Financing sport in the MENA region: Islamic banking and the funding of sport stadiums and infrastructure

Nicholas M. Watanabe, Ph.D.

Abstract

In recent years, the Middle East and North Africa (MENA) region has experienced significant growth in the sport industry, including the hosting of numerous high profile events. Alongside this boom in the sport sector has also been a growth in the building of world-class sport and entertainment venues, as well as training facilities needed to meet the demands of governing bodies, sport teams, fans, sponsors, and other key stakeholders. The current case study considers different methods through which major facility projects can be financed, including specific issues and challenges for funding stadiums in the MENA region. This case introduces funding methods that are allowed under Islamic financial law, while also analyzing the potential of public-private partnerships to finance sport venues.

Keywords: Finance, Stadiums, Equity, Debt, Sukuk, Public-Private Partnerships

Introduction to the case context

Mr. Ali, the Chairman of a large investment firm based in the MENA region, has decided that he wants to purchase a professional football club to enhance his company's business portfolio, as well as to invest in the rapidly growing sport industry. As part of this plan, it is Mr. Ali's desire to build a new state-of-the-art stadium for his club that will not only be another major asset for his corporation, but also to act as an anchor for urban development, and signal his intentions to be a major player in the sport industry.

At the same time, Mr. Ali and his associates have recognized that the development, construction, and operation of sport facilities and related infrastructure are among the most expensive costs for sport organizations.[1] Even with the increasing need for sport-related capital projects within the MENA region to meet existing demand, as well as the forecasted growth in this sector, Mr. Ali realizes that undertaking such a major project is no simple task, especially in terms of raising the funds to pay for the envisioned new stadium.[2]

In conducting research and talking to experts, Mr. Ali has been informed that sport facilities are generally financed through either debt or equity financing, or a

[1] John L. Crompton, "Economic Impact Analysis of Sports Facilities and Events: Eleven Sources of Misapplication," *Journal of Sport Management* 9, no. 1 (1995): pp. 14-35, https://doi.org/10.1123/jsm.9.1.14, p.14.
[2] "MENA Region's Potential as a Growing Market for Sports and Events Industries Praised at Josoor Institute's Programmes." Josoor Institute, August 9, 2015. https://www.josoorinstitute.qa/media/press-release/mena-region's-potential-growing-market-sports-and-events-industries-praised.

combination of these methods. Specifically, equity financing is when organizations give up ownership in exchange for cash (or other monetary instruments) needed to complete a project.[3] Debt financing, on the other hand, is when an organization takes out debt in order to receive the necessary capital for a project, with the promise to pay back the value plus interest in the future.[4] Because sport organizations often are unwilling or unable to give up large equity stakes, the tendency around the world is for them to rely on debt financing and government funding as ways to finance expensive stadium projects. However, such an approach to stadium finance presents challenges in the MENA region, where Islamic banking law (إسلامية مصرفية) does not allow interest payments known as *riba* (الربٰوة الربا, ربا), and thus means debt financing is not considered to be legally acceptable.[5] As Mr. Ali wants to ensure that he himself, as well as his corporation, follows the proper rules and regulations in financing the new stadium, he begins to consider the different ways in which he might be able to secure enough funding for the project.

Based on this, Mr. Ali has decided to conduct a detailed examination of the various ways in which stadiums and other capital projects can be financed within the MENA region in order to make sure his project will be a success. As such, he will first begin by conducting a detailed examination of how sport facilities are typically financed around the world, followed by an analysis of stadium construction in the MENA region as a comparison. Following this, Mr. Ali will then detail the methods through which

[3] Matthew T. Brown et al., *Financial Management in the Sport Industry* (London: Routledge, 2017), p.170.
[4] Brown, p. 170.
[5] Siti Sarah Razak, Buerhan Saiti, and Yusuf Dinc, "The Contracts, Structures and Pricing Mechanisms of Sukuk: A Critical Assessment.," Borsa Istanbul Review 19 (2019): pp. S21-S33, p.S21

stadiums and other major facilities can be financed in accordance with Islamic financial regulations, and provide examples to compare the different costs associated with different financial instruments. Finally, Mr. Ali will then consider the various options that are available to him and his corporation as a way to fund the construction of a new world-class sport venue.

Background: Financing sport facilities

Mr. Ali begins his consideration of how to finance a stadium by considering the two types of financing used by most sport organizations when they are in need of raising capital to pay for a project, operations, or other costs that must be met within the foreseeable future – debt or equity financing.[6] Generally, financing can be considered as a market that has two sides: those who need money, and those who have it and have a willingness to invest in the hope of accruing future gains. In choosing to make a decision to invest in a project, those with money will calculate their *required rate of return*, which is the annual amount that they will need to receive from the investment in order to make it worthwhile.[7] The required rate of return can simply be understood as the sum of various risks that are faced by investors, including the potential risk that borrowers may not be able to pay back the investors (default), the risk of inflation and passage of time (maturity), as well as the general risk-free interest rate set by governments.[8] In this manner, the required rate of return will be different for each

[6] Brown, p. 170.
[7] Brown, p. 170.
[8] Brown, p. 171.

investment, based on the various levels of risk that are present, including those related to financial health of the borrower and the overall marketplace. In considering various examples, Mr. Ali discovers that when National Football League (NFL) teams in the United States receive financing for their stadium projects, despite the fact that they are among the most expensive sport projects in the world, they are usually able to secure a rather low rate because of the strong financial health of the league.[9] As such, this means that NFL teams will be able to raise capital for these projects without having to incur as many costs as other organizations who are not as financially stable.

