Islamic Securitization After the Credit Crisis

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Abstract

Purpose: Islamic securitization in the form of *sukuk* has grown into a notable segment of global structured finance over the last three years. The article surveys the unique structural features of the *sukuk* market and assesses the potential of conflicts of interest that became apparent in the U.S. subprime mortgage crisis to contaminate the integrity of the securitization process if conducted in compliance with shari'ah principles. This examination also considers recent regulatory changes to the definition of *sukuk* and current policy considerations of alternative forms of capital-market based refinancing techniques, such as covered mortgage bonds, and the way they relate to Islamic securitization. The article concludes with a brief outlook on future challenges and developments in the *sukuk* market.

Method: Theoretical discussion of Islamic finance concepts in relation of structured finance.

Finding: There seems to be a lower proclivity of shari'ah-compliant structured finance products to many incentive problems that have infected conventional securitization; however, many economic and legal challenges remain.

Keywords: Islamic securitization, structured finance, asset-backed, asset-based, *sukuk*, ijara, shari'ah compliance, covered bonds, risk management.

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1 Introduction

Since last summer, securitization has come into sharp focus on account of its role in propagating the economic fallout from the US sub-prime crisis, causing a major reassessment of risk, and the price it should command across all asset classes. In principle, securitization is a capital market-based source of refinancing profitable economic activity in lieu of intermediated debt finance. It provides an alternative source of finance that serves to mitigate disparities in the availability and cost of credit in primary lending markets by linking singular credit facilities to the aggregate pricing and valuation discipline of capital markets. Thus, the emergence of securitization helps remedy deficiencies in financial markets arising from incomplete capital allocation.

The collapse of the securitization market and the ensuing market turbulence, however, have cast serious doubt on this economic proposition of unbundling, transforming, and re-distributing credit risk via structured finance instruments. In view of sweeping fiscal intervention in the financial sector, a widespread retrenchment of mortgage exposures, and substantial liquidity injections by central banks to support inter-bank money markets, both the scale and persistence of the current credit crisis seem to suggest that pervasive securitization — together with improvident credit origination, inadequate valuation methods, and insufficient regulatory oversight — can perpetuate market disruptions, with potentially adverse consequences for financial stability and economic growth.

This charge begs the question of how securitization could have contributed to excessive complacency in financial markets. In response to cost pressures and regulatory reforms over the years, rising sophistication in credit risk management has facilitated continuous innovation in structured finance products and derivative instruments. An increasing number of financial institutions have adopted an "originate-and-distribute" business strategy of loan origination by using securitization to transfer credit risk from their balance sheets to other banks, insurance companies, hedge funds, and other financial institutions.[2] Since credit risk is customized to the preferences and tolerances of agents, the tradability of securitized debt should improve the capacity of the financial system to bear risk and intermediate capital. Sadly, it did not. Instead, securitization weakened minimum standards of prudent lending, risk management, and investment at a time when low returns on conventional debt products, default rates below the historical experience, and the availability of cheap hedging tools encouraged more risk-taking for yield despite early signs of heightened systemic vulnerabilities in the financial sector.

After having nearly ground to a halt last year, securitization is now staging a modest comeback after the renewed turbulence in capital markets worldwide, but current efforts fall short of fully

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[2] Asset securitization involves converting a pool of designated financial assets into tradable liability and equity obligations as contingent claims backed by identifiable cash flows from the credit and payment performance of these asset exposures. From an issuer perspective, securitization registers as an alternative, market-based source of refinancing profitable economic activity in lieu of intermediated debt finance.

restoring investor confidence. An elevated premium for uncollateralized lending, as manifested in the rise of the LIBOR-OIS spread, indicates that liquidity pressures as well as concerns about counterparty risk persist. Market ruptures caused by the headlong flight to safety during the initial phase of the credit crisis seem not to have been contained, and the market for securitized mortgages remains tense and pricing depressed as banks dispose of non-core assets and raise capital to de-lever and bolster their imploding balance sheets.

Exhibit 1. *Modes of secured and unsecured capital market funding.*

	Short-term funding instruments	**Long-term funding instruments**
Secured funding	repo, sale-buyback, securities lending, asset-backed commercial paper (ABCP) conduits and SIVs, tenders-standing facilities	asset-backed securitization (ABS)[3], ***sukuk*** (after February 2008)
Unsecured funding	short-term deposits, commercial paper	Long-term (wholesale) deposits, asset-backed bonds (ABBs), covered bonds, ***sukuk*** (before February 2008)

That said, Islamic banking and finance remained on the sidelines, and, so far, have been affected by the global financial crisis only recently in response to inflationary pressures in the Gulf countries, uncertainty about commodity prices, and the widespread economic downturn. At the same time, as policy-makers and regulators hasten to re-design the financial sector architecture afflicted by the demise of structured finance, the soul-searching in conventional finance has directed attention to alternatives modes of securitization to fill the void of unmet credit demand. This effort also involves an assessment of Islamic investment certificates or *sukuk*, which have grown into a notable capital market segment over the last three years.

This article surveys the unique structural features of the *sukuk* market (see Exhibit 1) and relates the characteristics of this form of securitization to calls for enhanced disclosure and standardization, ratings agency reforms, price transparency, and better transparency of origination and underwriting practices in conventional structured finance. In particular, assesses the potential of conflicts of interest (which became apparent in the U.S. subprime mortgage crisis) to contaminate the integrity of the securitization process if it were conducted in compliance with *shari'ah* principles.

[3] In February 2008, the shari'ah committee of the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) issued recommendations regarding the role of asset ownership, investment guarantees, and the shari'ah advisory and approval process in sukuk origination and trading. These recommendations led to a critical re-assessment of outstanding sukuk issues and lengthened the approval process of new issues in 2008.

2 Incentive problems of conventional securitization

The main cause of the crisis can be traced to market failure stemming from conflicts of interests in the securitization process and ill-designed mechanisms to mitigate the impact of asymmetric information (see Exhibits 1 and 2). In securitization, an arranger underwrites the issuance of asset-backed securities (ABSs) at different maturities, notional values, and credit quality to an asset manager, who serves as an agent for capital market investors. These investors are repaid at a fixed or floating rate from a trustee account funded by the cash flows or premium income generated from the reference portfolio of securitized assets (or future revenues). The originator services the portfolio, makes the collections, and passes them on, less servicing fee, to the SPV. Both investment return (principal and interest repayment) and losses are allocated among the various tranches according to their seniority. By substituting intermediated lending with capital market finance, securitization, however, creates considerable agency cost (which are ultimately borne by investors) if agents are tempted to pursue their own economic incentives. The most prominent incentive problems involve frictions among the borrowers, originators, issuers, arrangers, and investors as well as additional agents, such as servicers, credit rating agencies, and third-party guarantors, whose functions are the direct result of the fragmentation of risk ownership in securitization (and the incentive problems it creates).

