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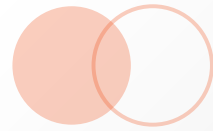
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# BREAKING BARRIERS:



## Assessing Women's Sports, Betting and Integrity Challenges

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# Foreword

2023 is a pivotal moment in the history of women's sport - the year that the women's game finally steps out of the shadows and starts to come into its own, not only beginning to move towards parity with the men's game, but with the potential in time, to eclipse it.

The numbers show that the last 5 years have seen an unprecedented rise in the popularity of women's sports across the world. The last Women's World Cup 2019 was watched by over 1.1 billion fans across the worldwide, whilst last's year's Women's Euros final not only broke viewing records for the women's game, it sets a new overall record for attendance - the women's final playing to a record crowd of 87,192, smashing the previous record of 79,115 set by the men's game. The Women's UEFA Champions League 2022/23 has now been picked up by mainstream broadcasters making it more accessible than ever before, with record viewers numbers and record crowds, and the perfect build up to this year's main event - the Women's World Cup.

What makes this even more interesting is that right now, women's soccer is about much, much, more than just sport. With the US securing a landmark victory for equal pay after a 6-year battle, Saudi Arabia making women's soccer part of its Vision 2030 strategy or England and NZ joining the growing list of teams to ditch white shorts - women's soccer is fast becoming an emblem for gender equality.

Throw in the fact that over 80% of all sports fans are happy to watch women's sports, and a fixture list that includes teams from every continent, colour, creed and religion - the Women's World Cup 2023 is on course to being not just the biggest women's sport event ever, but possibly the biggest sporting event ever.

And it's not just soccer. Both women's rugby and cricket are also seeing similar surges in popularity, with both World Cups attracting record crowds and record viewers as mainstream broadcasters start to add them to the schedule. Sponsorship too is on the rise with the sport attracting Tier 1 brand such as Visa, and the WPL predicted to become the biggest women's cricket property in the world.

This is not a fashion, or fad. This is the future of women's sport - a future that brings many new opportunities, but also some new risks.

The purpose of this research is to do just that.

CTR

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# Introduction

The increasing popularity of women's sports is evident, with a Nielsen (2018) study indicating that 84% of all sports fans have an interest in women's sports, and global live spectator numbers are consistently rising (Forbes, 2022). With this surge in popularity comes an increase in the economic volume that is at play. Prize money, media rights, and sponsorships have all grown sharply over the past few years. Similarly, the sports betting industry related to women's sports has expanded (Gambling Insider, 2021).

However, there is still a lack of understanding concerning the size and characteristics of the women's sports betting market. With increasing stakes and regulation and prevention infrastructure only just beginning to develop, examining the potential vulnerability of women's sports to match-fixing is essential.

The Department of Sport Economics and Sport Management of the German Sport University was commissioned by the International Betting Integrity Association (IBIA) to provide the following insights on this critical topic:

- *How has the demand for women's sports evolved globally?*
- *How have commercial aspects of women's sports developed?*
- *What trend can be observed in the women's sports betting market?*
- *What are the characteristics of the women's sports betting market?*
- *In how far can previous match-fixing cases and academic studies help to identify potential integrity threats to women's sports?*

The study includes three distinct chapters. The analysis is based on publicly available data and reports, scientific literature, and data from two members of IBIA, Entain plc., Flutter Entertainment and Stats Perform.<sup>1</sup>

Part 1 examines publicly available economic data related to interest in women's sports. It focuses on some of the most popular women's sports on a global level, namely basketball, cricket, soccer, tennis, and volleyball. Since interest is conceptually challenging to measure, a number of demand and other economic indicators that grant insights into the development of interest in women's sports are investigated.

In Part 2, the focus shifts to the analysis of sports betting data. Given the growing popularity demonstrated in Part 1, this section aims to analyse whether the increase in popularity is reflected by an increase in the women's sports betting market. It explores the number of individual bettors, the total number of bets placed, and the overall betting volume. Additionally, gender-specific consumer insights into sports betting on women's sports are provided. Moreover, relevant data from two other sources is presented. Furthermore, information from two additional sources is incorporated into the analysis. The first source highlights the progression of match-fixing alerts reported to IBIA between 2019 and 2023, categorized by individual sports. The second source focuses on the expansion of data coverage for women's sports competitions, as documented by the sports data and integrity provider, Stats Perform.

Finally, Part 3 provides a literature review of academic studies on the determinants of match-fixing and corrupt behaviour. The findings from this section can aid policymakers in identifying potential match-fixing threats in the current sports landscape. Moreover, Part 3 presents ten selected case studies of betting-related match-fixing in women's sports in order to identify potential match-fixing threats. The presented case studies focus on the type of match-fixing, level of play, involved stakeholders, and financial and sports consequences. These case studies reveal structures and characteristics that may be susceptible to match-fixing activities.

The study concludes by summarizing the key findings of each part and providing a draft of recommendations on managing, governing, and regulating the complex relationship between the rise of women's sports and sports betting.

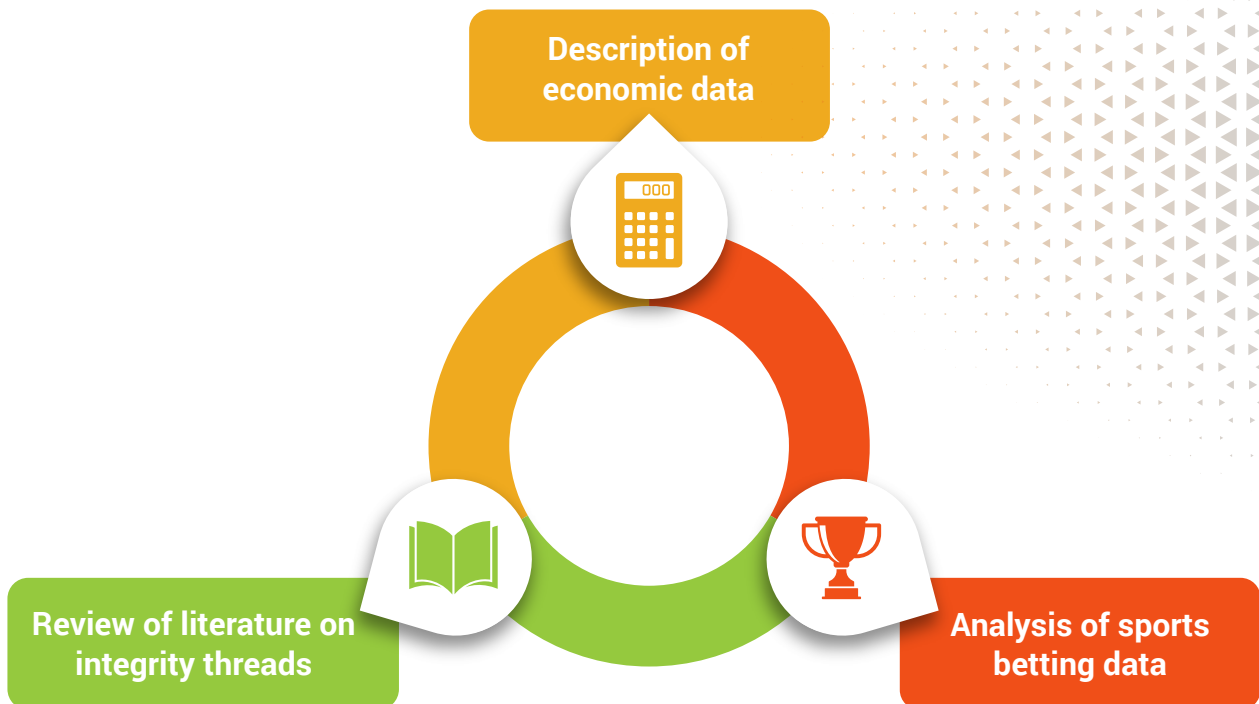


Figure 1: Overview of the report's structure

# Part 1 – Description of economic data

## 3.1 Methodology

Part 1 outlines the historical progression and current state of demand for women's sports. To this end, attendance data from the five most popular women's sports globally (YouGov, 2021; Basketball, Cricket, Soccer, Tennis, Volleyball) serves as the primary demand indicator. Where available, additional economic indicators, such as prize money, sponsorships, and broadcast deals, are also incorporated. Each sports section differentiates between various levels of competition. Data is collected from publicly accessible sources, including official websites of sports federations or events, news articles, and sports statistics websites, ensuring transparency and reliability in the analysis. The data collection and analysis took place between September 2022 and March 2023.

## 3.2 Findings



### 3.2.1 Basketball

The following section focuses on a particular set of basketball competitions, including teams at both the national level and at club level. Starting with the national team competitions, the biggest one is the FIBA Women's Basketball World Cup, which has been running since 1953. It is played every four years. In addition, there are continental championships played every two to four years, such as the EuroBasket Women in Europe.

For the club competitions, there are intra-continental championships on most continents. One exception is North America, where the presence of the WNBA supersedes the demand for international tournaments. These competitions are held every year. Finally, most countries run domestic leagues with clubs competing against each other, which are also played every year. The most prominent leagues in North America and Australia are the Women's National Basketball Association (WNBA) and the Australian Women's National Basketball League (WNBL).



### National teams' competitions

When analysing the demand for the Women's Basketball World Cup, the number of spectators represents one potential indicator. Figure 2 shows the total and average attendance at the most recent World Cups. The x-axis gives the year and country in which the World Cup was played, and the y-axis the corresponding number of spectators.

It demonstrates that since 2010 the total attendance, as well as the average attendance, have experienced a downward trend. The total attendance in 2010 was at around 100.000, and by 2018, it had fallen to half as much. <sup>2,3</sup>

However, the 2022 World Cup saw a boom in broadcast, digital, and attendance results. A total of 145,519 spectators made the 2022 World Cup the most-watched women's basketball World Cup ever.<sup>4,5</sup>

## 2022 Women's Basketball World Cup

The 2022 World Cup saw a boom in broadcast, digital, and attendance results.

**145,519**  
spectators

made the 2022 World Cup  
**the most-watched women's  
basketball World Cup ever.**

Social media impressions, engagements, and video views were also up about five times as high as the 2018 numbers. Unfortunately, data availability for the World Cup is limited, as it was not possible to obtain similar comparative data from some previous World Cups. Hence, the numbers should only be carefully interpreted as individual circumstances of the four events could drive this trend.

Despite being the biggest basketball tournament in the world, the World Cup is not broadcast on television in most countries. In the United States, for example, the sports network ESPN shows only six games on television, with the rest streaming on ESPN+. <sup>6</sup> In the past years, efforts have been made to increase the visibility of women's basketball. For example, in 2022, FIBA struck a deal with Google in an attempt to increase women's basketball visibility. <sup>7</sup> Similarly, in 2019 the FIBA agreed to a 12-year sponsorship deal with the Chinese multi-national conglomerate Wanda, which grants Wanda global marketing rights to the next three Women's Basketball World Cups. <sup>8</sup> Furthermore, most recently, in 2022, FIBA partnered with beIN, which allows the global sports and entertainment group to continue to broadcast FIBA's major international and continental events until 2025 in the Middle East and North Africa. For instance, beIN broadcasted the FIBA Women's Basketball World Cup 2022 under the new deal. <sup>9</sup> In 2016, FIBA announced a new 17-year partnership with the digital content and media group now known as DAZN. The partnership is worth nearly \$500 million and aims to enhance live TV production, broadcast services, and data and editorial distribution of FIBA events. <sup>10</sup> This partnership sees FIBA Women's events live-streamed on licensed sportsbooks around the world. According to Stats Perform, the 2022 Women's FIBA World Cup was watched on sportsbooks in more than 100 countries.

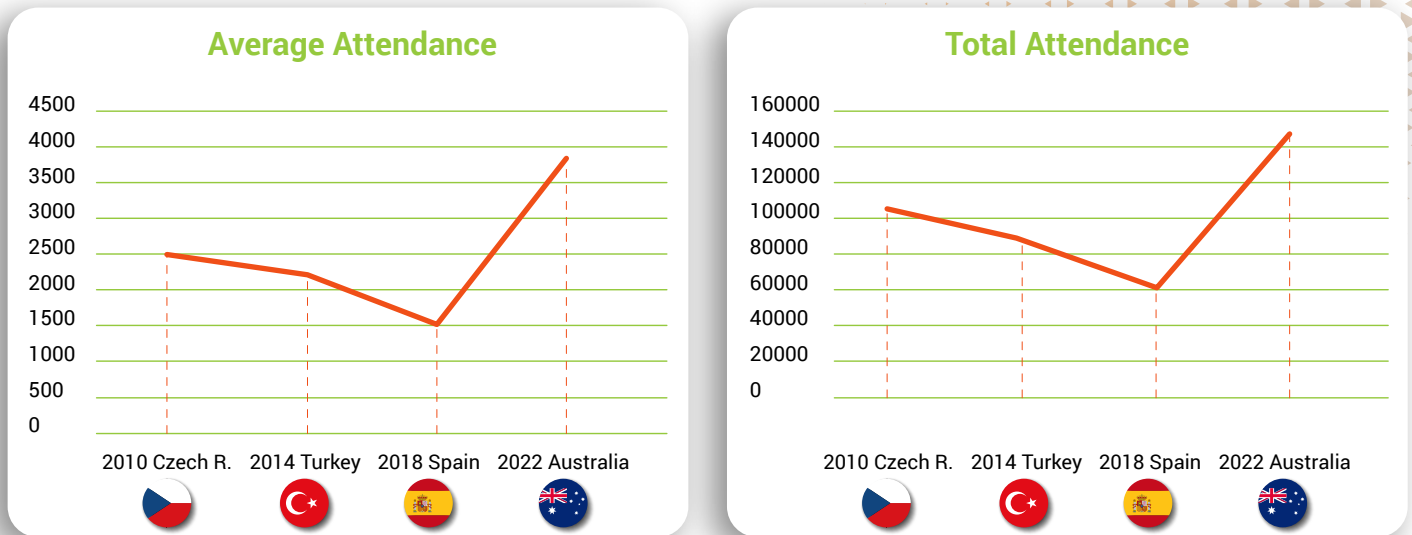


Figure 2: Average attendance and total attendance of the Women’s Basketball World Cup (2010-2018). Change (2010-2018) with (2010-2022).

