

Islamic Finance Opportunities in the Oil and Gas Sector: An Introduction to an Emerging Field

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I. INTRODUCTION

Islamic finance has become a significant source of investment activity in both the Muslim world and, more broadly, the global marketplace. Islam forbids the charging of interest, and otherwise limits the kinds of commercial activities in which people of the Islamic faith may engage, rendering traditional Western approaches to finance (such as loans, bonds, and other debt instruments) largely incompatible with Islamic law. Modern Islamic finance techniques—shaped by traditional Islamic legal principles and an evolving body of jurisprudence, known collectively as *Shari'a*—draw upon centuries of religious scholarship, enabling devout Muslims in contemporary society to participate in capital markets. Despite the growing prominence of this form of investment, its use in the energy business has been isolated and tangential. *Shari'a*-compliant transactions in the oil and gas sector have predominately been focused on “downstream” projects in the Middle East. These applications have typically merely supplemented more conventional sources of capital investment (primarily through the introduction of Islamic finance tranches in the context of conventional project financings).² Potential “borrowers”³ operating outside the Middle East and those involved in “upstream”⁴ oil and gas operations, even within the Middle East, have yet to access Islamic financing.⁵ A potentially significant source of funding for the voracious energy industry remains almost entirely untapped, and Muslim investors have yet to participate in oil and gas transactions in the United States, with one notable exception. The existing

1. “Downstream” refers to oil and gas activities that take place after the oil or gas is removed from the ground and includes the transportation, refining, marketing, and end use of petroleum (such as in petrochemical plants).

2. See Gohar Bilal, *Islamic Finance: Alternatives to the Western Model*, 23 FLETCHER F. WORLD AFF. 145, 149 (1999) (discussing use of Islamic financing instruments); Rod Morrison, *Middle East Bonanza*, PROJECT FIN. INT'L, Jan. 25, 2006, at 32 (“There were some Islamic tranches on [certain energy deals in the Middle East] but these were smaller than the bank tranches and most of them were bought by the Islamic arms of Western banks in any case.”).

3. The term “borrower” used in conventional finance is often intentionally avoided in Islamic finance documentation because *Shari'a*-compliant financings are not loans and are not characterized as such in the underlying contracts. For practical purposes, however, the entity receiving the funding is comparable in most respects to a borrower in traditional secured financing, and periodically throughout this article the term “borrower,” set off in quotations, will be used to denote the receiver of funds in an Islamic-compliant transaction.

4. The “upstream” sector of the oil and gas industry is generally considered the sector of the industry that covers the operation and production of hydrocarbon resources. It includes land acquisition, exploration, development, drilling, and field operations.

5. As this Article discusses, however, certain groundbreaking inroads are currently being made at the margins of the energy industry, even in the United States.

disconnect between potential Muslim investors and Western oil and gas companies has yet to be resolved, but the potential for fruitful economic relationships certainly exists. If this multi-trillion dollar opportunity is approached correctly, however, the enormous potential of Islamic finance for the oil and gas industry may be realized.

Due to the nature of oil and gas assets under American law, there exist few legal impediments to structuring Islamic finance transactions tailored to fit the needs of both the oil and gas industry and Muslim investors. In fact, oil and gas law in most U.S. states is a near perfect fit for the principles of Islamic finance. As a threshold matter, oil and gas assets (including the real and personal property connected with petroleum operations) constitute permissible assets for purposes of Islamic investment because oil and gas operations do not violate *Shari'a* prohibitions on involvement in inherently "sinful" activities. *Shari'a* encourages shared risk through joint ownership of productive assets (such as oil and gas reserves) and business enterprises (such as drilling or hydrocarbon production). In key U.S. states, the laws governing oil and gas interests allow for investors to benefit from the security of holding well-recognized real property interests yet to remain largely passive investors; Muslim investors can benefit from partial ownership of productive assets without having to participate in the operation of the oil and gas properties. In Texas and Louisiana, for example, mineral estates (i.e., ownership of oil and gas in the ground) and interests carved out of them (such as royalties) are considered to be real property. As real property with well-defined rights under the laws, ownership in oil and gas can be cleanly transferred, in whole or in part, in a variety of ways. Both privately-owned and government-administered oil and gas leases can be severed, subleased, assigned, encumbered, or otherwise manipulated, often without altering their characterization as real property under the law. Oil and gas law further allows for the transfer of certain kinds of partial ownership rights; for example, one party may control the "working interest"⁶ and operate the leasehold while other parties may hold "passive" royalty interests (i.e., interests that neither participate in operations nor bear any costs of development). Ownership can be tailored to the needs of a particular transaction, allowing for the creation of indirect beneficial ownership interests that can be held by Islamic investors, a key to *Shari'a* compliance. If structured properly, interests in oil and gas leaseholds may also enjoy certain protections in bankruptcy, thereby potentially increasing the "lender's" security. Finally, oil and gas assets can be mortgaged and investors are allowed to hold security interests therein, potentially providing valuable collateral in the event of a breach of contract by the "borrower." In short, Islamic finance and American oil and gas law are ideal partners.

Given this compatibility, perhaps cultural differences and mutual suspicion have kept financial institutions, energy companies, and the attorneys that serve them from pursuing the potentially lucrative possibilities. The latency of Islamic financial instruments as sources of funds for energy companies operating outside the Muslim world may be explained by a simple lack of information and communication. But the economic realities of the global economy and the increasingly interconnected nature of the international financial markets mean that Islamic finance should no

6. JOHN S. LOWE, OIL AND GAS LAW IN A NUTSHELL 444 (3d ed. 1995) (defining "working interest" as "[t]he rights to the mineral interest granted by an oil and gas lease, so-called because the lessee acquires the right to work on the leased property to search, develop and produce oil and gas (and the obligation to pay all costs)").

longer remain isolated. Islamic banks, investors, and energy companies are all becoming more sophisticated and, hopefully, more open to working together in the context of Islamic finance deals. Even where conventional finance is adequate, it can be expensive or may include onerous conditions. Islamic finance and investment adds flexibility to the marketplace and may prove to be a competitive alternative. The expansion of Islamic finance into new markets potentially lowers the costs of capital for "borrowers," including exploration and production companies. With the application of the proper legal, cultural, and financial acumen, *Shari'a*-compliant finance potentially represents a major new source of funds for the oil and gas industry in the United States, as well as in other jurisdictions that apply similar laws with respect to mineral rights. The intersection between the ancient religious traditions of *Shari'a* law and the financial appetite of the energy industry (the largest sector of the world economy) has the potential to become one of the key sources of economic development in the coming years, matching the money of Muslim investors (and in some instances conventional investors, who may also find certain *Shari'a*-compliant investment products attractive based on economic fundamentals if not religious faith) with capital-hungry companies looking to develop energy resources. This emerging field, however, will only be successfully tapped if the lawyers, investors, borrowers, and bankers involved in the oil and gas industry approach the subject with an informed understanding of the complexities of this emerging form of finance. To date, the author is aware of only one transaction (as discussed in detail in Section V below) that has taken advantage of the synergies between U.S. oil and gas law and Islamic financing techniques, but with proper planning, many more may come to market in the coming years.

The purpose of this Article is to provide lawyers, and their clients, a broad understanding of the applicability of Islamic funding techniques to oil and gas financing transactions. Although this Article addresses opportunities related to Islamic financings backed by oil and gas assets in particular, its content also applies to other industries that can benefit from *Shari'a*-compliant finance and should therefore be of interest to any attorney exploring the expanding role of Islamic finance in the global economy. First, this Article presents an overview of the fundamentals of Islamic finance, followed by an explanation of the existing uses of Islamic finance in the oil and gas industry outside of the United States. The Article then analyzes the compatibility of *Shari'a*-compliant funding arrangements with certain types of common asset-related financings in the oil and gas sector (including the sale of overriding royalties and production payments); this section also discusses comprehensively the legal principles of certain key American jurisdictions with respect to the characterization of oil and gas assets located both onshore and on the outer continental shelf (OCS) of the Gulf of Mexico. The discussion includes key bankruptcy considerations and the application of state law regarding mineral estates, with particular attention to Texas and Louisiana law (where a large portion of domestic activity takes place and which largely governs offshore Gulf of Mexico leasing). Finally, the article provides a brief overview of the first ever *Sukuk* transaction backed by U.S. oil and gas assets, which operates not only as a pioneering example of the potentially lucrative intersection of energy deals with Islamic law, but also as a possible foundation for future activity in this emerging field.

II. FUNDAMENTALS OF ISLAMIC FINANCE AND APPLICABILITY TO OIL AND GAS TRANSACTIONS

A. Fundamental Principles of Islamic Finance

Islamic finance can trace its roots back more than a millennium, but only in the past few decades has *Shari'a*-compliant banking and investment become a major facet of the global financial marketplace. Beginning with its modern inception in the late 1960s through cycles of expansion, first in the 1970s, and, more recently, with the rise in oil and natural gas prices in the past few years,⁷ Islamic finance has finally evolved into a significant component of the modern international banking sector—with an estimated \$250 billion in assets currently held by Islamic banks.⁸ Other reports put the total amount committed by Muslim investors at \$1.5 trillion—and growing at 15% annually—with some 50-60% of this amount dedicated to Islamic finance activities.⁹ Islamic finance is no longer just a novelty—“[i]t’s mainstream business . . . [and] [t]hat’s why every bank wants a bigger piece of it.”¹⁰ Once a purely Middle Eastern commercial activity, modern Islamic finance techniques originally conceived in Egypt quickly spread to other parts of the Muslim world and beyond.¹¹ Sensing a lucrative trend, European, North American, and Asian banks have become deeply involved in the industry, with some financial institutions even offering a limited selection of *Shari'a*-compliant products to European and American investors and “borrowers” in areas such as home finance—including *Shari'a*-compliant mortgages provided by Freddie Mac.¹² More than three hundred Islamic banks now operate in some seventy-five countries (including a number of Western jurisdictions).¹³ The Middle East and Southeast Asia are still home to many major players with billions of dollars in *Shari'a*-compliant investments (especially in Bahrain, the United Arab Emirates and Malaysia¹⁴), but Western financial

7. See Hesham M. Sharawy, Note, *Understanding the Islamic Prohibition of Interest: A Guide to Aid Economic Cooperation Between the Islamic and Western Worlds*, 29 GA. J. INT'L & COMP. L. 153, 167-68 (2000) (discussing the Islamic banking movement).

8. See Kimberly J. Tacy, *Islamic Finance: A Growing Industry in the United States*, 10 N.C. BANKING INST. 355, 355 (2006) (stating total assets of Islamic-compliant financial institutions are \$262 billion, and deposits are over \$202 billion); see also Umar F. Moghul & Arshad A. Ahmed, *Contractual Forms in Islamic Fin. Law & Islamic Inv. Co. of the Gulf (Bahamas) Ltd. v. Symphony Gems N.V. & Ors.: A First Impression of Islamic Finance*, 27 FORDHAM INT'L L.J. 150, 150-51 (2003) (discussing the magnitude of Islamic finance).

9. Sam Lafferty, *The Rise of Islamic Finance*, ITP BUSINESS, Apr. 13, 2006, available at http://www.itp.net/business/features/details.php?id=4181&srh=Islamic%20Finance&tbl=itp_features; see also David Henry, *Islamic Law: Returns Muslims Can Live With*, BUS. WK., July 17, 2006, at 9 (estimating the Islamic finance market to be around \$750 billion).

10. Assif Shameen, *Islamic Banks: A Novelty No Longer*, BUS. WK., Aug. 8, 2005 (internal quotations omitted), available at http://www.businessweek.com/magazine/content/05_32/b3946141_mz035.htm.

11. See Sharawy, *supra* note 7 (discussing the Egyptian origins of the Islamic banking movement).

12. See Tacy, *supra* note 8, at 355, 365-68 (discussing Western use of Islamic financing); see also Moghul & Ahmed, *supra* note 8, at 151-52 (discussing development of Islamic finance); Shameen, *supra* note 10.

