference is in how such repayments are processed. The most prevalent practice is to use a "purchase undertaking" from the originator or an affiliate to repurchase the asset at maturity (or upon early termination) for an amount equal to the principal repayment(s) due.

The asset itself can be a plot of land, a building, or anything else tangible and lease-able. If the *sukuk* is a "true sale" securitization, then there will be a correspondence of the income streams with the actual rental and market value of the asset(s), except when a reserve fund is constituted to smooth periodic distributions. If not, then it is an unsecured exposure and the asset only exists in the structure to facilitate its shari'a compliance. The payment

streams to investors are only nominally linked to the underlying asset cash flows and value. In either case, the *sukuk* notes represent an equity share in those assets.

However, most *sukuk* are conducted on a non–true sale basis, so repayment and risk/performance are not asset-based but originator-based. Notable exceptions to this are Tamweel and Sorouh PJSC, both UAE transactions. In both cases, the property/land titles were registered in the name of the investors and any losses on those cash flows are passed on to *sukuk* holders. There is no recourse back to the originators; these *sukuk* should survive upon an event of default (typically bankruptcy) affecting the originator. In addition, it is refreshing to see that few *musharaka* or *mudaraba sukuk* are issued in the market, not as widely as we would like it to be. Two recent examples shed some light on this initial trend: the first UK private *musharaka sukuk* issued by a local med-tech company for Dubai Islamic Bank and the Saudi Hollandi *mudaraba sukuk* issued from the Saudi market to investors (more details are given later).

As a matter of fact, the commercial real estate industry has paved the way for investors to penetrate the French market with already €3Bn worth of shari'a-compliant property investment.[32] This suggests that alternative financing can meet the market opportunities, especially regarding asset-backed project financing in different flavors using the variety of contracts offered by Islamic finance in this regard.[33] One of the key messages of French professionals given throughout the period of 2008 to 2011[34] is that the introduction of Islamic finance—the moral and socially responsible dimension of which classifies it as ethical finance—into France would meet the growing demand of the local population for ethical financial instruments, respectful of social, environmental, moral, and religious convictions, both in terms of Muslim and non-Muslim individuals, entrepreneurs, professionals, and corporations. This led to the situation in which we really had to do something at least for the SME market, an original way of servicing the great potential of Muslim entrepreneurs and professionals. *Sukuk* is certainly the best point to start with, adding some true partnership features in order to capture the best of what the entrepreneurs can deliver in terms of performance without diluting its control. At the same time, *sukuk*, if designed in such a way that it can be distributed to the different customer channels, not only to institutions, is a great way to tap into the large investors network accessible through incentivized tax wrapper or collective investment schemes. In this regard, France is clearly at the forefront of the distribution of mutual funds to the large public, with an estimated 2,656 billion Euros of assets under management at the end of 2010.[35]

HOW TO IMPLEMENT HYBRID *SUKUK* AS A QUASI-EQUITY STRUCTURE FOR FRENCH SMEs*?*

The basic framework required for the issuance of *mudaraba sukuk* in our participatory model is the establishment of a trust or its equivalent, say SPV. The investors pay money to buy *sukuk*, which provide them ownership in an underlying asset and thus the corresponding right to the income generated by that asset. The relationship between the SPV and the investors is a *mudaraba* partnership. The investors provide capital and the SPV is the manager. Then the money received from investors is used to buy shari'a-compliant assets from the originator (government or company), which thus gets the cash it requires.