A closer look at the attendance figures of the last intracontinental tournaments in Europe, Asia, and Africa, reveals that the EuroBasket Women in 2021 and FIBA Women’s Afrobasket in 2021 attracted upwards of 25,000 total spectators in the stadiums, whereas the FIBA Women’s Asia Cup in 2021 was only watched by a total of 1,734 fans.<sup>11</sup> However, the low number results from many matches being held in Jordan during Jordanian working hours.<sup>12</sup> A similar trend can be found for the average attendance of these championships, which is highest in Europe and Africa. Unfortunately, data from previous competitions was not available. Similar to the World Cup, the intracontinental championships are only broadcasted on live television in very few countries. For example, in 2021, the FIBA announced a deal with the French channel France Télévisions which grants the channel rights to show national team games through to the FIBA Basketball World Cup 2023.<sup>13</sup>

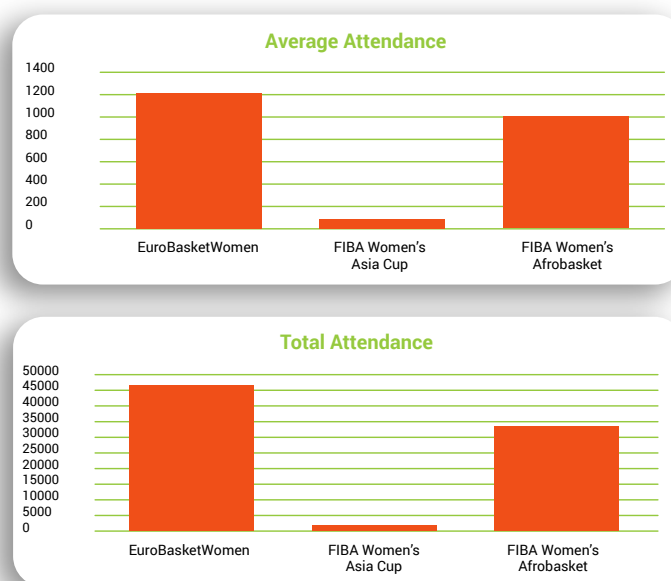


Figure 3: Average attendance and total attendance of the intracontinental national-level championships in 2021. (Note: Attendance data is not available for the South American Championship Women).





## Clubs' competitions

When comparing the top domestic leagues, attendance data is primarily available for the WNBA in the United States and the WNBL in Australia. The total attendance of the 2021/22 season in the WNBA amounted to almost 1.1 million people,<sup>14</sup> while the total attendance in the WNBL was 3,909.<sup>15</sup> However, it is important to note that the low numbers in the WNBL are closely related to the strict COVID-19 restrictions in Australia.

When looking at the trend of the earlier years, the data shows that the total attendance in the WNBL in the 2018/19 season amounted to 12,717, and the average attendance was at 4,239.<sup>16</sup> For the season 2019/20, the WNBL had a total attendance of 17,321 and an average attendance of 2,474. In comparison, the WNBA had an average attendance of 6,535 and a total attendance of 1.3 million in the season 2018/19. During the 2019/20 and 2020/21 seasons, various COVID-19 restrictions had a severe impact on the attendance numbers of the WNBA as well.

Attendance for the WNBA bounced back in 2022, resulting in the best regular-season viewership in 14 years.<sup>17</sup>

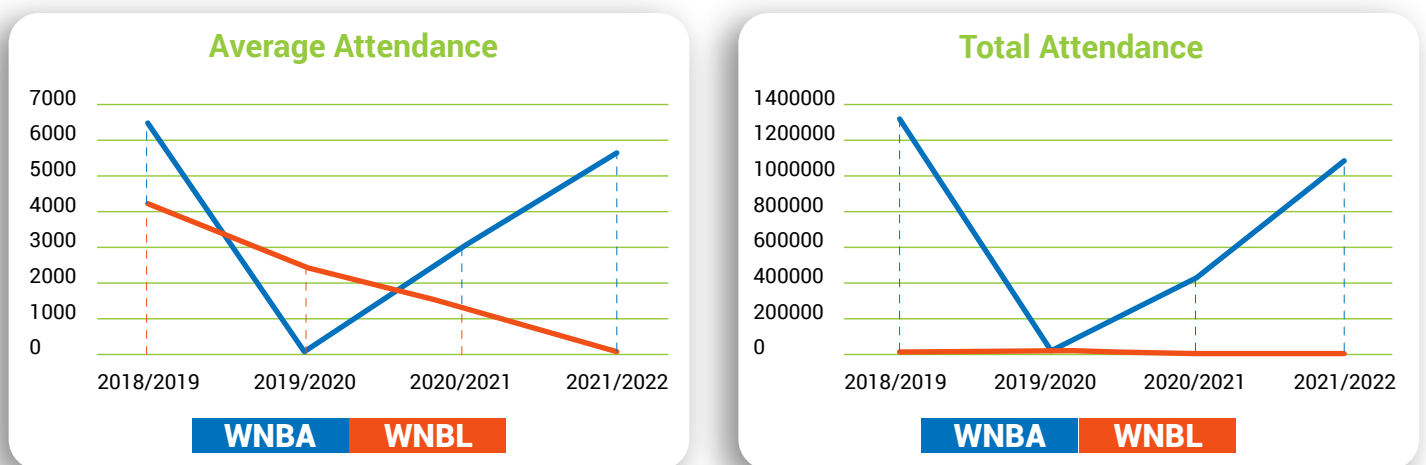


Figure 4: Average attendance and total attendance of the major national club-level leagues (2018-2022)

TV ratings are also the highest in the WNBA. The 2022 season was watched by an average of 379,000 viewers across ESPN, ESPN2, and ABC.<sup>18</sup> It marked an increase of 16% to the 2021 season and was the most-watched season in 14 years.<sup>19</sup> In 2021, the WNBA signed a media rights deal with Disney worth \$27 million which runs through 2025.<sup>20</sup> In comparison, the WNBL returned to the television screen when ABC returned as a broadcaster. Since then, two games have been shown per week on live television.<sup>21</sup> In the WNBA, the WNBA Commissioner's Cup sponsored by Coinbase was inaugurated in the 2020 season and paid out a \$500,000 prize pool.<sup>22</sup> One year later, in 2021, the WNBA announced a multi-year partnership with tech giant Google.<sup>23</sup>

### 3.2.2 Cricket

Compared to other sports explored in this chapter, Women's Cricket has traditionally only been played professionally in certain parts of the world, primarily in the Commonwealth countries such as Great Britain, Australia, New Zealand, India, the Caribbean, and South Africa. However, this is a rapidly changing landscape, with cricket starting to emerge as a popular sport in countries such as Ireland, the Netherlands, and North America (USA and Canada).

The World Cup is the most important tournament at the national team level. It is held every two years except for the year 2009, which was an anomaly. Attendance data is only available for the respective finals of the World Cup. In addition, there is an intracontinental championship in Great Britain called the Women's Cricket Super League. Cricket is played almost exclusively in the Commonwealth countries at club level. These countries host domestic leagues that are played every year. The most prominent leagues are the Australian Women's Big Bash League and the British "The Hundred", which currently have the highest viewership numbers.<sup>24, 25</sup>



#### National teams' competitions

In professional Cricket, there is a World Cup for the two different versions of Cricket, Twenty20, and 50-over. Figure 5 shows the attendance for the finals of the T20 World Cup for the years 2009-2020. Attendance had been stable at a low level of fewer than 10,000 spectators for a number of years. In 2016, the women's final game was held as a curtain raiser for the men's final game. Therefore, it is impossible to disentangle how many people attended the game to watch the women's game. The final in 2020 exhibited a considerable increase in spectators of more than 80,000. This high number is likely because the World Cup was held in Australia, and the Australian team actually played in the finals.<sup>26</sup> In total, the T20 World Cup reached a global TV audience of 104.8 million.<sup>27</sup>

Unfortunately, attendance numbers for the (T50) World Cup are not publicly available. However, TV viewership numbers sky-rocketed for the last World Cup in 2022. According to the International Cricket Council (ICC), 1.64 billion people watched the last World Cup across all the different ICC channels compared to about 180 million who watched the previous World Cup in 2017.<sup>28</sup>

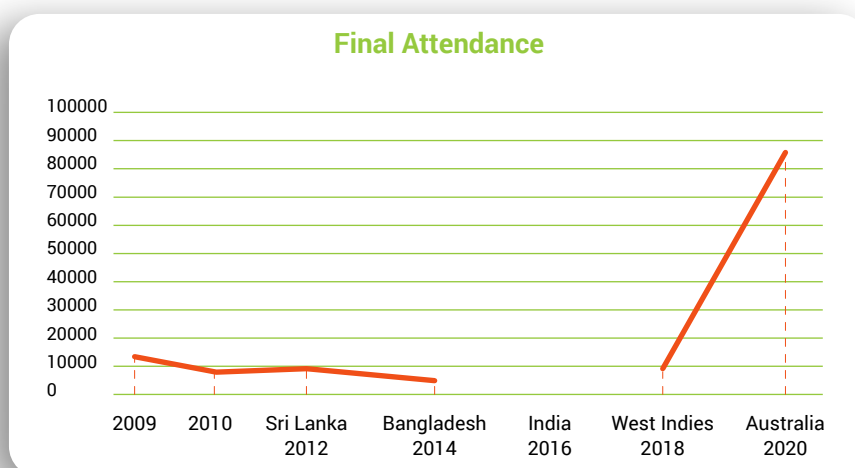


Figure 5: Final attendance of the Women's Cricket T20 World Cup (2009-2020)



## Clubs' competitions

One competition, for which data is available at the club level, is the British Women's Cricket Super League, which was renamed "The Hundred" in 2021. Attendance figures had been on the rise pre-COVID but dropped to 0 during the COVID-19 pandemic due to restrictions. In its first edition as "The Hundred", attendance increased sharply, while also reaching record levels in 2022.

The opening match of the 2021 season was the most-watched women's cricket match in UK history, with a total of 1.95 million TV and online viewers.<sup>29</sup>

### 2022 The Hundred

#### Viewership record

**1.95 million**  
TV and online  
viewers

the opening match of the 2021 season was **the most-watched women's cricket match in UK history**

One phenomenon that has boosted attendance and is specific to women's cricket is the inclusion of "doubleheader" games, where a women's game is played directly before a men's game. This led to an average crowd size of 7,500 per game, a sharp increase from previous years, with average crowd sizes between 800 and 2,500.<sup>30</sup> Moreover, very recently, UK broadcaster Sky Sports purchased the rights to broadcast the inaugural season of the Women's Premier League (WPL) T20 competition in the UK and Ireland. The deal grants them broadcasting rights until 2027.<sup>31</sup>

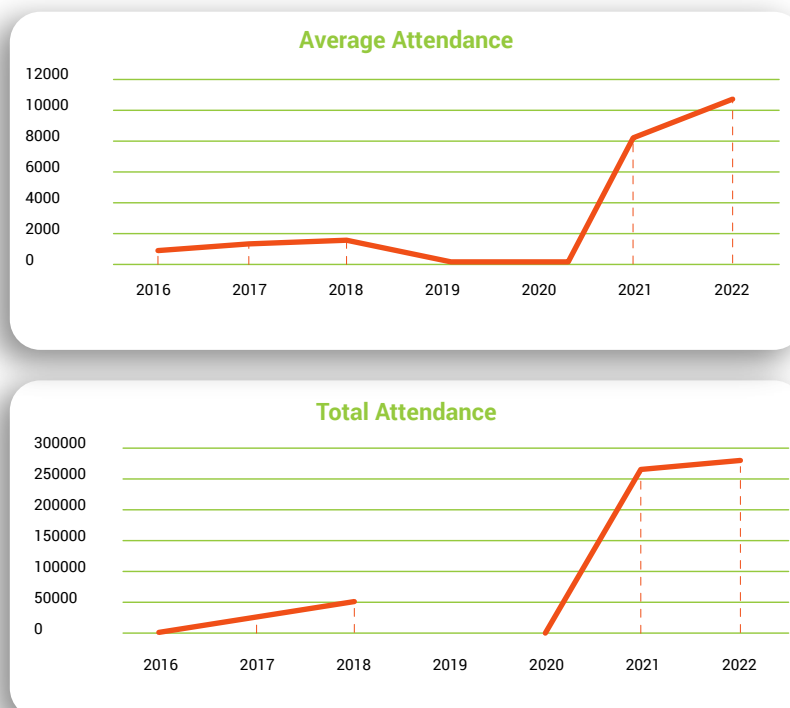


Figure 6: Average attendance and total attendance of the club-level "The Hundred" competition (2016-2022)

Apart from the “The Hundred” competition in the United Kingdom, another major domestic league can be found on the other side of the globe, namely in Australia. Figure 7 presents the attendance of the Women’s Big Bash League final game. While final attendance had been steady in the years preceding the COVID-19 pandemic.

The final game in 2021 set new attendance records. 15,511 fans attended the game, which was the highest attendance in a standalone WBBL match and trumped the previous record of 5,650.<sup>32</sup> Besides setting a new record for attendance inside the stadium, the game also set viewing records. Over half a million people watched the game on TV and streaming platforms. The combined audience of 535,000 surpassed the previous record of 506,000.<sup>33</sup>

## Women’s Big Bash League

Final game in 2021

### Attendance record

**15,511**  
spectators

the highest attendance in a standalone WBBL match and trumped the previous record of 5,650

### Viewership record

**535,000**  
combined audience

Over half a million people watched the game on TV and streaming platforms, surpassing the previous record of 506,000

Women’s competitions have also recently been on the rise in India. Particularly, measures have been taken to increase the professionalism of the sport. For example, very recently, in 2022, the Mumbai Cricket Association (MCA) announced that it would start its first women’s cricket league with 50 teams and more than 800 cricketers participating.<sup>34</sup> And January 2023 saw one of the largest financial injections in the history into women’s cricket when five Women’s Premier League teams were auctioned for more than \$570 million.<sup>35</sup>

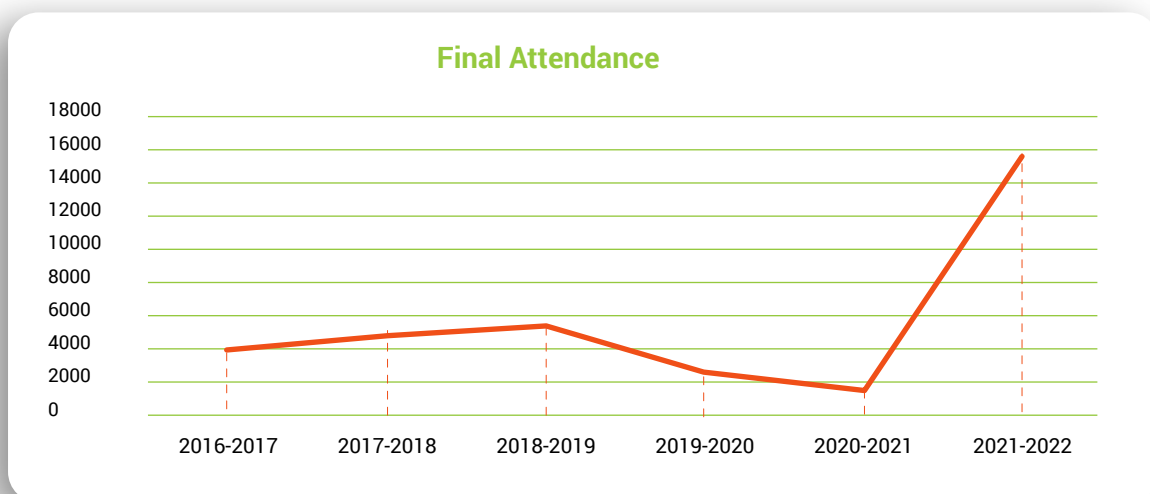


Figure 7: Final attendance of the Women’s Big Bash League (2016-2022)



### 3.2.3 Soccer

The following section focuses on the biggest national team competitions in women's soccer as well as at the club level in terms of spectators and prize money. Starting with the national teams' competitions, the FIFA Women's World Cup is the biggest tournament. It had total prize money of \$43 million in 2019 and potentially up to \$100 million in 2023<sup>36</sup> and is held every four years. In addition, each continent runs continental championships of the national teams every two to four years, such as the UEFA European Women's Football Championship. There are also a number of invitational tournaments which are held every year or every other year. These tournaments count as friendly games but still attract attention.