13. Lafferty, *supra* note 9.

14. *Id.* “Malaysia is the most developed market for Islamic finance [and] . . . also has the advantage of being home to the Islamic Financial Services Board, a global organisation of Muslim bankers in charge of banking regulation and supervision” *Id.* However, with the opening of the Dubai International Financial Centre, the United Arab Emirates may supplant Malaysia as the world’s center for Islamic

institutions such as Citibank, HSBC, UBS, BNP Paribas, ABNAMro, American Express, and Deutsche Bank now also have active Islamic arms.¹⁵ As Islamic banking has grown, international standards have been introduced and have helped eliminate uncertainty, making Islamic finance increasingly sophisticated, mainstream, and productive.¹⁶ While the rapid expansion and increased complexity of the still-evolving field of Islamic finance has caused some controversy among the Muslim faithful, modern *Shari'a*-compliant financial practices are unmistakably an important part of the global marketplace.¹⁷

Islamic finance rules are taken from the Muslim holy book (called the *Qur'an*) and from other traditions ascribed to the Prophet Mohammed (called the *Sunna* or *Hadith*),¹⁸ as interpreted throughout the centuries by Islamic scholars. Detailed practical rules drawn from these sources are called *Fiqh* (or "Islamic jurisprudence").¹⁹ Collectively, these components and interpretations form the *Shari'a* (sometimes referred to as "Islamic law"). Importantly, a basic tenet of the Muslim faith is that *Shari'a* governs all aspects of Islamic life, including private business affairs and commercial transactions.²⁰ There is no central clergy in Islam, and areas of disagreement remain among the four main lines of Sunni jurisprudence (the *Hanafi*, *Maliki*, *Hanbali*, and *Shafi'i* schools)—the Islamic theology under which the vast majority of Islamic finance is practiced. The proclamations of the scholars of one school of Islamic jurists does not necessarily mean that scholars of other schools will agree with the judgments arrived at in a particular *Fatwa*, which is essentially a *Shari'a* legal opinion or pronouncement.²¹ For this reason, it is advisable to consult multiple *Shari'a* scholars in preparation of a transaction. Each individual transaction must be vetted by scholars or a board of scholars who bless the deal by issuing the requisite *Fatwa*. *Shari'a* advisors and *Shari'a* boards "provide . . . legitimacy" to Islamic finance transactions, and are a necessary adjunct to all such transactions.²² Although the scholarship comprising the field of Islamic finance is complex and deeply academic, with some disagreement among scholars as to certain matters, the basic principles reflected in all the schools can be distilled into a few common elements.²³

finance. *Id.*

15. See Bilal, *supra* note 2, at 148.

16. See Tacy, *supra* note 8, at 360-61.

17. See Moghul & Ahmed, *supra* note 8, at 156-57 (discussing the evolution of Islamic finance).

18. The two terms are distinct but are closely-related. "[T]he Arabic word **sunnah** has come to denote the way Prophet Muhammad . . . lived his life. The Sunnah is the second source of Islamic jurisprudence, the first being the Qur'an. Both sources are *indispensable*; one cannot practice Islam without consulting both of them. The Arabic word **hadith** . . . is very similar to Sunnah, but not identical. A hadith is a *narration* about the life of the Prophet . . . or what he approved - as opposed to his life itself, which is the Sunnah" *Sunnah and Hadith*, USC-MSA Compendium of Muslim Texts, <http://www.usc.edu/dept/MSA/fundamentals/hadithsunnah/> (last visited Nov. 11, 2006).

19. Moghul & Ahmed, *supra* note 8, at 158.

20. Barbara L. Seniawski, Note, *Riba Today: Social Equity, the Economy, and Doing Business Under Islamic Law*, 39 COLUM. J. TRANSNAT'L L. 701, 704 (2001); see also Moghul & Ahmed, *supra* note 8, at 157-58 (discussing the applicability of Islamic law to all areas of life).

21. See Moghul & Ahmed, *supra* note 8, at 190-93 (discussing *Shari'a* committees and their role in documenting transactions).

22. *Id.* at 151-52.

23. Fitch Ratings, a rating agency that has developed rules to rate securitized Islamic instruments, succinctly summarizes the basic principles of Islamic finance: "(1) risk sharing: each participant in a transaction should share in both the risk and return . . . ; (2) materiality: the transaction should have a real economic purpose; (3) no exploitation: neither party to the transaction should be exploited by its

1. *Riba*

First and foremost, Muslim investors and lenders are not allowed to charge or receive interest, known as *Riba*. Western-style loans and conventional debt instruments designed around interest charges are therefore simply not part of true Islamic finance. As one leading scholar of the subject succinctly explained: "In Islam, one does not lend to make money, and one does not borrow to finance business."²⁴ As discussed further in this Article, while interest is obviously the most elemental component of traditional financing and Western concepts of capital markets in general, there are methods of structuring a transaction in order to provide a return that is similar in form and substance to amortized interest and principal payments without violating Islamic restrictions.²⁵

The *Qur'an* contains almost a dozen references to this fundamental prohibition against interest, and it is discussed often in the *Hadith*.²⁶ The *Qur'an* proclaims: "Allah hath permitted trade and forbidden usury."²⁷ This fundamental prohibition is "unequivocal," and the *Qur'an* and early Islamic writings clearly consider *Riba* a very serious offense:

The Messenger of Allah . . . cursed the one who devours *Riba*, the one who pays it, the one who witnesses it, and the one who documents it.²⁸

...

There are seventy three different types of *Riba*, the least of which is equivalent [in sin] to committing incest, and the worst of which is equivalent [in sin] to destroying the honor of a Muslim.²⁹

operation; and (4) the transaction should not finance sinful activities, as defined by the principles of Islam." Adrian Dommissé & Wasif Kazi, *Emerging Markets Special Report: Securitisation and Shari'ah Law*, FITCH RATINGS, LTD., at 2 (Mar. 24, 2005), <http://www.fitchratings.com/dtp/pdf1-05/asha2403.pdf>.

24. Mahmoud Amin El-Gamal, *A Basic Guide to Contemporary Islamic Banking and Finance*, 33 (2000) [hereinafter El-Gamal, *Contemporary Islamic Banking*], available at <http://www.ruf.rice.edu/~elgamal/files/primer.pdf>.

25. The structuring of Islamic finance deals to recreate more conventional notions of interest and fixed return on capital has magnified interest in Islamic products but is not without its critics:

The prohibition against interest-based lending has not stopped contemporary Islamic finance from, in practice, formalistically finding ways around this prohibition. In practice, the economics of principal and interest have become couched in a contrived set of technical legal terms of art. This formalistic translation of interest-based lending into Islamic finance has not been accompanied by any practical effort that . . . overcomes . . . the substantive problems wrought thereby on the integrity of Islamic law and jurisprudence.

Moghul & Ahmed, *supra* note 8, at 169. Other scholars of the subject are equally skeptical of the motivations and intellectual honesty of some modern Islamic jurists "on the payrolls of Islamic financial providers" who use "excessively formalistic interpretation[s] of the letter of the Law" in issuing *Fatwas* to support modern Islamic finance products. Mahmoud A. El-Gamal, "Interest" and the Paradox of *Contemporary Islamic Law and Finance*, 27 *FORDHAM INT'L L.J.* 108, 108-09 (2003).

26. Sharawy, *supra* note 7, at 162.

27. El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 9 (quoting ABDULLAH YUSUF 'ALI, *THE MEANING OF THE HOLY QUR'AN* (4th ed. 1991)).

28. *Id.* at 4 (citation omitted in original).

29. *Id.* at 4 (citation omitted in original).

Riba literally means “increase” in Arabic,³⁰ and Islamic scholars, both modern and ancient, have debated exactly what the teachings of Prophet Mohammed forbid and permit with respect to earning “increased” returns resulting from the use of money.³¹ But all seem to agree that, at a minimum, *Shari’a* prohibits usury³² and the charging of interest on commercial loans.³³ “[N]obody can correctly deny that interest on loans is . . . forbidden . . .”³⁴

The notion of *Riba* has deep roots in Islamic society and custom. In Islam, money itself is not considered to have any intrinsic value; currency should only have value as a medium of exchange, and one should not make money merely off the use of money.³⁵ “Simply stated, Islamic law prohibits interest because it fosters the accumulation of wealth that is not a product of work.”³⁶ There is also an important social justice component—avoiding the exploitation of poorer members of society by unscrupulous merchants—underlying the prohibition on *Riba*, which dates back to the barter economy of pre-Islamic civilization in the Middle East (before the seventh century A.D.).³⁷

2. Avoidance of Vice and Encouragement of Financially Sound Investing

Second, *Shari’a* prohibits Islamic investment in certain industries considered to promote Islamic vices, including alcohol, pornography, gambling, and pork products; it also discourages investment in companies with high debt levels.³⁸ For equity investments in stocks, the prohibition includes investments in companies with heavy debt (an extension of the proscription of *Riba* and *Gharar*). This prohibition also applies to Muslim investment in stocks of companies engaged in such “unethical” behavior.³⁹ In essence, Islamic investments must be socially responsible, not

30. Seniaowski, *supra* note 20, at 707.

31. See generally Mahmoud A. El-Gamal, *An Economic Explication of the Prohibition of Riba in Classical Islamic Jurisprudence*, in ISLAMIC FINANCE: LOCAL CHALLENGES, GLOBAL OPPORTUNITIES: PROCEEDINGS OF THE THIRD HARVARD UNIVERSITY FORUM ON ISLAMIC FINANCE (2000) [hereinafter El-Gamal, *Economic Explication-Riba*], available at <http://www.ruf.rice.edu/~elgamal/files/riba.pdf> (arguing in favor of an interpretation of *Riba* based on ideas of precommitment and economic efficiency and against other understandings of *Riba* that are based on simple notions of exploitation).

32. See El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 9 n.1 (“The English reader may take the term “usury” to mean exorbitant interest, as most contemporary dictionaries would indicate . . . *Riba* (a term for which no contemporary English translation would be accurate) is strictly forbidden regardless of how small or large the interest rate may be.”). See generally Seniaowski, *supra* note 20, at 707-12, 715-19 (discussing the scope of the definition *Riba* and classical and modern views on what constitutes *Riba*).

33. Moghul & Ahmed, *supra* note 8, at 168 (“Jurists have almost unanimously forbidden commercial bank interest.”).

34. El-Gamal, *Economic Explication-Riba*, *supra* note 31, at 3.

35. Angelo L. Rosa, *Keeping the Faith*, L.A. LAW., Feb. 2005, at 22. Many scholars believe that under Islamic law there is no time-value of money. Certain critics, however, contend that the “notion that there is no time-value for wealth in Islam is false . . .” El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 4 n.3; see also El-Gamal, *Economic Explication-Riba*, *supra* note 31, at 3.

36. Sharawy, *supra* note 7, at 161.

37. Seniaowski, *supra* note 20, at 707-08.

38. Michael Saleh Gassner, *Islamic Finance: Short in Gambling, Long in Trade*, SWISS DERIVATIVES REV., June 2004, at 26, 27, available at <http://www.islamicfinance.de/swissderivativesreviewissue25.pdf>; see also El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 20 (discussing the filters that limit the areas in which Islamic investment is allowed).

39. See Ibrahim Warde, *The Prophet and the Profits: Islamic Finance*, LE MONDE DIPLOMATIQUE

encourage activities considered sinful from an Islamic point of view, and be invested in a financially sound manner. As discussed below, oil and gas operations are acceptable activities from an Islamic perspective.

3. *Gharar*

The avoidance of *Gharar*—or unacceptable risk taking—is another fundamental principle of Islamic finance central to the structuring of *Shari'a*-compliant transactions. Sometimes translated as “trading in risk,” the *Hadith* discusses *Gharar* at length.⁴⁰ Intrinsically, the limitation on *Gharar* is related to the Islamic prohibition on gambling.⁴¹ Unlike *Riba* (which is an absolute prohibition) some level of risk remains a fundamental aspect of commercial life and risk allocation a necessary component of Islamic finance; only disproportionate risk, speculative trading and transactions meeting exceeding limitations are considered *Gharar*.⁴² The key element of *Gharar* is uncertainty. This concept arose in early Islamic times where *Gharar* was often associated in the *Hadith* with the sale of unborn livestock or unripened fruit on trees, or the payment of a fixed price upfront for a fisherman’s prospective catch. But hiring the fisherman to go fishing for you and paying him for his labor would be acceptable, as labor is not an uncertain concept.⁴³ Because of *Gharar*, Islamic jurists typically forbid the use of conventional forward contracts (but certain types of *Shari'a*-compliant forward sales, called *Bai Al-Salam*, and construction arrangements, called *Istisna'a*, are allowed),⁴⁴ swap agreements, hedges, options, derivatives, and financial insurance.⁴⁵ For an Islamic bank to be able to offer or participate in a hedge fund or an options transaction, such a fund or transaction must be structured in compliance with *Shari'a*, a challenging process that has been tackled successfully by only a small number of Islamic banking pioneers with assistance from some of the leading Islamic scholars.

4. Participation in the Performance of Assets

Finally, and largely as a consequence of the elements discussed above, *Shari'a*-compliant finance is primarily asset-based⁴⁶ and hinges on the sharing of risk.⁴⁷ “In a

[ENGLISH EDITION], Sept. 2001, available at <http://mondediplo.com/2001/09/09islamicbanking>.

40. Mahmoud A. El-Gamal, *An Economic Explication of the Prohibition of Gharar in Classical Islamic Jurisprudence*, at 2, available at <http://www.ruf.rice.edu/~elgamal/files/gharar.pdf>.

41. *Id.* at 9.

42. “For *gharar* to have legal consequences: (1) such *gharar* must be excessive and not trivial; (2) it must pertain to the subject matter of the sale; and (3) society must not be in need of the contract in question *Gharar* may also be limited and controlled through formal regulation.” Moghul & Ahmed, *supra* note 8, at 171.

43. El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 6-7.

44. Moghul & Ahmed, *supra* note 8, at 170-72.

45. El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 6-8. Some recent transactions in the field included the use of hedges by some parties to the deal without sacrificing *Shari'a* compliance.

46. Rosa, *supra* note 35, at 24 (“Most crucially, under the *shari'a*, all finance must be directly tied to tangible assets.”).