First and foremost, valuation uncertainty about the quality of securitized assets could lead to moral hazard by originators if they have limited liability on downside risk. Since securitization is predicated on the transfer of credit risk from the originator to an bankruptcy-remote issuing agent, such a special purpose vehicle (SPV) or conduit, either via a transfer of title ("true sale securitization") or the purchase of credit protection ("synthetic securitization"), originators have an incentive to limit their (unobservable but costly) effort of screening borrowers once they are protected from any adverse performance of the "reference portfolio" of securitized assets. This friction is exacerbated by potential collusion between originators and borrowers, which may result in the misrepresentation of creditor quality (see Exhibit 3).

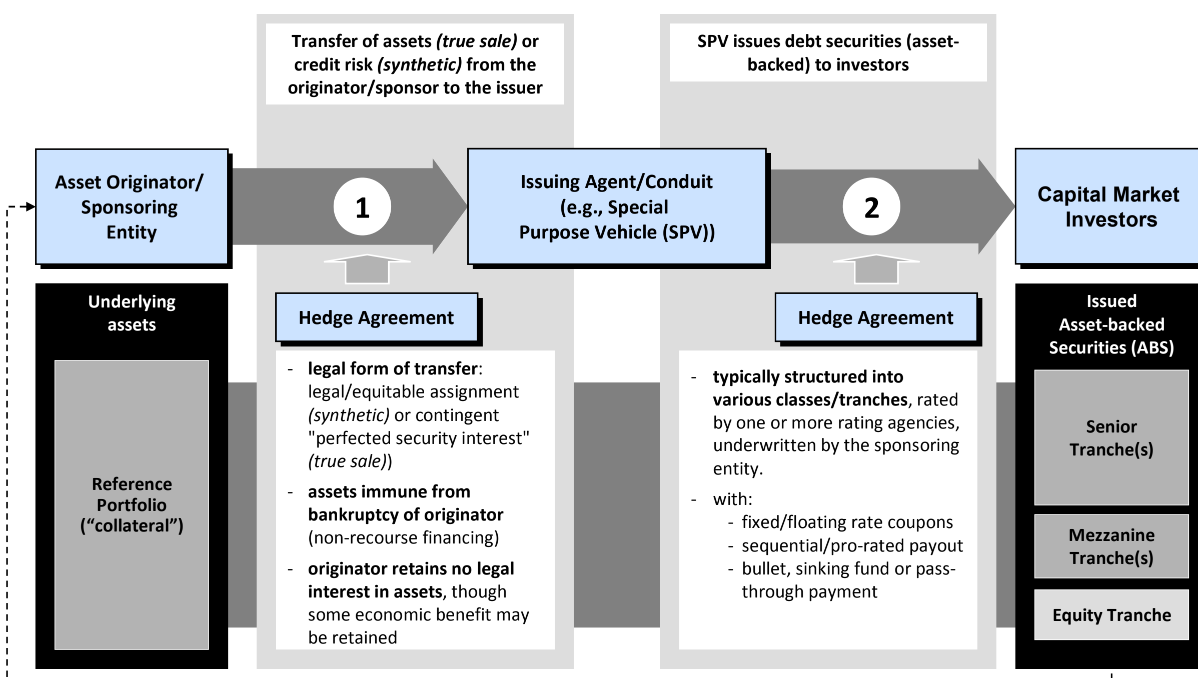
The information advantage of the originator with regard to the quality of borrowers and the historical performance of individual asset exposures could also give rise to adverse selection. The complex security design of securitized debt suggests superior information of arrangers about the true valuation of securitized debt. Since arrangers underwrite the sale of asset-backed securities (ABS), they might choose a particular composition of the reference portfolio and the transaction structure to optimize own payoffs (rather than the ones of ultimate investors). Therefore, rational issuers (and investors) would form negative beliefs about the actual quality of reference assets consistent with the lemons market problem à la Akerlof (1970). On the assumption of all (or most) assets (and transactions) to be of poor quality, they would request a reservation utility in the form of a lower selling price and/or higher return ("underpricing") as compensation for the anticipated investment risk of receiving a disproportionately large exposure to poorly performing assets (compared to any residual claims retained by the originator). Any

selective bias ("cherry picking") associated with the transfer of securitized assets also affects the relationship of arrangers with warehouse lenders and credit rating agencies. Warehouse lenders provide interim funding for the acquisition of assets during the "ramp-up phase" until the transaction can be finalized. Since required haircuts on securitized assets imply over-collateralization, forcing the arranger to assume a funded equity position, any change in views about credit quality increases the cost of the securitization transaction. Credit rating agencies face a similar lemons problem due to limited due diligence on arrangers and originators.

In addition, the servicing of securitized assets is afflicted by possible conflicts of interest between originators (or third-party agents) on one hand, and borrowers, asset managers, and investors on the other. Unless loan servicing remains with the originator, the issuer appoints a servicer that collects payments from borrowers, makes advances of unpaid interest, accounts for principal and interest, holds escrow or impounds funds related to the payment of property taxes and hazard insurance, notifies delinquent borrowers and supervises foreclosures as well as property dispositions (Ashcraft and Schuermann, 2008). Servicers commonly receive a periodic fee as compensation for their monitoring effort, which directly affects the realized level of losses and the distribution of cash flows to the arranger (and ultimately to investors). Almost all reimbursable expenses associated with the administration of deteriorating asset quality, such as the foreclosure cost of mortgages, are back-loaded, while advances of unpaid interest (and possibly principal) occur early on. Since their fee-based income increases over time, servicers have the natural incentive to inflate expenses to offset fixed upfront costs and keep securitized assets on their books as long as possible to assess late fees. For instance, in mortgage securitization, a servicer would prefer to modify the terms of a delinquent loan and/or delay liquidation (rather than foreclose), which stands in conflict with the best interest of both asset managers and investors to foreclose promptly once a loan is deemed uncollectible so as to prevent lost interest and lapses in maintenance from inflating losses.

However, the mode of payment collection and creditor forbearance impedes a coherent debt resolution strategy between agents. Any measure to limit debt modification (and other possible restrictions on the collection of delinquent debt) hampers the ability of servicers to resolve their own moral hazard problem with borrowers, whose willingness to pay (and preserve collateral value) declines as their option to walk away becomes more valuable than their equity claim on the underlying collateral. This conflict of interest is compounded by the fact that mortgage loans in the United States do not involve asset recourse, so that borrowers do not have to declare personal bankruptcy upon default, amplifying moral hazard concerns surrounding the administration of reference assets of deteriorating quality. In addition, trustees of ABS structures have the natural tendency to limit any efforts aimed at reducing moral hazard of the asset originator and arranger. Although they generally undertake contract enforcement and hold the benefit of covenants and collateral for the end-user (and other creditors), the responsibilities of servicers do not involve monitoring activities or the obligation to act unless instructed by a majority of end-users. Thus, the potential of "willful blindness" on part of the trustee imposes a further constraint on the integrity of the securitization process.