In the club competitions, there are intracontinental championships in each continent. Only the best teams from countries within their respective continent qualify and play against each other, a major example being the UEFA Women's Champions League in Europe. These competitions are held every year. Finally, most countries run domestic leagues, also played yearly. The most prominent domestic leagues in North America, Europe, Asia, and South America are: the National Women's Soccer League (NWSL), the English FA Women's Super League, the Japanese WE League, and the Brazil Campeonato. These leagues generally have the highest attendance numbers and are, at least to some extent, broadcasted on live television.<sup>37</sup>

Recently, in October 2022, FIFA published its second edition of "Setting the Pace", a women's soccer benchmarking report which analyses elite women's soccer. The report features 30 leagues and 294 clubs. The report mainly highlights the positive trends in women's soccer. Some of its key findings include that in 2022, 90% of leagues had a written strategy compared to 77% in 2021. 77% of leagues had a title sponsor in 2022, compared to 66% in 2021. Furthermore, international transfer fees amounted to \$2.1 million in 2021, which was an increase of 73% compared to 2020.<sup>38</sup>



## National teams' competitions

Figure 8 demonstrates that since 1991, when the first women's World Cup was organized, the total attendance at the FIFA Women's World Cup has experienced an upward trend. In contrast, average attendance has been marked with ups and downs, potentially due to the location of the event and ease and cost of attendance. The total attendance in 1991 was at around 500.000, and by 2019 it had more than doubled to more than 1.1 million spectators.

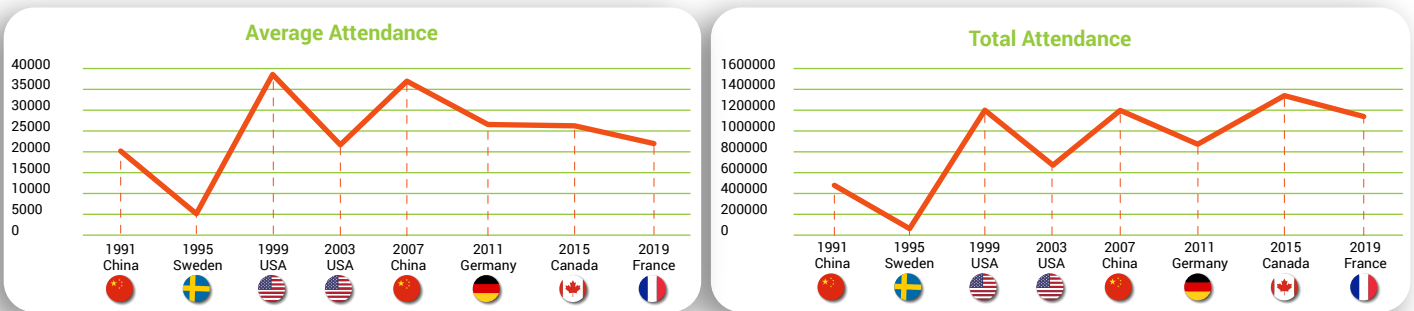


Figure 8: Average attendance and total attendance of the Women's World Cup (1991-2019)

In addition to spectators in the stadium, the 2019 Women's World Cup was watched by 1.12 billion people across all platforms, according to FIFA.<sup>39</sup> This marked a record viewership. The final between the United States and the Netherlands, which was the most-watched FIFA Women's World Cup match ever, with a total of 263.62 million unique viewers.<sup>40</sup>

## 2019 Women's World Cup

### Total attendance record

**1.1 million**  
spectators

the total attendance has more than **doubled** since 1991

### Total viewership record

**1.12 billion**  
combined audience

this marked the **record of people watching the women's world cup across all platforms**

### Prize money record

**\$30 million**  
prize money

this is **twice the amount** paid out for the previous World Cup

Another economic indicator represents the prize money. For the last World Cup 2019, the total prize money of \$30 million was twice the amount paid out for the previous World Cup.<sup>41</sup> The announced prize pool for the next World Cup in 2023 is \$85 million but might potentially be increased to \$100 million.<sup>42</sup>

There are vast differences in the total and average attendance figures for the intracontinental tournaments on the national team level.

The latest UEFA Women's Euro total attendance amounted to almost 600,000, which is about six times as many total spectators as the other intracontinental championship. Prize money: €16 million, double the amount of the last Euro 2017. Sponsorship revenues: are projected to increase from €3.5 million in 2017 to €30 million in 2025.

### 2022 UEFA Women's Euro

#### Total attendance record

**600,000**  
spectators

This is about **6 times** as many total spectators as the **other intracontinental championships**

#### Viewership record

**17.9 million**  
people in Germany

watched the **final match** between Germany and England **on TV**

#### Prize money record

**\$16 million**  
prize money

this is **double** the amount of the last Euro 2017

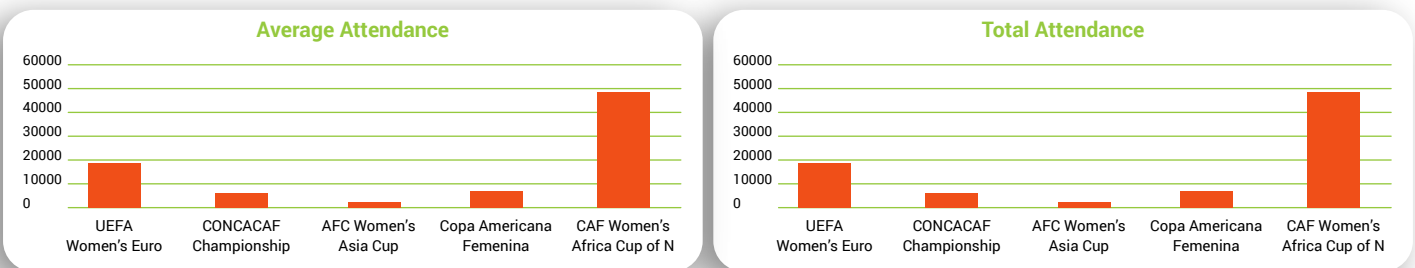


Figure 9: Average attendance and total attendance of the latest intracontinental national-level championships (Note: Copa Libertadores Femenina starts only in October, and the CAF Women's Champions League was only created as late as this year)

The last Euro 2022 also set record TV numbers. In Germany, about 17.9 million people watched the final between England and Germany.<sup>43</sup> The semi-final between England and Sweden was watched by 9.3 million people in England.<sup>44</sup> The prize money has also increased over time. For the Euro 2022, the prize money paid by the UEFA amounted to €16 million, double the amount of the last Euro 2017.<sup>45</sup> Accordingly, the sponsorship revenues of the UEFA Women's Euro are projected to increase from €3.5 million in 2017 to €30 million in 2025.<sup>46</sup>

There has not been associated prize money for the CONCACAF Women's Championship yet, but there will be by 2024. Similarly, a \$US 1 million prize money was awarded to the winner of the AFC Women's Asia Cup in 2022 for the first time ever.<sup>48</sup>



## Clubs' competitions

The UEFA Women's Champions League in Europe has by far the highest total attendance and average attendance when it comes to intracontinental club competitions. The 2019/20 and 2020/21 seasons took a hit in attendance due to the COVID-19 pandemic, but attendance numbers bounced back in the 2021/22 season (Figure 10). Before the pandemic, average attendance was around 3,000, whereas average attendance post-pandemic rose to more than 9,000.

The Champions League hit an attendance world record in early 2022 when 91,533 fans came to watch the old rivals' match between Barcelona and Real Madrid.<sup>49</sup>

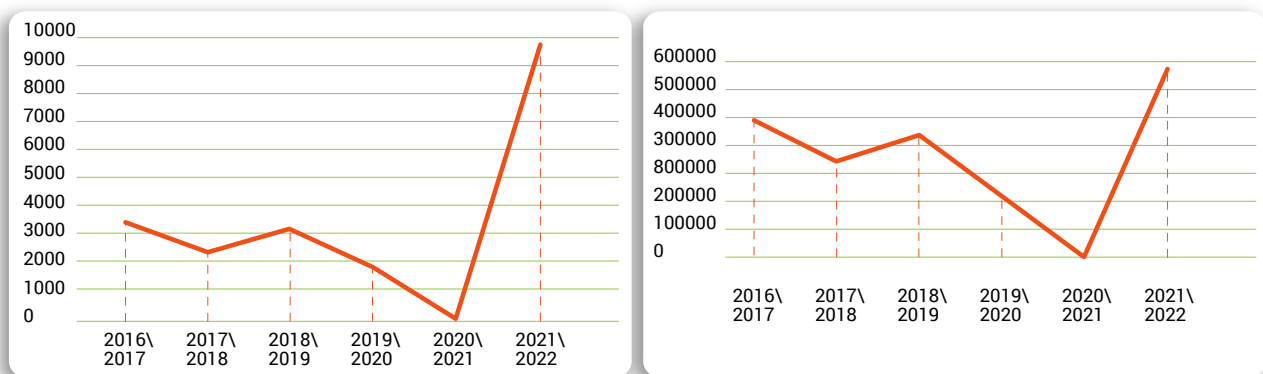


Figure 10: Average attendance and total attendance of the UEFA Women's Champions League (2016-2022)

The Champions League is broadcasted by DAZN. The prize money for the winning team of the 2021/22 tournament was €250,000. In addition, teams had earnings from the group stage.<sup>50</sup>

When comparing the top domestic leagues of North America, Europe, Asia, and South America, the NWSL in the United States has by far the highest amount of total attendance as well as average attendance (Figure 11). In terms of total attendance, the Japanese WE League has a higher number than the English FA Women's Super League due to the greater number of games played in the season, which in Japan includes pre-season games. The English FA Women's Super League records the second-highest average attendance, with almost 2,000. Due to the COVID-19 pandemic, comparing the top national leagues over time offers unclear and potentially misleading results. Therefore, the report focuses only on the snapshots of the top leagues.

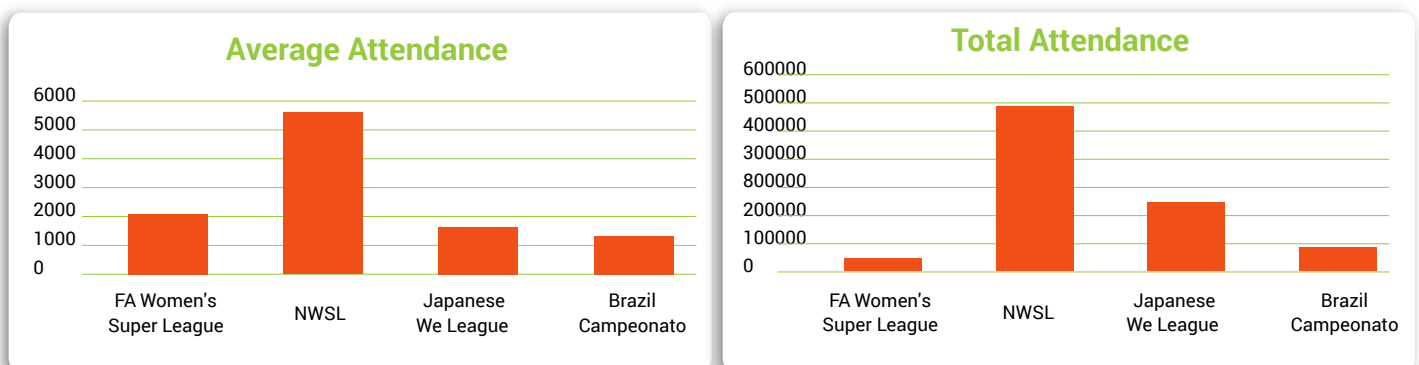


Figure 11: Average attendance and total attendance of the major national club-level leagues for the 2021/22 season



In the NWSL, the prize pool for the 2023 Challenge Cup will amount to \$1 million.<sup>51</sup> In addition to the increase in prize money, the WNSL recently struck new broadcasting deals with the streaming service Twitch as well as the major network CBS.<sup>52,53</sup> The deals appear to pay off, as about half a million people watch the games on TV. The final was also watched by about half a million people, an increase of about 216% compared to the 2019 final.<sup>54</sup>

## 2023 NWSL Challenge Cup

### Prize pool record

**\$1 million**  
prize pool

This is **nearly the same** as the \$1.1 million prize pool handed out in the **2020 MLS is Back tournament**

In England, the Women's Super League agreed to a new broadcasting deal with Sky in 2021, and since then, average TV viewership has increased by 170%.<sup>55</sup> One year earlier, in the 2019/20 season and for the first time ever in league history, a league prize fund of £500,000 had been set in place.<sup>56</sup> Since then, the WSL has agreed to a £30 million sponsorship deal with Barclays Bank, leading to an inpour of money into the English Women's Super League.<sup>57</sup> At the end of 2022, FIFA announced the launch of a Women's Club World Cup.<sup>58</sup>

### 3.2.4 Tennis

Tennis is organized differently compared to the other sports analysed in this chapter. All the other sports (namely basketball, cricket, soccer, and volleyball) are team sports - tennis is an individual sport. This means that tennis competitions are structured differently from the other sports, with a combination of local and international events but where the players are individuals from around the world. The tennis equivalent of the World Championship, with national teams competing against each other, is the Davis Cup/Billie Jean King Cup. However, there is no national league or intracontinental structure in a similar way as there is in the other sports covered in this chapter.

