

Koba, Timothy

## Article

# Private equity and venture capital in sport: Who is receiving funding and what factors influence funding

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Timothy Koba  
*University of Mount Union*

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## Private Equity and Venture Capital in Sport: Who is Receiving Funding and What Factors Influence Funding?

Timothy Koba  
University of Mount Union, Alliance, OH USA  
[kobati@mountunion.edu](mailto:kobati@mountunion.edu)

**Abstract:** Small business survival is paramount to the vibrant business community in the United States with over 400,000 new business created annually. While the cost of starting a business can vary, the necessity of access to available capital is vital for growth. As an industry, sport comprises several sectors of the economy with little understanding of the private equity market that exists for funding of these businesses. This paper investigates the \$9.2 Billion private equity marketplace for sport, fitness and athletic businesses in the United States between 2010 and 2020. The results of the study demonstrate the importance of revenue and total investors to the ability to attract investment dollars, as well as the capital invested in women and minority sport business. As one of the first studies to evaluate this funding, results help inform academics and practitioners on this area.

**Keywords:** Sport; Private Equity; Venture Capital

## 1. Introduction

Deciding to start your own business can be a rewarding, but daunting task. There were an estimated 30.2 million small businesses in 2018 that employed 58.9 million people (SBA, 2018). Between 2009 and 2016, there were an estimated 400,000 businesses started per year in the United States (Chamber of Commerce, 2019). Of the small business who open their doors, 80% survive the first year, 70% survive the second year, 50% through the fifth year and 33% through the tenth year (Chamber of Commerce, 2019; Shane, 2005). The range for the capital necessary to start a small business varies depending on the size of the business from \$5000 to over \$500,000, however, the start-up capital is estimated at \$30,000 (Chamber of Commerce, 2019). In general, the most common reasons provided for business failure is not creating a product that has a demonstrated need, lack of capital and having the wrong team, along with pricing and competition (Otar, 2018). It would appear that business success would include managerial competencies and access to capital. Since 2015 there has been over \$625 Billion of venture capital invested into small businesses in the US (Crunchbase, 2020). However, there is limited data available regarding small business financing, which makes inquiry a challenge (Board of Governors, 2017).

Small business development plays a critical role for the economy since they employ 47.5% of the number of private workforce employees (Office of Advocacy, 2018) and start-up businesses display the greatest growth in job creation and productivity when they survive (Federal Deposit Insurance Corporation (FDIC), 2018; Kane, 2010). Small businesses create new ideas that stimulate new business models. To be successful, they need good relationships and to turn opportunities into profits (Ratten & Tajeddini, 2019), they also require capital to accomplish this. Therefore, access to capital early on in the growth of a business can assist with sustained development to attract future investment, as well as assist in wealth creation and regional economic development (Lipper & Sommer, 2002).

When it comes to accessing capital, options for small businesses are limited; they can use personal resources, solicit financial support from family and friends, work with a lender, or seek backing from angel or venture capital (VC) groups (Morrissette, 2007). About 16% of small business funding comes from lenders, with approximately 2-6% coming from family and friends. In 2016, 5.7 million loans were issued by vendors under \$100,000 (SBA, 2016). In 2016 there were 7.4 Million loans worth \$256.5 Billion which was an increase from 2013 when there were 5 Million loans worth \$205.8 Billion. It is important to note that while there was little change in either the number or value of loans \$100,000 to \$1 Million, there was an approximately 25% increase in number and value of loans \$100,000 or less during this time period (Office of Advocacy, 2020).

Success in the sport entrepreneurial world is no different. These businesses face the same challenges that their general business counterparts face, but little is known about them. Unfortunately, there is no central location for sport focused small businesses information, so the magnitude of the industry, and the funding preferences utilized, have received limited academic inquiry.

The purpose of this paper is to describe the private funding of sport related businesses. Moreover, this study also looks to examine what factors are related to funding. Results of this study provide the academic community with insights into a business community with vast research opportunities, and practitioners with an overview of the private investment industry and a deeper understanding of the mechanisms contained therein. There exists a need to understand entrepreneurship in sport (Ratten & Tajeddini, 2019) and the mechanisms by which they obtain capital necessary for their success.

