The financial break even in professional tennis - From which ranking can you afford your life from professional tennis

Abstract

Even if professional tennis is a globally celebrated sport, the financial viability remains a significant challenge for most players outside the top ranks. This study investigates the ranking threshold at which players achieve financial break-even—where prize money offsets the substantial costs of competing professionally. Employing a bottom-up analysis of the top 100 junior players from 2008, this research examines their career trajectories, rankings, and financial outcomes. The findings reveal that a ranking of approximately ATP/WTA 150 represents the break-even point, with only 32-34% of the top juniors players achieving a positive financial balance by career end. Additionally, male players tend to sustain longer careers than females, potentially due to higher earnings in the ATP circuit outside Grand Slam events. Insights contribute to sports economics, with implications for athletes, governing bodies, and sponsors striving for a more equitable professional landscape.

Key Words: Professional Tennis, Financial Sustainability, Break-Even Analysis, Prize Money Distribution, Sports Economics

1. Introduction

Professional tennis is a globally renowned sport characterized by its high visibility, lucrative sponsorships, and prize money. The top stars of the circuit like Roger Federer, Serena Williams, Rafael Nadal and Novak Djokovic find themselves under the highest-paid athletes worldwide, with earnings of over 1 Billion dollars in the case of Federer (Knight, 2022). However, the financial reality for many athletes does not match the glamour. Only a small percentage of players achieve financial sustainability, while the majority struggle to cover the substantial costs associated with competing professionally, including travel, coaching, equipment, and accommodation. While the glamour and wealth of tennis' top stars dominate headlines, only a small percentage of players achieve financial sustainability. The vast majority of athletes face significant financial challenges as they navigate the professional circuit. Competing at this level entails substantial expenses, including travel, coaching, equipment, accommodation, and tournament fees. For lower-ranked players, prize money often falls far short of covering these costs, necessitating reliance on external support such as family funds, sponsorships, or secondary income sources. In line with the findings of Ehrenberg and Bognanno (1990), who demonstrated in the context of professional golf—a sport with conditions comparable to tennis—that prize money positively influences player performance, it can be argued that the current system may create a vicious cycle for lower-ranked players. These structures may also exacerbate financial inequalities, as the rewards are heavily skewed towards top performers, which is a general problem, as the tournament theory, for example, is repeatedly criticized for the fact that only the superstars benefit from it (Bourg & Gouguet, 2023).

This research addresses the question within the economics of professional sports: *At which ranking in professional tennis does a player achieve financial break-even?* The financial break-even point represents the ranking region where prize money earnings are sufficient to offset the operational costs of maintaining a professional career.

Understanding the financial break-even point can illuminate systemic disparities within the sport. For example, it may reveal how the distribution of prize money

disproportionately favors top-ranked players while leaving mid-tier and lower-ranked athletes struggling to sustain their careers. Additionally, this research can inform policy decisions, such as the redistribution of prize money or the provision of financial support for emerging players, to foster a more inclusive and equitable professional landscape.

Through a detailed exploration of financial data and existing literature, this study aims to identify the ranking range at which players can achieve self-sufficiency. By answering the research question of "In which ranking region does the financial break-even in professional tennis occur?" this paper contributes to a growing body of work on the economics of professional sports, offering insights that are relevant to athletes, policymakers, sponsors, and governing bodies alike. This investigation also seeks to enhance our understanding of the financial dynamics of professional tennis and propose pathways to a more sustainable future for all players.

This theoretical framework aims to explore the financial "break-even" point in professional tennis. Specifically, it investigates the ranking a player must attain to offset their expenses with prize money, a question that has significant implications for the sport's sustainability and inclusivity. The empirical part of this paper employs a bottom-up analysis to investigate the financial break-even point in professional tennis, defined as the ranking at which prize money earnings are sufficient to offset the costs of maintaining a professional career. The analysis focuses on the economic trajectories of the Top 100 junior tennis players from 2008, tracking their progression into and through the professional circuit.

2. Theoretical framework and key constructs

Tournament Theory

The Tournament Theory, initially formalized by Lazear and Rosen (1981), provides a theoretical framework for understanding how relative performance-based reward structures influence motivation and performance. In this context, individuals or teams are compensated based on their relative ranking rather than their absolute output, fostering competitive environments such as professional sports.

