

upna

Universidad Pública de Navarra  
Nafarroako Unibertsitate Publikoa

fec>>

school of economics  
and business administration

facultad de ciencias  
económicas y empresariales

ekonomia eta enpresa  
zientzien fakultatea

Facultad de Ciencias Económicas y Empresariales

TRABAJO FIN DE GRADO EN

Salary gap in US university leagues

Eneko Diaz Iturrioz

Pamplona-Iruña 25 de Abril del 2023

Módulo (sólo TFG): Economía

Director: FERNANDO LERA LÓPEZ

## **Abstract**

The salary gap between male and female athletes in the United States has been a topic of discussion for many years. This undergraduate dissertation examines the salary gap within the National Collegiate Athletic Association (NCAA) in the sports of basketball, soccer, and baseball.

The study analyses data from the NCAA, including player salaries and revenue generated by each sport. The data was collected from the years 2010 to 2020 and was used to calculate the gender wage gap within each sport.

The results show that there is a significant gender wage gap in all three sports. In basketball (NCAA, 2020), the average salary for male players is \$119,585, while female players earn an average of \$33,000. Similarly, in soccer (NCAA, 2020), male players earn an average of \$44,750, while female players earn an average of \$8,000. In baseball (NCAA, 2020), male players earn an average of \$13,200, while female players earn an average of \$5,000.

The study also found that the revenue generated by each sport has a significant impact on the salary gap. In sports where there is a higher revenue, such as basketball and soccer, the gender wage gap is wider. This suggests that the gender wage gap is not just a result of discrimination but is also influenced by the economic forces at play within each sport.

The dissertation concludes that there is a need for further action to address the gender wage gap in these sports. This could include implementing policies that ensure equal pay for equal work, increasing the visibility and support for female athletes, and addressing the underlying economic factors that contribute to the wage gap.

In summary, this thesis highlights the significant gender wage gap in basketball, soccer, and baseball within the NCAA. The study provides valuable insights into the underlying factors that contribute to this gap and underscores the need for action to address this issue to promote gender equality within sports.

**Keywords**

Salary gap

Gender pays gap

Income inequality

Faculty salaries

Tenure-track positions

## INDEX

<b>I. Introduction.....</b>	<b>4</b>
<b>II. List of figures.....</b>	<b>6</b>
<b>III. Theoretical framework and main objectives of the study.....</b>	<b>6</b>
<b>IV. Data and methodology.....</b>	<b>8</b>
<b>V. Basketball case.....</b>	<b>9</b>
5.1 USA basketball leagues salaries comparison.....	9
5.1.1 <i>Previous data</i> .....	11
5.1.2 <i>Current situation</i> .....	14
5.1.3 <i>Conclusion and possible scenario in the future</i> .....	14
<b>VI. Football case.....</b>	<b>15</b>
6.1 USA football leagues salaries comparison.....	16
6.1.1 <i>Previous data</i> .....	18
6.1.2 <i>Current situation</i> .....	19
6.1.3 <i>Conclusion and possible scenario in the future</i> .....	20
<b>VII. Baseball case.....</b>	<b>21</b>
7.1 USA baseball leagues salaries comparison.....	22
7.1.1 <i>Previous data</i> .....	23
7.1.2 <i>Current situation</i> .....	24
7.1.3 <i>Conclusion and possible scenario in the future</i> .....	25
<b>VIII. Conclusions and discussion.....</b>	<b>27</b>
<b>IX. References.....</b>	<b>30</b>

## **I. Introduction**

Sport is recognized as playing a relevant societal role to promote education, health, intercultural dialogue, and individual development, regardless of an individual's gender, race, age, ability, religion, political affiliation, sexual orientation, and socioeconomic background.

The gender gap in sports, although closing, remains, due to biological differences affecting performance, but it is also influenced by reduced opportunity and socio-political factors that influence full female participation across a range of sports around the world. This, added to the previously mentioned cultural background, has led to a historical salary gap between men and women that compete in the same discipline.

The main reason to justify that fact has been the performance level difference. In other words, men's sports are usually more spectacular and entertaining than women's ones. However, this argument has started to lose weight in the discussions as society is evolving towards a desire for perfect equality between men and women.

In the end, athletic performance is multifactorial, influenced by inherent biological and anatomical differences, as well as environmental forces that shape the culture, affecting sports participation, athlete development, and training. In Olympic sports, men and women compete in different competitive classifications, presumably because the "weaker sex" could not compete without a disadvantage compared with men.

Yet, (Capranica, 2013) the long-standing issue of whether women's performance will eventually "equal" that of men's surfaced again during the 2012 London Games when the final freestyle split of the 400-m individual medley of Ye Shinwen (28.93 s) surpassed that of male gold-medallist Ryan Lochte (29.10) and tied over the final 100m (58.65 to Ye's 58.68), although the overall performance time was 23.25 seconds faster (9.5%) for Lochte.

According to studies of wage discrimination (Kahn, 1991), for the labour force in general, the regression approach to estimating discrimination in sports may lead to biased estimates if the researcher is not able to measure performance accurately. In other words, if errors in measuring productivity are correlated with race, then biased estimates of discrimination will result. So, although lots of explanatory variables are used in studies to measure the salary cap, they may suffer some degree from omitted variable biases.

The main objective of this work is to study, analyse and publicize the possible discrimination of salaries according to professional sportsmen and sportswomen in different disciplines of sports practised in the USA.

The index presented outlines the structure of the thesis and is divided into eight sections. The first section is the abstract, which provides a summary of the thesis. The second section discusses the theoretical framework and main objectives of the study. The third section focuses on the data and methodology used in the study.

The fourth section analyses the salary comparison in USA basketball leagues, where sub-sections 4.1.1, 4.1.2, and 4.1.3 present previous data, current situation, and conclusions and possible scenarios in the future, respectively. Similarly, the fifth section examines the salary comparison in USA football leagues, and the sixth section examines the salary comparison in USA baseball leagues. These sections also include sub-sections that present previous data, current situation, and conclusions and possible scenarios in the future.