Equity financing

In investigating the various types of financing, Mr. Ali first considers equity financing. In his research he comes to understand that this type of financing can be thought of as an exchange of shares/ownership in a company in return for capital to complete a project. There generally are four ways in which equity financing can be up utilized by sport organizations.[10] The first is through the sale of *shares*, which provides the borrower with an influx of cash, and the investor a share of the company.[11] In this arrangement, a sport organization gives up a portion of their ownership in a company for cash, which in turn would provide the investor with dividends – payments made periodically to distribute profits among owners. One example of using shares to finance an organization can be found in English Premier League side, Manchester United, who

[9] Crompton, p. 14.
[10] Brown, p. 170.
[11] Brown, p. 174.

sold 10% of their company on the New York Stock Exchange as a way to raise capital to help with a massive refinancing project.[12]

The second method of equity financing is through *retained earnings*, which is when an organization uses their available cash that would normally be paid out to investors, and instead uses it for other projects. Typically, retained earnings does not play a prominent role in the financing of major facility projects in sport, as organizations typically do not have enough cash on hand to pay the entire cost of construction and development.[13] Similarly, the third type of financing, which is *gifts* – or capital received as a gift or donation, is also not commonly used to fund major sport projects. One exception to this can be found in collegiate sport in the U.S., where university athletic departments often receive large donations to help fund projects. Perhaps the most famous example of this is Oklahoma State University, which received over $265 million from T. Boone Pickens to help fund the construction of a new football stadium.[14]

The final method of equity financing is *government funding*. This type of financing is where sport organizations receive capital from the government to help in the completion of a facility project. Notably, there are two types of government funding – *direct* and *indirect* funding.[15] To begin with, direct funding is when a sport organization receives cash from a governmental organization. Such funding can come from a variety

[12] David Conn, "Manchester United Tackle Debt by Floating on New York Stock Exchange," The Guardian, July 3, 2012, https://www.theguardian.com/football/2012/jul/04/manchester-united-debt-cayman-islands.
[13] Brown, p. 174.
[14] Gardner, Steve. "T. Boone Pickens, Who Died Wednesday at 91, Donated Millions to Oklahoma State Sports." USA Today, September 11, 2019. https://www.usatoday.com/story/sports/ncaaf/big12/2019/09/11/t-boone-pickens-oklahoma-state-sports-benefactor-dies-91/2289856001/.
[15] Brown, p. 174.

of public programs. One prominent way governments do this is by collecting taxes from either the income of citizens, or the sales of certain types of goods, and then earmarking a portion of this tax revenue to help with financing a project. For example, in order to host the 2016 Olympic Games, the Brazilian government helped to provide over 7 billion Brazilian Real's (approximately $1.22 billion U.S.) to fund the construction of stadiums and other related infrastructure projects.[16] In his further investigations, Mr. Ali finds that within the MENA region direct funding from government organizations is commonly used to help finance sport facilities. Mr. Ali reads that for the 2022 FIFA World Cup in Qatar, direct funding was provided by the Qatari government to help pay for a number of the stadiums being constructed, such as the Lusail Iconic Stadium which is estimated to cost around $767 million (U.S.).[17]

At the same time, Mr. Ali knows that because many countries in the MENA region do not tax their citizens, direct government funding for sport projects often comes through other sources. One way in which this is accomplished is through the sale of government assets. That is, governments may choose to liquidate important assets such as land or natural resources, and convert them into cash to help finance projects. Similarly, governments can also choose to make appropriations, where a certain amount from the overall governmental budget is earmarked for the construction and development of sport facilities. Furthermore, within the MENA region, the use of

[16] Kao, Joanna S. "The Cost of Building the 2016 Rio Olympics." Financial Times, August 5, 2016. Kao. J. S. (2016, August 5). The cost of building the 2016 Rio Olympics. Financial Times. https://www.ft.com/content/52ce2456-5b71-11e6-9f70-badea1b336d4.
[17] Gerrard, Neil. "Photos | Progress on Qatar's 2022 World Cup Stadia." Construction Magazine, July 11, 2018. http://www.constructionmanagermagazine.com/news/photos-qatars-2022-world-cup-stadia/.

government funding as a source of financing for government projects can become rather complicated, as the flow of capital does not always come directly from the government, but rather can be supplied through state-owned investment companies. For example, in considering Table 1, it is evident that a number of major sport facilities built in recent years in the MENA region utilized either direct government funding, or received capital from companies that were backed by the government.

In examining a number of the cases compiled in Table 1, Mr. Ali starts to consider the potential of whether he will be able to receive government funding for his stadium project. Indeed, while a large number of organizations have received such financing to help with the construction and development of their facilities, as a private businessman he is aware that the government is not obliged to provide him with all of the money he needs to complete his project.