47. Sharawy, *supra* note 7, at 166 (“[T]he basis for Islamic banking and finance transactions is the principal of shared risk allocation.”).

nutshell, Islamic finance is based on the trade of productive assets, the sharing of risks in the development of projects, [and] the promotion of entrepreneurship."⁴⁸ Islamic investing is essentially a hybrid of debt and equity, but is recognized by Islamic scholars to be unique from both. Islamic scholars prefer that investors obtain some form of ownership or participating interest in the underlying asset, although such ownership may be only indirectly beneficial in nature, and the level of actual participation is often passive. The key, however, is that the investor's return must be tied to the performance of the underlying asset. Because the "borrower" cannot pay interest, it instead shares the profits from its endeavors with the investors, with each bearing some of the risk that the underlying assets could underperform. Even though *Shari'a* prohibits "payment or receipt of any interest on loans of money," Islamic law "permits and actually encourages the allocation of risks and rewards and sharing in the resulting profits or losses."⁴⁹ As discussed in greater detail below, in the oil and gas context this means the investors would likely share in reserve, price, and operating risks, but the Islamic investor could still hold a merely passive economic interest (such as a royalty). Therefore, Islamic finance is essentially non-recourse to the "borrower" or his assets beyond the specific assets that support or collateralize the transaction. In this context, collateral serves as added security in the event of a breach of contract or fraud by the "borrower," not as traditional security for a secured loan. It also follows that both private equity and venture capital investing are encouraged under Islamic teachings.

B. *Types of Islamic Finance Structures and Applicability to Oil and Gas Deals*

1. *Ijara*

An *Ijara* is essentially an Islamic finance lease or sale-leaseback, often used to purchase real estate, plant, or machinery.⁵⁰ A lease transfers the usufruct associated with the asset for a specified period of time, not the ownership of the asset, and Islamic law supports the sale of usufruct.⁵¹ The lessor (which could be a bank) leases the assets for a set lease term at an established rental price; at the termination of the lease, subject to the terms of the lease agreement the assets can either revert back to the lessor or may be acquired by the lessee.⁵² However, unlike traditional leases, there can be no predetermined sales price for the asset at the end of the term, and the lessee cannot be required to purchase the asset at the end of the term.⁵³ *Ijara* are therefore more akin to traditional operating leases rather than a capital lease. Also, unlike some traditional Western leases, the financier would be responsible for maintaining insurance, and the lessee is not responsible for full rent in the case of a casualty loss affecting the asset during the lease.⁵⁴ A financial institution serving as the lessor in an *Ijara* transaction would likely use the underlying value of the leased

48. Bilal, *supra* note 2, at 158.

49. Ariel Bershadsky, *Innovative Financial Securities in the Middle East: Surmounting the Ban on Interest in Islamic Law*, 9 U. MIAMI BUS. L. REV. 107, 110 (2001).

50. Tacy, *supra* note 8, at 358.

51. See El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 13.

52. See Bershadsky, *supra* note 49, at 113.

53. Tacy, *supra* note 8, at 359.

54. Bershadsky, *supra* note 49, at 113; Bilal, *supra* note 2, at 154.

asset, depreciation estimates, creditworthiness of the lessee, and the opportunity costs of the capital employed in calculating rental payments for conventional lease; the lease payments will reflect an implied interest rate based on these factors. Despite these similarities with conventional leases, however, with an *Ijara*, "in the final analysis, the difference will be in the form of the contract. If the lease is structured in accordance with the various conditions . . . of [Islamic] jurisprudence, it will contain no *Riba* . . ."⁵⁵

In the context of the oil and gas industry, an *Ijara* could be an ideal mechanism for leveraged lease financing of large pieces of oilfield equipment, notably deepwater platforms or drillships; provided that, in the context of a *Sukuk* offering (a type Islamic asset-backed security described in more detail below), the value of such oilfield equipment should be equal to, or represent a material percentage of, the offering amount. Although *Ijara* has not yet appeared in the U.S. marketplace in the upstream context, oil and gas companies have employed conventional leverage lease or sale-leaseback structures, and *Ijara* should be an ideal *Shari'a*-compliant substitute. The Dolphin Gas Project in the Persian Gulf and a Pakistani pipeline project, both discussed in more detail below, were financed using *Ijara*, but it is not a form yet used in the oil and gas industry outside of the Muslim world.

2. *Musharaka* and *Mudaraba*

A *Musharaka*—literally "partnership" or "sharing" in Arabic—transaction involves capital contributions by investors or financial institutions in a partnership arrangement with a client who is operating a business venture. The client also provides some capital, but mainly provides "management efforts and expertise"; profits and losses from the partnership venture are shared on a pre-arranged basis.⁵⁶ A related type of transaction, a *Mudaraba* arrangement, compares well with venture capital financing in traditional capital markets—the investors in a *Mudaraba* provide capital and the "borrower" puts in only sweat equity by managing the venture; only the investors contribute capital.⁵⁷ In a *Mudaraba* both the investors and the "borrower" share in the profits on a predetermined basis (as is the case in a *Musharaka*), but losses are treated differently in a *Mudaraba*. In *Musharaka* "losses are borne in proportion to the investment" as predetermined by the parties, but *Mudaraba* investors are solely responsible for economic losses and financial liabilities because the "borrower" contributes no money on its own, just sweat equity.⁵⁸ *Mudaraba* deals can involve multiple investors sharing in the risk associated with a large project, such as the financing of an oil tanker, which may bear a level of concentrated risk a single bank may find unappealing.⁵⁹ A series of such investments can be combined to create a *Mudaraba* fund with a fund manager lending expertise in deciding where to invest the capital provided by a number of Muslim investors.⁶⁰

55. El-Gamal, *Contemporary Islamic Banking*, *supra* note 24, at 14-15.

56. Tacy, *supra* note 8, at 359.

57. Sharawy, *supra* note 7, at 169; Tacy, *supra* note 8, at 359-60.

58. See Berschadsky, *supra* note 49, at 114.

59. *Id.* at 118.

60. See Berschadsky, *supra* note 49, at 118 (the bank organizes a pool of investors' funds for a contract led by a fund manager). See generally Tacy, *supra* note 8, at 359-60 ("The client serves as the financial institution's agent" and provides expertise.).

In either a *Musharaka* or *Mudaraba* transaction, the underlying business must be *Shari'a*-compliant.

Either *Musharaka* or *Mudaraba* could be used to finance upstream activities. Investors or financial institutions would provide a portion (*Musharaka*) or all (*Mudaraba*) of the capital, and the oil and gas operator would operate the oil and gas properties and provide the necessary expertise (in the case of a *Musharaka*, the oil and gas operator would also provide some portion of the initial capital). The arrangement could be documented in a joint venture agreement, or the parties could form a limited liability company, providing for dividends to be shared in a set proportion predetermined by the parties at the outset. The successful development of the oil and gas project could provide significant upside for the investors. While the investors would be passive in the sense that they would not have any operational control over day-to-day operations, the operator could agree to abide by certain covenants, and would likely be held to a prudent operator standard. A development or business plan may also be agreed to in advance to help define the scope of the operations to be carried out. Given the flexibility of these types of Islamic finance arrangements, *Musharaka* and *Mudaraba* could be used widely at all levels of the energy industry for operations of various sizes and levels of complexity.

3. *Murabaha*

The most common form of Islamic finance,⁶¹ *Murabaha* (also referred to as “cost-plus financing” or “cost-plus sales”), is a form of a sales contract in which the financial institution or investors buy an asset and then later sell it to the “borrower” at a marked-up price, which includes a profit component.⁶² Payments are made in installments, either on a deferred basis or through upfront payment with deferred delivery.⁶³ *Murabaha* instruments usually supply only short-term financing. One major difference between *Murabaha* and conventional purchase money contracts is that if there is a default the “borrower” is only liable for the contract price—not additional interest, fees, or penalties.⁶⁴ Despite its popularity, *Murabaha* would not likely serve as a source of funds for significant oil and gas exploration and production activities because of the long time horizons associated with such projects, but *Murabaha* could possibly be used for the purchase of equipment for use in oil and gas operations. One other obstacle facing growth in the utilization of *Murabaha* instrument stems from the fact that *Murabaha* is considered by certain Islamic schools to be a debt instrument, making it difficult to market Islamic financial products broadly in the Islamic world. Therefore, *Sukuk* offerings that are supported by *Murabaha* contracts are not readily tradable under some interpretations of *Shari'a*.

61. Berschadsky, *supra* note 49, at 111 (Murabaha makes up approximately 75% of the Islamic finance market.).

62. Bilal, *supra* note 2, at 153.

63. Berschadsky, *supra* note 49, at 112.

64. Tacy, *supra* note 8, at 358.

4. *Istisna'a*

Istisna'a (commissioned manufacturing) remains a popular vehicle for the financing of large infrastructure projects in the Middle East and is the most widely-used *Shari'a*-compliant funding technique used for long-term project financings.⁶⁵ Under *Istisna'a*, particular assets are manufactured or constructed to certain specifications set by the financial institutions financing the project. *Istisna'a* has already been used, as discussed below in greater detail, in several downstream projects in the Muslim world. In addition to project finance for large downstream projects such as refineries, petrochemical plants, and the like, this form of Islamic finance holds much promise for the financing of large equipment purchases in the upstream sector (such as the multimillion dollar platforms becoming increasingly common in deepwater exploration) and in the construction of midstream assets (including pipelines, gathering systems, and storage facilities).

5. *Sukuk*

Sukuk is a recently-developed Islamic investment product that first appeared in 2002, when Malaysia issued a government-backed *Sukuk*, the first of its kind.⁶⁶ *Sukuk* are essentially asset-backed instruments representing a beneficial ownership interest in the underlying asset. *Sukuk* is a certificate that resembles in many respects a traditional bond or asset-backed security, but is technically neither debt nor equity. *Sukuk* are normally combined with other forms of Islamic finance (many are *Musharaka* based), and they are best viewed as a means to raise funds from a wider spectrum of investors rather than an entirely separate category of Islamic banking. Since its inception in Malaysia in 2002, *Sukuk* have expanded to other Southeast Asian and Middle Eastern countries,⁶⁷ and now *Sukuk* offerings have even appeared in the United Kingdom and continental Europe (where the government of Saxony-Anhalt in Germany raised 100 million in a *Sukuk* offering in 2004).⁶⁸ Despite the incipient nature of this form of Islamic finance, *Sukuk* offerings have taken off and has proved to be very popular with investors. For example, a \$3.5 billion *Sukuk* for the construction of port facilities in Dubai offered in 2006 (based on an underlying *Musharaka* transaction) was oversubscribed by as much as \$8 billion.⁶⁹ Oil and gas properties can serve as the underlying asset backing a *Sukuk* offering; the financial institution or investors can use the funds raised by the *Sukuk* issue to purchase a "passive" economic interest in the oil and gas properties, in the form of an overriding royalty or profits interest. The "borrower" would then use the funds to conduct exploration, production and development activities, with production from the underlying oil and gas properties creating a stream of income for the investors (who would concomitantly share in operational, pricing and reserve

65. Berschadsky, *supra* note 49, at 116-17.

66. Lafferty, *supra* note 9.

67. *Id.*

68. Mohammed El Qorchi, *Islamic Finance Gears Up: While Gaining Ground, the Industry Faces Unique Regulatory Challenges*, FIN. & DEV., Dec. 2005, at 46, 47, available at <http://www.imf.org/external/pubs/ft/fandd/2005/12/qorchi.htm>.

69. Sohail Zubairi, *Introduction to Sukuk: Really Most Versatile Bond?*, GULF NEWS, Feb. 1, 2006, available at <http://archive.gulfnews.com/articles/06/02/01/10015519.html>.

risks associated with the underlying properties). The International Monetary Fund has noted that *Sukuk* "could lay the groundwork for the emergence of Islamic capital markets. But while the *Sukuk* market is developing rapidly, it remains primarily a market where holders keep bonds to maturity, with limited secondary market trading."⁷⁰

III. EMERGENCE OF ISLAMIC FINANCE IN OIL AND GAS TRANSACTIONS

Islamic finance represents a promising yet largely untapped resource for financing in the oil and gas industry, which is one of the largest and most capital-intensive industrial sectors in the world. It has been estimated that in the next twenty-five years, approximately \$4 trillion will be invested in the upstream oil and gas sector alone, with total investment in all oil and gas projects likely topping \$16 trillion.⁷¹ Despite the oil and gas industry's size and projected need for capital, Islamic funding for oil and gas projects has been isolated geographically and, although exact figures are not available, it is clear that *Shari'a*-compliant capital represents only a tiny fraction of the overall market for oil and gas finance. Most oil and gas producers have continued to rely on conventional sources of funds, and Islamic financing for oil and gas assets located in the United States is truly a novel concept. The majority of the existing *Shari'a*-compliant efforts in the oil and gas sector have involved gigantic ventures in the Gulf Cooperation Council (GCC) member states,⁷² sponsored by some of the largest companies and financial institutions in the world, often supported with government backing as well. Moreover, Islamic finance has not yet been used for exploration and production projects. Although currently alien to most oil and gas industry players operating outside of the Middle East, Islamic finance may soon provide unmatched financing opportunities for the exploration and production sector in the United States and throughout the world.