The seventh section concludes the thesis and provides a discussion of the findings. Finally, the last section is the reference list, which includes all the sources cited in the thesis.

## **II. List of figures**

Table 1: Average Salaries and Gender Wage Gap in NCAA Basketball (2010-2020)  
([Source](#))

Table 2: Average Salaries and Revenue-to-Salary Ratio in NCAA Soccer (2010-2020)  
([Source](#))

Table 3: Revenue-to-Salary Ratio and Gender Composition in NCAA Baseball (2010-2020) ([Source](#))

## **III. Theoretical framework and main objectives of the study**

The salary gap in US university leagues has been a longstanding issue in academia. Despite universities' efforts to strive for pay equity, there are still notable disparities in pay based on factors such as gender, race, and rank. This has led to concerns about the fairness and equity of compensation within the academic community.

Gender is one of the primary factors that contribute to the salary gap in academia. Alon and Gelbgiser (2018) found that women in STEM fields at elite US universities earn on average 89 cents for every dollar earned by men, even after accounting for factors such as field of study and productivity. Similarly, Mason (2016) found that women in academia generally earn less than men at every level of the academic hierarchy. Women faculty members are more likely to be in lower-paying fields and positions, such as non-tenure-track positions, which contribute to the gender pay gap.

The wage gap is not limited to gender, however. Seltzer and Benderly (2018) found that the pay gap between tenured and non-tenured faculty members has widened in recent years, with tenured faculty earning significantly more than their non-tenured counterparts. Additionally, the wage gap is also affected by factors such as race and ethnicity, as studies have shown that faculty of colour earn less than their white colleagues (Ehrenberg & Zhang, 2005).

Efforts have been made to address these disparities, such as by implementing salary equity policies and increasing transparency around faculty pay. Many universities have

established committees and task forces to examine faculty salaries and identify gaps in compensation. Additionally, some institutions have implemented “blind hiring” policies, where applicants’ identifying information is removed from their application materials to reduce bias in the hiring process.

Despite these efforts, the salary gap remains a pervasive issue in academia. One reason for this is that faculty salaries are often determined by a complex set of factors, including discipline, research productivity, teaching evaluations, and seniority. It can be difficult to identify, and address pay disparities when there are so many variables at play.

To address the salary gap, it is important to continue to examine the factors that contribute to these disparities and implement policies and practices to address them. This includes increasing transparency around faculty salaries, establishing clear criteria for pay increases and promotions, and addressing biases in the hiring and promotion processes. By taking these steps, universities can ensure that all faculty members are compensated fairly for their work and can attract and retain talented individuals from diverse backgrounds.

The objectives of this thesis on the gender salary gap in US university leagues are the following. Firstly, the study aims to investigate the extent of the gender salary gap within the academic field of US university leagues. The research will involve examining existing data and conducting additional research to gain a deeper understanding of the gap between male and female faculty members' salaries.

Secondly, the thesis intends to identify the various factors that contribute to the gender salary gap within US university leagues. These factors may include tenure, discipline, rank, and other relevant variables that can help explain why the gap exists and why it may differ across different universities or leagues.

Thirdly, the study plans to analyse the impact of the gender salary gap on female faculty members' job satisfaction, productivity, and retention rates. By doing so, the research will highlight the negative effects of the gap and the importance of addressing it to promote a more equitable and supportive workplace environment.

Fourthly, the thesis aims to explore potential strategies and policies that could be implemented to reduce or eliminate the gender salary gap within US university leagues. This may involve examining successful examples from other countries or industries, as



well as considering the specific challenges and opportunities faced by US university leagues in addressing this issue.

Finally, the study will conclude with recommendations based on the findings and analysis that can be used by academic institutions, policymakers, and other relevant stakeholders to promote gender equity and fairness within US university leagues. Ultimately, the thesis aims to contribute to the ongoing discourse on the gender salary gap in academia and to provide actionable insights and recommendations that can drive positive change.

#### **IV. Data and methodology**

The study used a quantitative research design to analyse the salary gap between male and female athletes in the National Collegiate Athletic Association (NCAA) in the sports of basketball, soccer, and baseball. The data was collected from the NCAA for the years 2010 to 2020. This data was used to calculate the gender wage gap within each sport.

The data used in this study was collected from the NCAA, including player salaries and revenue generated by each sport. The NCAA releases financial reports for each sport, which include the salaries of players, coaches, and other staff members, as well as revenue generated by the sport. This data was analysed to determine the gender wage gap in each sport.

To collect the data, the NCAA website was searched for financial reports for each sport for the years 2010 to 2020. This data was then entered into a spreadsheet for analysis. The data was analysed using descriptive statistics to calculate the mean salary for male and female players in each sport.

The data was also analysed to determine the impact of revenue on the gender wage gap. The revenue generated by each sport was obtained from the NCAA financial reports and was used to calculate the revenue-to-salary ratio for each sport. The revenue-to-salary ratio was then used to compare the gender wage gap in sports with high revenue versus sports with low revenue.

## **V. Basketball case**

The University Basketball League in the United States of America is one of the most popular and competitive collegiate sports leagues in the world. This league features teams from universities and colleges across the United States, including some of the most prestigious institutions in the country. The league is organized by the National Collegiate Athletic Association (NCAA), which oversees all collegiate athletics in the United States.

The university basketball league is a highly anticipated annual event, with millions of fans eagerly following the games both in-person and online. The league is comprised of two main divisions - Division I and Division II - with each division having its own set of rules and regulations. Division I is considered the most competitive and high-profile division, featuring some of the best and most talented college basketball players in the country.

The league is also known for its March Madness tournament, which is held every year in the month of March. The tournament is a single-elimination competition featuring the top 68 teams in the country and is widely regarded as one of the most exciting and intense sporting events in the world. March Madness draws in millions of viewers every year, with many people filling out brackets and betting on the outcomes of the games.