Facility Name	**Country**	**Year of Completion**	**Cost**	**Funding Sources**
Lusail Iconic Stadium	Qatar	2020	$767,000,000 U.S.[18]	Government Funding
Bahrain International Circuit	Bahrain	2004	$150,000,000 U.S.[19]	Government Backed Companies

[18] Gerrard, Neil. "Photos | Progress on Qatar's 2022 World Cup Stadia." Construction Magazine, July 11, 2018. http://www.constructionmanagermagazine.com/news/photos-qatars-2022-world-cup-stadia/.
[19] "Bahrain International Circuit." RacingCircuits.Info. Accessed May 14, 2020. https://www.racingcircuits.info/middle-east/bahrain/bahrain-international-circuit.html#.Xr2lTyhKiUl.

Hazza bin Zayed Stadium	United Arab Emirates	2014	$114,704,000 U.S.[20]	Private Company Funded by Government Official
Al Amerat Cricket Stadium	Oman	2012	$5,200,000 U.S.[21]	National Sport Organization & Corporate Sponsorship
Jaber al-Ahman International Stadium	Kuwait	2010	$394,600,000 U.S.[22]	National Sport Organization

Table 1 – Recent Government-Funded Facility Projects in the MENA Region
Source: Author

At the same time, Mr. Ali discovers that indirect funding can also provide important benefits to sport organizations in completing major stadium projects. Two prominent types of indirect funding provided by governments come in the form of *land donations* and *infrastructure improvements*. Land donations are where the government provides land either free of charge, or at a price below market value as a form of assistance to the sport organization.[23] This is especially useful for major projects that are being built in large urban areas, where there is not only a shortage of available land to build a facility, but also the cost of the purchasing the land would significantly raise

[20] "Hazza Bin Zayed Stadium." Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Hazza_bin_Zayed_Stadium.
[21] "Oman's Big Plans." Asian Cricket Council, July 16, 2008. http://www.asiancricket.org/index.php/news/july-2008/449.
[22] "Jaber Al-Ahmad International Stadium." Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Jaber_Al-Ahmad_International_Stadium.
[23] Brown, p. 174.

the cost of building a stadium. A notable example of land donation in the MENA region can be found in the construction of the Al Amerat Cricket stadium in Muscat, Oman. After it was decided that an international-level cricket facility would be built to host international events, the Ministry of Sports Affairs donated land to the national cricket board to help in covering the cost of the stadium project.[24] In this manner, the overall cost of the stadium was reduced for the owners of the stadium, as the land was provided free of charge by the government.

The final source of indirect government funding, infrastructure improvements, are the development projects that occur around a stadium, to help the stadium function properly and also allow fans to travel to events.[25] This would include a variety of things, including: building new transportation systems, improving the electrical grid to handle the energy load of the new stadium, improved sewer capacity, and even new roads and parking to allow fans easier access to and from games. For the 2022 World Cup, the Qatari government has invested a large sum of money not only in the construction of stadiums, but also in improving the infrastructure throughout the country, including the creation of a new metro system to operate between all of the World Cup venues, and mass construction to upgrade highways and other travel systems.[26]

[24] "Oman's Big Plans." Asian Cricket Council, July 16, 2008. http://www.asiancricket.org/index.php/news/july-2008/449.
[25] Brown, p. 174.
[26] Al Jazeera. "Qatar 2022 World Cup Stadiums: All You Need to Know." Al Jazeera, September 18, 2019. https://www.aljazeera.com/news/2018/10/qatar-2022-world-cup-stadiums-181025142408471.html.

Considering all of this information has provided Mr. Ali with a lot to think about in regards to the potential funding he may need to receive for his stadium. Certainly any government assistance would be welcome, but he also feels that with the potential economic uncertainty and his lack of experience in the sport industry, he will need to come up with a strong plan for how the stadium can be financed. Upon thinking about this aspect further, Mr. Ali decides to continue on reading about debt financing to see what other options might be available to him and his corporation.

Debt financing

In contrast to equity financing, Mr. Ali learns that debt financing is when an organization receives capital with the promise to pay back the borrowed amount, plus additional interest to those who provided financial backing. However, as Mr. Ali previously noted, because the concept of interest payments are considered as riba, and thus are not allowed in Islamic finance, stadium projects in the MENA region generally do not utilize debt financing.[27] At the same time, he realizes it is important to be aware of the types of debt financing which exist, as they provide guidance in terms of how sport organizations in other parts of the world finance their projects. Thus he begins researching the other financial instruments that sport teams use to fund their major construction and development projects.

Generally, the two main types of debt financing used by sport organizations to build new facilities are either *bonds* or *loans*. A bond can simply be understood as a

[27] Razak, p. S21.

financial instrument that is used to raise capital for a borrower, by promising to pay back the amount borrowed plus interest.[28] Similarly, Mr. Ali finds that loans and bonds share many similarities, especially in the requirement to pay back the amount borrowed with interest over time. What typically distinguishes a loan from a bond, is that loans tend to be taken out by private individuals/organizations, while bonds are provided to either publicly traded companies or governmental organizations.[29]

Again, Mr. Ali notes that although bonds are generally not considered acceptable within the MENA region because of local banking regulations, bonds are heavily used by sport organizations to fund expensive projects in the rest of the world. Mr. Ali finds that in North America, many of the professional sport leagues have set regulations where there must be a single owner who holds the majority shares within an organization, and thus have a sole individual who is the final decision-maker for the company.[30] Additionally, the bylaws of these leagues often stipulate that there cannot be public ownership of franchises, precisely because they will remove the ability to have a single executive who can make decisions. As such, this type of regulation means that ownership groups are often not able to give away equity in their teams in return for funding, as it would violate the policies set by major sport competitions. In further reading, Mr. Ali notes that most major sport franchises are owned by billionaires who not only want significant control of the operations of their team, but also are usually not willing to give up equity, as this would weaken their overall control of the organization.