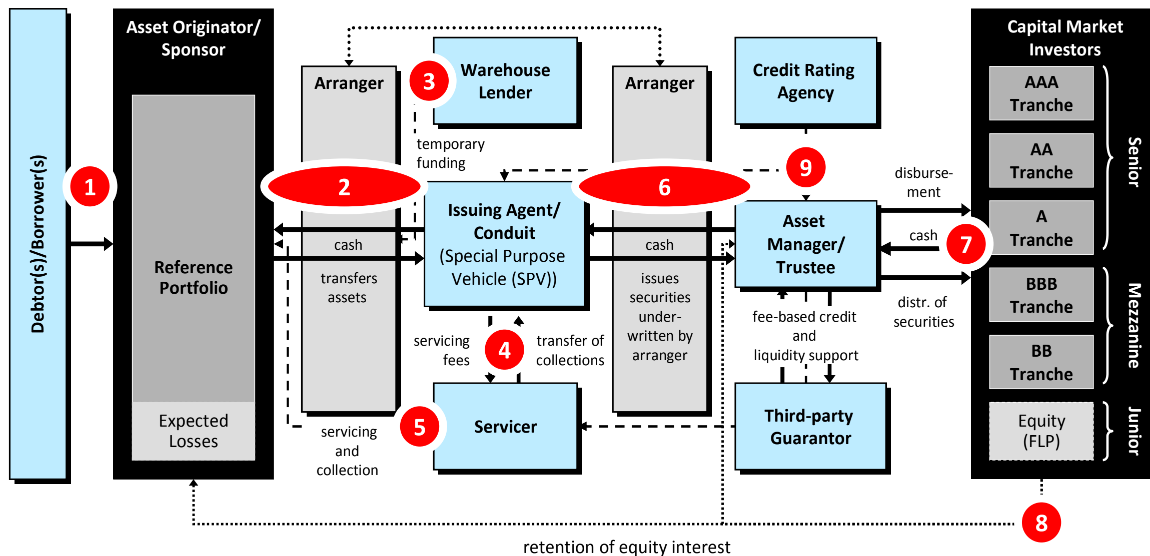
Exhibit 2. *Basic structure of a conventional securitization transaction.*



Finally, uncertainty about the true quality of securitized assets creates a principal-agent problem between asset managers and investors. Since investors cannot observe the effort of asset managers in screening potential investments and selecting the best trades, over-reliance on credit ratings for complex transactions, such as collateralized debt obligations (CDOs), and insufficient due diligence might encourage managers to engage in asset substitution. In "active" CDO structures, a manager is entrusted with the task of monitoring and, if necessary, trading credits within a dynamic reference portfolio of one or more credit-sensitive asset classes (and possibly different issuers and/or industry sectors) in order to protect the collateral value from impairment due to a deterioration in credit quality. Managers would adjust investment exposures over time to satisfy covenants on the weighted average rating of the portfolio and position limits on low-grade securities and/or a meet a certain degree of diversification in response to changes in risk sensitivity, market sentiment and/or timing preferences. "Lightly managed" reference portfolios allow for some substitution in the context of a defensive management strategy, while "fully managed" portfolios suggests more active role of managers subject to limits and investment guidelines that are determined by the issuers, rating agencies, and different levels of risk tolerance of investors at inception. However, investors in managed CDOs do not know what specific assets the CDO managers will invest in, and understand that those assets will change over time as managers alter the composition of the reference portfolio. Thus, investors face both credit risk as well as the risk of poor management. While credit rating agencies help resolve the apparent information gap between investors and asset managers by enhancing transparency due

to greater disclosure about the quality of the reference portfolio (and the investment mandate of the asset manager), the efficacy (and objectivity) of ratings could be hampered by the dependence of rating agencies on fees paid by the arranger ("issuer-pays model").

Exhibit 3. *Incentive problems of a conventional securitization.*



Agents in the securitization process can attenuate various conflicts of interest arising from asymmetric information (and limit the agency costs associated with the lemons premium) by soliciting creating greater transparency about the true value of securitized assets through signaling and screening mechanisms.

- Given the significant agency cost from adverse selection and moral hazard, *issuers* commit additional internal and external resources to a securitization transaction, such as reserve funds, variable proceeds from excess spread, and retain some securitized exposure, which, in substance, provide some degree of added protection to other parties to the transaction and serve as costly signals of asset quality. In order to signal credit quality it is still not uncommon for issuers to retain the most junior claim in a securitization structure as a low-cost risk sharing and support mechanism. In addition, a subordinated security design encourages incentive compatible behavior across investors at different points of the capital structure. Tranching has value if markets are incomplete or segmented due either to investment restrictions dictated by investor traditions or mandates and government regulations that render certain assets unattainable, or by the limited supply of certain categories of debt instruments that have risk-return profiles that could be replicated or enhanced by securitization.

- Arrangers, who oversee the transfer of assets to the trust and underwrite securitization transactions (after consultation with one or more rating agencies), conduct (continuous)

due diligence on *originators*, including the review of financial statements, underwriting guidelines, and background checks, while originators make a number of representations and warranties about the borrower and the underwriting process. This requires adequate capitalization of originators to reduce counterparty risk in the event of legal recourse. Down payments and the modification of loan contracts, in turn, limit the originators' exposure to moral hazard arising from borrower leverage.

- Arrangers reduce uncertainty about the performance of *servicer*s by balancing the intensity of monitoring efforts (and costly state verification) with the minimization of servicing expenses through forbearance. In addition to limits on loan modifications, servicer quality ratings and the installation of master servicers, which monitor the compliance with pooling and servicing agreements and enforce remedies of servicer default, help mitigate management risks.

- *Arrangers* themselves are subject to market discipline in the form of reputational risk, the provision of credit support, and due diligence by the asset manager aimed at restoring incentive compatibility with investors.

- Investors overcome the principal-agent problem vis-à-vis *asset managers* by imposing investment mandates and *ex post* evaluation of asset performance relative to benchmarks, which align investment strategies with their own risk-return expectations. Since investors do not observe the manager's effort, choice, and trading behavior, restrictions on the composition of the reference portfolio are based on average rating classification and/or type of eligible assets.

- In addition, *credit rating agencies* assess the credit risk and the suitability of a given securitization transaction based on expectations about the short run and through-the-cycle performance of the reference portfolio, which defines a certain risk-return profile. Since the business model of rating agencies depends as much on structuring fees as it does on reputation, any encroachment by arrangers on the objectivity of the rating process seems only a remote possibility. Moreover, rating and downgrade criteria are publicly disclosed and used by sophisticated investors to re-engineer rating assessments, thus, disciplining rating agencies.