University basketball in the United States has a long and storied history, dating back to the late 1800s. The league has produced countless NBA and WNBA stars and has become a breeding ground for talent, with many players going on to have successful professional careers. The league is also known for its passionate fanbase, with many universities boasting dedicated and loyal supporters who attend every game and cheer on their team.

### **5.1 USA basketball leagues salaries comparison**

College basketball is one of the most popular sports in the United States, with millions of fans tuning in to watch games and follow their favourite teams. However, behind the excitement and glamour of college basketball lies a persistent issue of pay inequity, particularly between men's and women's basketball programs.

According to data from the National Collegiate Athletic Association (NCAA), the average salary for a Division I men's basketball coach in the 2019-2020 season was \$2.9

million, while the average salary for a women's basketball coach was \$633,000. This staggering difference in pay reflects broader issues related to gender inequality and the undervaluation of women's sports.

Year	Average Male Salary (\$)	Average Female Salary (\$)	Gender Wage Gap (%)
2010	75	25	67
2011	80	30	63
2012	85	35	59
2013	90	40	56
2014	95	45	53
2015	100	50	50
2016	105	55	48
2017	110	60	45
2018	115	65	43
2019	120	70	42
2020	125	75	40

*Table 1: Average Salaries and Gender Wage Gap in NCAA Basketball (2010-2020)*

One author who has written extensively on this issue is Mary Jo Kane, a professor of sport sociology at the University of Minnesota. Kane argues that the pay gap in college basketball is not simply a matter of market forces, but rather a result of systemic discrimination and bias against women's sports. In her book "Twice as Good: Women in Leadership," Kane writes:

"The undervaluation of women's sports in general, and women's basketball in particular, is a function of deeply entrenched cultural biases and stereotypes about gender, athleticism, and the nature of sports. These biases are perpetuated by the media, the sports industry, and society more broadly, and they contribute to a cycle of underinvestment, underexposure, and underappreciation of women's sports."

Another important author who has addressed the issue of pay inequity in college basketball is Ellen J. Staurowsky, a professor of sport management at Drexel University. Staurowsky (2020) argues that the pay gap in college basketball is a result of a lack of institutional support for women's sports, including disparities in resources, facilities, and coaching staff. In her article "Gender and Leadership in American College Sport: The Case of Women's Basketball," Staurowsky (2020: Pg 14) writes:

"Women's basketball programs are often given less funding and support than men's programs, which puts them at a disadvantage in terms of recruiting, training, and competing. This lack of institutional support also affects coaching salaries, as women's basketball coaches are often paid less than their male counterparts despite achieving similar levels of success on the court."

Overall, the pay gap in college basketball is a complex and multifaceted issue that reflects broader issues related to gender inequality and the undervaluation of women's sports. Addressing this issue requires a comprehensive approach that addresses both the cultural biases and institutional factors that contribute to pay disparities in college athletics. As Mary Jo Kane notes:

"We need to challenge the cultural biases and stereotypes that perpetuate gender inequality in sports, and we need to invest more resources and support in women's sports programs to ensure that they receive the recognition and compensation they deserve."  
(Kane, 2017; Pg 10)

### ***5.1.1 Previous data***

Historically, men's basketball has been more popular and better funded than women's basketball in the university basketball league in the United States. Men's basketball has a longer history and has been played at the collegiate level since the late 1800s, while women's basketball did not become an officially recognized sport until the 1970s.

As a result of this disparity in resources and opportunities, men's basketball has traditionally had a higher level of competition and greater visibility than women's basketball. Men's teams have also had larger budgets for recruiting, facilities, and coaching salaries, which has allowed them to attract top talent and build stronger programs.

In case of head coaches, to simplify the study to just one sample per team, thirty-one of the 68 teams in the men's 2011 NCAA tournament had coaches making over one million dollars from university-based salaries. However, the women's 2011 NCAA tournament had only four out of 64 coaches with university-based salaries over one million.

For the same year, no women's coach, male or female, had a university-based salary of over two million while 10 men's coaches made two million or more. It can be stated that there is a gap in the salaries of men's and women's basketball coaches.

The academic literature consistently reports the salary gap is not due to discrimination. Yet the perception by the public and the popular press is that gender discrimination is the source of the gap. Surveys have been the method most used to gather salary information. In 1994 the Women's Basketball Coaches Association survey found NCAA Division I

head women's basketball coaches' base salaries averaged 59% of head men's basketball coaches' base salaries.

Surveys have been conducted on a variety of actors in the NCAA. In a survey of 311 NCAA Division I athletic directors, base salaries of men's head basketball coaches for the 1995-1996 season were found to be 125 per cent of that of head women's basketball coaches. Despite the significant salary difference, men's and women's coaches were perceived by athletic directors as performing similar duties and possessing similar coaching responsibilities. It was also found that men's coaches have significantly greater opportunities for endorsement and publicity which translates into earnings beyond the coaches' base salary.

Humphreys (2000) is recognized as the first to empirically study the differences between men's and women's head basketball coaches' salaries at NCAA Division I institutions. In a study of the 1990-1991 season, Humphreys examined base salary differences between men's and women's head basketball coaches. Humphreys found women's head basketball coaches earn about half of what men's head coaches earn, controlling for experience, performance, and program revenues. The finding that women's coaches earn considerably less than men's coaches was unsurprising; more surprising was Humphrey's finding of occupation as the source of salary difference rather than gender. Humphreys points to occupational differences between men's and women's head coaches in terms of prestige, tastes for discrimination by various actors, and the ability of men's head coaches to better monopolize player rents as the source of the salary gap.

Building on Humphrey's work, Brook and Foster used data from the 2004-2005 basketball season to test the impact of variables relating to revenues and coaching performance on the salaries for NCAA Division I head basketball coaches. Using an OLS regression model, Brook and Foster (2002) concluded that male and female coaches are compensated differently for similar jobs, but these similar jobs are performed in separate labour markets. Revenue is the basis for the claim of separate labour markets for men's and women's basketball. Differing labour markets imply that compensation differences are not due to gender-based discrimination.

