International Journal of Financial Management
12 (1) 2022, 37-46
http://publishingindia.com/ijfm/

Submitted: 09 November, 2021
Accepted: 15 November, 2021

The Conceptual Framework for Achieving Financial Self-Sustenance in Sports

Lysias Tapiwanashe Charumbira*

Abstract

Although considerable research has been devoted to measuring the financial value of sports entities, somewhat less attention has been paid to assessing the extent to which the different finance models followed by sports entities expose them to the risk of financial failure. As a consequence, the current study sought to determine the extent to which sports entities operating under different finance models are exposed to the risk of financial failure. Document analysis, involving the analysis of published financial statements from 100 purposively sampled sports entities drawn from four continents, and three focus group discussions were used to gather data for the study. The NVivo 12 software was used to classify the data into four thematic categories based on the participant entities' degree of financial self-sustenance. The findings were used to construct the conceptual framework for achieving sports financial self-sustenance. The framework ranks sports entities into a four-level hierarchy, according to the extent to which they are exposed to the risk of financial failure. It shows that it is unhealthy for sports entities to spend beyond the revenue they generate from their core operating and commercial activities, and provides guidelines on how sports entities can reduce the risk of financial failure and achieve 'sports financial self-sustenance' by implementing financial strategies which allow them to improve their revenue generating capacities and contain sports expenditure within their own sports revenues. The paper introduces new concepts that have not been explicitly discussed previously in the literature pertaining to sports finance.

Keywords: Sports Financial Self-Sustenance, Financial Red Zone, Low Revenue Financial Amber Zone, High Expenditure Financial Amber Zone, Financial Green Zone, Sports Revenue, Non-Sports Revenue, Sports Expenditure

Introduction

Background to the Problem

There has been an extensive increase in studies focusing on the financial performance of sports teams in the last 20 years. Studies by Andreff and Staudohar (2002), Doles and Solderman (2005), Kaynak, Salman and Tatoglu (2008), Macdonald (2014), Mieritz and Helde (2014), Rohde and Breuer (2016), Charumbira (2016), Soccerex (2021), and Deloitte (2021) have shown that sports entities operate under different finance models. Andreff and Staudohar (2002) note that some sports entities operate under a European amateur sports model whose economic viability is mainly sustained through subscriptions and private cash donations. Others operate under the traditional professional sports finance model, where revenue is derived from local spectators, public subsidies, and sponsors. On the other hand, Doles and Solderman (2005), Rohde and Breuer (2016), Soccerex (2020), and Deloitte (2021) note that there is a new finance model where professional sports teams derive their revenue from such sources as owners, spectators, media, corporations through sponsorship and advertising, and merchandising and markets through the sale of players and stock.

Sports financial valuation studies by Deloitte (2017, 2018, 2019, 2020, 2021) have focused on assessing the professional sports teams' ability to generate revenue from match day sources like ticket and corporate hospitality sales, broadcast rights earnings from participation in domestic and international competitions, and commercial sources like sponsorship, merchandising, stadium naming rights, advertising, jersey rights, among others, and rank them on that basis.

Other sports financial valuation studies by Soccerex (2018, 2019, 2020) evaluate the financial strength of football clubs around the world on the basis of such variables as playing assets (players), tangible assets (team's stadiums, training centres, and other properties), cash in the bank, owner potential investment, and net debt.

There are other significant studies in the subject area. Rosca (2013), who measured the entertainment value

* Bindura University of Science Education, Bindura, Zimbabwe. Email: lysiastapiwacharumbira1968@gmail.com

sports teams provide to fans in exchange for the money the fans spend on admission fees; Bradbury (2016), who investigated the determinants of revenue in North America's baseball, basketball, hockey, and football professional sports leagues by focusing on the impact of winning and the age of the stadium on revenue generation; Rohde and Breuer (2016), who determined the antecedents of financial success of Europe's elite football clubs and noted that financial success was driven by national and international sporting success and brand value; and Rohde and Breuer (2016) and Rey and Santelli (2017), who investigated the relationship between financial performance and sporting performance.