Instead, the WTA tour was organized by the WTA and founded in 1973. The WTA tour holds four major tournaments yearly, commonly known as the Grand Slam tournaments.<sup>59</sup> These four tournaments are the Australian Open, the French Open, the Wimbledon Championship, and the US Open. Besides these Grand Slam tournaments, the WTA Tour consists of more than 50 smaller tournaments worldwide and culminates in the year-ending WTA Finals tournament. In the finals, only the top-ranked players are allowed to compete. The prize money for the winner of the WTA Finals is the largest in tennis, behind the Grand Slams.

## Grand Slam level

For women's tennis, attendance numbers cannot be distinctly identified because the women's tournaments are typically held together with the men's tournaments. One other indicator of the demand for women's tennis is TV viewership. Figure 12 shows the total viewership of the four Grand Slam Finals in 2018, the most recent year that data for each Grand Slam is available in the United States. Wimbledon, the world's oldest and most prestigious tennis tournament, attracted a TV audience of 4.6 million viewers, followed by the US Open with 2.1 million viewers. The French and Australian Open had 1.45 and 1.17 million viewers, respectively.<sup>60</sup>

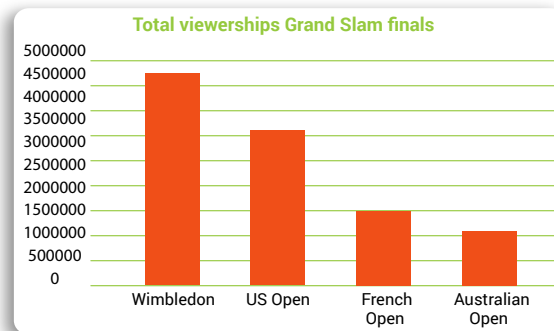


Figure 12: Total viewership of the four Grand Slam finals in the United States (2018)

Another economic indicator of women's tennis is the level of prize pay-outs for the major tournaments. Notably, all Grand Slams pay the same amount of prize money to the winner of the women's tournament as they do to the winner of the men's tournament. Figure 13 shows the prize money for the winner for the last six years (the 2020 tournament in Wimbledon was cancelled due to the pandemic). The US Open historically had the largest prize money, nearly \$4 million in 2019. The French Open has had the lowest prize pay-out, with around \$2.5 million. During 2020 and 2021, the two years of the COVID-19 pandemic, the prize pay-out of all four major tournaments dropped significantly but started to recover in 2022.

## Prize Payout Grand Slam

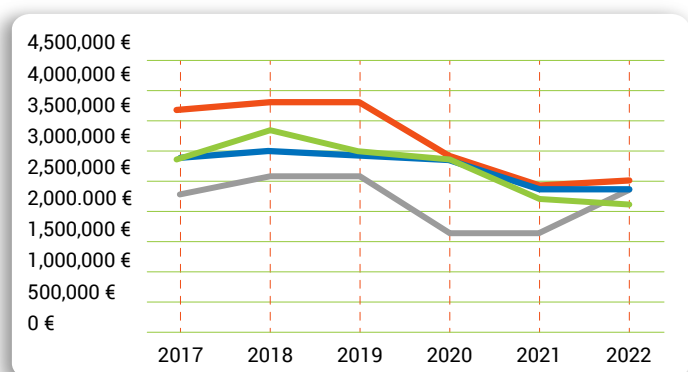
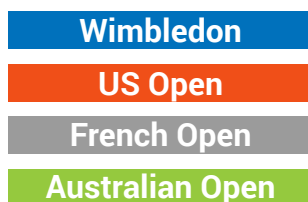


Figure 13: Prize payout for the Winner of the Grand Slam (Note: Numbers are in US dollars)

Besides the prize money, general earnings have also increased over time. For example, while top tennis stars such as Maria Sharapova and Serena Williams earned between \$25 and \$30 million annually between the years 2011 to 2019, and in 2022, Naomi Osaka eclipsed their highest earnings with earnings of more than \$51 million.<sup>61</sup> In 2021, 550 female players earned prize money. Their average earnings were \$254,394.55, with a median earning of \$75,888.<sup>62</sup>

## The WTA level

The WTA Tour is a series of more than 50 tournaments played over the course of a calendar year around the globe. It was restructured in 2021 and now includes more tournaments than up until 2020. The Grand Slam tournaments are a part of the WTA Tour, but this paragraph refers to the non-Grand Slam tournaments. The WTA's sponsorship company, IMG, denotes the annual attendance at 5.3 million. In addition, the WTA Tour has a cumulative TV audience of 395 million viewers.<sup>63</sup> However, reports show that these smaller tournaments attract a substantially lower attendance than their Grand Slam counterparts. While the tournament series is less prestigious than the four Grand Slams, the prize pay-out is still comparable. The winner of this year's WTA Tour receives \$1.2 million.<sup>65</sup> Figure 14 shows the development of the total prize money paid out in the WTA finals since 2005. Over the years, the prize payout has grown steadily. It greatly increased in 2019 when the tournament's primary sponsor, Shiseido, doubled the previous year's prize money.<sup>66</sup> After the COVID-19 pandemic in 2020, the prize payout dropped significantly in 2021 and has not recovered since then.<sup>67</sup> Thus, the pandemic had its most severe impact on the lowerscale tournaments and stresses the need for sponsorships to allow for a financial influx in order to recover prize payouts.

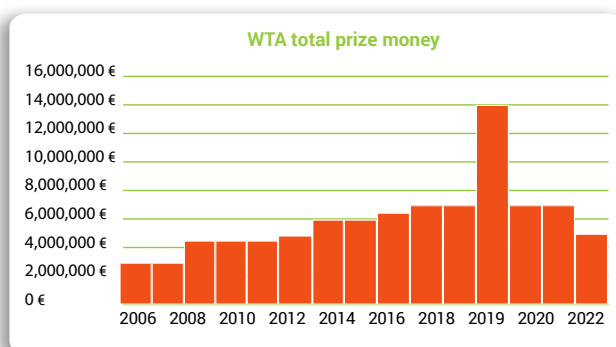
### Grand Slams

#### TV audience in the US (2018):



In 2020, the WTA partnered with Stats Perform with a focus on promoting and growing women's tennis. This included new data collected at a rally and shot level to help fans better understand the sport of tennis. The partnership is built on top of a pre-existing agreement that sees Stats Perform exclusively distribute live video of the WTA tour to licensed sportsbooks, streaming events in every continent worldwide.

Very recently, in March 2023, the WTA announced a partnership with CVC Capital Partners. The partnership will let CVC invest capital into the WTA indirectly via its managed funds in the hope of accelerating the sport's growth.<sup>68</sup>



- ← The prize payout has grown steadily, reaching its peak in 2019.
- ← After the COVID-19 pandemic in 2020, the prize payout dropped significantly in 2021 and has not recovered since then.
- ← The pandemic had its most severe impact on the lowerscale tournaments and stresses the need for sponsorships to allow for a financial influx in order to recover prize payouts.

Figure 14: History of the total prize money of the WTA tour since 2006

### 3.2.4 Volleyball

When analysing the women's volleyball national team competitions, the biggest and most important one is the FIVB Volleyball Women's World Championship. It is played every four years. There are also intracontinental championships, played every two to four years, such as the Asian Women's Volleyball Championship.

When looking at the club competitions, there are intracontinental championships on most continents. North America marks an exception, where the NCAA is the major US club-level tournament, and therefore no intracontinental tournament takes place there. These competitions are held every year.

In most countries, there are domestic leagues with club competitions, which are played every year. The most prominent domestic competitions on the club level in terms of viewership and TV broadcasts are the NCAA in the United States and the Women's Volleyball League Serie A1 in Italy.

#### National teams' competitions

Figure 15 demonstrates that since 2010 the total attendance and the average attendance of the FIVB Volleyball Women's World Championship has experienced a downward trend. The total attendance in 2010 was around 120.000, and by 2018 it had fallen to half as much.<sup>69</sup>

Unfortunately, data availability for the World Cup is rather limited, as it was not possible to obtain data from the previous World Cups. Hence, the numbers should only be interpreted carefully. Despite being the biggest volleyball tournament in the world, the World Cup has yet to air on television in most countries. Instead, the games can only be streamed on the platform Volleyball TV.<sup>70</sup>

Over the years the FIVB Volleyball Women's World Championship has experienced a downward trend.

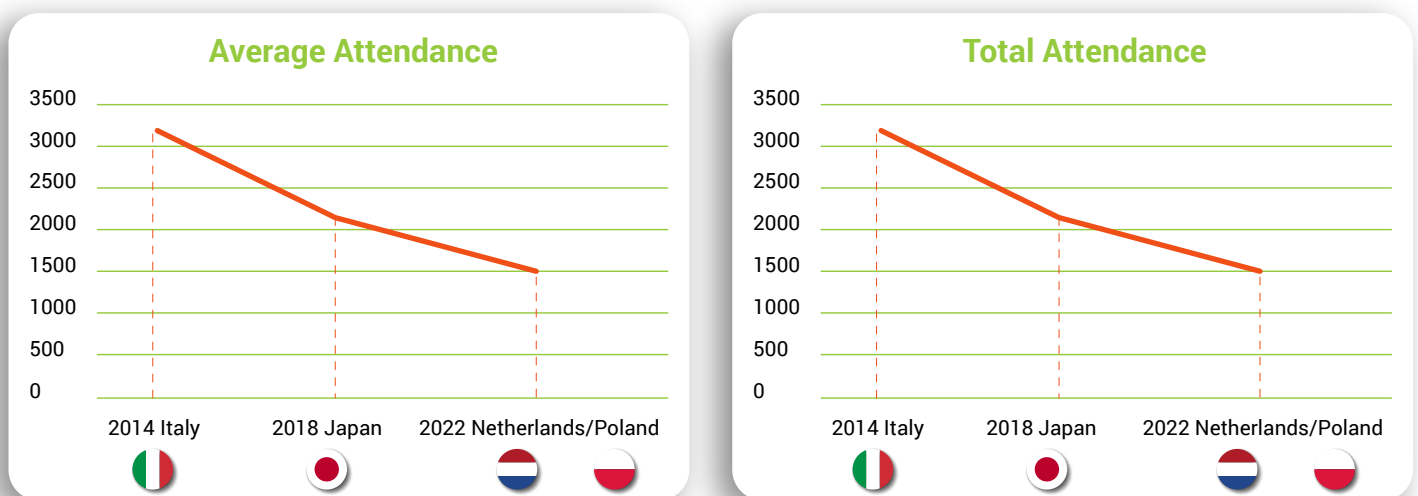


Figure 15: Average attendance and total attendance of the FIVB Volleyball Women's World Championship (2014-2022)

On the intracontinental national team competitions, the Women's European Volleyball Championships attracted the highest total attendance and average attendance (Figure 16). A total of almost 60,000 fans watched the last European Championship, while the NORCECA Volleyball Championship and the Asian Women's Volleyball Championship<sup>71</sup> were watched by less than 10,000 fans.<sup>72</sup> The average attendance of the Women's European Volleyball Championship was also about 1,000 fans higher than the Asian Women's Volleyball Championship, which had the second-highest average attendance. Like the World Championship, the intracontinental championships are also not shown on TV in most countries.

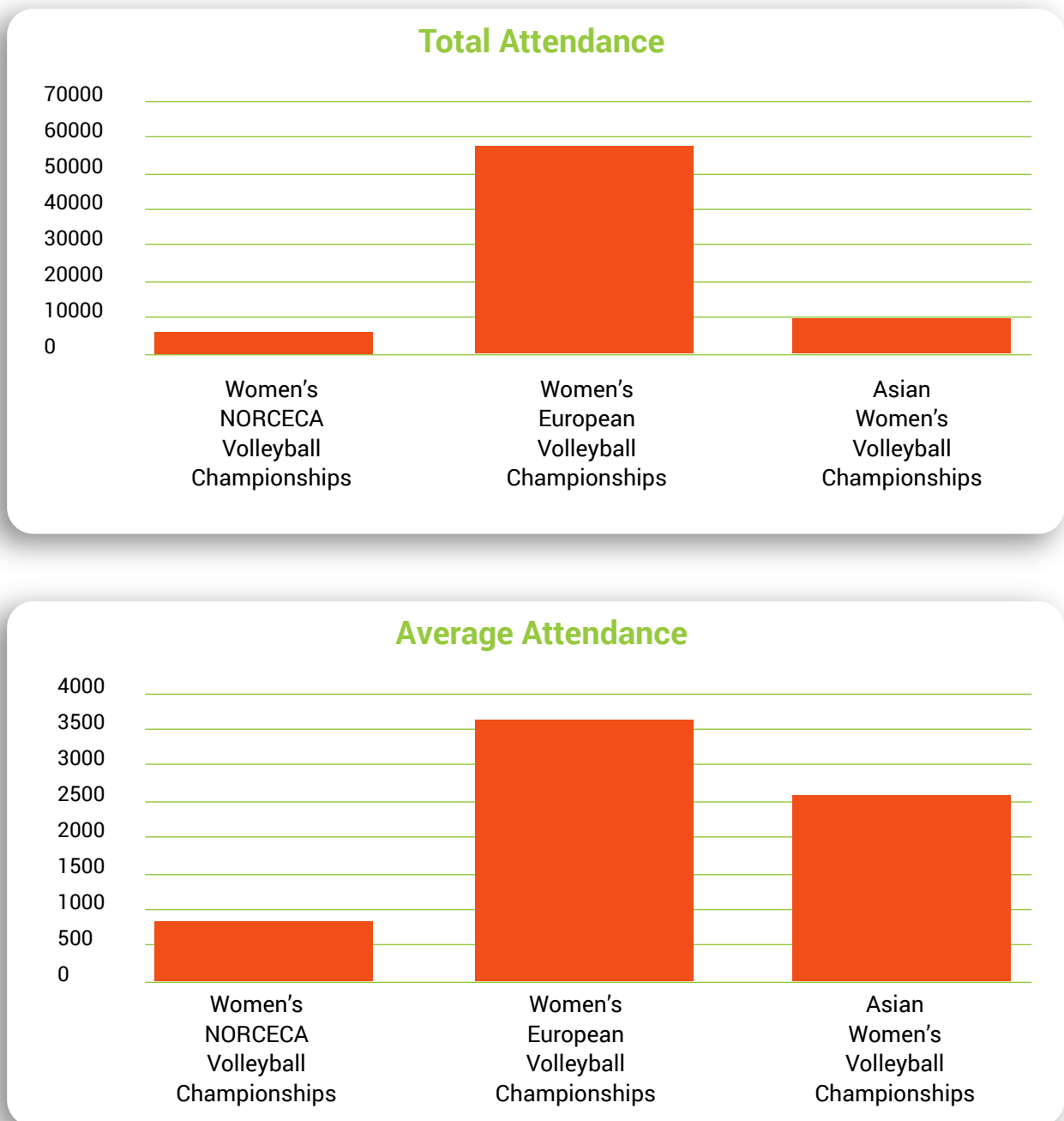


Figure 16: Average attendance and total attendance of the last intracontinental national team-level championships



## Clubs' competitions

Attendance data is only available for the European CEV Women's Champions League and for the Asian Women's Club Volleyball Championship and only for the 2019 season. Figure 17 shows that the Asian Women's Club Volleyball Championship beats out the European CEV Women's Champions League in terms of total attendance. However, the script is flipped when looking at the average attendance, where the European CEV Women's Champions League has a higher average attendance than the Asian Women's Club Volleyball Championship.