## 2. Literature Review

### 2.1. Sources of capital

It can be difficult for founders of small businesses to identify potential funding sources, yet successful access to capital plays a crucial role in helping small business grow, provide employment opportunities and increasing survival rates (Paglia & Harjoto, 2014). Common funding sources from the business founder's current savings and credit cards, capital from friends and family and loans from lending institutions (Morrissette, 2007; Strangler, Tareque, & Morelix, 2016). When starting a business, 10% of founders use a personal credit card and only 0.6% receive VC backing (Strangler, Tareque, & Morelix, 2016). Other sources of funding exist through the Small Business Association (SBA) and Small Business Investment Company (SBIC). SBIC receive support through the SBA and are able to access capital at favorable rates that they can then employ in financing younger, riskier companies to foster job creation (Congressional Research Service, 2019). While the SBA offers loans to small businesses, it was viewed as advantageous to offer debt-free access to capital in the form of equity financing.

Small business lending by a bank is the most common source of small business funding. Smaller banks (those with less than \$1 Billion in assets) play a large role in providing capital to small businesses. While these banks comprise 17% of banking assets, they contribute 53% of all small business loans. As a result of market consolidation, the number of small banks has decreased by 33% and seen a 14% reduction in assets which may impose a deleterious effect on small business lending in the future. This is especially important for communities, as local geography is important for capital availability of any type and smaller banks focus lending more locally than do large banks (FDIC, 2018). In order to access banking capital, many small businesses use their primary personal residence as collateral for a securitized loan, which has severe consequences in the event of a business failure. Entrepreneurs can look for external funding from angel investor and VC's (Wall, 2007), who do not impose collateral requirements in exchange for capital investments.

In terms of non-bank funding, angel groups supply capital to the greatest number of companies with the smallest initial investment (Board of Governors, 2017). An angel investor has been described as high net-worth individuals who put their capital to fund entrepreneurs in exchange for capital (Sudek, 2007), however, being high net worth is not necessarily a pre-requisite. A similar definition that has been put forth is "An angel investor is a person who provides capital, in the form of debt or equity, from his own funds to a private business owned and operated by someone else who is neither a friend nor a family member" (Shane, 2012, p.4).

For either definition, an angel investor supplies capital for young businesses in exchange for equity. Although, equity is the usually mentioned method of capital, angels can also offer capital as a loan. In order to more effectively meet the needs of the business community, a group of investors may get together in a more formal manner and form a syndicate or portal (Sudek, 2007). The average fund investment is 4-6 years (Sudek, 2007) and from 2001 to 2003 the average angle investment was \$10,000 (Shane, 2012), however, this varies considerably depending on the unique circumstances of each angel and business opportunity.

As firms mature and demonstrate opportunities for growth, the ability to attract interest from VC's becomes possible. While VC's supply large amounts of capital per investment, they tend to do so on more sophisticated lending terms, with convertible securities being a commonly mentioned structure (Board of Governors, 2017; Florin, Dino, & Huvaj, 2013). VC funding is viewed as making a contribution to the technology development, economic growth and employment in small businesses (Monica & Sharma, 2015). VC firms make a range of investments to young

companies with an anticipated exit several years (four to six) after the initial investment. They also tend to invest in more mature companies, while younger firms need less capital, they are more risky (Ramsinghani, 2014).

## ***2.2. Funding rounds***

Small businesses that seek external funding sources to support their growth go through a series of “stages” or “rounds” in which they pitch their product to potential investors often offering an equity stake in exchange for capital (Cremades, 2018). A pre-seed offering is often characterized as a “friends and family” investing round where early angel investors may also be approached. A seed round follows in which the founder approaches angel and early stage VC’s for an investment that is in the range of \$10,000 to \$100,000. When the business demonstrates continued growth potential, business potential and adequate management they can raise additional capital in a Series A in which they are looking for larger inflows of capital investment to continue to build or scale the business. Series B investments are looking to expand into more geographic locations and typically require investments of millions of dollars. A Series C investment is for those few businesses that demonstrate a defined exit strategy in the form of an acquisition or an Initial Public Offering (IPO) to adequately compensate investors. A newer trend has emerged in the VC arena as larger funds provide increasing capital to high-growth companies who continue to stay private, which provides an opening for an increasing number of small VC funds to provide capital in earlier rounds (Ewing Marion Kauffman Foundation, 2016). There was \$130 Billion invested in various rounds, with the bulk occurring in late stage VC funding (\$82.42 Billion) and the least occurring in the seed round (\$7.5 Billion) with the remaining \$41 Billion occurring in early VC funding (National Venture Capital Association (NVCA), 2019).