A review of literature on sports finance revealed that although considerable research has been devoted to measuring the financial value of sports entities, somewhat less attention has been paid to assessing the extent to which the different financial models followed by sports entities expose them to the risk of financial failure. Studies by Macdonald (2014) and Mieritz and Helde (2014) have shown that most sports entities follow risky financial models, where they do not operate within their own revenues. Macdonald (2014) argues that there is a bad trend in the football business world where costs are more than the revenue. Mieritz and Helde (2014) corroborate this by noting that the financial climate in sports has changed drastically with increased revenues through sponsorships, merchandising, and broadcasting deals. However, even though the income has increased, the expenses through wages and transfer fees have grown even more. This financial state of sports has influenced some sports federations like the Football Association in England (FA), Spanish La Liga, and the Union of European Football Associations (UEFA) to implement such remedial measures as the short-term cost control rules, financial fair-play rules, and financial fair-play regulations, respectively. However, these corrective measures have failed to arrest the current trend where some sports entities are spending more than what they are earning from their core operating and commercial activities. This failure can be attributed to the fact that sports practitioners generally misconstrue the rules to be aimed at limiting the impact of financial inequality on athlete performance, as opposed to ensuring that sports entities do not spend beyond their earnings.

This study was designed to bridge the theoretical and practical gaps identified in the preceding sections by providing some insights that can give rise to a better understanding of the significance of running sports entities on sustainable financial models. This was achieved by determining the extent to which different categories of sports entities were operating within their own revenues and using the findings to develop a sports finance model which can guide sports entities on how to improve their financial well-being by operating under self-sustaining finance models.

New Terms

The paper introduces new concepts that have not been explicitly discussed previously in the literature on sports finance.

In this study, 'sports financial self-sustenance' is a situation where sports entities minimise the risk of financial failure by containing expenditure within the revenue they generate from their core operating activities and commercial activities.

Sports revenue is conceptualised as income derived by sports entities from their core operating activities and commercial activities, and it is an aggregate of direct sports revenue and indirect sports revenue.

Direct sports revenue is income derived by sports entities from core operating activies like match day admission fees, match day corporate hospitality packages, subscription fees, and athlete transfer fees.

Indirect sports revenue is income derived by sports entities from commercial activities like sponsorship, merchandising, media rights, stadium naming rights, advertising, jersey rights, and stock exchange activities, among others.

Non-sports revenue is income derived by sports entities from such financing activities as loans from financial institutions, capital injections from owners, donations, and public subsidies, among others.

Sports expenditure is money spent towards the production and delivery of sports products and services to end users, and it is an aggregate of capital sports expenditure and recurrent sports expenditure.

Capital sports expenditure includes expenses incurred by sports entities towards the acquisition or creation of long-

term assets (such as land, building, sports facilities, sports equipment, and athletes), which can be used to produce and deliver sports products and services for more than one accounting period.

Recurrent sports expenditure includes short-term expenses incurred by sports entities in the current accounting period towards day-to-day operations, and it does not result in the creation or acquisition of long-term assets.

Financial red zone is a sports finance model where sports entities are exposed to high risk of financial failure, because they are mainly financed through non-sports revenue and are yet to develop the capacity to generate revenue from their core operating activities and commercial activities.

Low revenue financial amber zone is a sports finance model where sports entities are exposed to moderate risk of financial failure, because their low revenue-generating capacities do not allow them to generate adequate revenue from their core operating activities and commercial activities to cover their sports expenditure commitments.

High expenditure financial amber zone is a sports finance model where sports entities are exposed to moderate risk of financial failure, because they are spending beyond the revenue they generate from their core operating and commercial activities.

Financial green zone is a sports finance model where sports entities are exposed to low risk of financial failure, because they are containing expenditure within the revenues they generate from their core operating activities and commercial activities.

Methodology

Document analysis was used to gather data anonymously from 100 purposively sampled sports entities drawn from four continents. Since the study was conducted on a global scale, it was imperative to adopt methods which allow for the collection of high quality data from geographically disparate samples in a cost-effective manner. This explains why document analysis was used to collect data from 35 African, 35 European, 20 North American, and ten Asian sports entities, by analysing their published 2016 to 2020 annual financial reports which were available online for public access. The selection of document analysis was influenced by its ability to offer the opportunity for longitudinal analysis and to generate developmental explanations for changes in the financial viability of sports entities, as informed by such methodological scholars as Gray (2014) and Bryman (2016).