[28] Brown, p. 180.
[29] Brown, p. 178.
[30] Brown p. 15.

As the Chairman of a large firm, Mr. Ali understands the importance of having as much ownership and equity in an organization as possible. As he considers both the existence of league policies, and the potential issues that can come about from having too many investors, he feels that he is unwilling to give up equity in the professional sport club that he is acquiring. In further considering this point, Mr. Ali finds that owners of professional sport organizations avoid giving up equity when financing stadium projects by utilizing either government funding or debt financing, or use a combination of both.

In studying examples from North America, Mr. Ali notes that some franchises received a great deal of assistance from local governments to fund sport stadiums, with some cities or states often paying 100% of the total cost of construction and development of these projects.[31] However, as the public became more aware of the fact that government resources were being re-directed from other critical projects to fund facilities for rich owners who often had the resources to cover the cost on their own, there was a shift away from government funding as the primary source of financing. Rather, sport organizations began to utilize what is referred to as *public-private partnerships*, where the cost of funding a stadium is partially placed on the private owners of teams, while the other portion is then provided through various types of government funding.

[31] Brown, p. 174.

At the same time, Mr. Ali's research also indicates that the use of such public-private partnerships has been rather limited in financing sport facilities in the MENA region. There are a number of reasons for this. First, as the sport industry is still developing in terms of commercialization and revenue generation in many areas of this region, some organizations are not able to secure private financing for their projects. Thus, they are reliant on governmental funding to help complete the construction of stadiums and infrastructure. Second, although some organizations are able to secure private funding, the problem still exists that these organizations are similar to their counterparts in the rest of the world where they are not willing to give up equity in return for the necessary capital to develop world-class facilities. As these organizations are also not able to use bonds because of prohibitions on debt financing, they are then placed into a situation where they must depend on a large-share of funding to come from the government.

After finding that most stadium projects in the MENA region use government funding, Mr. Ali wonders what types of problems could be posed from using government funds for the completion of sport facilities and related infrastructure projects. Indeed, his research suggests there has been a long tradition of governments providing financial assistance to develop sport facilities around the world, as they are seen as a public good that can enhance the lives of citizens. At the same time, the over-reliance on government funding can present challenges for sport teams from several perspectives. Perhaps the biggest issue in relying on government funding is the potential risk in terms of the financial health of governments, and their ability to follow through with promised

funding for large-scale and expensive stadium/infrastructure projects. In discussing this matter with his associates, Mr. Ali asks if a financial crisis were to occur, or if the price of natural resources such as oil, which the MENA region is heavily dependent on, were to crash, would government's still prioritize funding sport projects? Although he notes that many countries in the MENA region have sought to diversify their economies to not be too reliant on any single industry or export, the reality still exists that governments may not always be able to place priority on fully funding sport facilities.

In concluding his readings in terms of the various types of financing available to his team for building a new stadium, Mr. Ali feels that he will need to use a more innovative approach that does not solely rely on government financing. At the same time, he also wants to follow local banking laws, which means that he will not be able to use debt financing. However, as Mr. Ali is unwilling to give up equity in his team to finance the stadium, he understands that he needs to come up with a creative solution to this problem. He believes that his organization could be a leader in the MENA region to find ways to shoulder their share of the burden when comes to financing stadiums and other infrastructure projects. Working with his finance team, Mr. Ali is informed of the ability to use *Sukuk* (صكوك) as a way to help fund the stadium, that will not require him to give up ownership if he makes payments, and is not considered to be a form of debt financing.

Sukuk and public-private partnerships in the MENA region

Mr. Ali asks his financial advisors to provide him with more information about Sukuk, and how it works, as this could be a potential solution to creating public-private partnerships in funding his stadium. His advisors tell him that Sukuk, the plural form of sakk (صك), is a financial instrument that has been approved by the Fiqh academy of the Organization of Islamic Countries (OIC) as a bond mechanism that is sharia compliant.[32] Sukuk was specifically created because the debt that is part of a bond is not allowable to Muslims, and thus were restructured so that instead of paying interest as a form of debt, payments were made as a share of profits.[33]

Mr. Ali then asks how Sukuk works from a financial and mathematical perspective, as he wishes to understand the nuances of using this financial instrument before he makes his decision. His financial team informs him that in order to avoid debt, those who are "borrowing" money through a Sukuk must put up some type of collateral, such as partial ownership in a corporation, or other physical assets that have monetary value. In this, the profit payments that are made to those who invested money in a Sukuk are considered to be a form of rent on the asset, with rent payments being allowed under Islamic financial laws.

Providing further details, his financial team then begins to help Mr. Ali understand how to calculate Sukuk price, using a formula similar to those for bond payment as follows:

[32] "Sukuk." Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Sukuk.
[33] Razak, p. S21.

$$PV = \frac{C}{(1+R)} + \frac{C}{(1+R)^2} + \frac{C}{(1+R)^3} + \cdots \frac{C}{(1+R)^t} + \frac{A}{(1+R)^n}$$

where: PV is the present value of the Sukuk, C is the Coupon Payment (the "profit/rent" payment made each year by an investor), R is the rate of return, A is the face value (the amount initially "borrowed"), t is the number of years , n is the maturity length.