The tournament Theory suggests that higher prize spreads between ranks incentivize greater effort, as the potential financial reward justifies the increased effort required to

perform at a higher level (Lazear & Rosen, 1981). The theory posits that individuals will exert greater effort when the rewards for ascending the ranking ladder are substantial, thereby enhancing performance. Frick (2003) extends this view by highlighting the dual function of tournaments in sports: selecting the most talented athletes and motivating players to exert maximum effort (Frick, 2003).

Professional tennis provides an ideal setting to examine the principles of Tournament Theory due to its clear, performance-based prize structure. Research indicates that prize money influences athletes' efforts, with higher potential earnings correlating with increased performance (Ehrenberg & Bognanno, 1990). Llorca et al. (2017) analyzed female tennis players and found that larger discrepancies in prize distribution between tournament rounds positively affected performance (Llorca et al., 2017).

While Tournament Theory effectively motivates top-tier athletes, it can create structural challenges for lower-ranked players. The disproportionate distribution of rewards toward top performers reduces the financial viability of pursuing a professional career for lower-ranked athletes. Szymanski (2003) underscores that the "winner-takes-all" nature of these contests amplifies income inequality and poses long-term sustainability issues (Szymanski, 2003). This phenomenon, as illustrated by the prize distribution model in professional tennis, may contribute to premature career exits among lower-ranked players.

Although Tournament Theory has provided valuable insights into performance incentives, scholars have identified limitations. Frick and Simmons (2007) argue that the model may oversimplify real-world conditions by overlooking external factors such as sponsorship income and psychological pressure (Frick & Simmons, 2007). Furthermore, the theory primarily addresses short-term performance effects, with less focus on long-term career sustainability.

After presenting the tournament theory as part of the theoretical framework we show different constructs which deal with the financial sustainability in professional tennis. Unlike many other sports where the where the expenses for trainers, travel, etc. are covered by the clubs or associations, a professional tennis player has basically to cover his expenditure by his own why it is important to get an idea of the income and cost structure in professional tennis.

Prize Money Distribution

The largest source of income for the majority of tennis professionals is the prize money at tournaments, where the professional tennis circuit exhibits a highly uneven distribution of prize money. The elite players, often in the top 1% of global rankings, claim a disproportionate share of the total earnings, leaving mid-level and lower-ranked players with minimal returns. Balliauw et al. (2017) analyzed the prize distribution model and highlighted that financial gains are primarily concentrated at the top, creating a severe disparity among players. Rosen (1985) explained that elimination tournament structures inherently favor top performers, intensifying financial inequalities. He showed that the top four receive more than 50% of the total prize money. Shrom et al (2023) explored how this prize money disparity impacts the sustainability of professional tennis careers for lower-ranked players. They show that only 1.8% of male and 3.1% of female players on the international tennis circuit earning a profit, which "…leaves most players competing on the professional tour in varying degrees of financial debt and in danger of prematurely ending their professional pursuit due to an inability to fund the extensive costs." (Shrom et al 2023). Building upon this, Ehrenberg & Bognanno (1990) demonstrate how tournament prize structures, in general, create strong incentives for high performance but may not necessarily translate into financial viability for all participants. Further, Sunde & Strulik (2012) show that in such winner-take-all systems risk aversion and effort decisions can create even greater disparities.

Operational Costs in Professional Tennis

Operational expenses for players include travel, accommodation, coaching fees, equipment, and tournament entry costs. For lower-ranked professionals, these costs often exceed their earnings, leading to financial instability. Balliauw et al. (2017) examined the financial challenges faced by players outside the top 250 and proposed systemic changes to support financial stability. Shrom et al. (2023) also highlighted the compounding pressures on players struggling to cover their operational expenses, which directly impacts their performance and mental health which makes it less likely that they improve to better ranking regions.

Financial Viability and Break-Even Analysis

The break-even point for tennis players represents the ranking threshold at which their prize money earnings can cover their operational costs. Research has attempted to quantify this ranking to better understand the sport's economic dynamics. Szymanski

(2003) used economic modeling to propose prize distribution reforms aimed at improving financial viability in sports in general. Jetter & Walker (2015) also show the heterogeneous financial situation for many professional tennis players outside the "lucrative bubble" when the present their research about match fixing in tennis. Echoing these concerns, Andreff (2007) argues that the financial weaknesses of European professional sports clubs pose a threat to the European model of sport. While focused on clubs, Andreff's analysis highlights the systemic vulnerabilities that can undermine financial sustainability, a concern that is particularly relevant to individual tennis players who bear the full financial burden of their careers

Economic Disparities and Structural Inefficiencies

The disproportionate earnings within professional tennis have broader implications, such as reduced inclusivity and limited career sustainability for players from lower-income backgrounds. Priest (2022) emphasized the long-term risks of economic disparity within tennis, advocating for structural reforms to the prize money allocation system. In addition Guevara et al. (2021) analyzed financial sustainability within sports federations, drawing parallels to tennis' economic model.