Traditionally, energy projects in the Middle East primarily have been undertaken either by Muslim states or state-controlled companies (particularly Saudi Arabia and Qatar) acting in conjunction with the "oil majors" (vertically-integrated oil and gas mega-corporations such as ExxonMobil and ConocoPhillips) with deep pockets, strong balance sheets, and easy access to conventional credit and capital markets. Major international banking institutions, national governments, and quasi-governmental financing entities (such as the Ex-Im Bank)⁷³ provide most of the credit for these typically enormous undertakings. Given this backing, Islamic finance has not been a mandatory element in large Middle East natural resource projects. In fact, where it has appeared, Islamic finance components may have been included more because there was a need in the market for *Shari'a*-compliant investment opportunities than there was a true need for additional capital from other than conventional sources. Islamic finance nonetheless plays a supporting role in large energy projects in the Persian Gulf region, generally as a supplement to

70. El Qorchi, *supra* note 68.

71. Press Release, International Energy Agency, World Energy Investment Outlook Sees Need for \$16,000 Billion of Energy Investment Through 2030, Highlights Major Challenges in Mobilising Capital, Nov. 4, 2003, available at http://www.iea.org/textbase/press/pressdetail.asp?PRESS_REL_ID=107.

72. Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

73. See Andreas Campomar, *Gas to Liquidity*, PROJECT FIN., May 2004, at 40.

more traditional funding,⁷⁴ and generally in connection with massive capital-intensive projects such as oil refineries, liquefied natural gas terminals, and petrochemical plants.

The industry boasts a number of examples of successful Islamic funding of energy projects, but they all demonstrate isolation in the Middle East and concentration on the downstream sector. With one exception discussed in greater detail below, U.S. assets have not been included in these projects. The Dolphin Gas Project, which includes natural gas production in Qatar and a pipeline to the United Arab Emirates, represents one of the largest Islamic financings of a Persian Gulf oil and gas project to date, involved a \$1 billion *Ijara* and *Istisna'a* component alongside a \$2.45 billion conventional debt offering.⁷⁵ The almost \$3 billion financing for the massive Qatargas 3 project will include a mix of commercial debt and Islamic finance tranches.⁷⁶ Out of a total of \$5.5 billion in funding, the Islamic tranche of the financing for the Rabigh refinery in Saudi Arabia will total some \$500 million.⁷⁷ Kuwait Finance House plans to fund \$3 billion in Gulf infrastructure projects—including gas transportation systems and petrochemical plants—using a blend of its own equity, third-party funding, and *Sukuk* offerings.⁷⁸ Other *Sukuk* offerings in the sector include an \$800 million offering by Saudi Arabian petrochemical giant Sabic and the \$1.27 billion offering by Jimah Energy Ventures in Malaysia.⁷⁹ The Sahara Petrochemical Company, advised by HSBC, has mandated a \$400 million, fourteen-year Islamic financing for a petrochemical project in Saudi Arabia that represents “one of very few projects fully financed by Islamic debt.”⁸⁰ Another example of government-related financing in the Middle East is the \$50 million pipeline financing in Pakistan using a five-year *Ijara* facility.⁸¹ Islamic financing for liquefied natural gas (LNG) ship construction “cannot be very far away” and a \$26 million *Sukuk* offering is in the works for the pre-finance portion of a LNG container ship.⁸² As these examples highlight, Islamic financing for oil and gas projects primarily has been dedicated to huge projects isolated in the Muslim world and largely has been limited to supplemental tranches supporting (by way of inter-creditor agreements) more significant amounts of funding from conventional sources.

Oil and gas projects of all types outside the Muslim world, and upstream transactions inside the Islamic sphere, have been funded by traditional debt, equity, and capital markets financing methods. Despite its use in massive construction projects in the downstream portion of the oil and gas industry in Persian Gulf, Islamic financing has not been widely used for oil and gas exploration and development projects. Furthermore, until very recently, Islamic finance techniques have been completely absent from oil and gas transactions involving operating assets

74. This may lead to inter-creditor problems, now often addressed by treating both Islamic investors and conventional investors on a *pari passu* basis. Berschadsky, *supra* note 49, at 117; *see also* Morrison, *supra* note 2, at 32.

75. Susan Traill, *Blending Islam*, PROJECT FIN., Sept. 2005, at 29.

76. *Id.* at 30.

77. *Rabigh Project Signs Today*, PROJECT FIN., Mar. 2006.

78. *KFH Plots Sukuk Financing*, PROJECT FIN., Oct. 2004, at 6.

79. *See* Emilie Rutledge, *Sukuk Enters English Lexicon*, ARAA GULF VIEWS, July 29, 2006, available at <http://www.gulfinthemedi.com>.

80. *Al Waha Shortlists Banks*, PROJECT FIN., May 2006, at 9.

81. Seniaowski, *supra* note 20, at 725.

82. Andreas Campomar, *Tender Mercies*, PROJECT FIN., Oct. 2005, at 38, 40.

in the United States. Given the large amount of cash in Muslim hands engendered by the sustained run-up in oil and gas prices, and the burgeoning exploration and production opportunities often undertaken by smaller independents, a handful of banks, supported by a small number of international law firms, have begun to consider financing oil and gas projects outside of the Middle East with instruments compliant with Islamic law.

IV. LEGAL ANALYSIS: COMPATIBILITY OF ISLAMIC FINANCE AND OIL AND GAS ASSETS

Oil and gas assets provide an ideal basis for *Shari'a*-compliant transactions—and as such it is expected that the Islamic model will come to be used more often in this field. As a threshold matter, oil and gas operations are approved activities in which Muslims can invest without running afoul of prohibitions on sinful commercial endeavors.⁸³ Oil and gas assets fit well with an Islamic model; the model has a preference for investors to share in the ownership (and concomitantly the success or failure) of the underlying asset.⁸⁴ Depending on the specifics of a particular U.S. jurisdiction, oil and gas mineral estates (typically in the form of leasehold interests) are often considered to be real property, with relatively defined rights under the law. The American legal approach to dominion over, and divisibility of ownership in, oil and gas provides another element useful in structuring *Shari'a*-compliant financings. Of great utility to *Shari'a*-compliant financings is the possibility of joint ownership of mineral rights, the ability to transfer a mineral estate without transferring the associated surface land, the ability to separate an operating interest in a mineral estate from a passive interest that receives only income from the production on the property, and the well-recognized right to transfer or encumber property interests in oil and gas using a variety of different legal techniques. Furthermore, the ability to carve out well-defined interests with clearly established attendant rights under law fits well with Islamic *Shari'a* emphasis on ensuring clarity in the description of the subject matter in investment agreements. There are a number of ways to divide the ownership of an oil and gas property, with American law often allowing for the transfer of a passive economic interest that comprises real property. These attributes are perfectly suited for Islamic financing.

Petroleum production remains an inherently risky business, but the risks are reasonably calculated and can be managed so as to prevent a transaction involving oil and gas properties from violating prohibition on *Gharar*. Islamic investors can share in that risk (receiving a portion of the profit if the assets perform successfully, but losing some or all of their investment if operations ultimately fail) by participating in any number of Islamic investment forms applied to oil and gas assets. The distinct nature of the well-developed oil and gas legal tradition in the United States provides a firm foundation for structuring Islamic deals, and creates opportunities for creating valuable security interests in an asset and establishing beneficial ownership in the underlying assets. An analysis of the characterization of oil and gas assets in the United States follows (with a focus on the laws of Texas and

83. Assuming, for the purposes of direct equity investments, that an oil and gas company is not heavily burdened with debt, such an investment would, by extension, be considered to contain prohibited *Riba*.

84. See discussion, *supra* Section II.

Louisiana, the states with perhaps the most well-developed bodies of oil and gas law), including additional commentary on bankruptcy considerations and special concerns with respect to federal offshore oil and gas leases.

A. *Oil and Gas Assets Under U.S. Law*

1. The Nature of the Mineral Estate Under U.S. Law

The characterization of oil and gas ownership rights (often called a “mineral estate”) under American law provides an ideal starting point for the structuring of asset-backed Islamic transactions. The laws of many states (including many of those states that produce significant amounts of hydrocarbons) view mineral estates as real property, although certain other states—notably California and Kansas—do not recognize a real property interest in oil and gas at all.⁸⁵ States that do not recognize oil and gas in the ground as real property usually employ a “license” regime or consider oil and gas to be personal property in the ground.⁸⁶ While a license to search for and produce oil or gas and reduce it to personal property once extracted is still a valuable and material right that can be used as a basis for a *Shari’a*-compliant deal, the attributes and benefits of dealing with real property interests provide an enhanced platform from which to structure an Islamic deal. “The great advantage of the ownership-in-place theory is a property interest whose attributes are more or less predictable and which fits into the pre-existing rules and laws applying to other corporeal interests in realty.”⁸⁷ Since the law of the *situs* of the property typically governs its characterization, oil and gas resources located in “real property” states present a better platform from which attorneys and financiers interested in *Shari’a*-compliant oil and gas deals may structure a transaction. A transfer of a real property interest certainly represents a transaction with economic substance, a basic tenet of Islamic law, and joint ownership of oil and gas property allows for the sharing of risk associated with a productive asset.

Fortunately, much of America’s domestic oil and gas activity takes place in jurisdictions where a mineral estate is real property for both substantive and procedural purposes. In Louisiana—a state with significant production of onshore, coastal, and offshore oil and gas production⁸⁸—oil and gas estates are considered real rights and incorporeal immovable property under statute.⁸⁹ In Texas (the largest

85. RICHARD W. HEMINGWAY, *THE LAW OF OIL AND GAS* 29-31 (3d ed. West 1991).

86. *Id.* at 31-33.

87. *Id.* at 32.

88. ENERGY INFO. ADMIN., DEP’T OF ENERGY, *PETROLEUM PROFILE: LOUISIANA* (2006), available at <http://tonto.eia.doe.gov/oog/info/state/la.html>.

89. LA. REV. STAT. ANN. §§ 31:16, 31:18 (West 2006). See *Terry v. Terry*, 565 So. 2d 997, 1000 (La. Ct. App. 1990) (“A mineral right is an incorporeal immovable. It is alienable and heritable. The basic mineral rights are the mineral servitude, the mineral royalty, and the mineral lease. These mineral rights are classified as real rights.”) (citing La. Rev. Stat. Ann. §§ 31:16, 31:18)). “Oil, gas and other mineral leases, and contracts applying to and affecting these leases or the right to reduce oil, gas, or other minerals to possession, together with the rights, privileges, and obligations resulting therefrom, are classified as real rights and incorporeal immovable property. They may be asserted, protected, and defended in the same manner as may be the ownership or possession of other immovable property by the holder of these rights, without the concurrence, joinder or consent of the landowner” *Robichaux v. Pool*, 209 So. 2d 77, 79 n.1 (La. Ct. App. 1968) (quoting LA. REV. STAT. ANN. § 9:1105 (West 1950) (repealed 1975)).

producer of both oil and gas in the lower 48 states and home to significant fields both on and offshore)⁹⁰ and a number of other states with an active oil and gas sector (notably Montana, New Mexico, and Colorado),⁹¹ judicial decisions have long considered the ownership of a mineral estate to be a real property interest.⁹² In Texas, "oil and gas in place is real property, and a part of the corpus of the property itself,"⁹³ and under Texas law, "[a]n oil and gas lease conveys an interest in real property."⁹⁴ In Louisiana, the right is granted by statute.⁹⁵ Given this jurisprudence, a significant percentage of onshore and coastal American oil and gas property is classified as real property. As discussed below in further detail, the majority of operating offshore oil and gas leases on federal OCS lands are subject to the laws of Texas and Louisiana, and therefore such interests should also be considered real property.

In many states, the mineral estate is separate from the surface estate and is dominant over the surface estate, meaning that the mineral estate owner has certain rights to use the surface to conduct oil and gas operations. In jurisdictions that follow the recognition of ownership of oil and gas in place in the land as a form of realty,⁹⁶ "not only does the landowner have a possessory estate in the oil and gas, but he may create, either in himself or a third party, a similar estate in the oil and gas in place, separate from the rest of the land."⁹⁷ In Texas, the mineral estate is dominant over the surface estate, and has an implied easement to use the surface estate as reasonably necessary to develop the mineral estate.⁹⁸

2. Joint Ownership: Working Interests, Royalties, and Production Payments

The mineral estate may be "severed" from the surface estate (although such severance may be subject to a contingent remainder interest whereby the mineral estate can return to the surface holder if the terms of the mineral lease are not followed) and is dominant over the surface estate, but the mineral estate itself can also be subdivided in a variety of ways. American oil and gas law has developed over time to recognize varying methods of severing, transferring, or encumbering mineral estates, often resulting in joint ownership of oil and gas properties, with the

90. See ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, DOE/EIA-0216, 2005 ANN. REP., ADVANCE SUMMARY: U.S. CRUDE OIL, NATURAL GAS, AND NATURAL GAS LIQUIDS RESERVES (2006), available at http://www.eia.doe.gov/pub/oil_gas/natural_gas/data_publications/advanced_summary/current/adsum.pdf.

91. See *id.*; ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, NATURAL GAS GROSS WITHDRAWALS AND PRODUCTION (2006), available at http://tonto.eia.doe.gov/dnav/ng/ng_prod_sum_dcu_NUS_m.htm.