In examining this equation, Mr. Ali comes to understand that the price of a Sukuk is calculated using the present value equation, which essentially allows one to calculate the current value that the Sukuk has based on the promised coupon payments and face value payment at the maturity date. His advisors tell him that from the perspective of an organization that is using Sukuk to help finance a project, using the present value calculation allows them to be aware of the cost of financing through this method, as well as the payment plan needed to payback the Sukuk.

In order to get a better grasp of how Sukuk can be used to fund a stadium, Mr. Ali looks up the costs of a stadium that is similar in size and scope of one that he wants to construct for his team. After looking at several candidates in the MENA region, he decides to use Al Janoub stadium in Qatar that was built to host matches at the 2022 FIFA World Cup, and following the completion of the tournament will be downsized to be the home stadium of Al-Wakrah SC, a professional football club that plays in the Qatar Stars League. Mr. Ali finds that the estimated cost of this stadium was around $260 million U.S., which is within the budget that he has envisioned for this project.[34]

[34] Al Jazeera. "Qatar 2022 World Cup Stadiums: All You Need to Know." Al Jazeera, September 18, 2019. https://www.aljazeera.com/news/2018/10/qatar-2022-world-cup-stadiums-181025142408471.html.

Using this amount, Mr. Ali and his financial team calculate the overall cost that would be needed to finance the stadium using Sukuk if he was required to cover all of the construction costs. For this example, Mr. Ali sets the Sukuk to have a maturity date of 10 years, an interest rate of 3 percent, and a coupon rate of 5 percent. He then sets up the calculation as follows:

$$PV = \frac{13{,}000{,}000}{(1+0.03)} + \frac{13{,}000{,}000}{(1+0.03)^2} + \frac{13{,}000{,}000}{(1+0.03)^3} + \cdots \frac{13{,}000{,}000}{(1+0.03)^{10}} + \frac{260{,}000{,}000}{(1+0.03)^{10}} = \$304{,}357{,}054$$

Solving the above equation provides Mr. Ali with a present value of the Sukuk at $304,357,054, or just over $300 million dollars. Simply subtracting the estimated cost from the present value of the Sukuk, Mr. Ali is then able to see that the cost difference between having the stadium funded by the government ($260 million) and privately through a Sukuk ($304 million) is approximately $44 million. In essence, this means that the overall cost of the stadium is $44 million cheaper by having the government cover the entire funding of the stadium construction. However, as he has noted in his previous discussions on financing the stadium, he is concerned that asking for the full amount from the government is not a prudent move, and thus he wants to further explore the use of a public-private partnership.

In order to do this, Mr. Ali begins to consider various scenarios through which he might be able to use a public-private partnership. He directs his financial team to recalculate the Sukuk, using the same basic information, but this time to cut the price in half to consider how much he would need to pay if the cost was split evenly between

himself and the government. To do this, his financial team uses the same equation, but now sets the face value of the Sukuk to $130,000,000.

$$PV = \frac{6{,}500{,}000}{(1+0.03)} + \frac{6{,}500{,}000}{(1+0.03)^2} + \frac{6{,}500{,}000}{(1+0.03)^3} + \cdots \frac{6{,}500{,}000}{(1+0.03)^{10}} + \frac{130{,}000{,}000}{(1+0.03)^{10}} = \$152{,}178{,}527$$

The financial team informs Mr. Ali, that in order to receive a Sukuk worth $130,000,000 to cover their portion of stadium financing, it would cost Mr. Ali a present value of $152,178,527. Performing some quick calculations, Mr. Ali adds up the present value of the new Sukuk and the government funding, and finds that the total value of the project is just over $280,000,000. In discussing this proposed public-private partnership, Mr. Ali notes there are a few points which would likely help to strength his team's argument in terms of receiving governmental funding. First off, although the overall total cost of the project increases by around $20 million, it cuts the overall cost to the government by half, and thus allows the government to utilize the $130 million for other public projects or investments. Similarly, by utilizing a public-private partnership, the price of the Sukuk is cut in half for the stadium, making it so that it is more feasible for the club to be able to cover the costs of the project.

Being a diligent businessperson, Mr. Ali also researches any potential issues that could come up through using Sukuk to fund his portion of the costs of a stadium project. In his reading, he finds there are a number of criticisms of the use of Sukuk as a replacement for bonds in Islamic banking law. In his mind, the largest issue that exists is that in many cases, those who are borrowing the money do not actually have enough

assets to provide as collateral, and this presents increased risk for both those who are investing and borrowing in this system.[35] However, in discussing this point with his financial team, Mr. Ali notes that in the case of sport organizations, especially professional football clubs, these organizations typically have enough assets in order to secure the type of funding needed to use Sukuk to fund part of a stadium project, if not the whole thing. Furthermore, he argues that as professional sport in the MENA region continues to grow and become more commercialized, professional sport clubs will provide an enticing opportunity for investors. In doing their research, Mr. Ali's financial team note that there is growing use and investment in Sukuk, with Qatar issuing around 11 percent of the Sukuk around the world, and even large Western banks such as Goldman Sachs taking on billions of dollars of Sukuk investments.[36][37]