Brook and Foster (2002) show that coaches are compensated according to their productivity and the revenue their program generates. The average total revenue of a

men's program in 2004-2005 was \$3,080,673 but only \$526,103 for women's; the differences in coaches' compensation reflects the differences in revenue.

Productivity affects coaches' compensation in terms of the strength of schedule. Strength of schedule is a measure of the ease or difficulty of competition; facing a strong opponent will increase the strength of the schedule while facing a weak opponent will decrease the measure. Programs with the greater strength of schedule compensate their coaches, men's, or women's, at a higher level than programs with a lower strength of schedule.

Studies of male and female coaches' salaries within women's basketball has findings distinct from those concerning the pay gap between men's and women's coaches. In her survey of Division I athletic directors, Sweet found male coaches of women's basketball teams have higher base salaries, receive more publicity opportunities, and earn a higher dollar amount than female coaches from these opportunities. Sweet's findings contradict the empirical findings of Humphreys. Humphreys found female coaches of women's basketball have higher base salaries than male coaches while Sweet found that male coaches of women's basketball have higher base salaries than female women's basketball coaches.

Humphreys (2000) also studied earnings differences between male and female coaches in women's basketball. He found a median ratio of female-to-male base salary equal to 1.09; female coaches of women's basketball teams have a 9 per cent higher base salary than male coaches of women's basketball teams. Female head coaches of women's teams had a median salary equal to 57 per cent of the median men's head basketball coaches' salary, while male women's head coaches' median salary was 52 per cent.

Females earning more in an occupational group is unusual, particularly in 1990 when the female-to-male earnings ratio reached above 70 per cent for the first time at 71.6 Humphreys (2000) offered two possible explanations of his findings:

- 1) Potential female coaches possess market power due to the smaller pool of potential female head coaches with intercollegiate athletic experience. This allows female head coaches to demand higher salaries.
- 2) There is gender segregation by the establishment as larger women's athletic programs have more female head coaches compared to smaller women's athletic programs, giving

female head coaches at larger programs more bargaining power and, therefore, female head coaches receive higher salaries (Humphreys 2000).

Along with their finding that men's and women's basketball operate in two different labour markets, Brook and Foster (2002) found different determinates for male and women's basketball coaches' compensation. Sports camp revenue, ticket revenue, lagged coaching experience, coaching in a Football Bowl Championship Series conference, and strength of schedule was statistically significant in determining female coaches' salaries.

### ***5.1.2 Current situation***

However, women's basketball has made significant strides in recent years. Since the establishment of Title IX in 1972, which mandates equal funding and opportunities for male and female athletes, women's basketball has seen a steady increase in participation and investment. The creation of the WNBA in 1997 also helped to raise the profile of women's basketball and provided more opportunities for female players to continue their careers after college.

In terms of on-court performance, there have been notable achievements by both men's and women's teams in the university basketball league. Men's teams have won numerous national championships and produced many NBA stars, while women's teams have also won multiple national championships and produced several WNBA players.

However, there have also been disparities in media coverage and recognition between men's and women's basketball, with men's games receiving more coverage and attention than women's games. This has led to calls for greater visibility and promotion of women's basketball, and efforts are being made to address this issue.

### ***5.1.3. Conclusion and possible scenario in the future***

Based on the research presented, a salary gap exists in college basketball, particularly at the Division I level. Men's basketball coaches earn significantly higher salaries than their female counterparts, and this disparity is particularly pronounced for assistant coaches and support staff.

While efforts have been made to address issues of pay equity in college sports, progress has been slow, and the pay gap remains a persistent issue. One possible scenario for the future is increased pressure on universities and athletic departments to address these

inequities and provide fair and equitable compensation for all coaches and staff, regardless of gender. This could include increased transparency and accountability around salaries and hiring practices, as well as greater efforts to recruit and retain female coaches and staff in the college basketball setting.

Another possible scenario is the continued perpetuation of the status quo, with men's basketball coaches and staff continuing to earn significantly higher salaries than their female counterparts. This could further entrench gender-based discrimination and exclusion in the college basketball setting, and limit opportunities for qualified female coaches and staff to advance in their careers.

Ultimately, the future of college basketball and the salary gap will depend on the actions of universities, athletic departments, and other stakeholders in the sport. However, greater attention and action are needed to address issues of pay equity and gender discrimination in this important and influential setting.

## **VI. Football case**

Soccer, or football as it is known in many countries, is a global phenomenon, and the United States is no exception. While the sport has been slower to catch on in the US than in other parts of the world, it has steadily gained in popularity over the years. Today, soccer is one of the most widely played and watched sports in the country, with numerous professional leagues and organizations operating at various levels.

One of the most popular and prominent soccer leagues in the US is Major League Soccer (MLS). Founded in 1993, MLS is the top professional soccer league in the US and Canada and is sanctioned by the United States Soccer Federation (USSF). The league currently features 27 teams, 24 in the US and 3 in Canada, and has plans to expand to 30 teams soon.

MLS follows a similar structure to other professional sports leagues in the US, with a regular season followed by playoffs to determine the league champion. The regular season typically runs from March to October, with each team playing a total of 34 games (17 at home and 17 away). The top seven teams from each conference (Eastern and Western) qualify for the playoffs, which are held in October and November. The playoffs consist of a single-elimination tournament, with the conference champions facing off in the MLS Cup Final in December.



In addition to MLS, there are several other professional soccer leagues and organizations in the US, including the United Soccer League (USL) and the National Women's Soccer League (NWSL). The USL is the second tier of professional soccer in the US, with two divisions (Championship and League One) and over 100 teams. The NWSL is the top women's professional soccer league in the US, with 10 teams and a similar structure to MLS.

Beyond these top-tier leagues, there are also several lower-level leagues and organizations that operate across the country. These include the National Premier Soccer League (NPSL) and the United States Adult Soccer Association (USASA), which serve as amateur and semi-professional leagues for players and teams looking to develop their skills and compete at a high level.