## ***2.3. Differences between Angel and VC investors***

There have been several differences between angel capital and venture capital identified; VC’s often form limited liability partnerships and raise funds to invest on behalf of the partners. VC’s often share in the profits in addition to a management fee and VC’s generally invest in later investment stages with an identified exit strategy, generally an acquisition or an IPO (Edelman, Manolova, & Brush, 2017). In support of the role that VC plays in the marketplace is that 40% of all U.S. IPO’s in 2018 had VC backing (NVCA, 2019). Since a defined exit strategy is an important consideration for VC’s in order to return a profit to their partners, this displays the importance of VC in providing capital for growth. Alternatively, angel investors invest their own money into companies in early seed rounds. Additionally, they tend to invest locally and may also invest their time and expertise to assist with the success of the business.

Angels have been described as having both financial and non-financial motives for investing that include a desire to help young entrepreneurs, invest with others and participate in the growth of a young business (Edelman, Manolova, & Brush, 2017). This tendency toward non-financial returns have been framed as creating psychic income for the angel investors who perceive that they are doing something to benefit the community and create jobs (Morrissette, 2007). Although an angel investor displays psychic motivation, the main motivation for investment continues to be a positive financial return, so the attractiveness of an opportunity is of paramount importance.

Despite the proposed non-financial motivations, private funding sources have experienced increased growth over the past few years angel funding growing to \$20 Billion in 2015 and VC funding providing an annualized \$60 Billion in available capital. Angel investment has demonstrated increased importance for investment capital as 46% of respondents to an angel group survey

indicated that they invest less than \$250,000 into each investment (Ewing Marion Kauffman Foundation, 2016). This lower amount is crucial for the vitality of younger businesses who require smaller amounts of capital for survival. While these numbers indicate the breadth of the industry, and the important role that private equity plays in business development, only about 0.2% of businesses receive VC investment (Kaplan & Lerner, 2016). Even so, there were over 8,380 companies that received VC funding totaling \$131 Billion in 2018 (NCVA, 2019).

Not all have access to private equity, however; women and minorities are less likely to obtain both private equity and VC funding (Paglia & Harjoto, 2014). Access to capital has additional challenges for women, who own 30% of the small businesses, but historically only receive 5% of the invested capital (Florin, Dino, & Huvaj, 2013). In 2019 women founders attracted 6.8% of total VC deals and only 2.7% of total VC invested dollars (Venture Monitor, 2019). A contributing factor is the type of questions that are asked by investors of founders. Female founders are asked questions that push them to position their company as playing not to lose while male founders are asked questions that allow them to position their company as playing to win (Kanze, Huang, Conley, & Higgins, 2018). Currently, there has been a trend for angel groups and VC's to create a more specific investment strategy that has seen an increase in both the number of female investors and female executives receiving funding (Kauffman Foundation, 2016). Similarly, funding for minority owned businesses is behind with only 2.4% of total venture capital funding going to firms of black and LatinX founders (Crunchbase, 2020b). This has led to the belief that minority and female businesses are emerging opportunities (Ramsinghani, 2014).

#### ***2.4. Small businesses in sport***

Entrepreneurship is important to success in many industries, especially in dynamic and rapidly involving industries, such as sport (Ball, 2005). There are many small businesses that exist within sport, however due to cataloguing businesses, sport is not a defined industry. This lack of distinction makes it difficult to determine what is included in the sport industry, however estimates place the size of the sport industry in excess of \$400 Billion (Brown, Rascher, Nagel, & McEvoy, 2016). The U.S. Office of Budget and Management created the North American Industry Classification System (NAICS) in 1997 for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy (U.S. Census Bureau, 2020). The sport industry is spread over several NAICS codes (Table 1) with the largest percentage of sport themed businesses being fitness and recreational sport centers (44.2%), sporting goods stores (17.4%) and sport and recreational instruction (14.6%).