4 The rise of Islamic finance

After the credit crisis has eroded market confidence and sapped risk appetite in conventional finance, investors — unsettled by excessive risk-taking and asset price volatility — have been flocking to Islamic finance. The Islamic finance industry has grown precipitously in recent years. There are currently more than US$800 billion worth of deposits and investments lodged in Islamic banks, mutual funds, insurance schemes (known as *takaful*), and Islamic branches of conventional banks. The current growth has been fueled not only by surging demand for shari'ah-compliant products from financiers in the Middle East and other Muslim countries, but

also by investors around the world seeking Islamic investment as a means of diversification, thus rendering the expansion of Islamic finance a global phenomenon (Hesse et al., 2008a, 2008b, and 2008c).

The current financial crisis invites a distinction of conventional and Islamic finance principles in the context of securitization and a comparison of their capacity to sustain efficient capital allocation and financial stability. Islamic finance is driven by the general precept of extending religious doctrine in the shari'ah to financial agreements and transactions. Shari'ah law bans the sale and purchase of debt contracts, profit-taking without real economic activity, as well as activities that are not considered *halal* (i.e., *shari'ah*-compliant). The central tenet of this form of finance is the prohibition of *riba*, whose literal meaning "an excess" is interpreted as any unjustifiable increase of capital in the form of interest (i.e., usury), whether through loans or sales.[4] Islamic finance is distinct from conventional finance insofar as it substitutes the (temporary) use of assets (or services) by the borrower for a permanent transfer of funds from the lender as a source of indebtedness. Whereas money has become a store of value in conventional finance, the asset-based organization of Islamic finance implies that money is not considered a commodity but a measure of value through which there can be an exchange and payment of goods and services.[5] While capital gains from interest are considered unlawful under the shari'ah, adequate compensation for the sale or temporary use of assets (or services) is encouraged.[6]

Besides the prohibition of interest-based forms of income and unethical (or socially detrimental and sinful) activities (*haram*), Islamic finance is beholden by the objective of maintaining a mutually beneficial balance between borrowers and lenders with a view to serving the public interest (*maslaha*). Since Islamic law does not recognize the concept of time value of money (as in conventional finance), contractual relationships between financiers and borrowers are not governed by capital-based investment gains but shared business risk (and returns) from entrepreneurial investment in lawful activities. The financier receives returns from the direct participation in asset performance in the form of state-contingent payments according to an agreed schedule (and participation amount). Since the religious overlay denies creditors (debtors) the benefit of unilateral gain, shari'ah-compliant finance contracts limit asset price appreciation to the contractually agreed repayment amount.

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[4] This definition refers to any positive and pre-determined return that is tied to the maturity and the amount of principal, resulting in wealth creation regardless of the outcome of asset performance (or the success of the business operations of the borrower).

[5] Stripped of its religious elements, this concept parallels the free-money theory of interest ("Freiwirtschaft"), which postulates an economic system where the most talented people would have the highest income, without forgery by interest and rent charge (Gesell [1958]).

[6] Besides interest earnings, Islamic law also prohibits (i) the direct or indirect association of contracts with (and investment in) lines of business involving alcohol, pork products, firearms, tobacco, and adult entertainment, (ii) betting and gambling (maisir), including the speculative trade, rescheduling, interest discounting or exchange of money for debt without an underlying asset transfer, (iii) the trading of the same object between buyer and seller (bay' al-inah) if it creates indebtedness, as well as (iv) preventable uncertainty and risk with delusion (gharar).

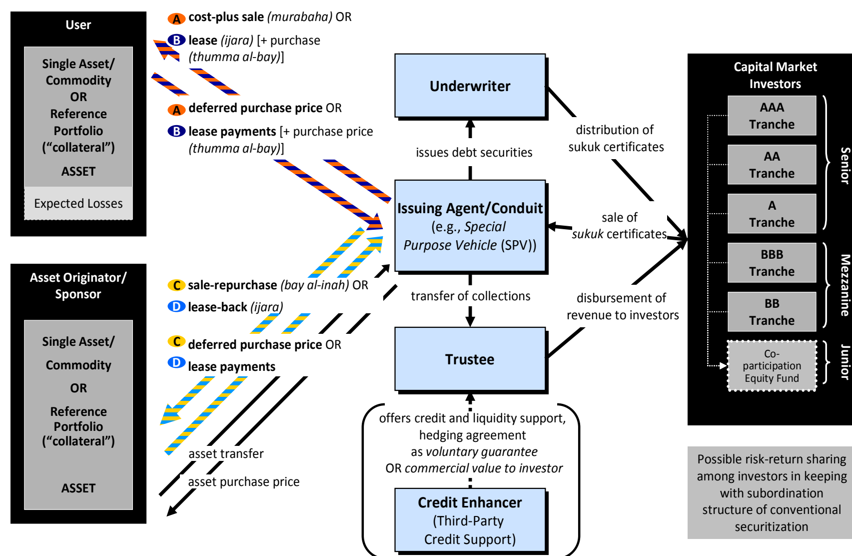
A notable feature in modern Islamic finance is that transactions are normally structured as composites of contingent claims, possibly using a set of underlying contract types that have a longstanding tradition under shari'ah and are commonly accepted in the legal tradition (El-Gamal, 2006). The three basic forms of Islamic finance contracts are: (i) debt-based contracts, e.g., synthetic loans/purchase orders (*murabahah*) and sale-buybacks *(bay al-inah)*; (ii) asset-based contracts, e.g., leases (ijara) and sale-leasebacks (*ijara thumma al-bay*); or (iii) equity-based contracts, e.g., profit-sharing/partnership (*musharakah*) and "sweat capital"/seed funding arrangements or trusts (*mudarabah*).[7]

5 The case of Islamic securitization

5.1 Definition of Islamic securitization and sukuk

Although the rapid expansion of Islamic finance is taking place across the whole spectrum of financial activities, perhaps the most striking element has been the fast growth of *sukuk*, the most popular form of securitized credit finance within Islamic finance. *Sukuk* encompass a broad range of shari'ah-compliant financial instruments and can be best described as participation certificates that grant investors return based on profitable investment resulting from actual asset ownership. Since asset-backing, entrepreneurial investment, and specific credit participation in identified business risk are fundamental to any Islamic transaction, securitization represents a straightforward capital market-based form of Islamic finance.

Exhibit 4. *Basic sukuk structure (with the purchase of debtor or third-party assets).*



[7] See also Errico and Farrahbaksh [1998] and El-Hawary et al. [2004] as well as Exhibit 7 (Appendix). Note that in many cases, returns from investment in unacceptable sources if they occur together with shari'ah-compliant investment may be regarded acceptable if these proceeds are donated to charity.