The findings were subjected to focus group discussions. During the focus group discussions, the findings were used in a manner that would not be linked to the sports entities whose financial statements were analysed. Codes were used to identify the 100 participant sports organisations. Three focus group discussions with ten participants each led by a trained moderator were conducted virtually on online video conferencing platforms.

Participants of focus group discussions were selected from a narrowly defined population, on the basis of their expertise on sports finance issues. The discussions focused on:

- Identifying the financial structures emerging from the document analysis results and the levels of financial self-sustenance of the participant organisations.
- Discussing the financial risks and prospects associated with each identified structure.
- Identifying what sports entities in each of the identified financial structures need to do to reduce the risk of financial failure.

The decision to conduct three focus group discussions was stated by Onwuegbuzie et al. (2009), who argue that three to six focus groups can generate adequate information to meet the exploratory objectives of most qualitative studies. On the other hand, the size of each focus group was in line with recommendations from Baumgartner, Strong and Hensley (2002), who recommend that focus groups should range from 8-12 participants in size.

The respondents were asked to complete informed consent forms before the commencement of the discussions. During the focus group discussions, codes were be used to identify each participant. The moderator and participants were not allowed to identify themselves by name, by position held, or their organisations. The deliberations were recorded with permission from the participants, and transcribed later.

The study was based on inductive reasoning, as it sought to generate a conceptual model from the patterns emerging from the research findings, as opposed to hypothesis testing. This is in line with the views of Saunders, Lewis

and Thornhill (2019), who encourage researchers in opaque topics like the one under review, to get a feel of what is going on, to understand better the nature of the problem and use the study result for the formulation of a theory, often expressed as a conceptual framework.

In an attempt to ensure compliance with the principle of anonymity, the NVivo 12 Software was used to organise the findings, at the group level, into four thematic categories, on the basis of the degree of financial self-sustenance (Table 1).

Research Findings

The findings were classified into four categories in NVivo 12, as summarised in Table 1.

Table 1: Classification of Sports Entities by Level of Financial Risk

Category	*Category Description*	*Financial Status*	*NVivo Coding References*
Financial Red Zone	Based on a financial model where the risk of financial failure is high.	– The stage is characterised by sports expenditure without sports revenue generation. – The quality of the core sports product is still inferior. – Sports entities cannot generate revenue from their core operating activities and commercial activities. – Their expenditure is financed from such non-sports revenue sources as owners' capital injections, subscription fees, donations, and public subsidies. – The funders cannot avail adequate resources to sustain operations. – Most of the benefactors' core business interests are in enterprises other than the sports entity for which they are benefactors. – The risk of financial failure is very high since these entities do not have any control over their financial affairs and are entirely dependent on non-sports revenue.	43
Low Revenue Financial Amber Zone	Based on a financial model where the risk of financial failure is moderate and is induced by low revenue generation.	– There is low sports revenue generation and high sports expenditure. – Sports revenue is mainly in the form of match day admission fees. – Sports entities at this level cannot offer long-term contracts to athletes, and hence the benefits they realise from the athlete transfer market are insignificant. – They also receive indirect sports revenue from narrowly diversified commercial activities. – Sports expenditure exceeds sports revenue; hence, non-sports revenue still plays a significant role in financing capital and recurrent projects. – The risk of financial failure is moderate, but higher than that of the high expenditure financial amber zone.	39
High Expenditure Financial Amber Zone	Based on a financial model where the risk of financial failure is moderate and induced by excessive expenditure.	– The stage is characterised by high sports revenue generation and excessive sports expenditure. – Sports entities at this level have a global fan base. – The quality of the core sports products is high. – They generate significant revenues from their core operating activities and widely diversified commercial activities. – They do not run viable talent identification and development programmes and hence, a considerable chunk of the revenue goes towards athlete transfer fees. – Sports entities at this level buy established athletes who demand very high salaries. As a result, their wage bills are difficult to sustain. – They do not generate significant revenue from athlete transfer activities, since they mainly sell athletes who are past their prime. – Although the sports revenue generating capacities are high, sports expenditure still outweighs sports revenue. – Non-sports revenue in the form of borrowed finances and capital injections from owners is used to bridge the fiscal deficits. – The risk of financial failure is moderate.	12