The breadth of businesses that exist within the context of sport is quite large, and can include organizations that focus on the athlete, coach, organization, management and marketing, professional and legal needs, health, fitness and recreational pursuits. Businesses can include gyms, boutique studios, tax preparation, law practices, sports medicine and sport therapy, strength and conditioning, education, business and market consultants, sport tech, gambling, apparel, retail and more. The challenge with categorizing sport is that even though there are NAICS codes for sport, they are not all-encompassing and do not include businesses such as sport travel and sports medicine, or emerging opportunities. In their assessment of the entrepreneurial landscape, Hayduk and Walker (2018) note that there has been accelerated growth in sport entrepreneurialism since 2009 with most of the growth emanating from media and digital media segments.

Table 1. Descriptive Statistics for Sport Businesses by NAICS Code

NAICS code	Description	Number of firms	% of Whole
339920	Sporting Goods Manufacturing	7,921	2.61
423910	Sporting Goods Supplies Wholesalers	8,421	2.78
451110	Sporting Goods Stores	52,724	17.4
611620	Sports and Recreation Instruction	44,305	14.6
711211	Sports Teams and Clubs	6,174	2.04
711212	Racetracks	4,350	1.44
711219	Other Spectator Sports	14,832	4.89
711410	Agents and Managers for Artists, Athletes Entertainers	9,014	2.97
713910	Golf Courses and Country Clubs	15,816	5.22
713920	Skiing Facilities	327	0.11
913940	Fitness and Recreational Sports Centers	134,100	44.2
713950	Bowling Centers	5,088	1.68
	Total	303,072	1

Health and fitness businesses tend to be founded by individuals who are passionate about the industry (Fallon, 2003). Initially, businesses are funded by the individual themselves in an innovation stage of growth, but as they create strong executive teams and grow, they attract outside capital hoping to capitalize on high future returns. Investors are looking to capitalize on the continued growth in the industry, as well as collaborate on software opportunities that have begun trending, like Peloton (Razzak, n.d.). Other appealing features of fitness investing is the low overhead expense in a specialized boutique, the strong cash flow outlook on the service model and the specialized nature leads to a lower cost per member (Chen, 2018). Yet, despite this interest in investing from a practitioner standpoint, there has been scant, if any, empirical research.

### 3. Methodology

As an exploratory study into the private funding of sport businesses, a search was performed via *Crunchbase*, a private, proprietary company that collects, synthesizes and reports on business funding sourced through relationships with investors, entrepreneurs and the utilization of artificial intelligence and machine learning algorithms (Crunchbase, 2020). *Crunchbase* then sells memberships to their data for market researchers, investors, entrepreneurs and other interested parties. A search was conducted for businesses with headquarters in the United States that received private equity or VC funding using the keywords “athletic”, “sport” and “fitness” with a founding date between 2010 and 2020. This resulted in 2801 individual businesses that met that search criteria. Duplicates and none sport related businesses were then removed leaving 2,678 unique businesses. Of these, only 934 had an amount of total funding reported, while the remaining 1,744 did not. Since *Crunchbase* is a private company it is not known whether missing information is a result of incomplete reporting, unavailable information or other reasons. Additional variables collected from *Crunchbase* included the headquarter city, total number of investors, total investment funding amount, the year the business was founded, the *Crunchbase* rank of the businesses, the estimated revenue range in millions (<\$1, 1-10, 10-50, 50-100, 100-500, >500), and the diversity in terms of a female founder or leader and Black or LatinX founders of leaders. The company headquarters were then categorized



into six regions (Northeast, Southeast, Midwest, Southwest, Rocky Mountain or Pacific) to account for any potential regional differences. The companies were broadly categorized into whether they were predominantly an “athletic”, “sport” or “fitness” company for assessment of differences in the type of sport related business sectors these companies were in.