Sukuk commoditize the proceeds from asset transfers between providers and users of funds raised from different shari'ah-compliant finance contracts (see above), such as lending transactions (installment sale) or trust-based investments in existing or future assets. While *sukuk* are structured in a similar way to conventional asset-backed securities (ABS) or covered bonds, they can have significantly different underlying structures and provisions (see Exhibit 4). Most importantly, *sukuk* — like Islamic financial instruments in general — need to comply with shari'ah, which prohibits the receipt and payment of interest and stipulates that income must be derived from an underlying real business risk rather than as a guaranteed return from interest. Thus, *sukuk* transform the (intended) capital gains generated from actual transactions, such as profit-sharing, leasing, or cost-plus sales, into marketable securities without explicit investment protection or principal guarantees.[8]

Exhibit 5. *Permissible trading assets under Islamic law.*[9]

	Gold	*Silver*	Wheat	Barley	Dates	Salt
Gold	🕘 =	🕘	☑	☑	☑	☑
Silver	🕘	🕘 =	☑	☑	☑	☑
Wheat	☑	☑	🕘 =	🕘	🕘	🕘
Barley	☑	☑	🕘	🕘 =	🕘	🕘
Dates	☑	☑	🕘	🕘	🕘 =	🕘
Salt	☑	☑	🕘	🕘	🕘	🕘 =

In their basic concept, *sukuk* represent the "capital market corollary" to a singular lender in Islamic finance. Originators sell existing or future revenues from lease receivables (asset-based), "sale-back profit" (debt-based) or profit participation from private equity arrangements by transferring legal ownership of a portfolio of Islamically acceptable assets to a *special purpose vehicle* (SPV),[10] which refinances itself by issuing securities to market investors. Investors own the underlying asset(s) via a SPV that funds direct investment in real, religiously-sanctioned economic activity (see Exhibit 4). As such, they assume the role of a "collective financier"

[8] According to the latest recommendations by the Accounting and Auditing Organization of Islamic Finance Institutions (AAIOFI), sukuk are equivalent in form to asset-backed securities (ABS), which would also hold out the possibility of investor subordination through co-participation schemes (see Exhibit 4).
[9] Exhibit 5 illustrates the possible pairing of traditional commodities (money: gold and silver; staple foods: wheat, barley, dates, salt) for shari'ah-compliant trade according to the qu'ran. These categories are to be viewed as "proxies" for similar commodities that are more prevalent today. The symbols signify that trade is either unrestricted (as indicated by the checked box) or legitimate only if it occurs (i) spot (as indicated by the clock symbol) without profit, and/or (ii) for the consideration of the same quality and quantity (as indicated by the equality sign).
[10] In conventional securitization, a SPV is set up solely for the purpose of the securitization and might be a trust, limited liability company, partnership, or a corporation. In Islamic securitization, the objectives set out in the constitutional documents of the SPV also must not infringe on the prohibition of riba and haram under Islamic law.

whose entrepreneurial investment does not involve guaranteed, interest-based earnings. A conventional *pass-through* payment structure seems to be closest to the strict interpretation of Islamic principles, which requires the transfer of a minimum level of ownership to ensure direct investor participation in the business risk associated with the performance of a dedicated collateral pool of securitized assets.

Adapting Islamic securitization requires compliance with the following conditions (Jobst, 2007):

i. There should be a *real* purpose behind raising funds via securitization (that encourages an *bona fide* trader rather than a profitable exchange of the same (or similar items), which ensures commercial value to investor(s), wealth creation, and diversity of trade from underlying asset transfer. Any unilateral deferment of an obligation (payment or delivery) that generates profit is only acceptable if the financial contract involves dissimilar assets (as indicated by tick marks in Exhibit 5). Otherwise, a transaction must occur at spot without profit-taking.

ii. The type of reference assets realizing the securitized revenues are clearly identified (or are capable of identification) and cannot be consumed (or be perishable). Ownership and possession *(qabd)* rests with creditors (or their agents) throughout the life of the transaction in order to ensure definite performance;

iii. Each transaction participant shares in both the risk and return, and investors should receive positive pay-off from profitable ventures only (and not from non-productive investment);

iv. Reference assets must not be debt, cash, or prohibited as *haram* (sinful activity), be employed for speculative purposes, and associated in any way with unethical or exploitative operations or with speculation and avoidable uncertainty *(gharar)* in the form of zero-sum payoffs at inception;

v. The structure should provide investor (unconditional) compensation for business risk from direct participation in the performance securitized assets (based on actual ownership) and should not imply an exchange of debt for (guaranteed) interest-generating investment return (unless those securitized assets are interest-free and sold at net or fair market value unless repurchase price is pre-agreed);

vi. The contribution from investors in the form of proceeds from issued notes (and any returns generated by the issuing agent from managing collateral assets) cannot be reinvested in short-term cash instruments or interest-bearing debt[11] (and turnover in managed portfolios should be kept low);

[11] Instead, commodities could serve as religiously acceptable, short-term investments.

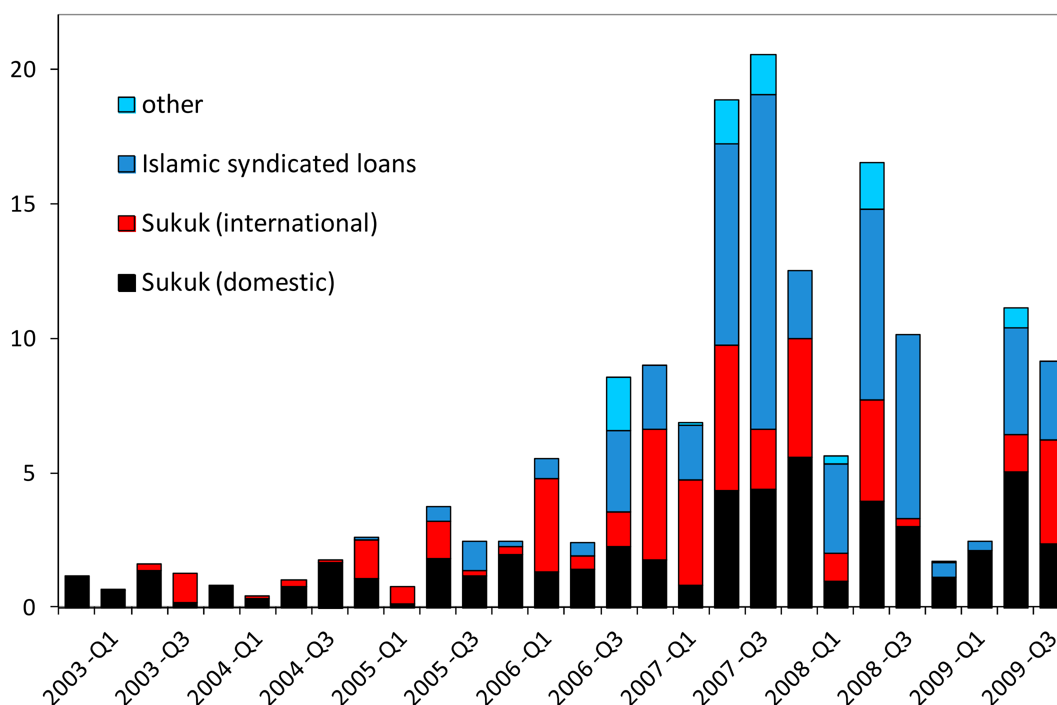
vii. Since conventional insurance violates shari'ah provisions, *takaful* (Islamic insurance, based on co-operation and mutual help) should be employed instead; and

viii. Any form of credit enhancement and/or liquidity support (and limitations of prepayment risk) must be in a permissible form, and guarantees can only be employed to cover cases of negligence, misconduct, or breach of contract (representations and warranties).