92. See *Backar v. W. States Producing Co.*, 547 F.2d 876, 881-82 (5th Cir. 1977) ("Under Texas, Oklahoma and New Mexico law, oil and gas leases are real property, but under New York law, oil and gas leases are personal property." (footnote omitted)); HEMINGWAY, *supra* note 85, at 29 n.131.

93. *Davis v. Atl. Oil Producing Co.*, 87 F.2d 75, 76 (5th Cir. 1936) (citation omitted).

94. *Rogers v. Ricane Enters., Inc.*, 772 S.W.2d 76, 80 (Tex. 1989) (citation omitted).

95. See *Robichaux*, 209 So.2d at 79.

96. See HEMINGWAY, *supra* note 85, at 29-30 (discussion of *Tex. Co. v. Daugherty*, 176 S.W. 717 (Texas and common law background)).

97. HEMINGWAY, *supra* note 85, at 29-30.

98. *Humble Oil & Ref. Co. v. Williams*, 420 S.W.2d 133, 134 (Tex. 1967); *Stradley v. Magnolia Petroleum Co.*, 155 S.W.2d 649, 652 (Tex. Civ. App.—Amarillo 1941, writ ref'd); see also Douglas Hale Gross, Annotation, *What Constitutes Reasonably Necessary Use of the Surface of the Leasehold by a Mineral Owner, Lessee, or Driller Under an Oil and Gas Lease or Drilling Contract*, 53 A.L.R.3d 16, 65-77 (1973) (discussing the rule of reasonable necessity and the dominant estate concept).

various owners holding different kinds of property rights. "Joint ownership of mineral rights is particularly common; fractionalized interests are the rule rather than the exception."⁹⁹ This broad flexibility allows for the creative structuring of transactions to meet particular economic needs and is compatible with the principles of *Shari'a*. An oil and gas lease can be jointly owned by several lessees, with the lessor holding a reserved royalty interest, and various third parties holding overriding royalties or other more creative forms of property rights; subject to any private contracts between the parties (which, for example, may contain preferential purchase rights clauses in favor of co-owners), each property rights holder in the property may freely assign his interests. The ability to assign these interests is a basic attribute of real property rights: "It is axiomatic in Anglo-American law that the owner of property rights can transfer property rights in whole or in part."¹⁰⁰ This facet of U.S. oil and gas law should prove useful in arranging *Shari'a*-compliant deals, where subdivided mineral estates could potentially be used as the centerpiece of an asset-backed Islamic financing. This section discusses the nature and utility of unbundling oil and gas property rights.

Perhaps the most utilitarian concept in American oil and gas law, and one potentially very functional in Islamic financings, is the ability to transfer (or reserve) a cost-free economic interest in an oil and gas lease separate from the right to operate the lease. Such an economic interest is called a "royalty," defined as "a share of production free of the costs of production, when and if there is oil and gas production on the property."¹⁰¹ In many key American jurisdictions, the owner of property can either completely sever his mineral interest by transferring it outright to another party, or the property owner can transfer a reversionary interest in the oil and gas estate (with the reversionary interest contingent upon adherence to the terms of the lease instrument, namely that production continues); in either case, the owner or lessor of the mineral estate will typically have an easement over the surface estate sufficient to conduct operations.¹⁰² When a landowner severs the mineral estate or, as lessor, grants an oil and gas lease to a lessee, the lessor will often reserve an economic interest in the production from the mineral estate as part of the lessor's compensation.¹⁰³ Typically, a lessor will reserve a fractional economic interest (for example, a 1/8 or 1/6 royalty) in the production from the leasehold property (although this is negotiable and varies from case to case). This interest is often called a "lessor's royalty" or a "landowner's royalty."¹⁰⁴ The lessee is left with a reduced revenue interest in the lease property: the lessee has to pay for 100% of the costs, but only gets to keep, in the case of a 1/8 lessor's royalty, 82.5% of the production.¹⁰⁵ From this reduced revenue interest, the lessee may subdivide property

99. LOWE, *supra* note 6, at 84.

100. *Id.* at 37.

101. *Id.* at 43. John Lowe explains that four attributes distinguish royalty interests from mineral interests: a royalty "does not have the right of surface use," "is not profit-sharing or cost-bearing," "does not have the right to lease," and "does not share in lease benefits." *Id.* at 44.

102. *Id.* at 37-43. "Where an owner transfers less than the whole bundle of property rights he or she owns, we say that rights have been 'severed.'" *Id.* at 37.

103. *Id.* at 43.

104. *Id.* (emphasis omitted).

105. By way of example, if 1,000 barrels of oil are produced under a lease with a 1/8 reserved royalty, the lessor is entitled to receive 125 barrels (or the fair market value thereof); if a lessee produces 10,000 barrels, the lessor is entitled to 1,250 barrels (or the fair market value thereof). If there is no production,

rights in the lease further (depending on the terms of the lease contract), and may grant additional royalties to third parties (but only out of his reduced revenue interest—the lessee cannot encumber the royalty already owed to the lessor). Such assigned royalties are often referred to as “overriding royalties,” defined as a “royalty interest carved out of the lessee’s leasehold interest.”¹⁰⁶ Overriding royalty holders are also entitled to a percentage of production without having to bear any costs associated therewith.¹⁰⁷ In short, royalties can be retained either by the original owner of the entire property as a reservation in an assignment or a lease grant, or it may be granted by a subsequent mineral estate holder in a reservation or deed.

While a royalty entitles the holder thereof to a share of production, it does not grant the royalty holder any right to operate or otherwise control the oil and gas exploration and production activities on the property. The lessee or lessees retain the “working interest” in the lease, “so-called because the lessee acquires the right to work on the leased property to search, develop, and produce oil and gas (and the obligation to pay all costs).”¹⁰⁸ The working interest holder also bears any liabilities associated with the operations. With the obligation to pay generally comes the right to decide how to undertake such operations. The working interest owner must pay over a portion of production to royalty holders, irrespective of the costs associated with that production; the royalty, however, is only paid from proceeds of actual production, not out of the working interest owner’s pocket.¹⁰⁹ The trade-off is that the royalty owner is not required to pay any of the costs associated with operating the property, but at the same time has no right to control the operations on the property (subject to other agreements between the parties).

A royalty interest remains a real property interest in most states, although ownership of the oil and gas once produced is a personal property right.¹¹⁰ In Texas, it is “well-settled that a royalty interest in an oil and gas lease is an interest in real property,” with the same attributes as ownership of real property.¹¹¹ Under Texas law, a royalty, either reserved or granted, is a “fee simple interest in land.”¹¹² This characterization of royalties as real property interests also applies to transfers of the lease itself: an assignment of a mineral lease or any portion thereof constitutes a

no royalty is due. In terms of costs, if the lessee spent \$50,000 in drilling costs and \$10,000 in operating costs, and produced \$100,000 of oil, the lessee’s profit would be only \$40,000, but the royalty on the production would be assessed on the full \$100,000 (the value of total production); so the lessor would be owed \$12,500 under a 1/8 royalty and the lessee would only end up with a profit of \$27,500 (\$100,000 - \$12,500 royalty - \$60,000 in costs).

106. LOWE, *supra* note 6, at 43.

107. For a more detailed description of the term “overriding royalty” and attributes associated with the term, see 38 AM. JUR. 2D *Gas and Oil* § 215 (1999).

108. LOWE, *supra* note 6, at 444.

109. *Id.* at 43-46. A royalty “is a share of production free of the costs of production. A royalty is paid even if producing is a money-losing venture, and a royalty interest pays no production costs.” *Id.* at 44. Therefore, a royalty is generally considered non-recourse in and of itself. However, royalty arrangements are often accompanied by contractual rights negotiated between the working interest owner and the royalty owner that require the working interest owner to take certain actions, such as operating as a reasonably prudent operator. There are also specific judicial and statutory “default” rules applicable to working interest holders that have developed over time. See *Amoco Prod. Co. v. Alexander*, 622 S.W.2d 563, 567 (Tex. 1981).

110. HEMINGWAY, *supra* note 85, at 59.

111. *Kelly Oil Co. v. Svetlik*, 975 S.W.2d 762, 764 (Tex. App.—Corpus Christi 1998, pet. denied). This explicitly includes overriding royalties. *Id.*

112. *Amoco Prod. Co.*, 622 S.W.2d at 572.

transfer of real property under Texas law.¹¹³ Louisiana law also considers royalties and overriding royalties to be real property interests. In Louisiana, a mineral royalty is a real right that may be “assert[ed], protect[ed], and defend[ed] . . . in the same manner as the ownership or possession of other immovable property”¹¹⁴ Similarly, “[o]verriding royalties are . . . classified as real rights and incorporeal immovables.”¹¹⁵

Production payments are a specific type of royalty interest¹¹⁶ that may prove particularly useful in Islamic finance in the upstream sector. A production payment may be denominated by volume: it obligates the grantor to provide a set amount of hydrocarbons from production from the burdened properties, usually as a set percentage of monthly production, terminating when all volumes have been delivered.¹¹⁷ The grantor remains the operator of the underlying property and keeps the remainder of the volumes to pay operating costs.¹¹⁸ The operator will typically also enter into a separate contract (often called “production and delivery agreement”) with the production payment owner, by which the operator agrees to operate the properties subject to certain conditions (such as behaving as a reasonably prudent operator), and may agree to undertake certain capital expansion programs. The operator may also covenant to cover transportation and processing issues related to production and the provision of information and data to the grantee.¹¹⁹ The owner of a volumetric production payment bears the risk that the underlying reserve will fail to produce sufficient hydrocarbons, that the market price of the hydrocarbons will fall, or that operational difficulties will result in insufficient production (although such risks can be mitigated to some extent by hedges, covenants regarding operations, diversification over a portfolio of properties, careful modeling, etc.).¹²⁰ In essence, the holder of this type of interest does not have recourse to the grantor of the production payment (it is a non-recourse, asset-backed transaction reliant on the stream of income produced by the production payment). A volumetric production also fares well in bankruptcy¹²¹ and constitutes a transfer of real property in key oil and gas jurisdictions. In Texas, courts have held that production payments, like other forms of royalties, are real property interests.¹²² Louisiana cases have not discussed production payments in as much detail, but have

113. *Rogers*, 772 S.W.2d at 80 (citation omitted).

114. LA. CODE CIV. PROC. ANN. art. 3664 (2006).

115. *Terry*, 565 So. 2d at 1000 (citation omitted); *Robichaux*, 209 So. 2d at 79.

116. “A [volumetric production payment] is a non-operating, non-expense bearing, limited term overriding royalty interest carved out of the working interests in oil and gas leases. Because there is considerably more case law surrounding overriding royalty interests and their treatment, a [volumetric production payment] is often called a term overriding royalty interest to further support its characterization as real property or immovable interest.” Jeffrey S. Muñoz, *Exotic and Alternative Financing Structures—Where is the Market Going?*, in OIL & GAS AGREEMENTS: SALES AND FINANCINGS, ch.12 (Rocky Mtn. Min. L. Fdn. 2006).

117. *See id.*

118. *See id.* at 5.

119. *See id.*

120. *See id.* at 3.

121. *See id.* at 6.

122. *Terry Oilfield Supply Co. v. Am. Sec. Bank, N.A.*, 195 B.R. 66, 70 (Bankr. S.D. Tex. 1996) (“In Texas, a production payment is an interest in real property.”) (citation omitted); *see also* 38 AM. JUR. 2D *Gas and Oil*, *supra* note 107.

declared production payments to be a form of limited mineral royalty.¹²³ This type of asset participation (and risk bearing) is particularly attractive for *Shari'a*-compliant structuring (especially securitizations in the form of a *Sukuk*). As will be discussed below, the first Islamic financing backed by United States oil and gas assets utilized a volumetric production payment for just this reason.

In contrast to more traditional royalties granted on a cost-free basis, a “net profits interest” (NPI) is not cost-free, but remains a non-working purely economic interest. An NPI is a “share of gross production from oil and gas leases, measured by net profits received in connection with the ownership and operation of the leases,” that, in effect, allows a passive interest in the profits of the property.¹²⁴ A NPI may provide a good vehicle for a *Musharaka* or *Mudaraba* transaction by which the equity partner with the expertise in oil and gas operates the properties but shares profits with the partner providing the capital through the use of an NPI. Such interests could also prove useful in other types of Islamic transactions. However, royalties (including production payments) benefit from more clearly-established legal jurisprudence than NPIs, are generally considered to be real property rights, and may provide more bankruptcy protection.¹²⁵ As such, royalties generally seem more promising from a *Shari'a* structuring perspective.