Since not all the companies in the dataset contained complete funding information, a multiple regression model was conducted to evaluate the relationship between having funding information reported and the variable of interest, specified as:

$$(1) \text{ Funding} = \beta_{0,i} + \beta_{1,i} (\text{Region}) + \beta_{2,i} (\text{Rank}) + \beta_{3,i} (\text{Category}) + \beta_{4,i} (\text{Number of Investors}) + \beta_{5,i} (\text{Revenue}) + \beta_{6,i} (\text{Female}) + \beta_{7,i} (\text{Diversity}) + \beta_{8,i} (\text{Year}) + \epsilon_i$$

Where funding is a dummy variable that takes the value of 0 (funding was reported) and 1 (funding information is missing or not reported), Region is a dummy code equal to 1 for the region of the headquarters and 0 otherwise for the six regions, Rank is the *Crunchbase* business ranking, Category is a dummy code 1 for the business category (athletic, fitness, sport) and a zero otherwise, Number of investors is the number of investors identified in the business at the time of the study, Revenue is a dummy code 1 for the estimated range of revenue in millions of dollar (<\$1, 1-10, 10-50, 50-100, 100-500, >500) and zero otherwise, female is a dummy code 1 for a female owned business and a zero otherwise, Diversity is a dummy code 1 for a Black or LatinX owned business and zero otherwise, year is a dummy code 1 for the year founded and zero otherwise and  $\epsilon$  is the residual of the model.

A second multiple linear regression model of the cross section of sport businesses was then undertaken on businesses with amount of funding reported (n=934) to determine the impact that these variables have on the total funding amount received by the businesses. The purpose of the regression is to identify what impacts the amount of funding that a private sport related business receives from the investment community. This model for assessment is:

$$(2) \text{ Total Funding}_i = \beta_{0,i} + \beta_{1,i} (\text{Region}) + \beta_{2,i} (\text{Rank}) + \beta_{3,i} (\text{Category}) + \beta_{4,i} (\text{Number of Investors}) + \beta_{5,i} (\text{Revenue}) + \beta_{6,i} (\text{Female}) + \beta_{7,i} (\text{Diversity}) + \beta_{8,i} (\text{Year}) + \epsilon_i$$

Where Total Funding is the total amount of funding that the business has reported on *Crunchbase*, Region is a dummy code equal to 1 for the region of the headquarters and 0 otherwise for the six regions, Rank is the *Crunchbase* business ranking, Category is a dummy code 1 for the business category (athletic, fitness, sport) and a zero otherwise, Number of investors is the number of investors identified in the business at the time of the study, Revenue is a dummy code 1 for the estimated range of revenue in millions ( (<\$1, 1-10, 10-50, 50-100, 100-500, >500) and zero otherwise, female is a dummy code 1 for a female owned business and a zero otherwise, Diversity is a dummy code 1 for a Black or LatinX owned business and zero otherwise, year is a dummy code 1 for the year founded and zero otherwise and  $\epsilon$  is the residual of the model.

Since the businesses in the dataset are in a private market, not all the information is complete for each business, especially for businesses with a higher rank. Whether this missing information is a result of inadequate reporting by the *Crunchbase* contributors, founders or investors is not known, and is a limitation of the study. Since the focus of the present study is on the funding of sport related businesses, the available information was limited to the companies that have available the total funding amount. The remaining businesses for evaluation is 934. A summary, however, is included for both sets of data.

#### 4. Results

The majority of the companies with recorded funding had their headquarters in the Northeast (272) or in the Pacific region (327), with the fewest located in the Southwest (54) or Rocky Mountain region (57). The top locations for headquarters were New York City, New York (116) and San Francisco, California (113) with Boston, Massachusetts (25), Los Angeles, California (22), Austin, Texas (21) and Santa Monica, California (21) comprising the top five.

The total amount of funding contributed to businesses in the sport industry between 2010 and 2020 was \$9.2 Billion (Table 2). Male companies received 75.8% of total funding at \$7.01 Billion with an average funding of \$9.8 Million while female owned or led businesses received 23.8% of total funding with \$2.2 Billion and an average of \$10.6 Million. Black owned businesses received 1.6% of total funding at \$150.5 Million and an average of \$13.6 Million, while LatinX owned businesses received 1.3% of total funding with \$121.7 Million and an average of \$11.0 Million.

Table 2. Summary of Funding by Group

Funding	Whole	Male	Female	Black	LatinX
Total	9265957342	7011813186	2205098121	150520558	121727447
Average	9920725.21	9806731.729	10652647.93	13683687.1	11066131.55
%		75.6	23.8	1.6	1.3

\*May not sum to 100% with a few businesses in multiple categories

When considering the full dataset, there were 1744 incomplete entries for total funding. Of those that had complete information, the range was \$4000 to \$995 Million with an average funding amount of \$9.9 Million and a median of \$1.00 Million (Table 3). For the businesses that had investors reported, the range was from one to 41 with an average of four and a median of two investors, with 1936 not having complete information. In the data for assessment the funding amount is the same as the full dataset. For the businesses that had investors, the range was one to 41 with an average of 4.5 and median of two, with 374 not having investor information available.