5.2 Current market situation

Sukuk issuance has soared over the last three years in response to growing demand for alternative investments (Jobst et al.[2008]). At the end of 2007, the outstanding volume of *sukuk* globally exceeded US$90 billion (Moody's [2007 and 2008]). Gross issuance has quadrupled over the past two years, rising from US$7.2 billion in 2004 to close to US$39 billion by the end of 2007, owing in large part to enabling capital market regulations, a favorable macroeconomic environment, large infrastructure development plans in some Middle Eastern economies and financial innovation aimed at establishing shari'ah compliance (IOSCO [2008]).

Exhibit 6. *Global sukuk issuance (2005-09, in USD billion).*



The *sukuk* market has not escaped unscathed from the credit crisis that erupted last year, with investment banks and finance houses worldwide still reeling from the collapse of the U.S. sub-prime mortgage market and the breakdown of the wholesale money markets. Although the

issuance of *sukuk* in the first half of 2008 has diminished and still remains somewhat below the 2007 record, volumes have held up, while the number of deals brought to market has steadily increased, chipping away at a significant backlog of shelved *sukuk* issues in 2007. The *sukuk* volume dropped to US$15.2 billion (down by about 35% on an annualized basis) in 2008 so far, while the issuance of conventional structured finance instruments collapsed to just under US$387 billion (down by about 80%) over the same time (see Exhibit 6). In particular, the less supportive economic environment in the Gulf Corporation Council (GCC) countries and the regional real estate sector troubled by the slowdown of global trade and foreign direct investment have contributed to this development. Even countries that have been driving forces in the *sukuk* market in recent years witnessed sizable declines. Amid a gradual normalization of credit conditions in early 2009, incipient demand helped stabilize the primary market for *sukuk*. During the first months of 2009 new issuance exceeded US$9 billion, compared with US$11.1 billion during the same period in 2008. On the assumption of a stable rate of growth, the volume of *sukuk* issued by governments and corporates could regain traction over the medium term, spurred by demand especially from banks, insurance companies and pension funds in both Islamic and non-Islamic countries.Sukuk – the good side of securitization?

Recent excesses in conventional financial markets have shed light on Islamic finance as an alternative framework for securitization. Predatory lending, deteriorating underwriting standards, and a series of incentive problems between originators, arrangers, and sponsors, of which all have infested the conventional securitization process, belie fundamental Islamic principles.

Any financial transaction under shari'ah law implies direct participation in underlying asset performance and assigns to financiers clearly identifiable rights and obligations for which they are entitled to receive commensurate return in the form of state-contingent payments subject to contractual certainty and the supremacy of public interest in social justice. Profits are earned in line with shari'ah prescriptions and cannot be guaranteed *ex ante* but accrue only if the investment itself yields income. Thus, investment is not guaranteed but secured on the basis of profitable ventures based on real assets, which mitigates adverse selection and moral hazard of both lenders and borrowers.

Sukuk might be a viable source of funds that could help stabilize the securitization market, as they already contain many contractual features that are now being considered instrumental to a resolution of inherent conflicts of interest between agents in the conventional securitization model. While *sukuk* are structured similar to ABS, risk-sharing and the full participation of both issuers and investors in the underlying asset performance (and how it affects the capital structure of the transaction) offer an alternative mechanism to conventional securitization in establishing incentive compatible behavior.

There are several Islamic principles of *sukuk*, which could potentially redress many conflicts of interest and valuation problems that infested the conventional securitization process:

- *between asset manager and investor* ("principal-agent dilemma"):
  - The religious prohibition of both gambling (*maisir*) and speculation (*gharar*) prevents excessive risk-taking (in the form of asset substitution) and commands clear object characteristics and/or delivery results as part of contractual certainty.
  - The trading activity of asset managers is restricted to *bona fide* merchant transactions on *real* debt while investor return must be derived from defined asset value associated with effective (or intended) ownership interest.
  - Since there is definite performance underpinned by actual and direct transfer of asset as object of unconditional sale in Islamic contracts, i.e., no mutual deferment of contractual obligations, any contingency risk from unfunded claims is limited to pre-defined timing mismatch of delivery or payment in accepted contracts (*salam*/*istisna* vs. *bay al'ajal*/*bay bithaman ajil*).
  - Trust-based contracts in Islamic law, such as *mudaraba*, limit the liability of the asset manager (*mudarib*) to cases of negligence, misconduct or breach of contract (representations and warranties). That being said, (i) partnership structures with fixed contribution ratios *(musharaka)* – and the possibility of additional participation of profits depending on verified effort choice – or (ii) principal-agent contracts *(wakala)*[12] with fixed management fees (including performance remuneration) help incentive problems from compromising pre-agreed investment strategies while maintaining positive-sum payoffs of both agents and investor.

- *between originator and issuer*:
  - The shari'ah approval and certification process promote adequate disclosures underpinned by a solid foundation of religious standards.

- *between issuer and investor*:
  - Investor return derived from effective (or intended) ownership of real asset(s) underlying the securitization structure (after actual and direct transfer as object of an unconditional sale) generates indebtedness and amounts subject to direct recourse.

- *between servicer and investor/asset manager*:
  - Contract certainty rules out potential of inflated, back-loaded (and variable) servicer expenses (and cannot be prioritized due to prohibition of provisions aimed at creating unilateral gains from interim changes in asset characteristics and valuation). Servicer fees are fixed and defined *ex ante*.

- *between borrower and originator*:

[12] Wakala defines a principal-agent relationship in which a fund manager acts as the agent of investors in accordance with pre-agreed investment parameters. The primary fee is fixed, for instance, as a percentage of assets under management. There may also be a performance-based fee but not a simple sharing of profits.

  - The Islamic principle of social benefit as public interest *(maslaha)* and the precept of supporting a system of distributive justice would preclude any moral hazard of originators ("predatory lending" or borrowers ("walking away"). Moreover, the shari'ah prohibits debt modification and unilateral gains (which are considered exploitation).

- *between arranger and guarantor*:
  - Guarantees must not establish the possibility of mutual deferment of contractual obligations without actual transfer of asset. Thus, only funded agency contracts with pre-specified terms would be deemed sufficient to rule out contingency risk of payment and actual delivery.