Category	*Category Description*	*Financial Status*	*NVivo Coding References*
Financial Green Zone	Based on a financial model where the risk of financial failure is low, because sports entities are able to contain expenditure within their own revenues.	– Sports entities have a global fan base since the quality of the core product is high. – They generate significant revenues from their core operating activities and a widely diversified range of commercial activities. – The entities run viable athlete talent identification and development programmes, and hence, they rely mostly on internally developed athletes who do not demand very high salaries before they reach their prime; as a result, the wage bills are sustainable. – They generate significant revenue from athlete transfer activities, since they operate on a model where they sell the homegrown athletes once they reach their prime, and replace them with emerging talent from the athlete development programmes. – As a result, sports revenue exceeds sports expenditure, and the entities generate enough sports revenue to sustain operations. – The risk of financial failure is low.	6

The Conceptual Framework for Achieving Sports Financial Self-Sustenance

The findings were used to construct a conceptual framework, where sports entities were ranked in a pyramid hierarchy based on the extent to which they were living within their own revenues (Fig. 1).

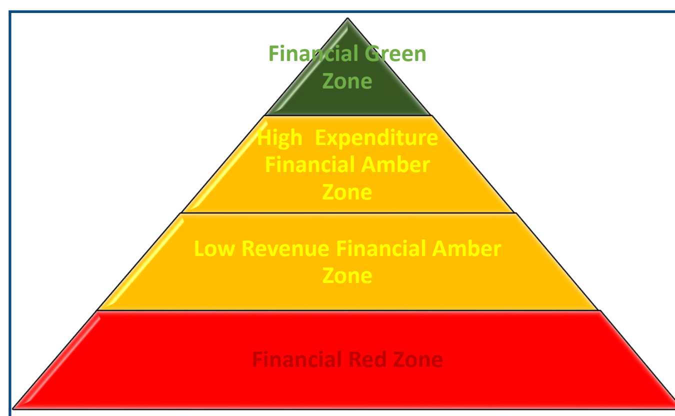

Fig. 1: The Sports Financial Self-Sustenance Pyramid

Financial Red Zone

This is a spoon-feeding stage which is characterised by sports expenditure without sports revenue generation. At this stage, sports entities are yet to develop the capacity to generate revenue from their core operating activities and commercial activities. This stems from the fact that the sports entity's perceived brand equity or the quality of its core sports products or services is still below the level where it can be offered for commercial consumption or attract corporate partners. As a consequence, sports entities are mainly dependent on non-sports revenue.

Sports expenditure, at this stage, is financed by intermittent revenue from such sources as owners' capital injections, subscription fees, donations, and public subsidies. These sources cannot avail adequate resources to sustain operations. The benefactors' core business interests are in ventures other than the sports entities they are supporting financially. Such benefactors tend to shrink for survival by withdrawing funding from non-core activities like sports, when faced with operational challenges like the current COVID-19 pandemic-induced operational disruptions.

As a result, sports entities in this zone do not have any control over their financial affairs, since they do not operate with their own revenues. This exposes them to very high levels of risk of financial and operational failure.

Financial management strategy at this stage should focus on building the capacity to generate revenue from core operating activities, by improving the quality of the core sports product for sustainable commercialisation. Sports entities at this stage can also raise funds through crowdfunding and such menial commercial activities as food, beverages, and clothing and equipment sales during sports events, among other fundraising activities. It is important to adopt branding strategies that can enable the sports entities to increase service or product usage and attract corporate sponsorship and public subsidies. Strategy should promote responsible spending for

sustainable 'sports financial self-sustenance'. Sports-governing bodies and public policy makers can institute levy and income tax-based policy measures to stimulate revenue generation for sports entities in the financial red zone.

Low Revenue Financial Amber Zone

Sports entities in the low revenue financial amber zone have improved the quality of the core sports product to a level that allows for the generation of revenue from core operating activities and commercial activities at a national level. The stage is characterised by low sports revenue generation and high sports expenditure. Revenue at this stage is mainly in the form of insignificant direct sports revenue; this is mainly in the form of match day admission fees. The sports entities are yet to build the level of brand equity needed to resonate with corporate consumers for sustainable indirect sports revenue generation. Shirbury et al. (2009) and Shank and Lyberger (2015) note that it is risky for sports organisations to draw most of their revenue from the core sports product, because it is unpredictable, subjective, and highly perishable, and demand fluctuates considerably. This is driven by factors beyond the control of the sports entity. This was noted in Zimbabwe, where the top flight football league, which is mainly driven by match day admission fees, failed to run for the entire 2020 and 2021 seasons when the fans were banned from attending matches as a measure to manage the spread of COVID-19.