Table 3. Summary Statistics for Funding, Crunchbase Rank and Number of Investors

	Min	1 <sup>st</sup> Q	Median	Mean	3 <sup>rd</sup> Q	Max
<b>Full Data</b>						
Funding	4000	175000	1007500	9920725	4033750	994707000
Rank	39	87690	211357	320938	501637	1079418
# Investors	1	1	2	3.818	5	41
<b>With Funding</b>						
Funding	4000	175000	1997500	9920725	4033750	994707000
Rank	39	28149	60583	69822	95968	1003783
# Investors	1	1	2	4.534	6	41

In the full dataset, 31% of the companies had less than \$1 Million in estimated revenue, 22.4% had \$1-10 Million in estimated revenue, 3.3% had \$10-50 Million in estimated revenue, 0.5% had \$50-100 Million, 0.5% had \$100-500 Million and 0.3% exceeded \$500 million in revenue with the remainder not having revenue ranges available (Table 4). For those businesses with funding information, 33.4% with less than \$1 Million in estimated revenue, 29.9% with \$1-10 Million, 4.7% with \$10-50 Million, 0.5% with \$50-100 Million, 0.8% with \$100-500 Million and 0.3% with estimated revenue exceeding \$500 Million. The full dataset featured 16.4% of all the businesses

having a female founder or leader while the data for assessment had 22.1% of businesses with a female founder or leader (Table 4). In terms of diversity, the full dataset had 0.7% of total companies being categorized as Black and 0.04% categorized as LatinX, while the data for assessment had 1.1% categorized as Black and 1.1% categorized as LatinX (Table 3).

Table 4. Summary Statistics for Revenue Range and Diversity

	<\$1	\$1-10	\$10-50	\$50-100	\$100-500	>\$500	Female	Black	LatinX
Full	832	601	90	15	14	10	441	18	11
%	31.0	22.4	3.3	0.5	0.5	0.3	16.4	0.7	0.04
With Funding	312	280	44	5	8	3	207	11	11
%	33.4	29.9	4.7	0.5	0.8	0.3	22.1	1.1	1.1

The results of this regression demonstrate a positive relationship between revenue reported of less than \$1 million ( $p=0.015$ ), \$1 to 10 million ( $p=0.024$ ) and \$10 to 50 million ( $p=0.021$ ) and funding information available and a negative relationship between company rank ( $p<0.001$ ) and female owned businesses ( $p=0.047$ ) (Table 5). Companies that have a higher rank, or are rated as less attractive, are likely to be missing funding information. There is a relationship between a female owned business and funding information being missing or available. There was no relationship between the type of business (athletic, fitness, sport), headquarter region or other minority ownership groups.

The results of the second multiple regression model do not demonstrate any regional differences in the amount of funding that a business receives, nor does the category of the business (Table 6). As the number of investors increases, so does the funding received, with each new investor contributing approximately \$4.5 Million to the total funding ( $p<0.001$ ). Reported revenue is related to funding reported and as a company's revenue grows, so does its ability to acquire funding; a business with revenue between \$100 and \$500 Million achieves an increase of \$111 Million in funding ( $p=0.014$ ), whereas a business with revenue exceeding \$500 Million see an increase of \$460 Million in funding ( $p<0.001$ ). Finally, there does not appear to be a difference in funding for either female, Black or LatinX owned or led businesses that reported total funding received. The adjusted R-square is 0.51 suggests that approximately 51% of the variability in funding is explained by the model.