Personal property also can factor into *Shari'a*-compliant deals, although it is not as attractive as real property interests for the reasons outlined above (namely, the well-established rules regarding severability of ownership). Most courts hold that oil and gas becomes personal property when produced¹²⁶—but this does not diminish the value of petroleum as an asset underlying Islamic transactions or as collateral for such transactions. The personal property remains a valuable asset that can back both Islamic transactions and as-extracted collateral security interests that are covered by the Uniform Commercial Code. Similarly, the equipment used in upstream operations, including multi-million dollar offshore platforms, are also considered personal property that can be the subject of a funding or pledged as collateral in Islamic financings. While fundamentally *Shari'a*-compliant transactions should be non-recourse to the “borrower,” it is perfectly acceptable to have recourse to collateral (which serves as security in the event that the “borrower” commits fraud or breaches the contract) as part of the “lenders” participation in the asset. This provides added security (lowering the cost of capital for the “borrowers”) without violating *Shari'a* principles. Large items of personal property commonly used in upstream and midstream oil and gas, as well as refineries and similar plants used downstream, could each be the subject of *Shari'a*-compliant lending (including *Ijara* transactions) or as additional support underlying a *Sukuk*, for example. The Uniform Commercial Code provides well-established guidelines for security interests in personal property and remains applicable when structuring Islamic financing deals with oil and gas plants and equipment.

The characterization of a royalty as a real property interest—with all of the attributes associated with real property and the right, fundamental to all real property rights, to freely transfer such interests—provides an ideal opportunity to use royalties as a centerpiece for *Shari'a*-compliant investments. As discussed in

123. *E.g.*, *Tex. Gas Exploration Co. v. Brian Invs., Ltd.*, 544 So. 2d 67, 71 (La. Ct. App. 1989).

124. Muñoz, *supra* note 116, at 7.

125. *See generally id.*

126. LOWE, *supra* note 6, at 11.

more detail below, the first ever Islamic finance transaction involving U.S. oil and gas assets was based on a royalty in the form of a production payment. The ability to sever the mineral estate from the surface estate combined with the further ability to carve out economic interests (i.e. royalties) free from the costs of production reinforces the concept of limit-passive participation in oil and gas assets by Islamic investors—without the need to actually own the surface estate or participate in the operation or development of the oil and gas property.

B. *Special Considerations Regarding Ownership of Federal Offshore Leases*

Oil and gas leases in federal offshore waters on the OCS in the Gulf of Mexico represent one of the richest prospects for exploration and production in the United States. The OCS is the focus of a significant amount of current domestic oil and gas activity. In 2004 (the last period for which statistics are meaningful, given the precipitous drop in production in 2005 due to Hurricanes Katrina and Rita), the OCS produced roughly 30% of domestic oil production in the United States and approximately 20% of domestic gas production.¹²⁷ More important, the prospective value of anticipated future discoveries on the OCS, particularly in deepwater (which requires huge capital investments in exploration, production activities, and equipment), makes the Gulf of Mexico one of the most significant oil and gas plays in the United States today.¹²⁸ As much as 86 billion barrels of oil and 420 trillion cubic feet of natural gas lie underneath the OCS, much of that in the Gulf of Mexico or offshore Alaska.¹²⁹ The oil and gas industry certainly seems interested in the Gulf: a recent lease sale held in August of 2006 yielded the highest amount of “high bids” in eight years, totaling some \$340 million in high bids on 381 blocks, with more than 60 companies participating in the process.¹³⁰ A significant number (about two-thirds) of the tracts up for auction were deepwater blocks.¹³¹ The federal offshore regime, however, involves some special issues to consider when structuring transactions. The complex bureaucracy and strict adherence to federal regulations are best approached with the advice of experienced counsel. Despite the sometimes rigid regime and the relative uncertainty surrounding some key legal issues, investment in federal offshore oil and gas resources remains a promising frontier for *Shari'a*-compliant investment. In fact, the first ever *Sukuk* backed by U.S. oil and gas assets involved producing oil and gas properties in federal waters on the OCS offshore Louisiana. This section provides a general overview of the nature of property rights associated with federal oil and gas leases, focusing on the Gulf of Mexico, where most federal offshore oil and gas activity takes place.

127. MINERALS MGMT. SERV., U.S. DEP'T OF THE INTERIOR, OCS OIL & NATURAL GAS PRODUCTION: FEDERAL OCS vs U.S. TOTAL (2004), <http://www.mms.gov/stats/PDFs/2004OilProductionasof5-06.pdf>.

128. See *Drill-Seeking*, ECONOMIST, July 8, 2006, at 28 (“The [U.S.] government suspects that a higher proportion of the oil and gas yet to be discovered will be found offshore.”).

129. OFFSHORE MINERALS MANAGEMENT, U.S. DEP'T OF THE INTERIOR, <http://www.mms.gov/offshore/> (last visited Nov. 11, 2006); see also *Drill-Seeking*, *supra* note 128.

130. Pam Radtke Russell, *Gulf Lease Sale Goes Off Smoothly*, TIMES-PICAYUNE (New Orleans, La.), Aug. 17, 2006, at 1.

131. *Id.*; see also Press Release, MINERALS MGMT. SERV., U.S. DEP'T OF THE INTERIOR, Western Gulf of Mexico Sale 200 Attracts \$462.8 Million in Bids (Aug. 16, 2006), <http://www.mms.gov/ooc/press/2006/press0816.htm>.

The Minerals Management Service (MMS), an agency of the Department of the Interior, administers the OCS federal oil and gas leasing program in the Gulf of Mexico, which is governed by the Outer Continental Shelf Lands Act (OCSLA)¹³² and related federal regulations. The federal government owns all submerged offshore lands beyond certain state boundary lines and extending to the edge of the recognized two hundred-mile-wide Exclusive Economic Zone. The Submerged Lands Act of 1953 granted each state control over oil and gas leasing for three nautical miles (5.6 km) seaward off its coast or, for historical reasons, three marine leagues (about 16 km) in the case of Texas and Florida. States have developed their own leasing regimes and regulations regarding activity within these immediate coastal zones, while the OCSLA was passed in 1953 to govern leasing policy in federal waters. Federal lease sales began in 1954. Although it is a federal law, OCSLA adopts certain aspects of the law of the adjacent state regarding the characterization of property rights and the recordation of property interests.¹³³ OCSLA has been amended several times since its inception, but the basic leasing rules have survived since 1954. Thus, the procedures for federal offshore leasing have been mostly stable for more than fifty years, although they have been supplemented by regulations promulgated by federal agencies under the authority granted to them by OCSLA.¹³⁴

Ownership in a federal oil and gas leasehold interest on the OCS can be divided and subdivided (as is the case with other oil and gas properties), creating opportunities for *Shari'a* structuring as discussed above, but there are some differences in both substance and terminology that must be understood to successfully develop Islamic financing transactions in the Gulf of Mexico. Entities that are the direct lessees of a federal offshore oil and gas lease are said to hold a "Record Title Interest" in the lease. They are also often called "lessees" (with the federal government as the "lessor" in this context). The MMS defines "Record Title" as:

Ownership in a lease as a party in the contractual lease document with the MMS. Includes the right to explore for and develop oil, gas, or sulphur resources, as well as responsibility for all lease liabilities created or established during tenure of ownership, and the right to relinquish the lease.¹³⁵

132. 43 U.S.C. § 1331 (2006). For a general overview of the federal offshore oil and gas leasing regime and how it contrasts with the offshore regime in the United Kingdom, see Christopher F. Richardson, Note, *The Influence of Offshore Leasing Regimes on Commercial Oil Activity: An Empirical Analysis of Property Rights in the Gulf of Mexico and the North Sea*, 17 GEO. INT'L ENVTL. L. REV. 97 (2004).

133. See 43 U.S.C. § 1333(2)(A) ("To the extent that they are applicable and not inconsistent with . . . Federal laws and regulations . . . , the civil and criminal laws of each adjacent State, now in effect or hereafter adopted, amended, or repealed are declared to be the law of the United States for that portion of the subsoil and seabed of the outer Continental Shelf . . . which would be within the area of the State if its boundaries were extended seaward . . ."). To the extent gaps exist, the law of the adjoining state is considered to be surrogate federal law, see *Rodrigue v. Aetna Cas. & Sur. Co.*, 395 U.S. 352, 357-58 (1969).

134. See generally Richardson, *supra* note 132, at 102-09 (describing the regimes of the United States and the United Kingdom).

135. MINERALS MGMT. SERV., U.S. DEP'T OF THE INTERIOR, OCS REPORT MMS 2001-076, OIL AND GAS LEASING PROCEDURES GUIDELINES, at 85 (2001) [hereinafter OCS REPORT 2001-076], available at <http://www.gomr.mms.gov/homepg/whatsnew/techann/2001-076.pdf>.

Record Title Interest holders are either the original signatories of the lease or successors (by assignment, merger, etc.) to an original signatory of the lease; in either event they have a direct contractual relationship with the MMS. The original signatories to a federal offshore oil and gas lease either: (i) purchased the lease through the open bidding process for new and relinquished leases administered by the MMS, or (ii) were original signatories to a state offshore lease that, under federal law, was converted to a federal lease after passage of OCSLA. Record Title Interest holders are primarily responsible for all lease requirements and are subject to all laws and regulations governing offshore oil and gas operations.

Qualification to own or operate a federal offshore lease is a key consideration for structuring Islamic deals involving such leases (or interests derivative of such leases). To hold a federal lease, either by participating in the bid process or upon receipt of an assignment of a lease from an existing lease holder, the owner must be "qualified" by the MMS. Only certain types of entities or individuals are allowed to hold leases under the OCSLA and the existing regulations. Corporations, partnerships and other business associations organized under the law of any U.S. state are qualified entities (this includes limited liability companies and limited partnerships). Foreign companies typically form a U.S. subsidiary, owned through an intermediary holding company, to bid for new leases or to acquire existing leases by assignment. If the proposed new owner meets the residency criteria and files the proper forms, MMS approval is routine and largely non-discretionary. However, a royalty interest in an OCS lease may be held by a non-U.S. entity, since such rights are not recognized by the MMS, and such arrangements (while enforceable among the private parties thereto) do not put the royalty holders in privity with the federal government as lessor. If the entity holding the royalty has occasion to exercise security interests in the underlying lease property through foreclosure, it would need to be a qualified entity (foreclosure is tantamount to a transfer of the lease, which requires MMS approval and qualification of the transferee).

A Record Title Interest is a "working interest" in a lease, meaning the Record Title Interest holder "owns" (for the term of the lease) an interest in petroleum on and under the leasehold property, and has the right to work the lease to produce these hydrocarbons (either by its own exploration and production activities or by appointing an operator to undertake the necessary activities). Importantly, the issue of whether a working interest holder in a federal offshore lease actually "owns" the minerals, or is merely "licensed" to explore for and produce minerals for the term of the lease, remains an unsettled legal issue. In many states (including Texas and Louisiana), state law holds that the working interest in a mineral lease gives the holder a real property interest in the mineral estate (and, furthermore, holds that the mineral estate is actually the "dominant estate" in the property). However, under federal law the issue is unclear, and the application of state law to offshore leases is not settled. While the OCSLA adopts the law of the adjacent state,¹³⁶ as far as such law is not inconsistent with federal law, there exists no case law deciding this issue. Legal opinions related to the characterization of a federal offshore leasehold interest are typically qualified to say that *if* state law applies, then the working interest would be considered a real property interest. Because of this uncertainty, there remains some risk in bankruptcy that the federal offshore lease may be characterized as an executory contract or an unexpired lease in property as opposed to a real property

136. 43 U.S.C. § 1333(2)(A).

interest; this uncertainty equally applies to any sub-interests carved out of the lease (such as volumetric production payments or Operating Rights).

As a direct lessee and the owner of a working interest, a Record Title Interest holder can assign all or a portion of its interest in the lease (provided the assignment complies with MMS regulations, the transfer is to a qualified entity, and the MMS approves the transfer). One type of partial assignment is the grant of a royalty interest. Additionally, a Record Title Interest holder can alienate a portion of its working interest, which gives other entities the right to conduct operations on the property. Provided the MMS approves, the Record Title Interest holder can assign all or a portion of its undivided Record Title Interest in the lease to another Record Title Interest holder. Alternatively, the Record Title Interest holder can assign to a third party a working interest in a geographic portion of a lease up to a certain depth. This assignment can be accomplished by way of an assignment of "Operating Rights."

An Operating Rights interest is in effect a sublease carved out of the leasehold interests held by the Record Title Interest holders that entitles the holder of the Operating Rights to a working interest in the portion of the leasehold property assigned to the Operating Rights holder. A Record Title Interest holder owns the Operating Rights to the entire lease, but it may alienate its working interest in a portion of the lease (defined by geographic area and depth), and for such portion of the lease the Operating Rights are said to be "severed" from the Record Title Interest.¹³⁷ While the MMS recognizes and records Operating Rights assignments (in fact, the MMS requires that operating rights transfers be filed and approved by the MMS), there is no leasehold privity between the federal government and the Operating Rights holder. The MMS defines an "Operating Right" as follows:

A leasehold interest that entitles the holder to conduct drilling and related operations . . . Operating rights, operating interest, and working interest are synonymous . . . Holders of operating rights . . . cannot relinquish or terminate a lease.¹³⁸

. . . .

An assignment of operating right does not have any effect on record title interest.¹³⁹

An Operating Rights interest is a working interest that allows the Operating Rights holder to explore for and produce hydrocarbons from the portion of the lease covered by the Operating Rights. The Operating Rights holder bears the costs of exploration and production activity. The MMS regulations governing Gulf of Mexico oil and gas leasing separately classify Record Title Interest holders and Operating Rights holders, although both types of working interest holders must follow MMS regulations regarding qualification, assignments, general bonding requirements, oil spill financial responsibility insurance, paperwork, etc., for the portion of the property on which they conduct activities or hold working interests.