The capacity to offer long-term contracts to athletes is still limited, and hence, sports entities in the low revenue financial amber zone reap insignificant benefits from athlete transfers activities. Most entities at this level do not own the sports facilities they use to generate their core sports products. The capacity to generate indirect sports revenue is also limited. The sports revenue they generate is not enough to sustain operations. As a result, non-sports revenue still plays a significant role, and it is used to bridge the gap between sports revenue and sports expenditure. This exposes sports entities to moderate risk of financial and operational failure.

Financial management strategy at this level should focus on improving the quality of the core product and brand equity, to enhance the capacity to generate direct sports revenue and indirect sports revenue. Strategy can also focus on strengthening the sports revenue generating capacities by extending the market of their core operating and commercial activities to other geographical regions, including beyond national boundaries. The strategy should focus on reducing dependence on non-sport revenue to promote sports financial self-sustenance. It is critical to ensure responsible spending for sustainable 'sports financial self-sustenance'. Public policy makers can introduce income tax-based policy measures to stimulate the flow of indirect sports revenue to sports entities in the low revenue financial amber zone.

High Expenditure Financial Amber Zone

The high quality of the core sports product for sports entities in the high expenditure financial amber zone allows them to have a global market appeal. The stage is characterised by high sports revenue generation and excessive sports expenditure. The excessive expenditure can be attributed to the overwhelming desire to achieve on-field success, even if it means spending beyond the entity's own revenues to realise that goal.

Sports entities in this zone generate significant direct sports revenue from their core operating activities. They also generate significant indirect sports revenue from a widely diversified range of commercial activities. They own the sports facilities they use to generate their core sports products.

However, they do not run viable talent identification and development programmes and hence, a huge chunk of their revenue goes towards athlete transfer fees. They normally buy established athletes who demand very high salaries. As a result, their wage bills are difficult to sustain. They do not generate significant revenue from athlete transfer activities, since they mainly sell athletes who are past their peak performance levels.

Thus, although their sports revenue generating capacities are very high, sports expenditure still outweighs sports revenue. As a result, sports entities at this stage still rely heavily on non-sports revenue in the form of borrowed finances and capital injections from owners to bridge their fiscal deficits. This exposes them to moderate risk of financial failure.

Financial management strategy at this level should focus on containing the sports entities' sports expenditure within the sports revenue they generate from core operating and

commercial activities. This can be achieved by running talent identification and development programmes, which will enable them to develop their own athletes and eventually sell them to other sports entities for a profit (with buyback and sell-on options), rather than buying expensive athletes in their prime. The use of internally developed young athletes, who do not make outrageous wage demands before they reach their prime, can also help to contain sports expenditure by cutting down on the wage bill. Financial strategy can focus on increasing market share by extending the operating and commercial activities to emerging markets, as this can help increase their sports revenue generating capacities even further.

Sports governing bodies and public policy makers can introduce policy measures aimed at promoting 'sports financial self-sustenance' by containing spending on wages and transfers within the sports revenue generated by entities in this zone.

Financial Green Zone

Sports entities in the financial green zone offer high-quality sports products and have a global fan base. The stage is characterised by 'sports financial self-sustenance', since sports expenditure is contained within the sports revenue they generate from their core operating activities and commercial activities. They generate significant revenues from their core operating activities and widely diversified range of commercial activities. They run viable athlete talent identification and development programmes, which allow them to identify and acquire emerging athlete talent at affordable rates, or transform them into elite athletes. The internally developed athletes do not demand very high salaries before they reach their prime performance phases. As a result, the wage bills for sports entities in this zone are sustainable. Sports entities in this zone generate significant sports revenue from athlete transfer activities, since they operate on a model where they sell homegrown athletes once they reach their prime, with sell-on and buy-back options, and replace them with emerging talent from the athlete development programmes. Sports entities in the financial green zone own the sports facilities they use to generate their core sports products.

As a result, they generate adequate revenue to sustain operations and hence, the risk of financial failure is low under this model.