Table 5. Multiple Regression Results for Available Funding and Total Funding Received

Model 1	Estimate	SE	T value	P value	Model 2	Estimate	SE	T value	P value
Intercept	0.352	0.168	2.091	0.037	Intercept	-9.91E+06	3.98E+07	-0.249	0.803
Midwest	-0.083	0.043	-1.953	0.051	Midwest	4.07E+06	9.08E+06	0.448	0.654
Northeast	0.009	0.028	0.348	0.728	Northeast	5.27E+06	6.11E+06	0.863	0.388
Rocky Mtn	0.043	0.061	0.703	0.482	Rocky Mtn	1.38E+07	1.41E+07	0.974	0.331
Southeast	-0.059	0.043	-1.389	0.165	Southeast	6.22E+06	9.25E+06	0.672	0.502
Southwest	0.027	0.062	0.441	0.659	Southwest	6.20E+06	1.36E+07	0.455	0.649
Rank	2.50E-06	1.10E-07	22.518	<0.001	Rank	6.64E+00	7.42E+01	0.089	0.929
Athletic	-0.029	0.055	-0.523	0.601	Athletic	-3.29E+05	1.17E+07	-0.028	0.977
Fitness	0.018	0.04	0.453	0.65	Fitness	5.74E+06	8.70E+06	0.66	0.509
# Investors	-0.001	0.002	-0.421	0.674	# Investors	4.58E+06	5.52E+05	8.293	<0.001
<\$1M	-0.345	0.142	-2.427	0.015	<\$1M	-5.94E+06	3.99E+07	-0.149	0.882
\$1-10M	-0.323	0.143	-2.262	0.024	\$1-10M	-3.04E+06	4.01E+07	-0.075	0.94
\$10-50M	-0.345	0.149	-2.302	0.021	\$10-50M	1.89E+07	4.10E+07	0.461	0.645
\$50-100M	-0.301	0.197	-1.521	0.129	\$50-100M	4.79E+07	4.80E+07	0.998	0.319
\$100-500M	-0.323	0.179	-1.803	0.072	\$100-500M	1.11E+08	4.53E+07	2.459	0.014
>\$500M	-0.299	0.214	-1.399	0.1623	>\$500M	4.60E+08	5.05E+07	9.108	<0.001
Female	0.053	0.027	1.986	0.047	Female	-3.97E+06	5.85E+06	-0.679	0.498
Black	-0.031	0.089	-0.354	0.723	Black	9.83E+06	1.81E+07	0.543	0.587
LatinX	-0.068	0.009	-0.709	0.478	LatinX	-1.68E+07	1.85E+07	-0.907	0.364
2010	-0.105	0.133	-0.79	0.43	2010	-4.32E+06	3.00E+07	-0.144	0.885
2011	-0.091	0.132	-0.693	0.489	2011	-8.35E+06	2.96E+07	-0.282	0.778
2012	-0.054	0.131	-0.416	0.677	2012	-1.94E+06	2.94E+07	-0.066	0.947
2013	-0.104	0.133	-0.782	0.434	2013	-3.22E+06	2.95E+07	-0.109	0.913
2014	-0.072	0.129	-0.555	0.579	2014	2.27E+06	2.88E+07	0.079	0.937
2015	-0.01	0.131	-0.081	0.936	2015	-2.92E+06	2.93E+07	-0.1	0.92
2016	-0.007	0.133	-0.056	0.955	2016	3.15E+05	2.97E+07	0.001	0.999
2017	-0.058	0.134	-0.437	0.662	2017	-1.79E+07	2.99E+07	-0.599	0.549
2018	0.038	0.142	0.267	0.78	2018	-8.29E+06	3.15E+07	-0.262	0.739
Adj R-square	0.527				Adj R-square	0.51			

## 5. Conclusion

The number of female companies in sport that report receiving funding (22.1%) is much greater than the estimated 7% of companies that had a female founder in the general composition of businesses (Pitchbook, 2020). However, being a female owned business is related to incomplete reporting, so it is not known if this would influence their total funding if full funding information was reported and available. The percentage of Black and LatinX companies that received funding was equal (11) at 1.1%. This is reflective of the larger funding universe where Black and LatinX businesses receive equal funding (Crunchbase, 2020b). Moreover, the amount of funding by Black and LatinX businesses in sport was 2.9% of total funding from 2010-2020, whereas the total amount of funding from all businesses since 2015 was 2.4% (Crunchbase, 2020b). While it appears that there are more female owned and led businesses who receive funding in sport it is still much less than male owned and operated businesses.