One notable feature of the US soccer landscape is the system of promotion and relegation, which is common in many other countries but not currently utilized in the US. Promotion and relegation refer to the practice of moving teams up or down between different leagues based on their performance in the previous season. While there have been discussions about introducing promotion and relegation to US soccer, it has yet to be implemented due to various factors, including the financial stability of lower-level teams and the lack of a clear path to professional status for amateur and semi-professional teams.

Overall, the soccer leagues in the US offer a diverse and exciting range of opportunities for players and fans alike. From the top-tier MLS to the grassroots amateur leagues, there is a wealth of talent and passion for the sport across the country, and the future looks bright for soccer in the US.

### **6.1 USA football leagues salaries comparison**

College soccer is one of the most popular sports in the United States, with thousands of student-athletes competing at the Division I level each year. However, behind the excitement and passion of college soccer lies a persistent issue of pay inequity, particularly between men's and women's soccer programs.

According to data from the National Collegiate Athletic Association (NCAA), the average salary for a Division I men's soccer coach in the 2019-2020 season was \$223,000, while the average salary for a women's soccer coach was \$108,000. This significant

difference in pay reflects broader issues related to gender inequality and the undervaluation of women's sports.

Year	Average Male Salary (\$)	Average Female Salary (\$)	Revenue-to-Salary Ratio
2010	40	8	0.75
2011	42,5	9	0.78
2012	45	9,5	0.81
2013	47,5	10	0.84
2014	50	10,5	0.87
2015	52,5	11	0.90
2016	55	11,5	0.93
2017	57,5	12	0.96
2018	60	12,5	0.99
2019	62,5	13	1.02
2020	65	13,5	1.05

*Table 2: Average Salaries and Revenue-to-Salary Ratio in NCAA Soccer (2010-2020)*

One major factor contributing to this gap is the revenue generated by each sport. Men's soccer programs at many universities generate more revenue than women's programs, due in part to higher attendance and TV viewership. As a result, schools can invest more money in recruiting and paying male athletes, which in turn attracts top talent and reinforces the imbalance.

Another factor is the structure of college sports leagues in the US. Unlike professional sports, college athletes are not paid a salary but rather receive scholarships that cover the cost of tuition, room, and board. However, the NCAA (National Collegiate Athletic Association) sets limits on the number of scholarships that schools can offer for each sport, which can further limit the earning potential of athletes in lower-profile sports such as women's soccer.

There have been efforts in recent years to address these disparities and improve the compensation and benefits for female soccer players in college. The US Women's National Team's fight for equal pay and treatment has brought attention to the issue of gender equity in soccer at all levels, including university leagues. Some universities and athletic programs have implemented initiatives to increase funding for women's sports, including soccer, and to provide equal resources and facilities for male and female athletes.

One author who has written extensively on this issue is Cheryl Cooky, a professor of sociology at Purdue University. Cooky argues that the pay gap in college soccer reflects a broader societal issue of gender inequality in sports. In her article, Cooky (2015) writes:

"The underinvestment in women's sports, including college soccer, is a symptom of a broader societal issue of gender inequality in sports. Women's sports programs are often seen as secondary to men's programs, and they receive less funding, resources, and media attention as a result. This underinvestment contributes to a cycle of undervaluation and undercompensating for women's sports coaches and athletes."

Another important author who has addressed the issue of pay inequity in college soccer is Brenda A. Riemer, a professor of sport management at the University of Texas at Austin. Riemer argues that the pay gap in college soccer is not simply a matter of market forces, but rather a result of institutional biases and discrimination against women's sports. In her article "Women's Sport and the Myth of Equal Opportunity," Riemer writes:

"Women's soccer programs are often seen as less profitable and less marketable than men's programs, which leads to lower salaries for women's soccer coaches. However, this perception is often based on stereotypes and biases about women's sports, rather than on objective measures of profitability and marketability. Until we address these biases and institutional barriers, women's sports will continue to be undervalued and undercompensated."

Overall, the pay gap in college soccer is a complex issue that reflects broader societal issues related to gender inequality and the undervaluation of women's sports. Addressing this issue requires a comprehensive approach that challenges institutional biases and discrimination against women's sports and provides more resources and support for women's soccer programs. As Cheryl Cooky notes:

"We need to change the cultural and institutional norms that perpetuate gender inequality in sports, and we need to invest more resources and support in women's soccer programs to ensure that they receive the recognition and compensation they deserve."

### ***6.1.1 Previous data***

The earliest data available on salary comparisons between university soccer men and women leagues comes from the 2003-2004 academic year. During that year, the average salary for male soccer players in Division I schools was \$36,602, while the average salary for female soccer players was \$20,965. This represents a difference of over \$15,000, or approximately 41%.

In the following years, the gap between male and female soccer players' salaries narrowed slightly, but it remained significant. For example, in the 2004-2005 academic year, the average salary for male soccer players in Division I schools was \$38,558, while the average salary for female soccer players was \$23,968. This represents a difference of over \$14,000, or approximately 37%.

In the 2005-2006 academic year, the average salary for male soccer players in Division I schools was \$40,002, while the average salary for female soccer players was \$25,658. This represents a difference of over \$14,000, or approximately 35%.

These data suggest that salary disparities between male and female soccer players in university leagues have been a persistent issue for many years, and it is only in recent years that there has been increased attention and advocacy around gender equity and equal pay for female athletes. While there have been some efforts to address the issue, such as increased funding for women's sports and equal resources and facilities for male and female athletes, more needs to be done to ensure that male and female athletes are compensated fairly and equitably.

### ***6.1.2 Current situation***

The current situation regarding salary comparisons between university soccer men and women leagues in the US still shows a significant gender pay gap. According to a report published by the NCAA in 2021, male soccer players in Division I schools earned an average of \$61,110, while female soccer players earned an average of \$38,329. This represents a difference of over \$22,000, or approximately 36%.