Financial strategy under this model must focus on perpetuating 'sports financial self-sustenance'. It is also important to ensure that the contained expenditure does not impact negatively on on-field performance, as this may in turn impact negatively on the revenue-generating capacity in the long run and expose entities to the risk of financial failure. Just like in the high expenditure financial amber zone, financial strategy can focus on increasing market share by extending the operating and commercial activities to emerging markets, as this can help increase their sports revenue generating capacities even further.

Significance of the Conceptual Framework

Sports is an important economic activity, with the ability to lift people out of poverty through increasing employment and generating economic activities, which can contribute to micro- and macro-economic growth. A study by Kearney (2014) revealed that the global sports industry generates as much as USD700 billion annually or 1 per cent of global Gross Domestic Product when sporting goods, apparel, equipment, and health and fitness spending is included. Sports also has multiple links to other economic activities, such as tourism, manufacturing, transport, and health, and can be a significant driver of economic growth.

However, the contribution of sports as a stimulus for economic growth is now under threat. Spending on athlete wages and transfer fees has spiraled out of control in Europe and North America. Most sports entities are spending beyond what they are generating from core operating and commercial activities. In addition, the COVID-19 pandemic has reduced revenue inflows from core operating and commercial activities.

As a result, this framework was developed for the purpose of providing guidelines to managers of sports entities, public policy makers, and sports regulatory authorities, on the financial management strategies and policy measures they can adopt to monitor and control sports expenditure, and improve the sports revenue generating capacities of sports entities operating at the various levels of 'sports financial self-sustenance' hierarchy, for optimal economic contribution.

The framework can be used to determine the extent to which sports entities are exposed to the risk of financial failure, by assessing the extent to which they are

operating within their own revenues. It provided some insights that can give rise to a better understanding of the significance of running sports entities on sustainable financial models. It shows that it is unhealthy for sports entities to spend beyond the direct sports revenue and indirect sports revenue they generate from their core operating and commercial activities, as illustrated in Fig. 2.

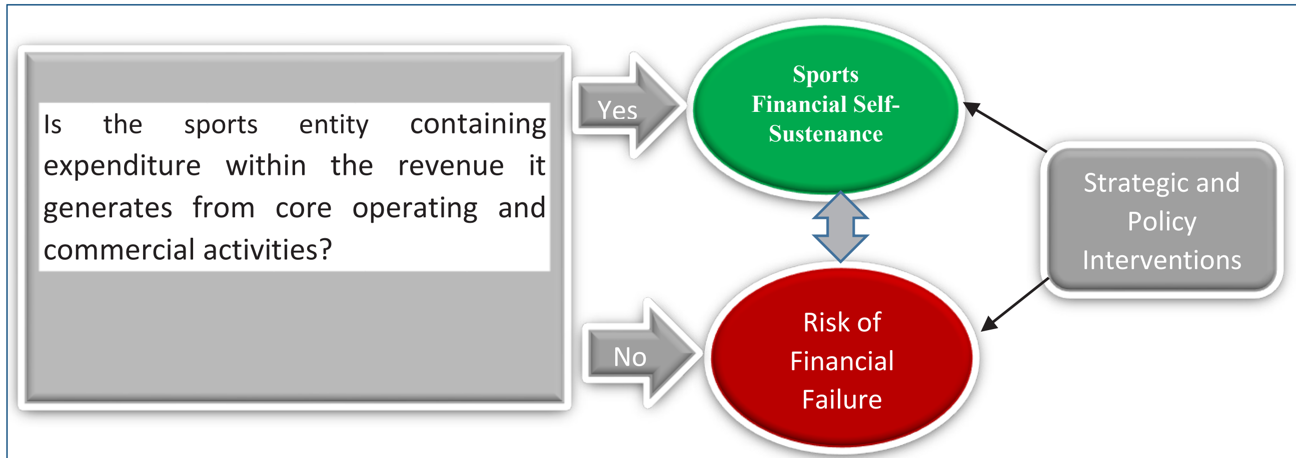

Fig. 2: The Sports Financial Self-Sustenance Question

It goes on to highlight the significance of strategic and public policy interventions in ensuring responsible spending and promoting revenue generation, to reduce the risk of financial failure for 'sports financial self-sustenance' and optimal economic performance by the sports sector.