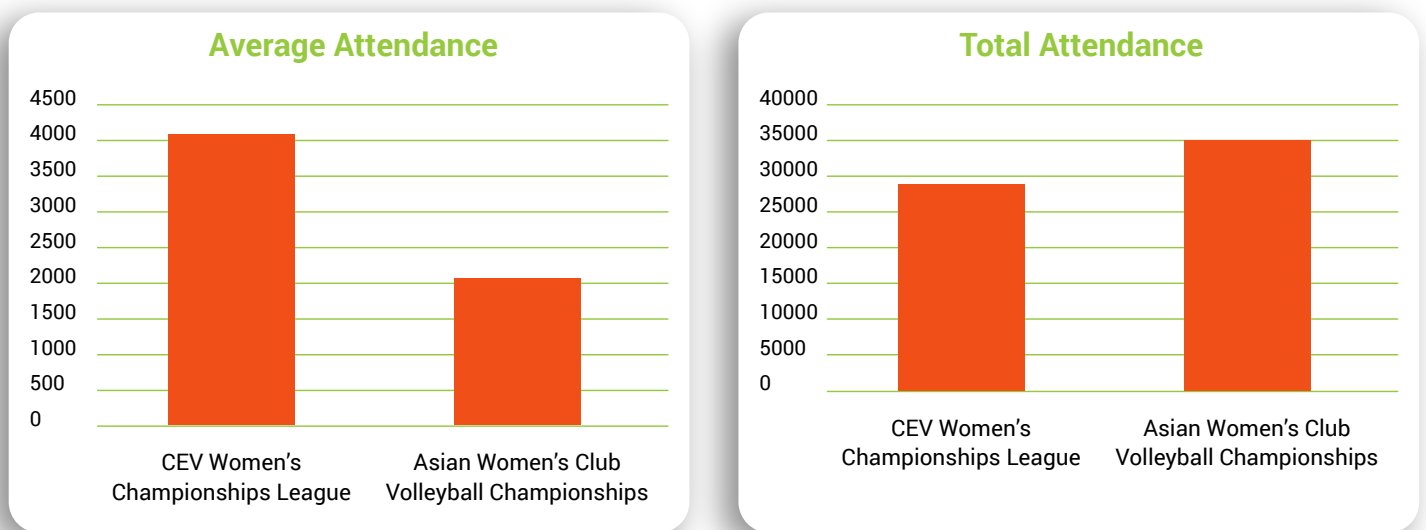


Figure 17: Average attendance and total attendance of the intracontinental national team-level championships (2019)

When comparing the top domestic leagues, attendance data is only available for the NCAA in the United States and the Women's Volleyball League Serie A1 in Italy. With regard to the total attendance, the NCAA beats the Serie A1 by a wide margin. This is unsurprising, given that the NCAA consists of many more teams, and therefore, many more games are played in the NCAA compared to the Serie A1. Before the COVID-19 pandemic, the total attendance in the NCAA hovered around 2.7 million,<sup>73</sup> whereas, in the Serie A1, it was around 60,000.<sup>74</sup> However, the average attendance was higher in the Serie A1 at just below 3,000 fans per game,<sup>75</sup> whereas in the NCAA, the variance is much higher, leading to a lower average of about 600 fans per game.<sup>76</sup> Unfortunately, full data for the 2022 season is not available. Therefore, for the 2022 season, the figure uses the available data from the NCAA Division I women's volleyball tournament.

The NCAA is one of the few female volleyball leagues broadcasted on live television. In fact, the last NCAA Women’s Volleyball Championship match was watched by 1.19 million people, the most ever to watch a women’s volleyball game on ESPN.<sup>77</sup> After the low TV numbers in 2019, the TV ratings have fully recovered.<sup>78</sup> Similarly, on the other side of the globe, China’s Volleyball Nations League (VNL) tournament has drawn very high TV ratings. For example, the match between China and the USA hit a peak rating figure of over 2.35%.<sup>79</sup> It was also the VNL that made headlines by giving out the same amount of prize money to the male and female teams.<sup>80</sup> For each victory in the preliminary round, the winner gets \$9,000, and the loser gets \$4,000. The team that wins the tournament receives \$1,000,000. The second-place team receives \$500,000, and the third-place team receives \$300,000.<sup>81</sup>

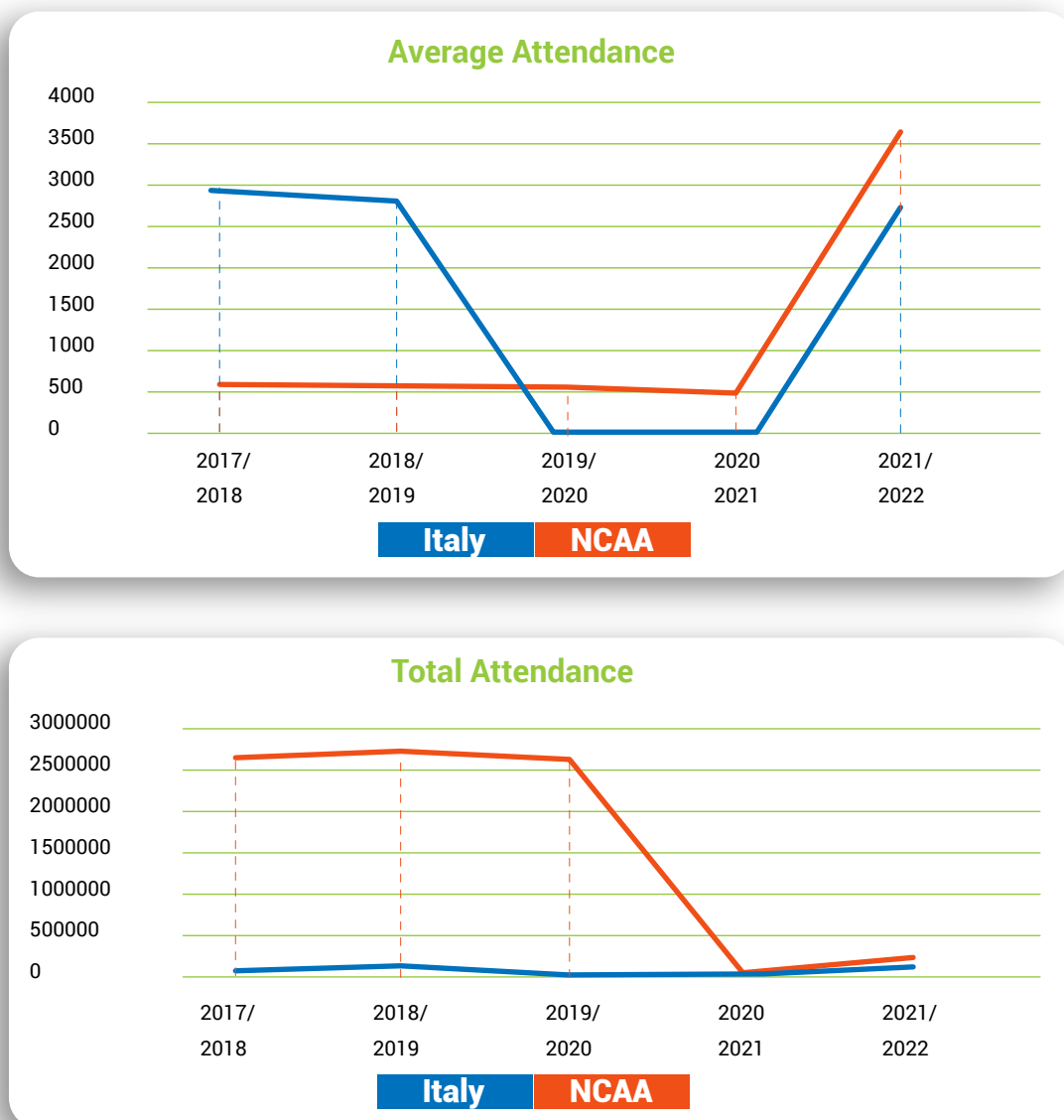


Figure 18: Total attendance and average attendance of the major national club-level leagues (2017-2022)

**Key insights of Part 1:**

- Following the COVID-19 pandemic, the investigated sports have experienced a swift recovery in terms of demand
- Recent data indicates that basketball, cricket, and soccer have achieved unprecedented levels of demand, as evidenced by record-breaking attendance and TV ratings
- Grand Slam tournaments in Tennis offer top-tier financial rewards for female athletes
- A notable trend in various sports is the recent formation of financially rewarding partnership and sponsorship agreements
- There appears to be a proportional relationship between the increase in demand for these sports and the growth of prize money
- Despite the rising interest in major events, there still remains a deficiency in the availability of broadcasting deals and change is slow
- Acquiring data on demand indicators continues to pose a challenge for researchers especially when it comes to historical data



# Part 2 – Analysis of sports betting data

## 4.1 Methodology

Part 2 features sports betting data provided by the project’s official partners showcasing the development from 2017 to 2022 for women’s sports of basketball, cricket, soccer, tennis, and other sports. In the description and analysis of the data, three primary indicators are utilized: the number of individual bettors, the total number of bets, and the total betting volume. Aggregated numbers are shown for all three indicators. Compound annual growth rates (CAGR) are estimated, indicating the average growth rate of a sport over the specified time period. In addition, the three indicators are analysed for 11 selected events from 2021 and 2022, including the four tennis Grand Slam tournaments, the WNBA season 2021, the EURO 2022 in soccer, the cricket event “The Hundred” in 2021, the BWF World Tour in badminton, and the three Olympic events in badminton, basketball, and volleyball. Alongside the total numbers, gender-specific analyses are provided, including aggregated numbers split by male and female and a supplementary analysis describing the share of total female and male bettors and their development across sports.

## 4.2 Findings

### Sports-specific data

Figure 19 illustrates the development of the number of individual bettors, the number of individual bets, and the total volume of bets over time for various women’s sports. Soccer has consistently attracted the highest number of bettors, followed by tennis, with basketball, cricket, and other sports trailing far behind. The number of bettors in women’s soccer saw rapid growth starting in 2020, possibly fueled lately by the success on the women’s EURO in 2022. A CAGR of approximately 20% further supports this trend. Additionally, for women’s basketball, cricket, and tennis, the estimated CAGRs surpass 10% during the period 2017-2022, indicating cricket a positive trajectory.

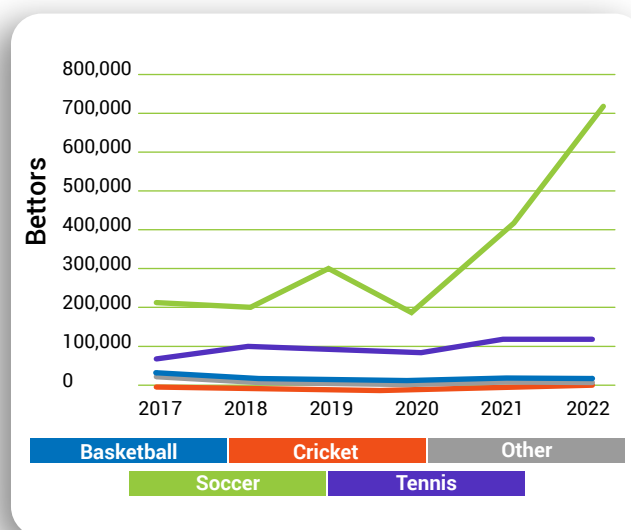


Figure 19: Development of the number of bettors, number of bets, and total volume of bets on women’s sports.

Regarding the number of individual bets, the pattern is similar, with women’s soccer leading, followed by tennis, and then basketball, cricket, and women’s other sports at a considerably lower level. Women’s Soccer recorded over 6 million individual bets in 2022, while women’s tennis had around a quarter of that amount, and the remaining women’s sports had substantially fewer bets. The estimated CAGRs are at a similar level compared to the number of individual bettors. However, when examining the total volume of bets, the picture changes. Tennis boasts the highest volume in all years, with soccer coming in second and basketball, cricket, and other sports far behind. This implies that the average value of bets placed on tennis is much larger than in other sports. In 2022, the total volume of bets reached approximately €30 million for both tennis and soccer, while cricket recorded about €3.4 million, and basketball and other sports had less than a million euros each. The CAGRs are notably lower compared to the first two indicators. Among them, only basketball exhibits a CAGR exceeding 10%.