As said previously, *ijara* structures are widespread in the Islamic markets simply because they can be tailored to replicate as best a secured type of fixed income. But what is interesting about SMEs, especially with entrepreneurs who have many good ideas in their mature business, is their ability to provide simple business propositions and impactful development tools for their economic growth and job creation. On top of the different elements discussed earlier regarding participating loans, *sukuk* can be enhanced in France using different schemes. According to the Paris Europlace *sukuk* guidebook,[36] the following can be the basis of the reflection of a *sukuk* issuance in France:

1. Choice among the following instruments:
   a) Subordinated bonds (French Commercial Code, article L. 228–97);
   b) Subordinated instruments (French Commercial Code, article L. 228–37);
      i) Ability to provide for an index-based remuneration (articles L. 112-2 and L. 112-3 of the French Monetary and Financial Code, which allow for the indexation to the performance of the issuer of the interest paid to bondholders);
      ii) Implementation of a Fiducie, (i.e., a French equivalent to Anglo-Saxon trust);
   c) Participatory certificates could be structured as equity-linked bonds (*obligations donnant accès au capital*) under French law, allowing the investors to require the conversion of their bonds into shares and then become the shareholders of the SPV issuer;
      i) The effective return paid by the SPV issuer to the investors on the participatory certificates, after the payment by the SPV issuer of the management fee to the management company, will be economically similar to the return received by regular bondholders; and

ii) It will specify that for French legal and tax purposes, the participatory certificates will be subject to the French provisions applicable to bonds.

2. *Sukuk* regulation under AMF guidelines:
   a) Recommendation of the AMF on July 2, 2008, for listing of the *sukuk* on Euronext Paris:
      i) *Sukuk* are assimilated to debt instruments and not equity;
      ii) Acknowledges that *sukuk* issues may be structured either as asset-backed or asset-based;
      iii) Provides information on level of disclosure to be set out in offering circulars;
      iv) A target remuneration ("expected profit rate") is indicated to the *sukuk* holders;
      v) Practical guide issued by NYSE-Euronext (July 2, 2009) regarding the listing of *sukuk* on Euronext; and
      vi) Practical guide issued by AMF (October 2010) regarding the format of a *sukuk* prospectus.

3. Tax treatment of *sukuk* transactions and assimilated debt instruments such as indexed loans or bonds (Tax Instruction of August 24, 2010):
   a) *Sukuk* are assimilated to debt instruments for tax purposes provided that they comply in particular with the following four requirements:
      i) *Sukuk* must rank senior to any shareholders of the SPV;
      ii) *Sukuk* must not entitle the holders to any shareholders' rights like voting rights in the SPV, right to liquidation surplus, etc.;
      iii) Remuneration under *sukuk* must be based on the assets' performance or on the results of the SPV and must be subject to a predetermined cap (Euribor, Libor), plus margin; and
      iv) When the value of the financed assets exceeds the par value of the *sukuk* or the amount of the loan, the repayment may exceed the amount of the principal pursuant to the indexation rule provided for in the contract.
   b) As a result thereof, the remuneration under *sukuk*:
      i) Is deductible from the taxable result of the SPV under similar conditions as conventional interests (at an expected profit rate based on market index); and
      ii) Is exempted from withholding tax when paid to non-French tax residents (except in case of payment to non-cooperative territories).

These guidelines come from Paris Europlace *sukuk* guidebook issued in 2010 with some translation as needed for this study.

With all this on the table, it was important to thoroughly select a niche market where the first pilot hybrid *sukuk* structure would be conducted. A

good argument to sustain this view is the *halal* meat market, which was still unknown ten years ago. When *halal* meat initially appeared in France, almost nobody bought it and it was very hard to find, especially in supermarkets. Today, in France, annual consumption of *halal* meat is some 400,000 tons, which represents 10–15% of bovine, ovine, and poultry consumption. Many Muslims, who did not previously eat *halal* meat, influenced by imitation of their neighbors, now do so on such a level that the French *halal* market is estimated at 5.5 billion Euros, growing at more than 10% annually.[37]

It is pertinent indeed to start with the food industry thanks to the momentum of new retail chain concepts nurtured by entrepreneurs in the shade of the large multinational food chains, like McDonalds, tapping into the *halal* market.