After consulting with his financial team, as well as others who have worked in the sport industry, he finds that the biggest issue in terms of using Sukuk for a sport organization would be to ensure that they have enough capital and cash flow to pay off the amount that was borrowed by the maturity date. Along these lines, Mr. Ali is informed that whether he decides to utilize Sukuk or not for his stadium project, he still needs to follow a proper *capital budgeting* process. Mr. Ali's financial team tell him that capital budgeting is the appraisal process of considering whether to make a large investment in a long-term capital project. That is, the capital budgeting process will start

[35] "Sukuk." Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Sukuk.
[36] Calderon, Justin. "Asian Demand to Drive Qatar Sukuk." Investvine.com, January 9, 2013. http://investvine.com/asian-demand-to-drive-qatar-sukuk/.
[37] "UPDATE 1- Goldman Sachs Gets Strong Demand for Landmark Sukuk Issue." Reuters, September 16, 2014. https://www.reuters.com/article/goldman-sukuk-launch-idUSL6N0RH2RH20140916.

with the initial cost of a facility project, and then project future cash flow into the organization and analyze whether it is possible to pay back the money used to fund the project. [38]

In his meetings with others who have invested in professional sport teams, Mr. Ali is surprised to find that many sport organizations often skip the capital budgeting process, or do not do an adequate job when they are performing such analysis. He is told that this can lead to a number of issues. In many cases, organizations do not properly forecast their future revenues, cash flow, and expenses, and because of this they are often left unable to make payments for the financing of their facilities. Indeed, one advisor tells him, there are a number of examples of poor financial decision-making where organizations have moved into new stadiums, while they (or the government) still owed money for the previous facility. For example, when Giants Stadium, home of the New York Giants and Jets of the NFL, was torn down, there was over $100 million in payments that still needed to be made for building and construction costs.[39]

Hearing all of these stories causes some concern for Mr. Ali, as he did not realize that even some of the most successful sport organizations often have cash flow issues, and have to deal with large debts. Based on this, Mr. Ali decides that there is need to consider additional revenue sources that can help to fund the stadium project, so that he can lower the Sukuk payments that he will need to make. In conducting further research, his advisors note that there are a number of examples of professional sport

[38] Brown, p. 192.
[39] Brown, p. 192.

teams using corporate sponsorships as a way to help finance sport venues. Hearing this, Mr. Ali decides he wants to consider this as a revenue stream to help with the Sukuk payments.

Financing public private partnerships through corporate sponsorships

After conducting more research, Mr. Ali's team has come up with more details about corporate sponsorship as a way to further enhance the funding on the private side of a public-private partnership. Specifically within the MENA region, Mr. Ali's associates have found that the development of the Bahrain International Circuit for F-1 racing used a public-private partnership, with corporate sponsorships helping to make up a significant portion of the private funding for the venue.[40] In his own investigations, Mr. Ali has found that several of the professional soccer clubs in Turkey have sold the naming rights of new facilities to corporate partners, and that those funds were then used to help teams make the payments that were due on the stadium. Although, Mr. Ali finds that the use of corporate sponsorship does not fully protect organizations from a financial standpoint, the additional revenue is generally beneficial to sport teams.

Using his business contacts, Mr. Ali approaches a number of large corporations about his plans to purchase a team and build a new stadium. Following several presentations, he is provided with two offers from large corporations. The first offer is a 10-year deal worth $30 million from a major airline, with the contract indicating that $3 million will be paid annually for naming rights to the stadium. The second offer is a 5-

[40] "Bahrain International Circuit." RacingCircuits.Info. Accessed May 14, 2020. https://www.racingcircuits.info/middle-east/bahrain/bahrain-international-circuit.html#.Xr2lTyhKiUl.

year deal worth $20 million in partnership with a major energy corporation, with $4 million a year to be paid annually for the first five years. After carefully pondering both offers, Mr. Ali is undecided on which sponsor he should sign a contract with.

Bibliography

Al Jazeera. “Qatar 2022 World Cup Stadiums: All You Need to Know.” Al Jazeera, September 18, 2019. https://www.aljazeera.com/news/2018/10/qatar-2022-world-cup-stadiums-181025142408471.html.

“Bahrain International Circuit.” RacingCircuits.Info. Accessed May 14, 2020. https://www.racingcircuits.info/middle-east/bahrain/bahrain-international-circuit.html#.Xr2lTyhKiUl.

Brown, Matthew T., Dan Rascher, Mark Nagel, and Chad McEvoy. Financial Management in the Sport Industry. London: Routledge, 2017.

Calderon, Justin. “Asian Demand to Drive Qatar Sukuk.” Investvine.com, January 9, 2013. http://investvine.com/asian-demand-to-drive-qatar-sukuk/.

Conn, David. “Manchester United Tackle Debt by Floating on New York Stock Exchange.” The Guardian, July 3, 2012. https://www.theguardian.com/football/2012/jul/04/manchester-united-debt-cayman-islands.

Crompton, John L. “Economic Impact Analysis of Sports Facilities and Events: Eleven Sources of Misapplication.” Journal of Sport Management 9, no. 1 (1995): 14–35. https://doi.org/10.1123/jsm.9.1.14.