The principles underlying sukuk fall in line with recent policy moves to rehabilitate structured credit markets. As one measure to revitalize the secondary mortgage market, policy-makers in the United States (and other countries) have drawn up plans to encourage the issuance of covered mortgage bonds, popular in some other countries, such as Germany, to redress the misaligned incentives of asset managers that undermined *ex ante* market discipline and led to the eventual demise of the structured finance market. Covered bonds are unsecured (on-balance-sheet) debt obligations collateralized by a dedicated reference portfolio of assets that are fully retained by the issuer. The interest payments are guaranteed and do not depend on the performance of the underlying cover assets. Similarly, most *sukuk* are still unsecured based on a pool of underlying assets (like covered bonds in conventional finance) with principal guarantee provided by the issuer via a purchase undertaking agreement (see Exhibit 5). Coupons ("periodic distribution amounts") are protected by a liquidity provisions. Pay-through bonds collateralized by on-balance-sheet assets, whose asset proceeds are dedicated but conveyed through interest-bearing debt, however, would not qualify as suitable securities under Islamic law.

After recommendations issued by the Accounting and Auditing Organization of Islamic Finance Institutions (AAOIFI) in February 2008, however, *sukuk* have become more akin to asset-backed, pass-through off-balance sheet structures, without institutional guarantees on the asset performance. Principal and coupon payments depend on the cash flows derived from the pool of underlying assets, and on the structure of the transaction. Unlike ABS, new *sukuk* structures afford investors direct recourse to a defined portfolio of underlying assets, which fund secured repayment from profitable investment in religiously sanctioned, real economic activity. If securitized assets are removed from the originator's balance sheet, ownership conveyance through true sale ensures (i) the exclusive dedication of cash flows from the underlying asset to establish the linkage of ownership interest to identifiable economic activity and (ii) secured but unconditional repayment from underlying assets. The ownership of sukuk investors in real assets generating commoditized indebtedness is tantamount to the institutional guarantee afforded to covered bonds.

Nonetheless, many pitfalls of financial innovation that contributed to the US sub-prime crisis also apply to Islamic finance by an even larger measure, such as sound risk assessment, adequate rating processes, and the use of integrated risk mitigants. For instance, inflated asset prices of difficult-to-value collateral could obfuscate lower-than-expected asset performance, increase residual equity, and help maintain artificial arbitrage gains of asset managers. Also high execution costs, heightened administration, and collection risks can amplify the potential for principal-agent problems in absence of long default histories, robust recovery rate estimates due to untested collateral enforcement procedures, and sufficient asset diversity.

5.3 Economic Challenges of Islamic Securitization

Despite considerable, and growing, demand for shari'ah-compliant assets, the further development of *sukuk* depends on essential economic, regulatory and infrastructural conditions.

Amid weak reliance on capital market financing in many Islamic countries, issuers of *sukuk* are first and foremost faced with several critical economic impediments that pertain to their ability to (i) identify reference assets that meet shari'ah requirements and offer attractive returns, and (ii) substitute standard structural features in conventional securitization structures, such as credit enhancement and liquidity support, which are not permissible in an Islamic context. Given the limited sourcing and structuring of eligible asset portfolios, Islamic issuers have begun to originate their own Islamically acceptable assets rather than buy asset pools in the market.

However, the *sukuk* market is still plagued by illiquidity in the secondary market, with the combination of high originator concentration and regional fragmentation clouding the overall positive outlook. Although the concept of asset backing is inherent to Islamic finance, structured credit transactions are few and far between where financial transactions have to follow the precepts of the shari'ah. The current level of *sukuk* issuance by corporations and public sector entities still remains a fraction of the global fixed income markets. Since only a handful of large banks and managers are behind the bulk of transactions completed by a small number repeat issuers, origination and servicer risk from narrow asset supply poses challenges to investor diversification. In addition, the lack of information from private sources about securitized assets in many *sukuk* and the prevalence of "buy-and-hold" investments inhibit efficient price discovery and information dissemination.

An even bigger diversification issue arises from poor asset diversity given the narrow range of deal types and maturity tenors in the existing market. *Sukuk* are available at maturities of three, five and ten years, but not for short-term maturities, which significantly limits their application for money markets. Although Islamic banks are currently among of the largest buyers of shari'ah-compliant products (at long maturities), they would benefit most from issues at shorter tenors. There is some hope that the launch of different *sukuk* funds in the near future might potentially unlock liquidity constraints, but this might only create new demand without

sufficiently alleviating supply constraints. It is currently also difficult to set up *sukuk* funds with sufficient diversification.

5.4 Legal Challenges of Islamic Securitization — Regulatory Consolidation and Supervisory Harmonization

Despite the phenomenal growth of *sukuk* over the last three years, future development of *sukuk* could be arrested by insufficient supervisory and legal harmonization across national boundaries and the ongoing controversy about the financial innovation in Islamic finance.

Governance issues, especially the shari'ah compliance of products and activities, constitute a major challenge for the Islamic finance industry. Although shari'ah rulings *(fatwas)* by legal scholars are disclosed, there are currently no unified principles (and no precedent) on which shari'ah scholars decide on the shari'ah compliance of new products. *Fatwas* are not consolidated, which inhibits the dissemination, adoption, and cross-fertilization of jurisprudence across different countries and schools of thought. Moreover, there is still considerable heterogeneity of scholastic opinion about shari'ah compliance, which undermines the creation of a consistent regulatory framework and governance principles. Therefore, the fragmented opinions of shari'ah boards, which act as quasi-regulatory bodies, remain a source of continued divergence of legal opinion.

The absence of uniform and definitive guidance on shari'ah compliance affects the legal integrity of the restitution interest of investors in *sukuk*. Islamic investors are not only concerned with the compliance of both cover assets and the transaction structure with the shari'ah, but also with legal enforceability of asset claims under contract law. In this context, the question of whether Islamic law governs *sukuk* by substance or form arises. While the conclusion of financial transactions under different legal regimes can lead to the same outcome (i.e., substance), the legal process (i.e., form), and possibly the associated rights and obligations of the contractual parties, might vary considerably. If shari'ah compliance is treated (only) as a matter of substance and upholds in spirit what was created in form, such as perfected security interest defined by commercial law, the violation of the shari'ah would temper investor interest but not preclude legal enforceability of investor claims. However, if the transaction were governed solely by shari'ah law as a matter of form, the opinion of shari'ah courts could override commercial legal concepts and re-qualify the legal nature of a securitization transaction. For instance, insolvency officials in Islamic jurisdictions could invalidate the substantive non-consolidation and "re-characterize" a true sale securitization as an unsecured loan.

Recent efforts to achieve regulatory consolidation and standard setting have addressed legal contingencies imposed by Islamic jurisprudence and poorly developed uniformity of market practices. Leading regulatory organizations in Islamic finance, such as AAOIFI, the General Council for Islamic Banking and Finance Institutions (GCIBFI), the Islamic International Rating

Agency (IIRA), the Islamic Financial Services Board (IFSB) and the *Fiqh Academy* in Jeddah, have been working on aligning shari'ah principles on a consistent basis.