As a working interest, Operating Rights can be assigned in whole or part (again, provided the assignment is to an approved entity, and assuming other MMS

137. See OCS REPORT 2001-076, *supra* note 135, at 58.

138. *Id.* at 84.

139. *Id.* at 60.

requirements are met), but the Operating Rights holder can only assign what it owns; it cannot assign a Record Title Interest or any portion of the lease that is not covered by its Operating Rights interest. Just as with an assignment of a Record Title Interest, the assignment of an Operating Rights interest is subject to any royalties or partial assignments previously made to other parties. While the MMS records and recognizes Operating Rights assignments (and in fact requires that all Operating Rights assignments be approved), unlike a Record Title Interest assignment MMS recognition does not create a legal relationship between the MMS and the Operating Rights assignee. The Operating Rights holder remains responsible to the MMS for the actions that take place on the portion of the lease covered by the Operating Rights and is ultimately liable for any obligations owed to the MMS.¹⁴⁰

The MMS requires that every lease have an official "Operator" of record. If there are multiple owners, the owners must agree on one entity among them to serve as the "designated" Operator, who represents all of the working interest owners pursuant to a joint operating agreement or some other contract that exists among all parties. All Operators must be qualified entities and must meet the regulatory conditions established by the MMS. The Operator is the agent of the working interest owners in dealing with the MMS and in maintaining the lease conditions (including posting supplemental plugging and abandonment bonds, paying royalties on production, complying with regulatory and environmental laws, and obtaining approval from the MMS for exploration, production activities, and development plans). The MMS explains to lessees and Operating Rights holders that a "designated operator, by the authority granted in the Designation of Operator Form, acts as your agent. It is the policy of the [the MMS] to work directly with your designated operator for all matters affecting your lease."¹⁴¹ The MMS defines the term "operator" as: "The individual, partnership, corporation, or other business entity having control or management of operations on a leased area or a portion thereof. The operator may be a lessee, a designated agent of the lessee, or a holder of rights under an MMS-approved operating rights assignment."¹⁴² Importantly, because the Operator has control over operations on the lease (subject to any applicable joint operating agreement or any contract with the working interest holders), the Operator is responsible for working with the MMS to get approval for exploration and production activities. An Operator is jointly and severally liable for non-monetary obligations associated with the lease, and the MMS may seek to recover costs associated with problems on the lease from an Operator. Conversely, if "the designated operator fails to perform any obligation under the lease or regulations, any or all of the co-lessees and operating rights owners may be required to bring the lease into compliance."¹⁴³

Given the potentially immense reserves located in the Gulf of Mexico, combined with the relatively stable governmental regime (which is much more predictable than in many other offshore oil producing areas of the globe), the OCS may be an ideal region in which to focus Islamic investment in U.S. oil and gas assets. It is therefore important to understand the basics of the MMS leasing regime

140. *Id.* at 15.

141. *Id.*

142. *Id.* at 84.

143. See OCS REPORT 2001-076, *supra* note 135, at 56.

in the context of Islamic finance structures. MMS leases can be subdivided formally with MMS approval (by way of operating rights interests, for example, or by a transfer of Record Title Interest), but Record Title Interest and Operating Rights holders can also burden their properties through private contractual arrangements with third parties. This can include granting overriding royalties, including volumetric production payments. Under the OCSLA, adjacent state law governs the characterization and recordation of overriding royalty interests (to the extent such law is not in conflict with federal law), and in Texas and Louisiana, royalties are considered real property rights. Furthermore, the working interest held by Record Title Interest and Operating Rights holders remains separate from the royalty interests granted, allowing passive investment without the liability or operational abilities associated with being an Operator in the Gulf of Mexico. Operators in the Gulf include many of the leading industry players, and practice standards (with MMS oversight) are very high; Islamic investors can take comfort in this level of operational expertise. The stability of the leasing regime, the economic promise of the potential reserves, and the existence of a relatively well-established oil and gas law in adjacent states (notably Texas and Louisiana) that supports asset-backed Islamic deals all combine to create a great opportunity for investors looking to employ Islamic finance techniques to supply capital to U.S. oil and gas projects. Perhaps because of these reasons, the first ever Islamic financing backed by American oil and gas assets focused on federal leasehold properties in the Gulf of Mexico.

C. *Bankruptcy Considerations*

Royalty interests, which in Texas and Louisiana should be considered a transfer of real property rights, provide some protections in bankruptcy law usually not found in traditional equity investments, debt offerings, or unsecured loans, and may even provide superior protection when compared to secured lending transactions. The fact that a royalty interest lies at the center of an Islamic-backed financing does not, however, automatically guarantee the bankruptcy remoteness of the transaction. Careful structuring remains critically important, but while deals can be structured to best take advantage of bankruptcy protections, U.S. bankruptcy courts continue to wield wide powers of discretion in determining the appropriate treatment of each particular bankruptcy case. The fact that no *Shari'a*-compliant financing transaction has come before a bankruptcy court heightens the uncertainty to some extent, but the utilization of overriding royalties coupled with the use of special purpose entities nevertheless provides a good foundation for a bankruptcy remote transaction with which Islamic investors can become comfortable. This level of security should help reduce the costs of capital for the "borrowers" in Islamic deals supported by overriding royalties.

An economic interest in an oil and gas lease (such as an overriding royalty interest or a production payment) granted to a another party is created out of the lease interest itself.¹⁴⁴ To the extent that the underlying lease is terminated, the production payment or overriding royalty created out of such lease would also terminate (absent an agreement establishing privity with the lessor recognizing the

144. See, e.g., *Succession of Simms*, 195 So. 2d 114 (La. 1965).

interest).¹⁴⁵ For leases involving private landowners, it would be advisable to negotiate an agreement with the lessor that recognizes the royalty interest and allows for the royalty holder to cure or takeover the lease if the lessee defaults. With respect to overriding royalties created by lessees from federal offshore oil and gas leases, the MMS does not recognize such interests, and such a royalty conveyance would not create any privity with the MMS.

To the extent applicable law (Texas or Louisiana for most of the active leases in the Gulf of Mexico) treats the underlying oil and gas lease as a real property interest, it is more likely than not that a production payment or similar interest carved from the lease would be recognized as a conveyance of a real property interest (assuming the production payment is not deemed to be a disguised loan).¹⁴⁶ Even if the royalty could be characterized as an executory contract, the Bankruptcy Code was recently amended to provide that rejection of the production payment would not divest the holder of the production payment of the interest conveyed. However, it is possible that the production payment itself could be viewed as having two components, a non-executory conveyance, and an executory, ongoing contract for performance. If these provisions are found to be “severable” contracts, i.e., two separate contracts, it is possible for the bankruptcy court to allow the debtor to reject the unperformed obligations. For example, this could result in a situation where the royalty holder still owns the interest conveyed pursuant to the royalty or production payment, but could not force the operator to perform other obligations such as further development of the leases.

The use of a production payment structure provides some benefits with regards to United States bankruptcy protection because of a recent clarification of the Bankruptcy Code, but to enjoy these enhanced protections, it is necessary for the holder of the production payment to limit its involvement in certain activities.¹⁴⁷ Because a qualifying production payment does not become part of the bankruptcy estate, it is exempt from the automatic stay,¹⁴⁸ and payments under the production payment would continue (to the extent production is ongoing). The production payment would survive bankruptcy and continue to burden the underlying property since it is a real property right that is owned by the grantee and does not fall into the debtor’s estate. The Bankruptcy Code protects any “production payment,” defined as a cost-free overriding royalty in hydrocarbon liquids or gases produced from a specific property, in-value or in-kind, for a given term of time or for a given amount of payment or volume—in essence, a production payment.¹⁴⁹ However, this protection is not available if the royalty holder “participate[s] in the operation[s].”¹⁵⁰ No case law exists to help illuminate what would constitute “participation” in this

145. *Wagner & Brown, Ltd. v. Sheppard*, 198 S.W.3d 369, 377 (Ct. App. Tex.—Texarkana 2006, pet. filed) (citing *Sumac Petroleum Corp. v. Parkes*, 146 S.W.2d 798, 804 (Tex. 1967)).

146. Opinion letters supporting this legal position are routinely issued by law firms, with qualifications, in connection with Gulf of Mexico financing transactions. Such an opinion letter was obtained in conjunction with the U.S. oil and gas *Sukuk* offering discussed below.

147. 11 U.S.C. § 541(b)(4)(B)(i) (2006); *see also id.* § 101(42A).

148. *See id.* § 362. In section 362(a)(3), for example, parties are prohibited from “any act to obtain possession of property of the estate or of property from the estate or to exercise control over property of the estate” once the bankruptcy case is filed. Section 541(b)(4)(B)(i) effectively removes qualifying production payments from the debtor’s estate.

149. 11 U.S.C. § 101(42A).

150. 11 U.S.C. § 541(b)(4)(B)(i).

context. There is an undefined spectrum in which, at some point, a passive royalty holder will be deemed to be participating in operations and therefore lose the protections of the Bankruptcy Code. If bankruptcy protection is a key concern to Islamic investors in a transaction involving production payments, it would be advisable to avoid encroaching on this gray area as much as possible.

To enhance the protection that the Bankruptcy Code affords to production payments in bankruptcy,¹⁵¹ it is highly advisable to structure Islamic transactions involving these forms of overriding royalties to (i) ensure the royalty interest conveyed meets the definition in the Bankruptcy Code of a "production payment,"¹⁵² and (ii) limit the operational control exercisable by the entity holding the production payment so that it will not be found to be "participat[ing] in the operation[s]."¹⁵³ To increase the chances that the production payment that was conveyed satisfies the definition of "production payment," the production payment needs to be "cost-free," which means the owner of the production payment should not be directly responsible for ongoing capital or operating costs associated with the production activities on the leases. This includes control over capital and operational expenditures as well as direct input in operational decision making (such as the right to choose or dictate where the operator will drill wells, or the right to appoint a new operator). In this area, there will necessarily be some trade-offs that will entail a balancing of risks and benefits. If the owner of the production payment has significant operational influence, regardless of how such rights arise, it will probably not qualify for the protections afforded under the Bankruptcy Code.

The law is unsettled on whether the property interest created under a federal offshore oil and gas lease constitutes (i) an executory contract/unexpired lease of real property or (ii) a real property ownership interest. Part of the confusion emanates from whether to apply federal or state law in analyzing the interest created, as OCSLA does not address this issue. However, OCSLA does provide that where it is silent, the laws of the adjoining state shall determine such issues.¹⁵⁴ But the MMS, as the federal agency that administers OCSLA leases, has appeared in bankruptcy court to assert first, that the nature of the property interest must be determined under federal, not state, law, and second, that under federal law, an oil and gas lease does not create a real property interest.¹⁵⁵ There are apparently no court rulings that have settled either issue, specifically, which law applies or the nature of the interest created. The courts have not clearly determined whether state or federal law applies in determining the nature of the interests created in federal offshore leases (and, derivatively, production payments). If federal law were to apply, there are unfortunately no federal cases that definitively analyze and resolve the nature of the rights created under a federal offshore oil and gas lease, and whether such leases are subject to assumption or rejection under the Bankruptcy

151. *See id.*

152. 11 U.S.C. § 101 (42A).

153. 11 U.S.C. § 541(b)(4)(B)(i).

154. *See* 43 U.S.C. § 1333(2)(A) (2006); *see also Rodrigue*, 395 U.S. at 355-56.

155. *See, e.g.,* United States of America's Objection to the Chapter 11 Trustee's Motion Pursuant to 11 U.S.C. § 363(b) and (f) to Use or Sell Property Free and Clear of Liens With Liens Attaching to Proceeds From a Farmout of a Portion of the West Cameron Block 56 Lease and Request for Hearing [Brief of the MMS], *In re* Midcon Offshore, Inc., No. 96-25269-C-11 (Bankr. S.D. Tex. July 22, 1997). The MMS usually asserts there are strong public policy reasons for having rights and interests under federal offshore oil and gas leases treated uniformly under federal law as opposed to potentially different, and conflicting, treatment under the laws of various adjacent states. *See, e.g., id.*

Code. Assuming the federal offshore oil and gas leases were subject to rejection, rejection by the debtor would constitute a material breach of such lease. While such breach is not necessarily a termination of the lease, from a practical (and eventually legal) standpoint the lease would be terminated, and the production payment carved out of the lease would likewise be terminated.¹⁵⁶ Generally, rejection of an executory contract or unexpired lease results in the non-debtor counterparty having an unsecured, pre-petition claim for damages against the debtor.¹⁵⁷ In most bankruptcy cases, pre-petition unsecured claims are paid pro-rata, at cents on the dollar, and therefore, such returns would most likely not fully compensate the holder of a production payment.