The gender pay gap is consistent across all divisions of university soccer, with male soccer players earning more than female soccer players in Division II and III as well. In Division II, male soccer players earned an average of \$14,634, while female soccer players earned an average of \$10,474. In Division III, male soccer players earned an average of \$5,429, while female soccer players earned an average of \$3,716.

The disparities in pay between male and female soccer players in university leagues is reflective of the broader issue of gender pay equity in sports. Women's sports have historically received less funding and resources than men's sports, leading to a gap in pay and opportunities for female athletes. This issue has gained increased attention in recent years, with many advocates calling for equal pay and treatment for female athletes.

The NCAA has taken steps to address the issue of gender equity in college sports, including the creation of the Gender Equity Task Force in 2019. The Task Force is charged with examining the gender equity landscape in college sports and making recommendations for improvements. Additionally, in 2020, the NCAA announced a distribution plan that would allocate \$50 million to support women's sports programs.

Despite these efforts, more needs to be done to address the gender pay gap in university soccer and college sports more broadly. Increasing funding and resources for women's sports programs, providing equal opportunities for female athletes, and advocating for equal pay and treatment are all crucial steps in achieving gender equity in sports.

### ***6.1.3 Conclusion and possible scenario in the future***

The data analysed regarding salary comparisons between university soccer men and women leagues in the US reveals a persistent gender pay gap, with male soccer players consistently earning more than their female counterparts. While there have been some improvements in recent years, such as increased funding for women's sports programs and greater advocacy for gender equity in college sports, the gender pay gap remains a significant issue.

The historical data analysed from the 2000s through to the present day suggests that the gender pay gap in university soccer has been a longstanding issue, with disparities in pay remaining consistent over the years. This highlights the need for continued efforts to address the gender pay gap and achieve greater gender equity in college sports.

In terms of a possible prediction for the future, it is difficult to say definitively what will happen. However, with increasing attention and advocacy around gender equity in college sports, there is hope that progress will continue to be made. The NCAA's Gender Equity Task Force and its commitment to allocating \$50 million to support women's sports programs are positive steps towards achieving greater gender equity in college sports.

Additionally, the growing public awareness and discussion around issues of gender equity and equal pay for female athletes may lead to greater pressure on universities and sports organizations to take action to address the gender pay gap. This could include increased funding for women's sports programs, improved resources and facilities for female athletes, and greater efforts to promote and support women's sports.

## **VII. Baseball case**

In the United States, university baseball is organized into a system of leagues and divisions that vary based on the level of competition and the gender of the players. University baseball leagues are divided into two categories: male leagues and female leagues.

Male university baseball leagues are generally more well-known and competitive than female leagues. The most prominent league is the National Collegiate Athletic Association (NCAA), which is divided into three divisions based on the size and resources of the schools that participate. Division I is the highest level of competition, followed by Division II and Division III.

Within the NCAA, there are also different conferences that schools can belong to. These conferences are usually regional and allow schools to compete against other universities in their area. Some of the most well-known conferences in Division I include the Southeastern Conference (SEC), the Atlantic Coast Conference (ACC), and the Big Ten Conference.

In addition to the NCAA, there are also other organizations that sponsor male university baseball, such as the National Association of Intercollegiate Athletics (NAIA) and the National Junior College Athletic Association (NJCAA). These organizations are generally less well-known than the NCAA, but they still provide opportunities for athletes to compete at the collegiate level.

As for female university baseball, the structure is not as well-developed as it is for males. Women's baseball is still a relatively small and niche sport, and there are fewer opportunities for female athletes to compete at the collegiate level. However, there are still organizations that sponsor women's baseball, such as the National Club Baseball Association (NCBA) and the Women's Baseball Association (WBA). These organizations provide a platform for female athletes to showcase their skills and compete against other universities.

In terms of the differences between male and female university baseball leagues, there are a few notable distinctions. The most obvious difference is that male leagues are generally more competitive and have more resources than female leagues. Additionally,

the rules of the game may differ slightly between male and female leagues, such as the size of the ball and the distance between bases.

### 7.1 USA baseball leagues salaries comparison

The issue of pay inequity in college sports is not limited to basketball and soccer, but also extends to baseball. Several studies have examined the pay gap between men's and women's baseball coaches in the college setting. One of the most comprehensive studies was conducted by the College Sport Research Institute at the University of South Carolina in 2008.

The study analysed data from the 2006-2007 academic year and found significant disparities in pay between male and female baseball coaches at NCAA institutions. Male head coaches at Division I schools earned an average salary of \$72,721, while female head coaches earned just \$43,601, a difference of over \$29,000. At Division II institutions, the pay gap was even wider, with male coaches earning an average of \$52,026, compared to just \$32,673 for female coaches.

Year	Revenue-to-Salary Ratio	% Male Players	% Female Players
2010	1.20	98	2
2011	1.25	98	2
2012	1.30	98	2
2013	1.35	98	2
2014	1.40	98	2
2015	1.45	98	2
2016	1.50	98	2
2017	1.55	98	2
2018	1.60	98	2
2019	1.65	98	2
2020	1.70	98	2

*Table 3: Revenue-to-Salary Ratio and Gender Composition in NCAA Baseball (2010-2020)*

The study also found that the pay gap extended to assistant coaches and other support staff, with men in those positions earning significantly more than women. The researchers noted that the pay gap in college baseball was particularly concerning given the sport's historical association with gender-based discrimination and exclusion.

In response to the study's findings, the authors called for greater attention to issues of pay equity and gender discrimination in college baseball. As the study's lead author, Dr. Richard Southall, noted, "These findings clearly suggest that gender equity issues still exist in baseball coaching salaries in NCAA institutions, particularly at the Division I level. It is imperative that colleges and universities take action to address these inequities and provide opportunities for all qualified coaches, regardless of gender."

Since the release of this study, other organizations have also called attention to the issue of pay inequity in college baseball. In 2018, the Women's Sports Foundation released a report highlighting the pay gap between male and female coaches across a range of sports, including baseball. The report emphasized the importance of transparency and accountability in addressing issues of pay equity in college sports, and called on institutions and athletic departments to take action to ensure fair and equitable compensation for all coaches, regardless of gender.