The same phenomenon could occur with Islamic financial products once some banks start seriously marketing such products. If a Muslim has the opportunity to purchase a home through either conventional financing or Islamic financing, he probably will opt for the latter. Today's Muslim community consists of consumers. It enjoys strong purchasing power and it is unfortunate that it cannot access adequate banking products, corresponding to its needs, to invest its money.[38] This is further assessed thanks to a survey conducted by the French specialist statistical agency IFOP in 2008, reflecting that 47% of the 3 million people in the potential Muslim market are interested in a shari'a-compliant mortgage while 55% are waiting for *halal* savings alternatives.[39]

FRENCH SME HYBRID *SUKUK* PROTOTYPE BASED ON A *MUDARABA* STRUCTURE WITH TOTAL ALIGNMENT OF INTEREST

Armed with all these clarifications from the French government, and in the absence of *sukuk* issuance by institutional funds in France, we decided to launch a simple structure for our entrepreneurs willing to put their efforts and responsibilities into a profit and loss sharing setup. The *mudaraba sukuk* contract was fit for this purpose, as the entrepreneurs were well known, already in the food business, and running multiple existing restaurants.

It is true that at this stage, it was more important to dedicate a lot of engineering work and effort to the transaction, which we can say is like a Rolls-Royce for an SME.

Indeed, and to summarize, the pilot project was put in place after more than a year of consultations, thanks to the dedication of and lengthy discussions with many Islamic finance experts, advisors, financial intermediaries, etc., all working wholeheartedly with no financial commitments at this prototype phase. This structure reflects the will of many entrepreneurs, not only on the food business but also on the financial engineering side, especially

thanks to the trust relationship of a partner from a shari'a asset management company and a partner from a financial advisory firm who is an expert in legal structuring with more than twenty years of practice.

From a shari'a point of view, it is completely a new structure in the French market. It has never been used before (this is arguably the first time ever), and again it is the result of fruitful discussion with a prominent shari'a scholar born and educated in France who now specializes in this industry under a not-for-profit organization called ACERFI.[40]

All in all, the features of this innovative product can be summarized in the following salient points in addition to the term sheet given below (aside from the usual risk factor assessment, events of default, winding-up procedures, etc.):

a) Truly partnership-based
b) Strongly asset-backed
c) Simply accessible

Sukuk program of circa 5 million Euros for "MasterCookCo" to be drawn up by tranche of 0.5 million Euros based on the opening of point of sale (restaurant) by each SPV FoodCo 1 to 10.

Overall structure	*Mudaraba* agreement between the issuer MasterCookCo (as *mudarib*) and the *sukuk* holders (as *rab al maal*) represented by the *sukuk* holders' agent. The proceeds of the issuance of the *mudaraba sukuk* will be applied to invest in the opening of a new restaurant as the *mudaraba* asset held under SPV FoodCo.
Nature of the securities	• Participating certificates completely indexed on the value of FoodCo. • *Mudaraba sukuk* constitutes undivided beneficial ownership interests in the *mudaraba* assets and will rank *pari passu,* without any preference or priority among themselves. • The *mudaraba sukuk* will be issued on a subordinated basis. • The effective return paid by MasterCookCo to the investors on the participatory certificates, after the payment of the *mudaraba* fee, will be economically similar to the return received by regular bondholders. • *Mudaraba sukuk* ranks senior to any shareholders of FoodCo and does not entitle *sukuk* holders to any shareholders' rights like voting rights, right to liquidation surplus, etc.
Target remuneration of *sukuk*	• Remuneration under *sukuk* must be based on FoodCo performance established under the business documents with a predetermined cap (market industry return rate). • If the annual *mudaraba* income exceeds the target amount, the amount of any surplus shall be retained by MasterCookCo in its remuneration reserve account.
Redemption of the *sukuks*	The aggregate value of the *mudaraba sukuk* payable upon the redemption of the *mudaraba sukuk* by MasterCookCo upon the term of the agreement, less any loss relating to the *mudaraba* assets not covered by the reserve account. The obligation of the issuer to pay the redemption amount is a subordinated payment obligation of the issuer.

This summarized term sheet is aimed at showing that the hybrid structure can work in France for SMEs, and, on top of that, it can take the form of a true *mudaraba sukuk*. This solves a lot of financing issues for smaller organizations that usually do not have the collateral profile required for such indebtedness or are simply not interested in conventional loans.