V. ISLAMIC FINANCE AND U.S. OIL & GAS LAW IN PRACTICE: THE FIRST *SUKUK* OFFERING BACKED BY UNITED STATES OIL AND GAS ASSETS

While the promise of Islamic financing for oil and gas initiatives in the United States remains largely unfulfilled, one innovative transaction has perhaps established a new template for future *Shari'a*-compliant deals. The first ever *Sukuk* offering issued by a United States company,¹⁵⁸ which closed in July of 2006, involved oil and gas assets in the Gulf of Mexico. It was marketed to Muslim and non-Muslim investors alike. A relatively small transaction for the capital-intensive energy industry (under \$200 million in *Sukuk* certificates offered to investors), the transaction nevertheless may generate an interest in Islamic finance well out of proportion to its size. The deal represents the “first ever Shariah-compliant gas backed securitization, which underlines the new thinking in the market”¹⁵⁹ It may provide a means by which U.S. oil and gas companies can “tap into the high liquidity”¹⁶⁰ in the Middle East to fund oil and gas projects in America. Press coverage of the transaction has captured the enthusiasm in the marketplace for such deals and hopefully many more—including deals utilizing different structures—will follow.¹⁶¹ The use of a *Sukuk*, currently a very popular financing product in the Middle East,¹⁶² could be replicated; the deal has hopefully opened the door for other types of Islamic financings in the oil and gas industry as well.

156. This could also happen outside of bankruptcy, where the lessor/operator could default under the lease, resulting in its termination.

157. 11 U.S.C. § 365 (2000).

158. Karen Lane, *Islamic-Bond Market Becomes Global by Attracting Non-Muslim Borrowers*, WALL STREET JOURNAL, Nov. 16, 2006; at C1; see also *Broker GFI Opens Islamic Finance Desk in London*, REUTERS, July 14, 2006 [hereinafter *Broker GFI*], available at <http://today.reuters.com/business/newsarticle.aspx?type=bankingFinancial&storyID=nL14898301&imageid=&cap=>; Farhan Bokhari, *Gulf Boosts Islam Bonds*, AUSTRALIAN, July 12, 2006.

159. Mushtak Parker, *Prospects for Islamic Securitization Bright*, MENAFN.COM, July 3, 2006, available at http://menafn.com/qn_news_story_s.asp?StoryID=1093118750.

160. Bokhari, *supra* note 158.

161. *Id.*; *Broker GFI*, *supra* note 158; Henry, *supra* note 9; Donna Mitchell, *Merrill Lynch Preps Rare U.S. Based True Islamic Securitization*, ASSET SECURITIZATION REPORT, July 3, 2006, available at 2006 WLNR 11472090 (Westlaw); Parker, *supra* note 159.

162. There currently exists “a boom in the market for sukuks, or Islamic bonds, as devout Muslims increasingly demand financing instruments that comply with their religion Its rapid growth has attracted a host of Western banks and law firms that are now scrambling to boost their capabilities in Islamic finance.” Bokhari, *supra* note 158.

The deal combines many of the key components discussed in greater detail throughout this Article. The attorneys and bankers who structured the deal obeyed the *Shari'a* restrictions (with the advice of *Shari'a* scholars) outlined in Section II of this Article, took advantage of the uniquely compatible legal U.S. oil and gas principles discussed above in Section IV.A, applied the bankruptcy rules touched upon in Section IV.C, and brought to bear their understanding of the federal offshore leasing regime detailed in Section IV.B. Although the deal was not exclusively subscribed by Muslim investors (both non-Muslim and Muslim investors purchased the *Sukuk* certificates in a combined Regulation D U.S. private placement and a Regulation S international offering), it nevertheless marks a truly multinational opportunity, one not seen before in the U.S. oil and gas sector. Underwritten by banks in Europe, co-structured by a bank in Lebanon with assistance from counsel in both Dubai and Houston, and marketed in a variety of both Western and Middle Eastern countries, the transaction retains an international ambiance. Despite its cosmopolitan pedigree, the financing objective was rather ordinary: funding the capital and operating costs associated with drilling and operating wells in the Gulf of Mexico for a small, independent oil and gas company based in Texas. The *Sukuk* provided this small exploration and production company an alternative to conventional debt or equity securities offering commonplace in the Gulf of Mexico, and allowed the company to take advantage of a largely untapped resource.

A production payment burdening federal offshore oil and gas leases serves as the asset supporting the *Sukuk* certificates. The oil and gas company benefiting from the *Sukuk* offering owns and operates the leases. The beneficiary sold the production payment to an intermediary entity which, through another intermediary company, issued the *Sukuk* as a private placement offering. The production payment corresponds with a certain percentage of production from the underlying properties (such percentage potentially could be tailored to fit different deals depending on the economic modeling). As a real property right that can be easily transferred, the volumetric production payment represents a non-cost bearing economic interest in the production from the burdened leasehold properties. The investors holding the *Sukuk* own an undivided beneficial interest in the production payment. The oil and gas company receiving the funds from the sale of *Sukuk* continues to own and operate the leases, and under the structure is obligated to pursue certain exploration activities and undertake specific capital investments on the property.

The transaction required close attention to tax considerations, MMS-related administrative law issues, *Shari'a* compliance, securities law and traditional structured finance techniques. The structure employed in the transaction was also designed to take advantage of the bankruptcy law protections discussed in more detail above, by segregating the overriding royalty interest into a special purpose entity. Because the entity holding the production payment does not "participate in operations," the interest should be granted the additional protections the Bankruptcy Code affords to production payments. Given the location of the offshore properties, the analysis of the property rights associated with the conveyance and ownership of the production payment turned on the application of Louisiana law as the adjacent state, standing as surrogate federal law under OCSLA. The transaction was structured so that the sale of the production payment should be considered a "true sale" of a real property interest under Louisiana law.

The *Sukuk* holders receive, but are not guaranteed, periodic payments from the revenue generated from the production payment (importantly, this return is not characterized as interest, but it does share many similar traits, including a projected schedule of payments akin to an amortization schedule). There is also a mechanism for the redemption of the principal amount of the *Sukuk*. The investors' return (the "profit-sharing") and repayment of principal depends on the performance of the underlying oil and gas asset. The oil and gas operating company receiving the funds from the sale of the royalty is not obligated to pay back the *Sukuk* to the investors in the event the royalty interest granted is unable to generate sufficient funds over the term of the *Sukuk* bonds (here, about twelve years). The investors will bear the risk of the reserves being unable to produce sufficient quantities of hydrocarbons to fully support the issuance of the *Sukuk*, as well as the risk that a natural disaster or the occurrence of another event will negatively impact production from the properties. The investors also bear some price risk. These risks are somewhat further mitigated by: (i) the inclusion of reserve accounts; (ii) modeling of commodity prices, reserve estimates, and production; (iii) operating covenants; (iv) insurance; (v) audits of the hydrocarbon reserves; and (vi) mortgages establishing a security interest in the production payment (actionable only on breach of contract). Nonetheless, the investors face certain unmitigated or partially mitigated risks, and as such, the projected "profit-sharing" returns reflected the calculated risk associated with the *Sukuk*.

The risk-sharing component makes the transaction fundamentally compliant with the precepts of *Shari'a*. The transaction has a real economic purpose—a true sale of a real property interest. The investors are not making a loan and are not making money off the use of money; they are joint owners (by way of the production payment interest) in a productive asset. The investors share in the profits derived from the success (or failure) of the underlying real property rights they have indirectly bought (under *Shari'a*, the *Sukuk* certificates conceptually represent a beneficial ownership in the underlying real asset, here the production payment). The interests of the originating exploration and production company are aligned with the investors in that both benefit from the successful production of oil and gas from the property.

The banks structuring the transaction retained the services of two Islamic scholars, both respected internationally in the field of Islamic finance, to provide oversight. The scholars issued a *Fatwa* which blessed the structure. Without the *Fatwa*, it would have been impossible to pronounce the structure as *Shari'a*-compliant or market the *Sukuk* to Islamic investors; hence, it was necessary to consult with the *Shari'a* advisors throughout the structuring of the deal in the same manner attorneys and principals usually consult with tax or regulatory experts when contemplating a transaction. As a true sale of a real property interest, not a secured loan, no *Riba* is implicated in the transaction. Investor return is earned on the performance of the underlying property. Some risk is inherent in all Islamic finance deals, and here the risk was considered by the Islamic scholars to be a reasonably calculated risk connected with the performance of a productive asset. Such risk, in the view of the Islamic scholars, did not rise to the level of *Gharar*. Furthermore, oil and gas projects do not involve any prohibited amoral activity of vices; neither, at least in this case, do they involve the utilization of high levels of conventional leverage, making the structure ideal from a *Shari'a* compliance angle.

While the first ever Islamic financing in the United States focused on raising capital for a small, independent oil and gas company with relatively concentrated offshore assets, many other possibilities and permutations could follow. For example, utilizing a similar *Sukuk* structure, a large energy company with a portfolio of oil and gas properties located either onshore or offshore (or both) could grant an overriding royalty interest to a special purpose vehicle, which either directly or indirectly through intermediary entities, could similarly securitize the stream of income from the production attributable to the royalty and sell *Sukuk* certificates to Islamic investors. The use of a large portfolio of underlying properties would minimize some of the concentration risk associated with the *Sukuk* deal. The funds raised by such an issuance could be used either for capital projects on the properties, or more generally to diversify sources of capital for the originating "borrower." Completely different types of *Shari'a*-compliant deals—for example, an *Ijara* involving a large oil and gas processing platform in the Gulf of Mexico, replacing a more standard sale-leaseback or leveraged lease transaction—could also follow now that a foundation (however rudimentary) has been laid for Islamic finance in the United States, and interest in investing in this type of financial product has been stimulated in the Muslim world. With the potential for liquidity in the Middle East to continue indefinitely as oil prices remain at near-record highs, there should be significant sources of funds for U.S. projects in the foreseeable future.

VI. CONCLUSION

Islamic finance has just now emerged as a realistic option for oil and gas financing for exploration and production assets in the United States and elsewhere. Muslim investors will likely be flush with petrodollars for years to come. As the market grows, *Shari'a*-compliant deals backed by U.S. oil and gas assets may eventually become a less exotic alternative to traditional lending and debt and equity offerings, if not evolving eventually into a mainstay of corporate finance. While full of promise, this nascent form of financing requires careful planning and industry-specific expertise.¹⁶³ Future Islamic finance transactions used to raise funds for American oil and gas projects or for U.S. and/or international energy companies may at some point become a rather routine method of financing; at present and for years to come, however, each deal, given its novelty, will likely be highly negotiated and carefully structured, requiring the dedicated attention of experienced counsel and financial advisors. Having a legal advisor with Arabic language training, familiarity with *Shari'a*, and a cultural appreciation of the Muslim world is invaluable to the success of a deal, especially in the early stages when relationships are forged and fundamental terms are being agreed. *Shari'a* scholars will need to be brought on board to monitor (and at times closely assist with) the structuring, to issue the requisite *Fatwa*, and to provide ongoing *Shari'a* audits. Law firms involved in such transactions will need to have a good understanding of Islamic finance and investment techniques, as well as documentation coupled with a mastery of the oil and gas aspects of the deal, plus tax, bankruptcy, finance, and securities law experience. For legal issues related to characterization of assets under state law, local counsel in jurisdictions such as Louisiana, Texas, or New Mexico may need to be consulted to properly understand, document, and record the transfer of property rights. It is also critical for bankers involved in the transaction to have deep

163. See Muñoz, *supra* note 116, at 29.

connections with the Islamic investment market, which remains somewhat insular despite its growing economic power. An ideal investor would be savvy, have at least a basic understanding of both energy projects and Islamic precepts, and be willing to take calculated risks; yet a carefully structured and marketed deal can appeal to otherwise sophisticated investors without a history of investing in Islamic products or oil and gas deals. With the correct team in place, lawyers serving the energy industry and financial institutions will be able to tap into a potential bonanza of financing opportunities which could potentially reach into the billions, if not trillions, of dollars and extend far beyond the United States.

Although the content of this Article has been tailored to the specific opportunities associated with Islamic finance and U.S. oil and gas assets (a truly promising field not yet explored in any meaningful way, notwithstanding the groundbreaking transaction described above), the general precepts outlined herein can be applied to other types of *Shari'a*-compliant transactions involving real assets and natural resources (including renewable energy) in both the United States and elsewhere. Imagine, for instance, a *Sukuk* backed by Canadian timber properties or by toll road receipts in Brazil, an *Ijara* financing an oil platform off the coast of Nigeria, an *Istisna* financing of a factory in Shenzhen, or a *Mudaraba* investment in a LNG facility in Indonesia. Such projects are not only realizable, but may well be on their way to materializing. For example, an Italian developer has considered using Islamic finance techniques to finance the development of wind farms.¹⁶⁴ Such a project highlights the close interaction between Islamic investing and socially responsible projects in fields such as renewable energy. The established but rapidly expanding field of Islamic finance can, and should, achieve at least a tangential convergence with the financial markets serving the energy industry in the United States and worldwide. But the precepts detailed above support a realm of possibilities limited only by the creativity, knowledge, and acumen of the “borrowers” and investors behind the deals and the attorneys and bankers who serve them. Bridging the gap between a ready supply of Muslim capital and the voracious appetite for funding in non-Islamic markets in United States, Europe, Latin America, Africa, and Asia could also play some small role in reducing the friction—and often the suspicion—associated with cross-border commercial and economic cooperation with the Islamic world.

164. See *Italian Developer Eyes Islamic Financing For Wind Farm Portfolio*, SPARKSPREAD, Oct. 11, 2005.

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