Gardner, Steve. “T. Boone Pickens, Who Died Wednesday at 91, Donated Millions to Oklahoma State Sports.” USA Today, September 11, 2019. https://www.usatoday.com/story/sports/ncaaf/big12/2019/09/11/t-boone-pickens-oklahoma-state-sports-benefactor-dies-91/2289856001/.

Gerrard, Neil. “Photos | Progress on Qatar’s 2022 World Cup Stadia.” Construction Magazine, July 11, 2018. http://www.constructionmanagermagazine.com/news/photos-qatars-2022-world-cup-stadia/.

“Hazza Bin Zayed Stadium.” Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Hazza_bin_Zayed_Stadium.

“Jaber Al-Ahmad International Stadium.” Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Jaber_Al-Ahmad_International_Stadium.

Kao, Joanna S. “The Cost of Building the 2016 Rio Olympics.” Financial Times, August 5, 2016. Kao. J. S. (2016, August 5). The cost of building the 2016 Rio Olympics. Financial Times. https://www.ft.com/content/52ce2456-5b71-11e6-9f70-badea1b336d4.

“MENA Region's Potential as a Growing Market for Sports and Events Industries Praised at Josoor Institute's Programmes.” Josoor Institute, August 9, 2015. https://www.josoorinstitute.qa/media/press-release/mena-region’s-potential-growing-market-sports-and-events-industries-praised.

“Oman's Big Plans.” Asian Cricket Council, July 16, 2008. http://www.asiancricket.org/index.php/news/july-2008/449.

Razak, Siti Sarah, Buerhan Saiti, and Yusuf Dinc. “The Contracts, Structures and Pricing Mechanisms of Sukuk: A Critical Assessment.” Borsa Istanbul Review 19 (2019): S21–S33.
“Sukuk.” Wikipedia. Accessed May 14, 2020. https://en.wikipedia.org/wiki/Sukuk.
“UPDATE 1- Goldman Sachs Gets Strong Demand for Landmark Sukuk Issue.” Reuters, September 16, 2014. https://www.reuters.com/article/goldman-sukuk-launch-idUSL6N0RH2RH20140916.

Teaching notes

Case Assignment Questions

In order to help him make his decision, Mr. Ali has asked you to write a report to help make the decision. Mr. Ali does like the idea of receiving $30 million rather than $20 million, but he also knows there is the potential that after the end of the 5-year deal with the energy company, that the energy company or another corporation could sign a new naming rights deal.

1. For the first part of your report, Mr. Ali asks you to provide the calculations for both the 10-year and 5-year deal, and then to make an argument as to which sponsorship deal should be chosen. To do this, you will need to setup the Sukuk calculations, and deduct the value provided from the corporate sponsor for the payments in each year. Using this information, you should then write up a report detailing the pros and cons of each sponsor, and the reason for your final recommendation of which sponsor to choose.

2. Further considering Private-Public Partnerships, Mr. Ali has decided that he would like to seek out different options in terms of sponsorship revenue. As such, he has asked you to add to the report by compiling information about different types of sponsorship deals that have been used by sport organizations in the MENA region as an alternative method of private financing for the stadium. In this, you should write up

the details of at least five different sponsorship deals in the MENA region (these can include naming-rights deals, arena signage, on-field ad boards, etc.) and discuss their potential to either replace or supplement the sponsorship deals from the first question to help generate further private financing for the stadium.

This case introduces the concept of Sukuk, as a financial instrument which can be used to fund major stadium projects. The key calculation that students will need to learn to successfully answer the questions within this case is the Present Value (PV) equation. Before starting this case study, students should have been introduced to the concept of the time value of money – that the value of money decreases as time passes. Additionally, it would be beneficial if students have been introduced to the present value and future value calculations, although it is not entirely necessary for students to be able to work on the case. As noted in the case, present value for a Sukuk is calculated using the following equation:

$$PV = \frac{C}{(1+R)} + \frac{C}{(1+R)^2} + \frac{C}{(1+R)^3} + \cdots \frac{C}{(1+R)^t} + \frac{A}{(1+R)^n}$$

where:

PV is the present value of the Sukuk.

C is the Coupon Payment (the “profit/rent” payment made each year by an investor).

R is the rate of return.

A is the face value (the amount initially “borrowed”)

t is the number of years

n is the maturity length.

To better illustrate how the Present Value calculation works in the case of Sukuk, it would be helpful for the instructor to first provide an example within the classroom. This will not only provide students with an understanding of how to conduct the calculations, but also will provide the instructor the opportunity to answer questions before students begin working on the case. Rather than work with a large value, the first example should try and provide a simple calculation as detailed in the following

example. First, we will assume that the Sukuk is for five years in length, with a face value of $1,000. Next we will use a standard rate of return of 5 percent, and a coupon payment of 10%, which would mean $100 per year.

$$PV = \frac{100}{(1+0.05)} + \frac{100}{(1+0.05)^2} + \frac{100}{(1+0.05)^3} + \frac{100}{(1+0.05)^4} + \frac{100}{(1+0.05)^5} + \frac{\$1{,}000}{(1+0.05)^5} =$$

$1,216.47

As the above example illustrates, the present value of a Sukuk with face value of $1,000 over five years is $1,216.47. In essence, this means that the value of providing a Sukuk of $1,000 is worth $1,216.47 to the investor. From the perspective of an organization that is using Sukuk to help finance a project, using the present value calculation allows them to be aware of the cost of financing through this method, as well as the payment plan needed to payback the Sukuk.