The proposed conceptual framework for achieving financial self-sustenance in sports represents a departure from previous approaches used to assess the financial well-being of sports entities, in that it ranks the entities operating under different finance models in a single pyramid hierarchy, according to the extent to which they are exposed to the risk of financial failure.

The use of terms used to denote the levels of traffic risks in everyday life was meant to provide an improved theoretical understanding of the different levels of financial risk to which sports entities operating under different finance models are exposed.

The study is also significant in that it introduced a number of new concepts that have not been previously discussed in the literature pertaining to sports finance. This was meant to contribute towards the growth of sports finance as an independent sub-discipline of financial management.

Although the framework organises sports entities into a four-level hierarchy according to the extent to which they are exposed to the risk of financial failure, movement between these levels is complex and not unidirectional. Some entities can reduce the risk of financial failure by improving their sports revenue generating capacities or reducing their sports expenditure, and move to a higher level on the pyramid. On the other hand, entities may fail to contain their sports expenditure or fail to generate adequate sports revenue and increase their exposure to financial failure. This will force them to move to a lower zone on the hierarchy. The movement is also not a continuous progression from the lowest to the highest level of the pyramid. Sports entities may skip some steps in their movement up or down the hierarchy. It is also possible for other entities to remain trapped at the same level for the entire duration of their business life cycles.

Limitations of the Framework

As with any study, this study had a number of limitations that should be considered in follow up studies on the subject. First, since the conceptual framework focuses on how sports entities can reduce their exposure to the risk of financial failure and achieve financial self-sustenance over time, it would have been more appropriate to adopt longitudinal time horizons for the study.

Eighty per cent of the data was collected by means of document analysis. This may fail to capture the hidden

complexities of the sports financial management process and environment in the same manner as methods which allow practitioners to express their experiences with the environment and processes, like interviews and focus group discussions. As a result, follow up studies should adopt methods which allow them to collect in-depth information from the financial management practitioners in sports entities.

Directions for Further Studies

The current study was based on the breakeven principle. It focused on determining the extent to which sports organisations were exposed to the risk of financial failure, by analysing their income statements and establishing whether the entities were operating within the revenues they generate from their core operating and financial activities. The study did not take into consideration the value of the non-current assets owned by the same entities. As a result, future studies may be based on analysing the entities' balance sheets and use financial ratios to determine financial health. Future studies can also focus on externally validating the developed framework. Third, the study introduced a number of new concepts that have not been previously discussed in sports finance literature. As a result, it might be necessary for future studies to assess the significance of these concepts in the management of the financial affairs of sports entities.

Conclusion

The study sought to determine the extent to which sports entities operating under different finance models are exposed to the risk of financial failure. The research revealed the extent to which the different finance models followed by sports entities expose them to the risk of financial failure. The findings were used to construct the 'Conceptual framework for achieving financial self-sustenance in sports'. The framework ranks sports entities on a four-level hierarchy, according to the extent to which they are exposed to the risk of financial failure. At the base of the sports financial self-sustenance hierarchy is the financial red zone, which is characterised by expenditure without revenue generation and high risk of financial failure. The second level is coined the low revenue financial amber zone; it is characterised by moderate risk of financial failure, which stems from the low revenue-generating capacities of the sports entities at that level. The high expenditure financial amber zone, which occupies the third level in the financial self-sustenance hierarchy, is characterised by high revenue generation; however, excessive expenditure exposes sports entities to moderate risk of financial failure. At the summit of the hierarchy is the financial green zone, a stage characterised by 'sports financial self-sustenance', since expenditure is contained within the revenue generated from core operating activities and commercial activities. The framework shows that it is risky for sports entities to spend beyond the revenue they generate from their core operating and commercial activities. As a result, sports entities operating under different finance models can reduce the risk of financial failure, and achieve 'sports financial self-sustenance', by implementing financial management or branding strategies, and abiding by public policies which allow them to improve their sports revenue-generating capacities and contain sports expenditure within their own sports revenues. The study introduced a number of new concepts that have not been previously discussed in the literature pertaining to sports finance. This helped provide an improved theoretical understanding of the different levels of financial risk to which sports entities operating under different finance models are exposed.

References

Andreff, W., & Staudohar, P. D. (2002). European and USA sports business models. In C. P. Barros, M. Ibrahmo & S. Szymaski (Eds.), *Transatlantic Sport: The Comparative Economics of North American and European Sports* (pp. 23-49). Great Britain: Biddle Ltd.