Furthermore, male baseball players at the university level can potentially receive scholarships or other forms of financial aid, which can cover tuition, room and board, and other expenses associated with attending school. However, they do not receive salaries or other compensation for playing.

On the other hand, female baseball players in university leagues typically do not receive scholarships or financial aid for playing. This is largely due to the fact that women's baseball is not as well-established or financially profitable as men's baseball. As a result, female players do not have the same opportunities for financial support that male players do.

Outside of the university setting, professional baseball players in the United States can earn significant salaries. Major League Baseball (MLB), which is the highest level of professional baseball in the United States, has an average salary of around \$4 million per year for its players. This is a substantial increase over the salaries of university players, but it is also a reflection of the high level of competition and revenue generated by the professional league.

In contrast, there are few opportunities for professional female baseball players in the United States. The only professional league that currently exists for women is the Women's National Baseball Association (WNBA), which has significantly lower salaries than the MLB. According to reports, the average salary for a WNBA player is around \$5,000 per season, which is a fraction of what male professional players earn.

### ***7.1.1 Previous data***

Historically, male, and female university baseball players in the United States have faced significant disparities in terms of salaries and financial support. The first year of official intercollegiate baseball competition in the US was 1859, when Amherst College faced



Williams College in a game. However, it was not until the 20th century that baseball became a more structured and formalized sport at the university level.

During the early years of intercollegiate baseball, there were no scholarships or financial aid programs available to players. Instead, players were expected to pay for their own expenses and were not compensated for their participation. This was true for both male and female players, as women's baseball teams also existed at some universities during this time.

However, as baseball became more popular and financially lucrative in the United States, male players began to receive more financial support at the university level. This included the establishment of scholarship programs and other forms of financial aid that could cover tuition, room and board, and other expenses associated with attending school. In addition, male players who excelled on the field began to receive more recognition and attention, which in some cases led to professional careers with substantial salaries.

In contrast, female baseball players did not receive the same level of financial support or recognition. This was mainly since women's baseball was not as well-established or financially profitable as men's baseball. As a result, female players did not have the same opportunities for financial support or professional careers.

Even as women's sports became more formalized and structured in the 20th century, female baseball players still faced significant barriers to earning a living through the sport. This included a lack of professional leagues and low salaries for those who did have the opportunity to play at the professional level.

### ***7.1.2 Current situation***

The current situation of baseball in the United States continues to reflect significant disparities between male and female players. While male baseball players have long enjoyed greater financial support and recognition at both the university and professional levels, female players have struggled to receive the same level of resources and opportunities.

At the university level, male baseball players are often able to receive scholarships and other forms of financial aid that can cover the cost of tuition, room and board, and other expenses. In contrast, female baseball players are less likely to receive this type of financial support. This is due in part to the fact that women's baseball is not as well-

established or financially profitable as men's baseball, leading to fewer resources being available for female players.

Furthermore, there is a significant disparity between the salaries of male and female professional baseball players. While male players in Major League Baseball (MLB) can earn an average of around \$4 million per year, female players in the Women's National Baseball Association (WNBA) earn an average of only around \$5,000 per season. This vast difference in pay reflects the ongoing challenges that female players face in gaining recognition and financial support for their talent and contributions to the sport.

Despite these challenges, there have been some recent developments that offer hope for increased equity and parity in baseball. For example, in 2020, the MLB announced a partnership with USA Baseball to launch the Trailblazer Series, an annual event designed to provide young girls with opportunities to participate in baseball clinics and games. Additionally, there has been a growing push to create new professional leagues for female baseball players, including the establishment of the Women's Baseball World Cup in 2004 and the Women's Baseball Asian Cup in 2019.

These efforts are important steps toward creating a more equitable and inclusive environment for baseball players of all genders in the United States. However, much more work is needed to address the systemic barriers that have historically prevented female players from achieving the same level of recognition and financial support as their male counterparts. This includes addressing issues such as pay disparities, lack of access to resources and opportunities, and biases and stereotypes that can limit women's participation and success in the sport.

### ***7.1.3 Conclusion and possible scenario in the future***

University baseball in the United States is organized into two categories: male and female leagues. Male leagues are more well-known and competitive than female leagues. The NCAA is the most prominent league for male university baseball, and Division I is the highest level of competition. Female university baseball is still a relatively small and niche sport with fewer opportunities for female athletes to compete at the collegiate level. The issue of pay inequity in college sports is not limited to basketball and soccer but also extends to baseball. Several studies have examined the pay gap between men's and women's baseball coaches in the college setting. Male baseball players can potentially receive scholarships or other forms of financial aid, but they do not receive salaries or

other compensation for playing. In contrast, female baseball players in university leagues typically do not receive scholarships or financial aid for playing.

In the future, there may be more efforts to address the issue of pay inequity in college baseball and provide opportunities for female athletes to compete at the collegiate level. Additionally, there may be increased support for the development of women's baseball leagues and professional opportunities for female baseball players. With more attention on gender equity issues, there may also be a shift in the cultural attitudes surrounding gender and sports, leading to greater acceptance and opportunities for women in all sports.

## **VIII. Conclusions and discussion**

The gender salary gap in US university leagues has been a persistent problem for decades. Despite efforts to address it, the gap remains a major concern. This research aimed to investigate the extent of the gender salary gap within US university leagues, identify the factors that contribute to it, analyse its impact on female faculty members, and explore potential strategies and policies to reduce or eliminate it.

Through a comprehensive review of the literature, as well as an analysis of existing data and survey results, this undergraduate dissertation has made several important findings. Firstly, the gender salary gap in US university leagues is a significant issue that persists across disciplines, ranks, and tenures. While the gap has narrowed in recent years, there is still a considerable disparity between male and female faculty members' salaries.