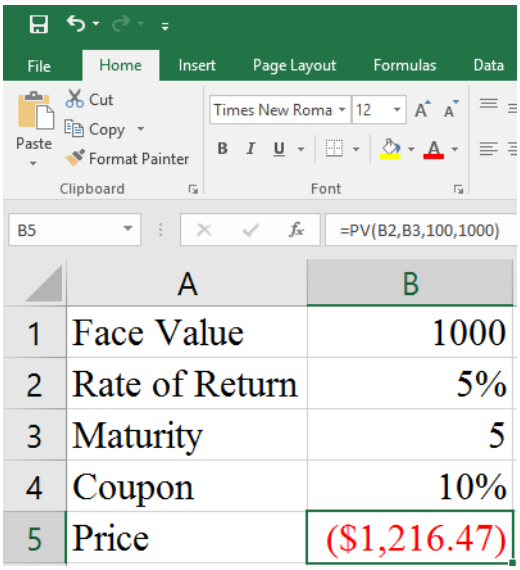
As the students read through the case, it would also be useful for them to work through the calculations both on paper, as well as in the Excel Software. For example, in working on the previous example provided in the teaching notes, the instructor can do the math on the board, and also show the students how to setup the calculation in Excel as follows:

Year	Rate of Return	Payment	Payment Type	Present Value
1	1.05	$100.00	Coupon	$95.24

2	1.05	$100.00	Coupon	$90.70
3	1.05	$100.00	Coupon	$86.38
4	1.05	$100.00	Coupon	$82.27
5	1.05	$100.00	Coupon	$78.35
5	1.05	$1,000.00	Face Value	$783.53
				$1,216.47

In this manner, students will be able to see the Present Value calculation for a Sukuk clearly, and know how to set it up themselves. Following this, it is usually more beneficial for the instructor to ask the students to do the rest of the calculations themselves to make sure that they are able to do the math correctly on their own. To assist all instructors, an Excel file is included with all of the Sukuk calculations already laid out.

For courses that are seeking to teach students sport finance through the use of Excel, this case also provides an opportunity to introduce students to the use of formulas in Excel. Using the examples provided in the case, students can be introduced to long-form calculations in Excel, such as that in the table presented above in the teaching notes. At the same time, students should also be shown how to setup quicker calculations using the “PV” formula within Excel. Using the same example as above to introduce the Sukuk calculations, instructors can show students that the formula can also be laid out as a table as follows:



	A	B
1	Face Value	1000
2	Rate of Return	5%
3	Maturity	5
4	Coupon	10%
5	Price	($1,216.47)

In this instance, the Present Value for a Sukuk can be calculated using the formula, =PV(B2,B3,100,1000), where B2 is equal to the Rate of Return, B3 is the number of years (payments) till the maturity date, 100 represents the interest payment made each year, and 1000 is the face value of the Sukuk.

Overall, this case study is designed to have students explore the use of Sukuk in relation to public-private partnerships. The assignment questions provided at the end of the case have been created to serve as a guide for the instructor in terms of having the students be able to work on these calculations on their own, as well as to write a report as if they were making financial recommendations based on actual data. General answers to the calculations can be found in the accompanying Excel file, with each sheet labeled to denote which question they correspond to. However, students may come up with their own solutions to the problem that do not perfectly match when answering the second question, as there are many ways in which the payments could

be front-loaded or back-loaded. Additionally, instructors should feel free to expand upon the material in the case, and provide additional or different scenarios for the students.

For example, the instructors could use the data from Table 1 from the other stadiums in the region, and ask the students to use these values to calculate the price of a Sukuk for more expensive projects. Additionally, students could be provided with different scenarios, such as the government being unwilling to pay half of the stadium cost, and instead saying they will only contribute a lower percentage or a set amount. In this, the instructors should feel free to alter the scenarios and the assignment questions that are provided to students to meet the needs of their course.

Finally, this case study also provides the opportunity for instructors to connect to other important concepts and calculations in sport finance. For example, on p. 16 the concept of capital budgeting is introduced, which is a vital part of the decision process in developing a stadium. If the instructor wishes, they could integrate the Sukuk payment calculations alongside the capital budgeting process to provide an even more in-depth examination of the budgeting and financing of a stadium in the MENA region. Based on this, assignments could be designed to show students the importance of conducting a proper capital budgeting process to make sure that not only are they getting the necessary funds to cover the costs of the project, but that they will also have future revenue to be able to make the required payments. More details on the capital budgeting process in the context of sport finance can be found in Chapter 8 of the book

Financial Management in the Sport Industry – 2nd Edition written by Matt Brown, Dan Rascher, Mark Nagel, and Chad McEvoy.

Optional Question: Mr. Ali has been informed that he may can still further negotiate the sponsorship deals with both corporations. Although neither is willing to change the total amount or length of their deals, they are willing to change the payment plan by either front-loading (providing larger payments at the beginning and then reducing them in each year) or back-loading (providing smaller payments at the beginning and then increasing them in each year) their payments. Mr. Ali asks you to calculate out both a front-loaded and back-loaded scenario, and to provide your recommendation as to which payment option would work out better financially.