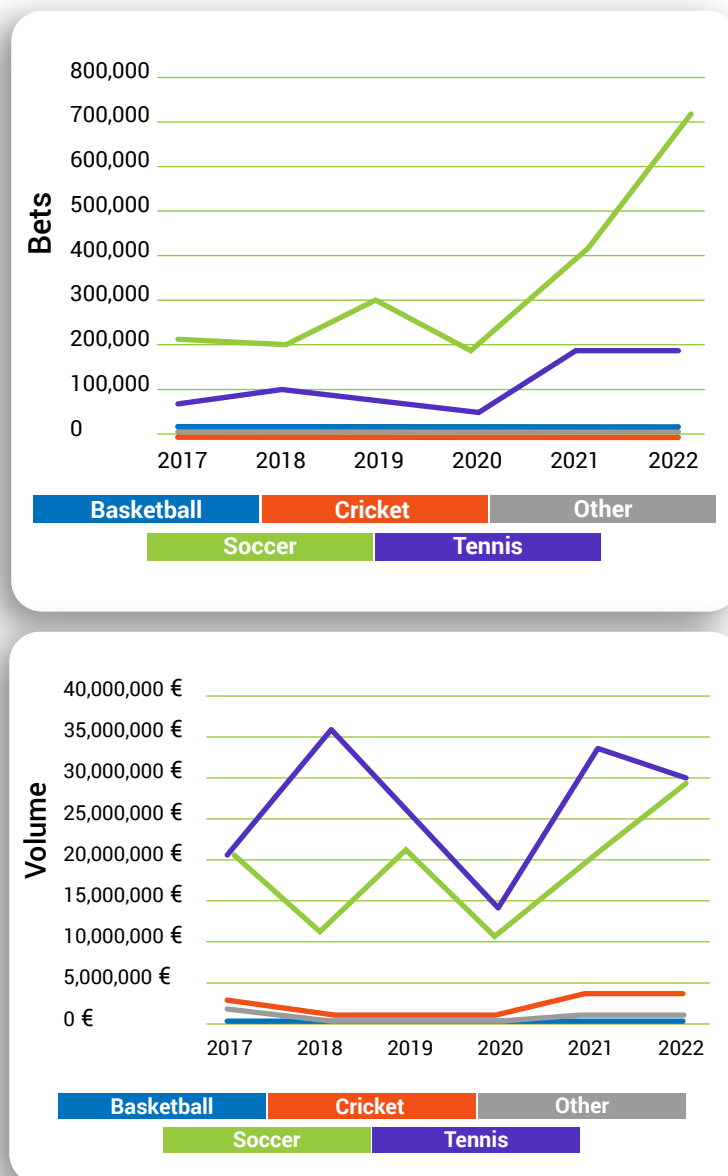


Figure 19: Development of the number of bettors, number of bets, and total volume of bets on women’s sports.

Figure 20 compares the number of individual bettors, the number of individual bets, and the total volume of bets for major women’s sports events in 2021 and 2022. The EURO 2022 stands out as the event with the most individual bettors, outpacing all other events by a factor of ten. In tennis, the French Open attracts the most bettors, while Wimbledon, despite its prestige, has the lowest number of bettors among the Grand Slam tournaments. For the Olympic Games, most bets are placed on Volleyball, with basketball and badminton following at a distance.

The pattern is similar when examining the number of bets. The EURO 2022 sees almost 2 million bets, while the four Grand Slam tournaments receive around a quarter of a million bets each. In the Olympic Games, Volleyball continues to dominate in terms of bets placed. Regarding the total volume of bets, the EURO 2022 leads with nearly €20 million, while the four Grand Slams generate between €7 and €12 million each, aligning with the previously mentioned trends. Among smaller tournaments, the Volleyball Olympics has the highest betting volume, amounting to a few million €.

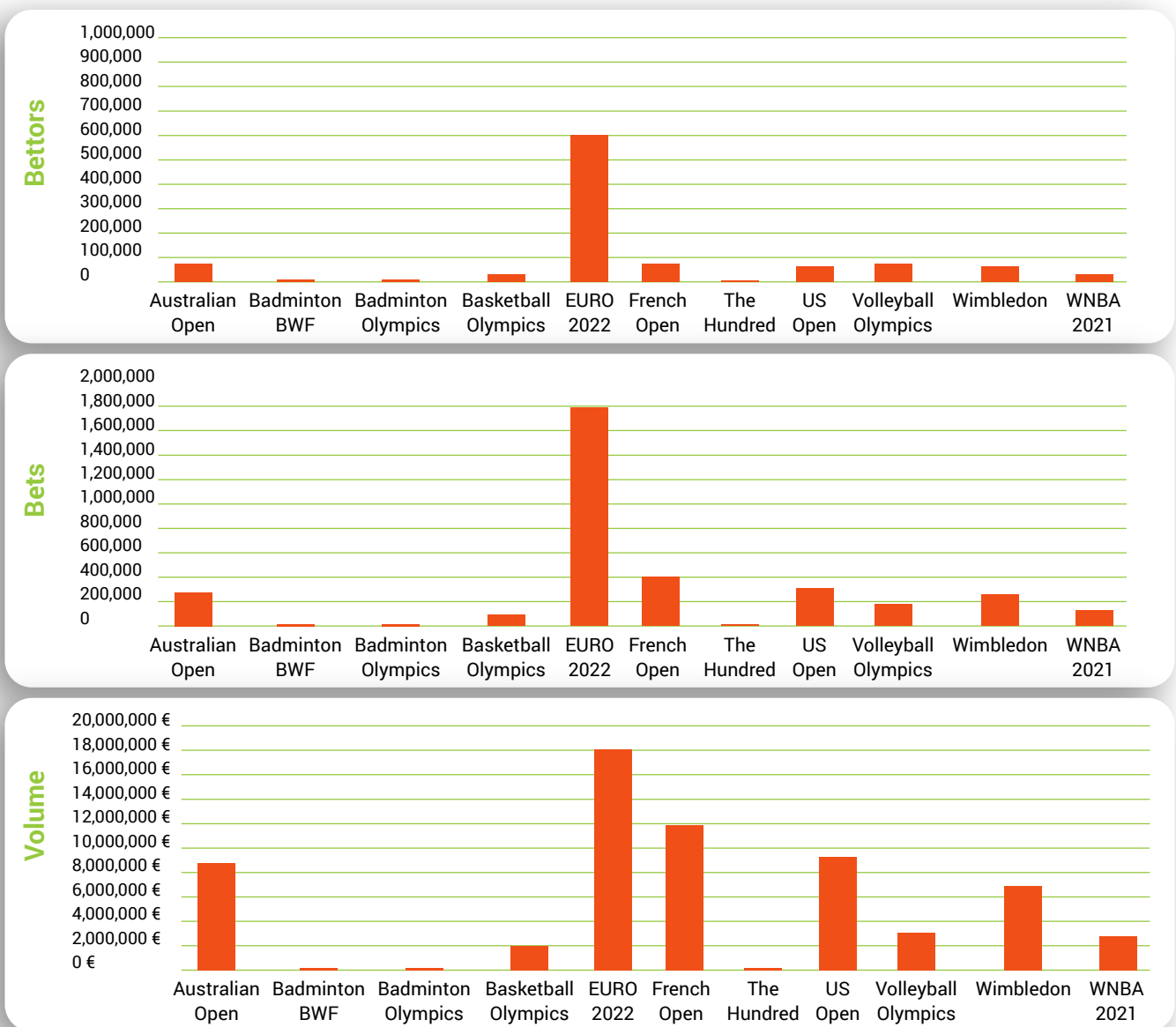
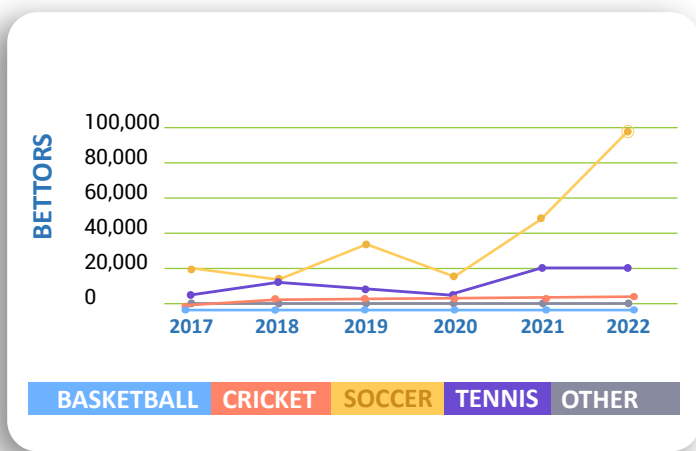


Figure 20: Number of bettors, number of bets, and total volume of bets for selected women sport events in 2021/22.

### Gender-specific analysis

Upon examining the development of total numbers of female bettors over time, the most remarkable observation is the significant surge in women’s soccer since 2020 (Figure 21). The number of individual female bettors placed bets and total volume have all more than doubled within this period, which is reflected by soccer’s CAGR ranging from 10-30% across the three indicators. Concurrently, women’s basketball and women’s tennis have also experienced a considerable increase, as evidenced by their CAGR of around 20%, albeit at a lower level.



#### Growth of betting on women's sports by women

Growth betting on **10-30% CAGR**   
**women's soccer** by **CAGR**  
 women (2017-2022) in terms of number of bettors, numbers of bets and total volume of bets

Growth of betting on **20% CAGR**    
**women's tennis and women's basketball** by **CAGR**  
 women (2017-2022) in terms of number of bettors, numbers of bets and total volume of bets

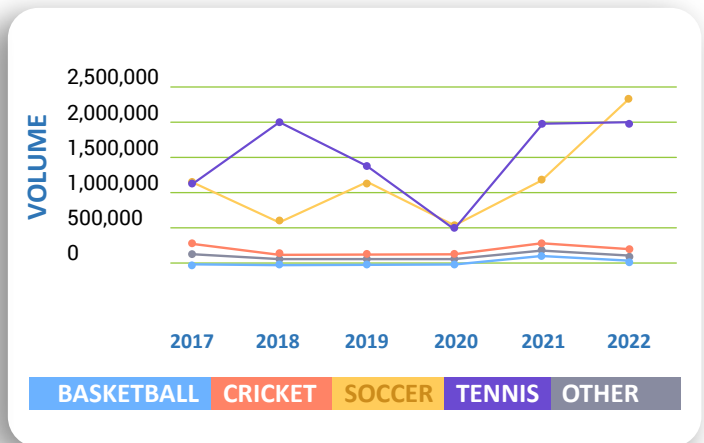
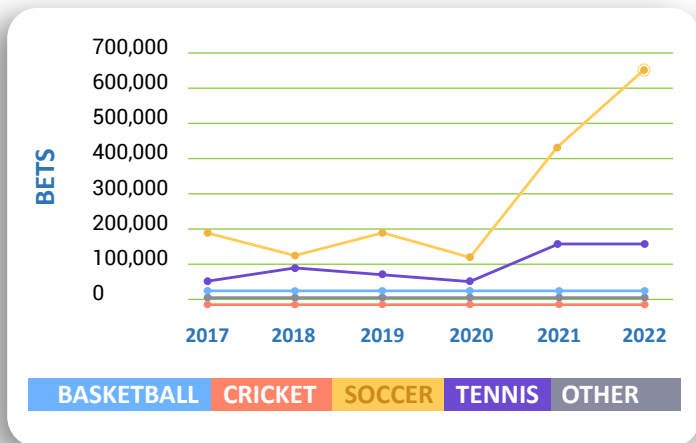


Figure 21: Development of the number of bettors, number of bets, and total volume of bets on women's sports (Female).

With respect to the male total numbers, the first aspect to highlight is the substantially greater figures for all three indicators (Figure 22). The pattern generally resembles the women's figures, with the most substantial increases observed in women's soccer since 2020. The CAGR for the number of bettors and bets is around 20% for men as well. Nevertheless, the growth rates for women's basketball, cricket, and tennis are marginally lower for men compared to women, and in the case of other women's sports, even negative across all three dimensions. Comparing the annual growth rates between men and women reveals the most considerable difference in volume. The CAGR for the total volume bet by men is markedly lower than for women across all sports. As a result, it appears that while the betting market for women's sports has expanded, it has grown more among women than men.



Figure 22: Development of the number of bettors, number of bets, and total volume of bets on women's sports (Male).

Figure 23 depicts the share of males and females in terms of the number of bettors, bets, and total volume for the different women’s sports in 2022. In all sports, men accounted for a minimum of 85% of the number of bettors, bets, and total volume. Generally, the male share is most significant in cricket and other sports, while the female share is more prominent in basketball, soccer, and tennis. Even within individual sports, the discrepancies between the three indicators are minimal. In soccer, the proportion of female bettors is marginally higher than the female share in the total betting volume.

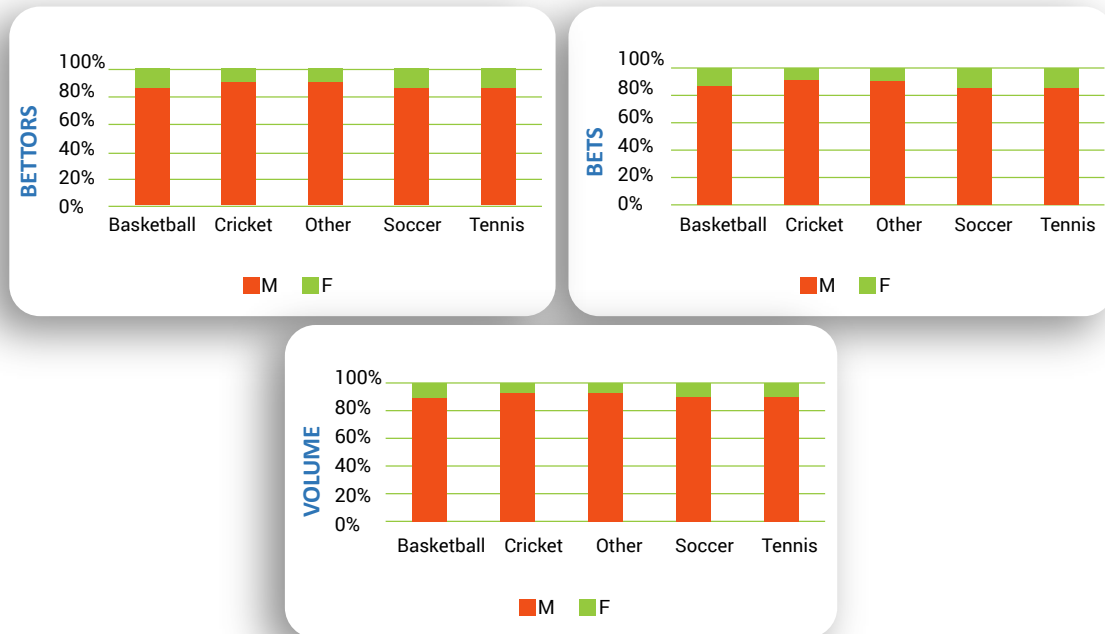
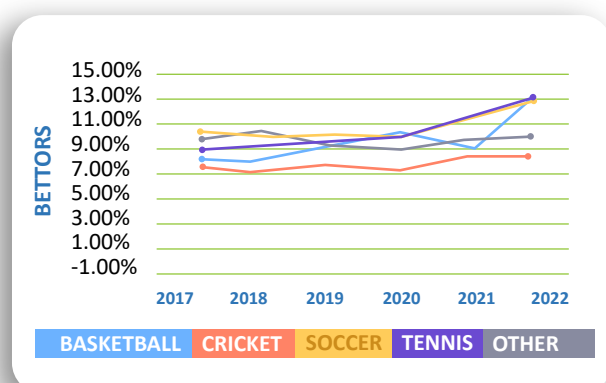


Figure 23: Share of male and female for bettors, number of bets, and total volume of bets for women’s sports in 2022.