Bradbury, J. C. (2016). Winning and other determinants of revenue in north america's professional sports leagues. *Faculty Publications*, *4011*. Retrieved from http://digitalcommons.kennesaw.edu/facpubs/4011

Brayley, R. E., & McLean, D. D. (2008). *Financial resource management: Sport, tourism, and leisure services* (2nd ed.). Champaign, Illinois, United States of America: Sagamore Publishing LLC.

Bryman, A. (2016). *Social research methods* (3rd ed.). Oxford: Oxford University Press.

Charumbira, L. T. (2016). Proposing the sports team brand hierarchy conceptual framework. *International Journal of Marketing and Business Communication, 5*(1), 12-20.

Charumbira, L. T. (2018). The integrated conceptual framework for understanding perceived brand equity

in professional sports teams. *International Journal of Marketing and Business Communication, 7*(4), 7-16.

Deloitte. (2017). *Football money league: Sport business group* (20th ed.). United Kingdom: Deloitte LLP.

Deloitte. (2018). *Football money league: Sport business group* (21st ed.). United Kingdom: Deloitte LLP.

Deloitte. (2019). *Football money league: Sport business group* (22nd ed.). United Kingdom: Deloitte LLP.

Deloitte. (2020). *Football money league: Sport business group* (23rd ed.). United Kingdom: Deloitte LLP.

Deloitte. (2021). *Football money league: Sport business group* (24th ed.). United Kingdom: Deloitte LLP.

Denscombe, M. (2017). *The good research guide for small social research projects* (6th ed.). Berkshire, England: Open University Press.

Dolles, H., & Solderman, S. (2008). Mega-sporting events in Asia-impacts on society, business and management: An introduction. *Asian Business and Management*, *7,* 147-62.

Gray, D. E. (2014). *Doing research in the real world* (3rd ed.). University of Surrey: Sage Publications.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability, *Field Methods, 18,* 59-82.

Kaynak, E., Salman, G. G., & Tatoglu, E. (2008). An integrative framework linking brand associations and brand loyalty in professional sports. *Journal of Brand Management*, *15,* 336-357.

Kearney, A. T. (2014). A.T. Kearney study: Sports industry growing faster than GDP. Retrieved from https://www.ameinfo.com/business

Macdonald, A. L. (2014). *The impact of UEFA's financial fair play regulation: A case study analysis of FC Porto, Chelsea FC and Real Madrid FC* (Master of Science in Finance and Management Dissertation, University of Glasgow, Scotland).

Mieritz, J. G., & Helde, E. M. (2014). *UEFA financial fair play - A legal and economic analysis of UEFA's financial fair play regulations' effect on the competition in European football* (Master of Business Administration Thesis). Copenhagen Business School, Copenhagen, Denmark.

Rey, A., & Santelli, F. (2017). The relationship between financial ratios and sporting performance in Italy's serie A. *International Journal of Business and Management*, *12*(12), 53-63.

Rohde, M., & Breuer, C. (2016). The financial impact of (foreign) private investors on team investments and profits in professional football: Empirical evidence from the premier league. *Applied Economics and Finance, 3*(2), 243-255.

Rohde, M., & Breuer, B. (2016). Europe's Elite football: Financial growth, sporting success, transfer investment, and private majority investors. *International Journal of Financial Studies, 4*(2), 1-20.

Rosca, V. (2013). A model for measuring value for money in professional sports. *Theoretical and Applied Economics*, *20*(7), 77-86.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Business research methods for business students* (7th ed.). Harlow: Pearson Education.

Shank, M. D., & Lyberger, M. R. (2015). *Sports marketing: A strategic perspective* (5th ed.). New York: Routledge.

Shirbury, D., Westerbeek, H., Quick, S., & Funk, D. (2009). *Strategic sport marketing* (3rd ed.). Crows Nest, Australia: Allen & Unwin.

Soccerex. (2018). *Football finance 100* (1st ed). Retrieved from www.soccerex.com

Soccerex. (2019). *Football finance 100* (2nd ed). Retrieved from www.soccerex.com

Soccerex. (2020). *Football finance 100* (3rd ed). Retrieved from www.soccerex.com