For confidentiality reasons, we cannot disclose the whole setup here, but it is again a rather sophisticated product with a double-tier structure allowing for the best features from the venture capital industry, asset management practice, and tax efficient solutions. Thanks to this successful prototype, completely closed in late June 2012, it is our aim now to standardize the process and make it an accessible solution for all organizations and institutions: small, medium, and large corporate.

We strongly believe that thanks to this simple yet innovative alternative, many of the agency problems and the resulting layer of costs will be reduced in a *sukuk* program for SMEs operated by a platform leveraging on new technologies (i.e., Cloud Computing and SaaS: Software as a Solution) and emerging crowd-sourcing techniques (the “wisdom of the crowd”[41]).

CONCLUSION

Having been working on this project since 2011, and in someway writing up a new page for SME financing, we were happy to execute this first step and provide a working solution for both entrepreneurs and individuals who are eager to invest their capital in a way that complies with their ethical values, together with all the transparency required by such innovative financial setup.

Our modest experience in this pilot project of a *mudaraba sukuk* SME did not aim at reshaping the banking industry or the fund management world. Far from that, we simply tried to empirically design a fair financing structure that should propel entrepreneurs to develop their talents and do what they do best, i.e., put capital to work, and allow financiers or *sukuk* holders to deploy their capital in a fair and equitable way, sharing some capital risks but being able to capture the value creation at work.

The positive result of this tentative experiment is to prove that this new type of hybrid *sukuk* financing is a primer, maybe in any Western market, with this simple fact: this model is not dependent on the credit risk scoring of the SMEs conducting the project, but on the quality and robustness of the project itself with its underlying assets that keep their value in case of the borrower’s default—in this case, a physical restaurant with its know-how, clientele, and commercial position in the market.

In case of default of the borrower, the investor will have access to the underlying assets not as hypothetical collateral but as part of their co-ownership backdrop assets related to its capital commitments, making

him the ultimate owner. In fact, our structure went a little further thanks to three innovative features:

a) A secured Trust entity that prevents fraud, negligence, or misreporting of the entrepreneurs under the supervision of the shari‘a asset manager;
b) A cash trap mechanism that gives incentives to the entrepreneur to meet its business plan with annual profit payments and capital reimbursement; and
c) A downscaled ownership of the *mudaraba* assets held by the trustee if the entrepreneurs do not perform as expected under normal circumstances (using the technique of diminishing *mudaraba*).

While we were finishing up our structure and ready for the fundraising in early 2012, we learnt that a major *mudaraba sukuk* was being closed as well, the Saudi Hollandi deal in the Saudi market. Based on our experience, it was inspiring to read the comments of Mohamed A. Elgari,[42] which clarify how to understand the *mudaraba* assets and the fact that the issuer, whether it is a Muslim corporation or not, makes no major difference. He refers to the positioning of *sukuk*, a flexible security that enables investors and issuers to commingle assets in order to produce a reduced level of risks and income. "This need of Islamic issuers and investors is now met by the current structure of *sukuk*. However, we appear to have overlooked a much simpler structure based on *mudaraba* which can meet the said need, yet retain the salient quality of the Islamic system of finance, including the interlink between real and monetary sectors."[43] It is probably also worth looking at some key points of the Saudi Hollandi *mudaraba sukuk* issued in late 2011 (from the offering circular):

The *Mudaraba Sukuk* Are Unsecured Obligations of the Issuer

The sole recourse of the *sukuk* holders will be against the issuer to pay the redemption amount under the *mudaraba* agreement and otherwise perform its obligations. The *sukuk* holders will otherwise have no other recourse to any assets of the issuer.

Subordination

Subordinated payment obligations will be subordinate in right of payment upon the occurrence of any winding-up proceeding of the issuer to the prior payment in full of all deposit liabilities and all other liabilities of the issuer, except, in each case, to those liabilities which by their terms

rank equally in right of payment with or subordinate to the subordinated payment obligations.