When looking at the development of the female shares over time, Figure 24 reveals three key insights. Firstly, the share of female bettors has grown over time. Especially in the last couple of years, the share of female bettors in women’s sports has consistently risen across all covered sports, with the CAGRs ranging between 1-10%. Secondly, the share of the total number of bets placed by female bettors has remained relatively stable. Aside from minor fluctuations, the share of bets was the same in 2022 as it was in 2017. Given the increase in the total number of bets over time, as demonstrated in Figure 19, this suggests that the share of bets placed by women has grown at a similar pace to the overall market. Lastly, female bettors’ share of the total volume has slightly increased over time. Basketball, other sports, soccer, and tennis boast a CAGR marginally above 6%, while cricket presents a slightly negative CAGR.



### Women and betting

**1-10% CAGR**

The share of **the number of female bettors** in women’s sports has constantly risen (2017-2022)

**6% CAGR**

**Female bettors’ share** of the **total volume of bets** on women’s sports has increased overtime (2017-2022)

Figure 24: Development of female share for bettors, number of bets, and total volume of bets on women’s sports.

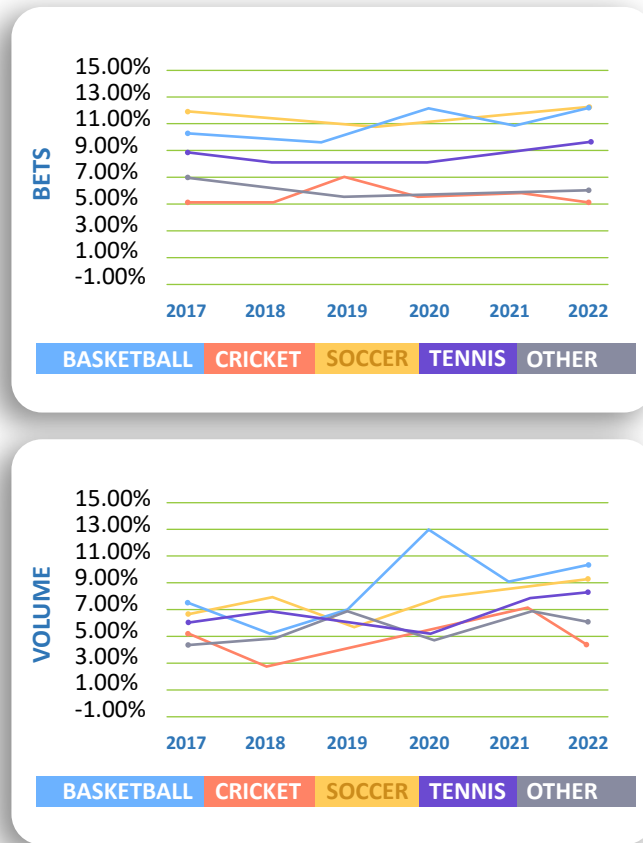


Figure 24: Development of female share for bettors, number of bets, and total volume of bets on women's sports.

**Other data**

Besides from the pure women's sports betting data, there are other indicators for the growth of the women's sports' betting market. As the sports betting sector relies heavily on real-time data to facilitate global betting markets, the rise in women's sports is inextricably linked with an uptick in data coverage for women's competitions. Table 3 illustrates the volume of women's sports matches for which Stats Perform collected data between 2019 and 2022. During this period, data coverage of women's sporting events within the sports examined in this chapter has surged by over 62%. Soccer and basketball matches constitute the majority of events under coverage. In the case of cricket, the data showcases the number of days covered.

Table 1: Number of women's sport matches Stats Perform collected data on (2019-2022)

	2019	2020	2021	2022	Total
Basketball	2,912	1,958	3,295	4,109	12,274
Criquet(days)	145	117	188	303	753
Soccer	3,949	3,138	6,146	7,289	20,522
Total	10,591	7,011	16,763	17,076	51,891

Finally, tables 2 and 3 provided below show the number of suspicious betting activity alerts received by IBIA<sup>82</sup> from 2019 to 2022 for both women and men, for certain selected sports.<sup>83</sup> Generally, the number of alerts for women's sports is significantly lower than for men's sports, which can be attributed to the considerably larger market for men's sports.<sup>84</sup>

Overwhelmingly, the highest volume of alerts each year is generated by women's tennis, followed by women's table tennis and soccer. The general trend is that the percentage of alerts that are from women's events has decreased. This is, however, a little misleading. This downward trend is rather a reflection of a decrease in Tennis alerts as a proportion of the total alert set, with tennis being the sport that sees by far the most alerts in women's matches. Tennis alerts accounted for 44% of total alerts during 2019/20 but only 36% since.

Since 2020, IBIA's alerts have contributed to the sanction of 31 clubs, players or officials.

*Table 2: Women's and men's sports breakdown of suspicious betting activity alerts by year (2019-2023) from the International Betting Integrity Association*

Year	Women	Men
2019	32 (18%)	147 (82%)
2020	55 (23%)	180 (77%)
2021	15 (7%)	190 (93%)
2022	26 (12%)	200 (88%)
2023 to 03/03	2 (10%)	18 (90%)
Total	130 (15%)	735 (85%)

*Table 3: Women's sports suspicious betting activity alerts by sport by year (2019-2022) from the International Betting Integrity Association*

Year	2019	2020	2021	2022	Total
Badminton	2	0	0	0	2
Basketball	0	0	1	0	1
Handball	0	0	0	1	1
Soccer	2	4	0	0	6
Table Tennis	0	8	1	0	9
Tennis	28	43	13	24	110 (85%)
Volleyball	0	0	0	1	1



**Key insights of Part 2:**

- Women's soccer is the leading sport in terms of the number of bettors and bets, with a particularly marked increase since 2020 (approx. 20% CAGR).
- Women's tennis exhibits an exceptional betting volume, rivaling the popularity of women's soccer within the betting landscape.
- The consistent growth across the three betting indicators in the 2017-2022 period (CAGRs > 10%) indicates an increasing interest and investment from bettors.
- The pinnacle of betting activities is centered around high-profile events such as the Women's EURO 2022 and the prestigious Women's Tennis Grand Slam tournaments, demonstrating their immense popularity among bettors.
- For soccer, basketball, and tennis, the share of female betting experienced significant growth across all betting indicators between 2017 and 2022 (CAGRs > 10%).
- Despite comparable growth rates for the number of male and female bettors and bets, the men's betting volume lags on women's sports, highlighting potential untapped opportunities.
- The data pertaining to suspicious betting alerts reveals no discernible trend for women's sports, reflecting a potentially stable and reassuring environment in this domain.
- The growth of live data in women's sports may serve as a precursor, signaling the vast growth potential awaiting the women's sports betting market.

# Part 3 – Review of case studies and literature on integrity in women's sports

## 5.1 Methodology

Part 3 comprises two parts: a presentation of ten case studies and an analysis of existing academic literature on integrity.

The first section presents case studies of match-fixing in women's sports from the last 25 years. Therefore, an internet search of various online sources documenting information on the different cases is conducted. In the majority of the closed cases, the investigation concluded that the matches were corrupted. Those investigations that are still ongoing can only be referred to as alleged match-fixing. Ten match-fixing cases in women's sports, equally split between individual and team sports, were selected with two main objectives:

1. To showcase the range of women's sports that can be subject to manipulation.
2. To demonstrate the various circumstances in which match-fixing can occur and which stakeholders are involved.

Over the years, only a few match-fixing cases in women's sports have been formally documented,<sup>86</sup> and access to official information, including the results of the investigations, is scarce. Since details on the official cases are limited, the ten cases were selected based on publicly available information such as the competition, people involved, match-fixing type, and the sanctions and punishments. Cases 1 and 2 are not specifically linked to sports betting-related match-fixing instances. They are listed to demonstrate that other forms of match-fixing (e.g., deliberate underperformance to gain competitive advantages) might threaten the integrity of women's sports as well.

For the second part, scientific databases from the field of psychology, economics, and sports are employed to identify relevant academic studies. The process utilizes key search terms such as corruption, bribe, match-fixing, manipulation, and underperformance. Subsequently, the studies are reviewed in terms of their context, methodology, and data analysis. The identified determinants are categorized, and their effect on the likelihood of engaging in corruption is indicated ( ↓ ↑ ). In addition, the academic evidence is evaluated at three levels (+; ++; +++) according to the number of studies supporting the effect and the strength of the empirical evidence (e.g., causal effects from field and laboratory experiments).

## 5.2 Findings

### 5.2.1 Review of literature on match-fixing cases in women's sports CASE STUDIES:

#### *Case 1: Badminton – South Korea, China (2012)*

A match-fixing scandal in Badminton not known to be related to sports betting occurred at the 2012 Summer Olympic Games in London. At that time, the tournament structure was such that the teams played a group phase, after which the best teams advanced to the knock-out stage. When the South Korean team of Jung Kyung-eun and Kim Ha-n and the Chinese team of Yu Yang and Wan Xiaoli played against each other in the last game of the group phase, both teams were already qualified for the knock-out stage. During the game, both teams intentionally played very poorly in an attempt to lose intentionally. The reason was that the teams wanted to avoid facing the respective other team in the knock-out stage. In fact, the level of play got so bad that the crowd started booing. In the next game, only an hour later, the same thing happened between the South Korean team of Ha Jung-eun and Kim Min-Jung and Indonesia's Meliana Juahari and Greysia Polii. The Badminton World Federation (BWF) organized a review panel quickly after the second game concluded, to investigate the cases. The teams justified their poor level of play by arguing that they were trying to conserve energy. A formal investigation was filed the next day, and all eight players were disqualified from the 2012 Olympics. The incident marks the largest mass disqualification of athletes for match-fixing reasons at the Olympics in the twenty-first century. Significantly, it is also the first time female athletes were disqualified from the Summer Olympic Games for match-fixing unrelated to betting or gambling.

#### Sources:

Blair, K. (2018). The 2012 Olympic badminton scandal: Match-fixing, code of conduct documents, and women's sport. *The International Journal of the History of Sport*, 35(2-3), 264-278.

 **Case 2: Soccer – Japan (2012)**

During the 2012 Summer Olympics in London, the Japanese Women's national soccer team had already qualified for the knock-out stage. At the Olympics, the locations for the knock-out stage games were known in advance. If the Japanese team were to win their last group phase match, they would have to travel to a different location for their first knock-out stage game. However, if they were to draw their last match of the group phase, they could remain at their current location for their first game of the knock-out stage. As a result, the Japanese national team intentionally played for a tie in the last game of the group stage in order to avoid having to travel in the first round of the knock-out stage. The Japanese's final opponent in the group phase was South Africa, a considerably worse team at the time, and the game ended in a tie. After the match, the national team's coach admitted that he had instructed the players to play for a tie. There were neither financial consequences nor legal consequences for either stakeholder involved.

**Sources:**

<https://bleacherreport.com/articles/1284615-olympic-results-2012-how-japans-tie-impacts-womens-soccer-field>

Park, J. H., Choi, C. H., Yoon, J., & Girginov, V. (2019). How should sports match fixing be classified?. *Cogent Social Sciences*.

 **Case 3: Volleyball – South Korea (2010/11)**

A wave of match-fixing incidents shook South Korean volleyball in 2012. In addition to thirteen male players, two female players from the Heungkuk Life Pink Spiders were under suspicion of fixing matches during the 2009-2011 seasons. The allegations were such that the two female players took 4,400\$ each from gambling brokers and, in return, fixed the outcome of a game by deliberately making mistakes. The players were eventually banned for life, implying they would also not be allowed to take coaching jobs.

**Sources:**

<https://www.aljazeera.com/sports/2012/3/14/south-korea-indicts-match-fixers>

<https://www.reuters.com/article/baseball-korea-fixing-idUKL4E8EE4G220120314>

 **Case 4: Tennis – Slovakia (2017)**

In 2020, information surfaced that revealed that Dagmara Baskova had been involved in at least five match-fixing incidents in 2017. She was accused of contriving the outcome of games and did not report it to the governing authorities. Baskova admitted the charges and was subsequently banned for 12 years and fined an additional 40,000\$, which prompted her to quit her career. The majority of the fine was suspended to \$1,000. She had a peak WTA ranking of 1117 in singles and 777 in doubles. No reports were found on how Baskova had benefited from fixing the matches and whether she was working alone.

**Sources:**

<https://www.itia.tennis/news/sanctions/slovakian-tennis-player-banned-for-match-fixing/>

<https://sbcnews.co.uk/sportsbook/2021/01/04/slovakian-tennis-player-banned-for-match-fixing-offences/>

 **Case 5: Soccer – Spain (2018)**

In 2018, a match-fixing scandal occurred in the first division of women's soccer in Spain. The scandal known as "Operation Cortés" also included second and third division matches in men's soccer, indicating that those involved in manipulating men's sports are now expanding into women's sports. It involved the three players Nayadet López, Marta Parralejo, and Estefanía Lima from the Spanish soccer club Santa Teresa de Badajoz, who allegedly took money from bettors residing in China for the manipulation of matches. The players received between 2,000-5,000€ per fixed match, whereas the fixers made up to twenty times that amount per fixed match through betting. They apparently ordered the manipulation of games in many different forms, as they bet, for example, on the number of penalties, corners, goalkeeper saves, etc. The Spanish police investigations, in partnership with Europol, arrested more than 20 people.

**Sources:**

<https://www.elmundo.es/deportes/futbol/2018/06/11/5b1d6e1222601d2d248b45e6.html>

[https://www.cope.es/deportes/futbol/noticias/tres-jugadoras-del-santa-teresa-femenino-detenido-por-operacion-cortes-contra-amano-partidos-20180612\\_226488](https://www.cope.es/deportes/futbol/noticias/tres-jugadoras-del-santa-teresa-femenino-detenido-por-operacion-cortes-contra-amano-partidos-20180612_226488)

 **Case 6: Cricket – India (2019)**

In 2019, before the limited-overs home series against England, the two individuals Rakesh Bafna and Jitendra Kothari approached players of the Indian national women's team to get the players to throw matches. The match-fixing approach was revealed when one of the players recorded phone calls in which Bafna requested the match-fixing and offered the player 1,130€ per match. The player then informed authorities, and shortly afterwards, the Anti-Corruption Unit (ACU) of the Board of Control for Cricket in India took on the case. The match-fixing did not take place, and thus, the attempt of the two fixers failed. According to media reports, Bafna was warned for his actions by the ACU, and the case was handed over to the local police.