However, current regulatory changes concerning the structure of *sukuk* warrant careful consideration and might mute some of the recent enthusiasm for Islamic capital market products. These proposed rules attracted significant attention prior to their release, following a statement by the chairman of the shari'ah committee in November 2007 indicating that 85% of *sukuk* issues in the GCC do not concur with shari'ah principles. Shari'ah scholars raised objections to principal guarantees via repurchase agreements, asset retentions by originators adept at minimizing withholding tax obligations of issuing conduits, and the concurrent transfer of certain proportions of debt associated with underlying assets, such as interest-bearing liens. Most *sukuk* have been sold with a borrower/creditor guarantee to repay the full notional amount at maturity, or, in the event of default or early redemption, mirror the structure and payout of a conventional bond. Such a promise (and not the option) to repay capital violates the principle of risk-and profit-sharing under Islamic law. The debate about the general applicability of these recommendations with regard to the approval process of *sukuk* (and the screening of both their structure and characteristics of underlying assets) has raised concerns about the economies of Islamic securitization and the shari'ah governance of Islamic capital markets at large.

6 Conclusion

As Islamic finance comes into its own, and more companies turn to capital market-based sources of finance, *sukuk* will become essential to the competitiveness of corporations and banks alike. With more than US$2 trillion of credit demand projected to be unmet in the next three years as the conventional securitization market remains dysfunctional, the current market situation provides a window of opportunity for *sukuk*. Seemingly, the religious overlay of *sukuk* has helped temper unfettered financial innovation and (unnecessary) structural complexity, both of which have become the undoing of conventional securitization. In spite of having been hemmed in by the credit crisis, the widespread economic downturn, and the recent slump in the real estate sector of the GCC, the *sukuk* market is expected to soon gain momentum again, largely due to past windfall from high commodity prices, especially oil revenues in the GCC. The *Asia Gateway Initiative*, which also includes the promotion of *sukuk* as medium to develop local bond markets provides the first silver lining of a promising future.

Nonetheless, for shari'ah-compliant structures to become veritable alternatives to conventional instruments and fill some of the void left behind by the broad-based retrenchment of conventional structured finance, improvements in legal certainty and transparency are needed. Recently, investor sentiment has been severely damaged from the initial debt standstill imposed on one of the most prominent sukuk issued by property developer Nakheel and might halt the strong rebound of the market in the wake of continued uncertainty about investor protection.[13] At

[13] The recent debt restructuring of Dubai World and the last minute rescue of property subsidiary Nakheel, which issued one of the largest sukuk three years ago, has shaken the confidence in Islamic finance owing to growing

the same time, recent legal charges brought against arrangers of Islamic capital market transactions have further deepened skepticism by confounding the delineation between conventional and shari'ah law. [14] Going forward, further expansion of the sukuk market will depend on efforts geared towards exploring options for (and greater flexibility in) the interpretation of different modes of secondary sources of Islamic faith supporting religious doctrine (analogous deduction *(qiyas)*, independent analytical reasoning *(ijtihad)* and scholarly consensus *(ijma)* based on first principles)).

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controversy about the interaction of shari'ah compliance and principles of investor protection in times of distress. The $3.5 billion Nakheel structure, explicitly guaranteed by Dubai World (but not by the Government of Dubai), was a commercial leasehold interest-based sukuk al-ijara (lease-based) with assets being mostly Dubai waterfront properties. While the issuance of sukuk certificates in this transaction was governed by English law, the issuing special-purpose vehicle (SPV) itself was incorporated in the Jabel Ali Free Zone, subjecting the sale or lease of the collateral assets to shari'ah-based United Arab Emirates (UAE) law as applied by Dubai courts. However, this arrangement raised questions whether shari'ah compliance would uphold legal enforceability of investor claims, and possibly encroach upon dispute resolution under conventional law.

[14] In the recent U.K. court case the Kuwaiti asset management firm Investment Dar, is wrangling over the repayment of a separate type of debt to Bank Blom, a Lebanese bank, on the grounds that the purported wakala (principal-agent) agreement between both firms was not consistent with shari'ah law. The English court ruled that the Investment Dar was only liable for the principal and not the profit share. It remains to be seen what the full repercussions are for Islamic finance but there is a danger that the court ruling could set a precedent for other similar cases.

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8 Appendix

Table 3. *Islamic finance contracts - basic terminology.*

Term	***Explanation***
Amana (Demand deposits)	Deposits held at the bank for safekeeping purpose. They are guaranteed in capital value, and earn no return.
Bay mu'ajal or *bay bithaman ajil* (BBA) (Pre-delivery, deferred payment)	The seller can sell a product on the basis of a deferred payment, in installments or in a lump sum. The price of the product is agreed upon between the buyer and the seller at the time of the sale, and cannot include any charges for deferring payment. In a BBA contract, the lender is not compelled to disclose the profit margin.
Salam (Pre-payment, deferred delivery)	The buyer pays the seller the full negotiated price of a product that the seller promises to deliver at a future date.
Ijara (Lease, lease purchase)	A party leases a particular product for a specific sum and a specific time period. In the case of a lease purchase, each payment includes a portion that goes toward the final purchase and transfer of ownership of the product.
Istisna (deferred payment and delivery)	A manufacturer (contractor) agrees to produce (build) and to deliver a certain good (or premise) at a given price on a given date in the future. The price does not have to be paid in advance (in contrast to *bay salam*). It may be paid in installments or part may be paid in advance with the balance to be paid later on, based on the preferences of the parties.
Ju'ala (Service charge)	A party pays another a specified amount of money as a fee for rendering a specific service in accordance with the terms of the contract stipulated between the two parties. This mode usually applies to transactions such as consultations & professional services, fund placements and trust services.
Kifala	It is a pledge given to a creditor that the debtor will pay the debt, fine or liability. A third party becomes surety for the payment of the debt if unpaid by the person originally liable.
Mudaraba (trust-based contract)	*Rabb -ul- mal* (capital' s owner) provides the entire capital needed to finance a project while the entrepreneur offers his labor and expertise. Profits are shared between them at a certain fixed ratio, whereas financial losses are exclusively borne by *rabb -ul- mal*. The liability of the entrepreneur is limited only to his time and effort.
Murabaha (Mark–up financing)	The seller informs the buyer of his cost of acquiring or producing a specified product. The profit margin is then negotiated between them. The total cost is usually paid in installments.
Musharaka (Equity participation or "sweat capital finance")	The bank enters into an equity partnership agreement with one or more partners to jointly finance an investment project. Profits (and losses) are shared strictly in relation to the respective capital contributions.
Qard Hassana	These are zero-return loans that the *Qur'an* encourages

Term	*Explanation*
(Beneficence loans)	Muslims to make to the needy. Banks are allowed to charge borrowers a service fee to cover the administrative expenses of handling the loan. The fee should not be related to the loan amount or maturity.