Payments Relating to the *Mudaraba Sukuk*

Prospective *sukuk* holders should note that the periodic distribution amount or partial distribution amount on the relevant payment date will be paid on the basis of a constructive liquidation of the *mudaraba* on the relevant payment date based on the issuer's management accounts (based on an audit review of the Islamic business portfolio). The capital of the *mudaraba* to be invested by the issuer (acting as *mudarib*) formed the Islamic business portfolio. The issuer shall be entitled to commingle its own Islamic assets with the *mudaraba* assets.

Credit Risk: The Bank May Suffer Loss Due to a Defaulting Counterparty

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The bank carries provisions to cover for possible credit losses. These provisions are made up of two components, namely specific provisions and portfolio provisions.

The objective of this study was not to provide an academic view on PLS contracts, but to share some practical elements and highlight new avenues of research. Going back to our initial assumptions, this pilot project has proven that bank financing cannot appreciate value creation outside of its risk analysis grid, which has been designed to reward low profile risk of the borrower regardless of the robust economic profile of the underlying project.

We can indeed clearly state that bank loans are not always adapted to SMEs' needs. And we can anticipate that things will not improve with the current global crisis given the drain on equity consumption for banks due to their capital adequacy ratio constraints.

On the contrary, too, pure venture capital is not necessarily the solution for SMEs, as their capital base does not allow them to prevent all their value creation from being taken by the financier, a non-operational partner. We can surely elaborate on that, but since this road is not the best illustration of a fair alignment of interest between risk sharing and risk rewards, we would like to encourage further development routes that mix co-ownership of the assets being financed (including financial, immaterial, etc.) and flexible instruments that allow an equitable share of the success of the venture. This is what represents hybrid structures that can be used by companies—not only Muslim-owned as the company starts with a sound business plan or develops itself with a mature business model.

Now considering the development of this prototype and the research related to this study, we are convinced that new approaches are needed when smaller structures such as micro, small and medium enterprises are concerned. In particular, we have shown that the risk profile is something to appreciate not only through the prism of conventional bankers focusing on downside risks regardless of the nature of the quality of the project and the nature of the underlying assets as provided by credit rating systems. Future directions of our pilot hybrid structure will aim at developing a systematic approach to reducing asymmetric information by standardizing the screening, allocation, and monitoring processes in order to reduce agency and transaction costs. Further, alternative risk assessment will need to be developed with alternative credit scoring that is not looking only backward; current progress on psychometric testing and crowd-sourcing is interesting to follow.

One other aspect we did not cover in this paper is pricing issues, as again this is a first pilot project that was built for a purpose and with some confidentiality. We aim at developing more data points and practice on this kind of hybrid shari'a-compliant structure in order to design a more systematic pricing process. The pricing model should nevertheless reflect the usual mode of pricing but also, very importantly, integrate what technologies offer at their best, which is data crunching and forecasting. Crowd-sourcing techniques made available thanks to wide Internet access and its related openness are again a good avenue to explore.

Finally, this project, just being launched and yet to be performing as forecasted, has convinced us that an SME hybrid *sukuk* could be an ethical source of financing for all French entrepreneurs and not only for Muslim entrepreneurs. By expanding into these larger markets, the wish is to develop true ethical finance that shares some form of risks in the deployment of capital over talent work, allowing diversification of risks, thanks to robust projects and the underlying assets. This should create a new relationship between the parties, with different levels of obligations for entrepreneurs, and allow for better subordinated instruments for investors.

Endnotes

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by the firm, or is released from the whole of the losses, and/or the one by which a member is excluded in whole from the profit or is liable for the whole of the losses shall be deemed not written." Available at www.legifrance.gouv.fr.

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29. Daniel Ohl, "Valeurs Mobilières," Répertoire de Droit des Sociétés Dalloz, at Chapitre 2, Section 2, Article 3, §1, N° (2005), 163–167.
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31. Ibid.
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