**Sources:**

<https://www.bbc.com/news/world-asia-india-49717590>

<https://www.indiatoday.in/sports/cricket/story/india-women-cricket-team-player-approached-fix-matches-bcci-acu-1599840-2019-09-16>

### *Case 7: Tennis – Bulgaria (2020)*

In 2019, Bulgarian top tennis player Aleksandrina Naydenova was provisionally suspended under the purview of the Tennis Integrity Unit (TIU). Naydenova faced allegations of involvement in an array of match-fixing episodes spanning from 2015 to 2019. In the final hearing that took place in late 2020, Naydenova was found guilty of match-fixing and was banned from professional tennis for life for 13 charges. The charges comprised twelve instances of match-fixing within the WTA Tour and one for her lack of cooperation with the TIU. Consequently, Naydenova was met with a substantial penalty of US\$150,000. At the time of her ban, Naydenova was ranked No. 239 in singles in the world.

#### **Sources:**

<https://www.itia.tennis/news/sanctions/aleksandrina-naydenova-banned-tennis-life/>

[https://www.espn.com/tennis/story/\\_/id/30359170/bulgaria-aleksandrina-naydenova-given-life-ban-match-fixing](https://www.espn.com/tennis/story/_/id/30359170/bulgaria-aleksandrina-naydenova-given-life-ban-match-fixing)

### *Case 8: Soccer – Brazil (2022)*

In 2022, the Brazilian police revealed that it currently has eleven open police investigations involving seventeen football matches, some of which are from the women's Brasileirão, Brazil's highest national women's soccer league. Most of the complaints involve the suspicion that bets were made on sports betting sites regarding the final results of the matches. One of the cases that became known to the public involved the teams of FC Santos and Red Bull Bragantino of the Brasileirão. The case involves the Bragantino goalkeeper, the Santos goalkeeper coach, and an unnamed intermediary. The Bragantino goalkeeper claimed that the Santos goalkeeper coach, Fabricio de Paula, offered up to 1,800\$ for her to let in five goals in the game and 900\$ for a masseuse and wardrobe from the same club, who intermediated the conversation. At the time of writing, the police reports are still pending, therefore, no financial or legal consequences have been announced yet. Fabricio de Paula, the goalkeeper coach who had allegedly made the offer, was quickly re-leased from Santos.

#### **Sources:**

<https://g3newswire.com/brazil-match-fixing-scandal-uneearthed-in-womens-football/#>

<https://igamingbrazil.com/en/sports-betting-en/2022/09/13/sports-betting-18-football-matches-are-under-suspicion-of-match-fixing/>

 **Case 9: Tennis – Chile (2022)**

The 26-year-old Chilean tennis player, Bárbara Gatica Avilés, has been banned for three years after she admitted to accepting a bribe to deliberately lose a game in 2016. She was also fined \$5,000. The exact match or the size of the payment was not released. It was not specified which match was fixed and how large the payment was. Interestingly, earlier in 2022, Gatica Avilés also received a suspension due to a violation of the anti-doping code of conduct.

**Sources:**

[https://www.espn.com/tennis/story/\\_/id/35259962/chile-barbara-gatica-aviles-gets-3-year-ban-match-fixing](https://www.espn.com/tennis/story/_/id/35259962/chile-barbara-gatica-aviles-gets-3-year-ban-match-fixing)

<https://athletic.com/tennis/152909.html>

<https://www.itia.tennis/news/sanctions/gatica-three-years-ban/>

 **Case 10: Tennis – Kyrgyzstan (2022)**

The former world-ranked number 163 Ksenia Palkina has admitted to match-fixing offenses during the 2018 and 2019 seasons. She was found guilty of contriving the outcome of games by not putting forth her best effort and receiving money from outside parties for doing so. One reported incident involves a match during an ITF international tournament in March 2019 in Gonesse. Palkina has been banned for 16 years, backdated to 2019. In addition, she has been fined 100,000\$.

**Sources:**

<https://www.express.co.uk/sport/tennis/1603722/Tennis-star-Ksenia-Palkina-16-YEAR-ban-match-fixing-tennis-news>

<https://itia.tennis/news/sanctions/ksenia-palkina-banned/>

## 5.2.2 Literature review of academic studies

### *Corrupt behaviour*

The academic literature on predictors of corruption can be divided into research on micro and macro-level determinants (Zimelis, 2020). The micro-level focuses on individuals and their behaviours. From a theoretical perspective, it is either assumed that individuals are rational and maximize their benefits when engaging in corruption, or a more moralist view posits that individuals are inadequately educated or trained, leading to behaviour that violates existing norms. Conversely, the macro-level emphasizes the role of societal structures and institutions, asserting that the circumstances surrounding the individual determine the level of corruption.

The reviewed evidence is derived from survey data, field experiments, or laboratory experiments. Most research has centred on public officials and their behaviour concerning bribe acceptance or bribe-giving in exchange for benefits as a form of corruption. Some studies have also examined the perception of corruption prevalence.

Survey-based studies typically focus on a specific population. On the micro-level, a representative population of a country is often surveyed, whereas on the macro-level, aggregated indicators from different countries are frequently compared. Since data is often collected at a single point in time, identifying causal effects can be challenging. Field and laboratory experiments, however, have the advantage of employing control and treatment groups, enabling researchers to isolate the effects of determinants influencing corruption. In contrast to laboratory experiments, field experiments possess considerably higher external validity, as they are conducted in natural settings, and participants are unaware of their assignment to control or treatment groups.

Based on a review of the existing literature on the determinants of corruption, the following categories are established: *Socio-demographic determinants, Economic determinants, Social norms and values, and Institutional determinants.*

*Table 4: Socio-demographic determinants of corruption*

Determinants	Effect	Sources
Gender Female	↓ ++	Mocan (2008); Rivas (2013); Swamy et al. (2001); Armantier & Boly (2013)
Age	↓+++	Armantier & Boly (2008); Torgler & Vales (2006)
Education	↓+++	Dreher et al. (2007); Mocan (2008); Truex (2011)
Religiouness	↓ ++	Armantier & Boly (2013); Ko & Moon (2014) Waithima (2012)



Table 5: Economic determinants of corruption

Determinants	Effect	Sources
Wages	↓ +++	Van Veidhuizen (2013); Van Rijckeghem & Weder (2001); Armantier & Boly (2011)
Bribe size	↑ +++	Vranka & Bahnik (2018); Bahnik & Vranka (2022)
Probability Punishment	↓ ++	Abbink et al. (2022); Banerjee & Mitra (2018); Van Veldhuizen (2013); Bahnik & Vranka (2022)
Punishment size	↓ +++	Banerjee & Mitra (2018); Bahnik & Vranka (2022)
Unemployment	↓ +	Schulze et al. (2016); Torgler & Valev (2006);
Economic freedom	↓ ++	Graeff & Mehikop (2003); Park (2003); Perioni & D'Agostino (2013)

Table 6: Social norms &amp; cultural values of corruption

Determinants	Effect	Sources
Perceived norms	↓ +++	Banerjee (2015); Banuri & Eckel (2012); Barr & Serra (2010); Cameron (2009); Salmon & Serra (2017)
Cultural values		Achim (2016); Debski et al. (2018); husted (1999); Jha & Panda (2017); La Porta et al. (1999); Seleim & Bontis (2009); Tu et al. (2020)
<i>Individualism</i>	↓ +++	
<i>Power distance</i>	↑ +++	
<i>Uncert, avoidance</i>	↑ +	
<i>Masculinity</i>	↑ ++	
Personality		Agbo & Iwundu (2016); Connelly & Ones (2008); Salmanova (2021)
<i>Neuroticism</i>	↑ +	
<i>Extraversion</i>	↓ ++	
<i>Openness</i>	↓ +	
<i>Conscientiousness</i>	↓ +	

Table 7: Institutional determinants of corruption

Determinants	Effect	Sources
Democratization	↓ ++	Elbahaswy & Revier (2012); Jetter et al. (2015); Serra (2006)
Transparency	↓ ++	Benito et al. (2015); Elbahaswy & Revier (2012); Jimenez & Albalate (2018)
Political instability	↑ +	Goel & Saunoris (2017); Park (2003); Serra (2006)

## Match-fixing

The academic literature on match-fixing has evolved considerably over the last decade. Numerous studies have drafted theoretical models to conceptualize an individual's decision to engage in match-fixing (Forrest & Simmons, 2003; Preston & Szymanski, 2003; Maennig, 2002). The models usually draw upon economic theory and are often based on Becker's (1968) famous model of crime and punishment.

Due to its clandestine nature, empirical evidence examining the determinants of match-fixing is still limited. Giel et al. (2020) employed a laboratory approach to test the previously mentioned models. Hill (2009, 2010) combined qualitative and quantitative evidence when investigating match-fixing in soccer, while Hill et al. (2020) adopted a similar approach when studying the susceptibility of match-fixing in the major sports leagues in the United States. A number of studies focused on specific match-fixing cases, such as match-fixing in German grassroots sports (Nowy & Breuer, 2015), Taiwanese Baseball (Tzeng et al., 2021; Tzeng et al., 2022) or Brazilian football (Marchetti et al., 2021). A few studies also relied on survey data when studying social norms' role (e.g., Barkoukis et al., 2020).

Consistent with the prior section, the determined factors are categorized and evaluated.

*Table 8: Economic determinants of match-fixing*

Determinants	Effect	Sources
Probability of detection	↓ +	Forrest & Simmons (2003); Hill et al. (2020)
Severity of punishment	↓ ++	Forrest & Simmons (2003); Giel et al. (2022)
Size of the Bribe	↑ +	Forrest & Simmons (2003); Maenning(2002)
Players' wages	↑ +	Hill et al. (2020); Maenning (2002)

*Table 9: Match-related determinants of match-fixing*

Determinants	Effect	Sources
Probability of a successfui fix	↑ +	Forrest & Simmons (2003); Hill et al. (2009)
Probability of winning the match	↓ ++	Giel et al. (2022); Hill (2009)
Impotence of the match	↓ +	Hill (2009); Hill et al. (2020)

*Table 10: Individual determinants of match-fixing*

Determinants	Effect	Sources
Social norms & values	↓ ++	Barkoukis et al. (2020); Hill (2009); Forrest & Simmons (2003); Tzeng et al. (2020)
Gambling addiction	↑ +	Hill (2010)

Table 11: Betting-related determinants of match-fixing

Determinants	Effect	Sources
Size of the underground market	↑ +	Preston & Szymanski (2003); Tak et al. (2018); Tzeng et al. (2022)
Corruption of bookmakers	↑ +	Preston & Szymanski (2003)

Table 12: Institutional determinants of match-fixing

Determinants	Effect	Sources
Corruption of public officials	↑ +	Hill et al. (2020); Marchetti et al. (2021)
Social-cultural capacities of organizations	↓ +	Nowy & Breuer (2015)

**Key Insights of Part 3:**

- While there is extensive research on corruption in general, the study of factors influencing match-fixing remains limited
- Academic evidence from studies using field and laboratory experiments as well as surveys suggests:
  - Younger, highly educated females are less inclined to participate in corrupt activities
  - The relationship between wages and the size of bribes plays a role in the likelihood of engaging in corruption and match-fixing
  - Institutional factors, such as the probability of punishment and the severity of penalties, have an impact on corruption and match-fixing occurrences
  - Upholding social norms and values can serve as a preventive measure against both corruption and match-fixing
- Insufficient official data exists on match-fixing cases in women's sports, limiting the understanding of its prevalence
- Publicly available and confirmed match-fixing incidents in women's sports are significantly lower than in men's sports, creating the perception that women's sports may be less susceptible. However, this discrepancy is more likely related to the difference in overall popularity between men's sports and women's sports.
- While women's tennis is deemed more vulnerable to corruption in line with general trends, other women's sports are also susceptible to manipulation
- In the publicly accessible match-fixing cases involving women's sports, corruption can occur in both betting-related and non-betting-related contexts
- Across the 10 cases, it is evident that the financial stakes are currently substantially lower compared to men's sports, and the imposed sanctions and penalties tend to be relatively mild

# Conclusion

Globally, women's sports are experiencing significant growth, prompting questions about the implications of sports betting on women's events and the preservation of sports integrity. This report comprises three sections: an examination of economic data reflecting the interest in women's sports, an analysis of exemplary data on sports betting in women's sports, and a summary of academic research on determinants and documented cases of match-fixing in women's sports.

The findings of Part 1 validate the rising popularity of women's sports, with record-breaking attendance and TV ratings across various sports, such as basketball, cricket, and soccer and direct links to financially rewarding partnerships and sponsorships and increased prize money.

Part 2's analysis of sports betting data on women's sports reflects a similarly upward trend, with notable increases in the number of bettors, bets, and betting volume. While still, less than one in five bettors are female, recent data suggests a growing proportion of female bettors.

Evidence presented in Part 3 reveals that this documented growth carries potential risks to the integrity of women's sports. Given that many sports still have relatively low salaries, women's sports may be susceptible to corrupt practices. Even though studies show that women have a lower tendency to participate in corruption, the examined case studies demonstrate that such instances persist across various sports and countries.

**Aiming to inform stakeholders across sports, the betting industry, and the political landscape, the subsequent implications have been identified:**

- **Strengthen monitoring and regulations:** Given the rapid growth in women's sports and sports betting, it is crucial to implement comprehensive monitoring and regulatory systems to prevent match-fixing. Enhanced cooperation between sports governing bodies, betting operators, and law enforcement agencies can help mitigate risks.
- **Improve public perception of women's sports integrity:** Stakeholders should actively challenge the misconception that women's sports are less susceptible to match-fixing. By raising awareness of the risks and promoting women's sports' integrity, they can help foster a more vigilant and responsible sports community.
- **Develop targeted education and awareness programs:** Targeted programs for athletes, coaches, and support staff can raise early awareness about the risks of corruption and match-fixing and emphasize social norms such as the importance of ethical conduct, fair play, and respect for the opponent. By focusing on factors specific to women's sports, these programs can help create a culture of integrity.
- **Promote fair wages and economic transparency:** Ensuring equitable pay and economic transparency in women's sports can reduce the risk of corruption and match-fixing.
- **Improve data availability and research:** Encourage transparency and data sharing among stakeholders and support research initiatives to better understand match-fixing dynamics in women's sports.

# Appendix

## 7.1 Reference list of Part 3

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# Notes

## Page 2

1 The data supplied by Flutter Entertainment is only pertinent to the Paddy Power and Betfair UK&I brands and does not encompass other parts of the company's operations

## Page 4

2 [https://www.wikiwand.com/en/2018\\_FIBA\\_Women%27s\\_Basketball\\_World\\_Cup\\_Final#References](https://www.wikiwand.com/en/2018_FIBA_Women%27s_Basketball_World_Cup_Final#References)

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