The funding for minority owned businesses in sport appears to be similar to the broader funding of business, with apparent room for growth. This presents an opportunity to support sport entrepreneurs within the larger business ecosystem; if there are more female owned sport related businesses, then females should be encouraged to pursue entrepreneur opportunities within this industry sector. Universities can then emphasize sport entrepreneurship education opportunities for women and minorities. Increasing the number of entrepreneurship programs will help provide women and minorities with the education and skills that they can utilize in business development through improving their ability to identify opportunities and act on them (Jones & English, 2004).

Currently, there are women and minority entrepreneurship resources available through the SBA, including training, education and loan opportunities (U.S. Senate Committee, n.d.). However, expanding public policy initiatives in further support of female and minority businesses continues to be a vital component of long-term entrepreneurial vitality (Barr, 2015). These opportunities could include support of women owned business in the sport sector through providing financial incentives for ownership, establishing networks and developing investor relations. An opportunity for female led businesses in sport is to seek funding and support from sport businesses with a stated goal of assisting women entrepreneurs (adidas, 2020). Since access to capital is such a vital component of long-term success, investors need to be aware of the impact that women executives can bring to a managerial role and the value that these organizations provide (EY, 2017). The adoption and creation of sport themed investors who understand the sport sector will also help in acquiring capital as these firms have specialized knowledge within this sector.

The finding that firms that report revenue acquire funding and that higher revenue models receive more total funding is in line with the risk profile of start-up investing. As the business becomes more mature with growing revenue, they are more likely to attract investors (Ramsinghani, 2014). From a practical perspective, founders should emphasize revenue generation, both in terms of attracting capital and investors. Reported revenue is related to funding reported, which can serve as a signal to investors that the focus on revenue potential may make an attractive investment.

Similarly, for the number of investors, once a company finds an investor it becomes easier to attract other investors, thus increasing the total available funding for the business. The model's ability to explain approximately 51% of the variability in funding makes intuitive sense, as none of the variables describes the type of business in the data. One of the challenges with utilizing privately sourced market data is that the data is private. Since it is not known how the information is reported, it could be that analysts, investors or the companies themselves are not providing

complete information to *Crunchbase*. This lack of complete information is a limitation of the study and more robust data is necessary for further examination.

Another barrier is that the types of businesses vary dramatically; they are not only in different sectors with relationships to fitness, sport and athletics, but may only be tangentially related. Moreover, the ability to catalogue them in a coherent or cogent manner is also challenging, with many that involve multiple segments, or trying to create new ones altogether. Thus, while the results of this study do not identify any differences in funding reported or total funding amongst the three search categories, there may exist differences in the sector or type of businesses that receive funding. Therein exist two of the limitations of the present study; the use of privately sourced market information and the difficulty in categorizing the types of businesses.

Despite these limitations, this study is the first to assess the funding of businesses within sport. Although this study is not able to ascertain the specific type of business that receives funding we are able to show that from 2010 through 2020 sport businesses received \$9.2 Billion in total private equity funding with women owned and led businesses receiving 23.7% of funding comprising 22.1% of the invested capital, far in excess of the 7% reported nationally. While the sport industry would appear to be more hospitable to females, the funding and percentage of Black and LatinX owned businesses is similar to national data, and highlights room for improvement. Since access to capital is important for the success of a business, it is vital that funding be equitable for all business owners. Establishing networks for owners and investors in the sport related sector can improve relationships, lead to collaborations for innovative ideas and directly connect those with capital to those in search of capital (Hall, 2021). For a business looking to attract investors and grow, it is important to focus on generating revenue, as this leads to funding potential. Once an investor is found, it is important to attract others through strong sales and pitch since more investors are able to contribute more financial resources.

As one of the first studies to investigate the private equity markets in the sport industry, there is potential for increased academic inquiry, including the types of businesses that receive funding, as well as differences in the funding between geographic areas. It is also important to future inquiry to have complete data to utilize in order to more fully examine this area. Robust data collection and storage will not only benefit researchers, but will improve the ability of investors and owners to effectively examine this industry segment. The access to capital challenges being faced by women and minorities is not unique to the sport industry but is, nevertheless, deserving of greater inquiry. The focus on accurate data reporting and collection will assist in identifying any differences in funding or biases that may exist, which is also of critical importance to the industry. The impact of COVID-19 on the funding or success of small businesses presents additional lines of inquiry. Once the breadth of the industry is understood, further research can elucidate the nuances that exist within this private investment marketplace.

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