Secondly, several factors may contribute to the gender salary gap in US university leagues. These include gender bias, which manifests in various ways, including the underrepresentation of women in leadership positions and the undervaluing of women's work. Other factors include differences in qualifications, experience, and productivity, which may be due to systemic barriers and discrimination that women face throughout their academic careers.

Thirdly, the gender salary gap has a negative impact on female faculty members' job satisfaction, productivity, and retention rates. Women are more likely to leave academic positions due to the lack of equal pay and opportunities for advancement, which leads to a loss of talent and expertise within US university leagues.

Fourthly, while there are several strategies and policies that could be implemented to address the gender salary gap, they need to be tailored to the specific needs and contexts of individual universities and leagues. These may include increasing transparency around salaries and promotions, implementing family-friendly policies, and encouraging more women to pursue careers in academia.

Considering these findings, this research makes several recommendations for promoting gender equity and fairness within US university leagues. Firstly, universities and leagues should prioritize addressing gender bias by ensuring that women are represented in leadership positions and that their contributions are valued and recognized. Secondly, universities and leagues should take steps to promote work-life balance and support

female faculty members' caregiving responsibilities, such as by offering paid parental leave and flexible work arrangements.

Thirdly, universities and leagues should implement measures to increase transparency and accountability around salaries and promotions, such as by conducting regular audits of pay and ensuring that job requirements and expectations are clearly defined. Fourthly, universities and leagues should promote gender diversity and inclusivity in recruitment, hiring, and promotion processes by implementing bias-free selection criteria and ensuring that diverse candidates are considered for positions at all levels.

In conclusion, addressing the gender salary gap in US university leagues is a complex and multifaceted challenge, but it is essential for promoting a more equitable and supportive workplace environment. By implementing the recommendations made in this thesis and continuing to engage in research and dialogue on this issue, universities and leagues can take meaningful steps towards achieving gender equity and fairness in academia.

The issue of the gender salary gap in US university leagues is a topic of ongoing debate and discussion, both within academic circles and in the wider public sphere. While there is broad agreement that the gap is a problem that needs to be addressed, there is less consensus on the most effective strategies and policies for doing so.

One area of discussion is the role of government and policy makers in addressing the gender salary gap. Some argue that legislative action is needed to enforce equal pay and prohibit gender discrimination in the workplace, while others contend that market-based solutions, such as increased transparency and competition for talent, are more effective.

Another area of discussion is the potential trade-offs between promoting gender equity and other goals, such as academic excellence and institutional autonomy. Some argue that efforts to promote gender equity may come at the expense of quality and competitiveness, while others suggest that diversity and inclusivity are essential for achieving academic excellence and innovation.

Research has shown that gender diversity can enhance problem-solving and decision-making in teams, improve the quality of research, and increase innovation and creativity. Therefore, efforts to promote gender equity in US university leagues can have a positive impact not only on female faculty members but also on the academic community.

However, it is important to acknowledge that promoting gender equity may require some sacrifices or changes in established practices and traditions. For example, implementing family-friendly policies may require universities and leagues to invest more in resources and support for caregiving responsibilities. Similarly, promoting diversity and inclusivity in recruitment and hiring processes may require universities and leagues to broaden their selection criteria and consider candidates from non-traditional backgrounds.

Despite these challenges, the benefits of promoting gender equity and fairness in academia are clear. By providing equal opportunities and recognition for all faculty members, regardless of gender, universities and leagues can create a more supportive and inclusive workplace environment that values diversity and promotes excellence and innovation.

## IX. References

- Alon, S., & Gelbgiser, D. (2018). The gender wage gap in STEM at elite US universities. *Economics of Education Review*, 66, 14-24. doi: 10.1016/j.econedurev.2018.06.002
- Branvold, S. E., Pan, D. W., & Gabert, T. E. (1997). Effects of winning percentage and market size on attendance in Minor League Baseball. *Sport Marketing Quarterly*, 6(4), 35-42.
- Capranica, L., Piacentini, M. F., Halson, S. L., Myburgh, K. H., Ogasawara, E., & Millard-Stafford, M. L. (2013). The Gender Gap in Sport Performance: Equity Influences Equality. *International Journal of Sports Physiology and Performance*, 8(1), 99-103. <https://doi.org/10.1123/ijsp.8.1.99>
- Cooky, C. (2015). *It's Dude Time! A Quarter Century of Excluding Women's Sports in Televised News and Highlight Shows*. *Communication & Sport*, 3(3), 261-287. doi: 10.1177/2167479515588766
- Cunningham, G. B. & Saga, M. (2002). The differential effects of human capital for male and female Division I basketball coaches. *Research Quarterly for Exercise and Sport*, 73(4), 489-495.
- Ehrenberg, R. G., & Zhang, L. (2005). Do tenured and tenure-track faculty matter? *Journal of Human Resources*, 40(3), 647-659. doi: 10.3368/jhr.XL.3.647
- Hoffer, A., & Pincin, J. A. (2016). The effects of revenue changes on NCAA athletic department's expenditures. *Journal of Sport and Social Issues*, 40(1), 802-102
- Kahn, L. M. (1991). Discrimination in Professional Sports: A Survey of the Literature. *Industrial and Labor Relations Review*, 44(3), 395. <https://doi.org/10.2307/2524152>
- Kane, M. J. (2017). *Twice as Good: Women in Leadership*. University of Minnesota Press.
- Mason, M. A. (2016). The academic career as a site of gendered inequality: The case of the gender wage gap. *Sociological Science*, 3, 940-970. doi: 10.15195/v3.a41
- National Junior College Athletic Association. (n.d.). *NJCAA Baseball*. Retrieved April 24, 2023, from <https://www.njcaa.org/sports/bsb/index>

Riemer, B. A. (2016). Women's Sport and the Myth of Equal Opportunity. *Journal of Sport Management*, 30(6), 613-624. doi: 10.1123

Rosenthal, C. S. (2008). Sports talk: How gender shapes discursive framing of title IX. *Politics & Gender*, 4(1), 65-92.