Sustainability Models in Professional Tennis

Efforts to create a sustainable economic framework for tennis include revisiting prize money allocation, operational support, and sponsorship accessibility. Balliauw et al. (2017) proposed a sustainability model that redistributes prize money more equitably to support players ranked below the top 100. Brouwers et al. (2015) went in the same direction, examining policy interventions that could enhance financial stability for mid-tier and emerging players.

Tennis Rankings and income on the professional tennis circuit

All in all the tennis rankings are not only a measurement to express the performance of the players; from the players' perspective, they also represent the entry criterion in order to be able to take part in competitions. The ranking represents the currency of professional tennis, in which collecting ranking points from the tournaments of the professional circuit gives both prestige and the corresponding financial rewards for progress on the tour (Reid et al., 2014). The admission and seeding lists for all tournaments are created based on

rankings, i.e. the ranking decides which tournament category a player can take part in. The tournament category, in turn, determines how much prize money and ranking points can be earned there.

In the end, the aim of every professional tennis candidate is to achieve a top ranking on the WTA or ATP Tour. From a financial perspective, research shows that from a ranking position of 101-250 income begins to cover expenses (Balliauw et al., 2017; Bane et al., 2014).

Balliauw et al. (2017) show that every year outside the Top 250 means a financial deficit of 25.110 € to 67.170 €, depending on how the player organizes his training environment and if they travel alone to the tournament or in occupation of a staff of coaches and physios. There is no empirical data about how much a year on the international Juniors Tour costs, but considering the fact that the tournaments, like the professional tour, also take place worldwide and no prize money can yet be earned, it can be assumed that the financial deficit will be at least of the same magnitude.

3. Status Quo of Research on the economic perspective of professional tennis

The economic structure of professional tennis has been a subject of considerable scholarly inquiry, focusing on issues such as prize money distribution, operational costs, and the broader challenges of achieving financial sustainability. While the literature provides critical insights into the financial inequalities inherent in the sport, specific aspects, such as the exact ranking threshold at which players reach financial self-sufficiency, remain insufficiently explored.

Research consistently underscores the disproportionate allocation of prize money within professional tennis, heavily favoring top-ranked players. The bulk of earnings is concentrated among those within the top 100 rankings, leaving lower-ranked players to rely on alternative income sources or external support. Rosen (1985) explained that the structure of elimination tournaments inherently amplifies economic disparities, as success in such tournaments is monopolized by elite players. Balliauw et al. (2017) further demonstrated how players outside the top 100 often struggle to earn enough prize money to cover even basic expenses, thereby perpetuating a cycle of economic vulnerability. While these studies highlight systemic issues, they stop short of quantifying the exact

financial implications for players, a critical oversight in understanding the broader economic landscape.

Competing in professional tennis demands substantial financial investment in areas such as travel, coaching, equipment, and accommodations. These costs, which are largely fixed regardless of a player's ranking, place an outsized burden on those outside the elite echelons. Balliauw et al. (2017) identified that for players ranked below 250, operational expenses often exceed prize money earnings, forcing many to depend on family funds or sponsorships to sustain their careers. Priest (2022) echoed these findings, emphasizing that players competing in lower-tier tournaments, face particularly acute financial strain due to minimal prize money and fewer sponsorship opportunities. Despite these insights, existing research does not provide a detailed cost-revenue analysis across different ranking bands, leaving a gap in understanding where financial viability begins.

The current economic model of professional tennis raises significant questions about its sustainability, particularly for players ranked outside the top tiers. Existing studies, such as Jetter and Walker (2015), have highlighted the precarious economic conditions faced by these players, emphasizing the widening gap between their earnings and the costs of maintaining a professional career. Shrom et al. (2023) focused on the financial challenges encountered during the transition from junior to senior professional levels, illustrating how many talented players abandon the sport due to insurmountable financial pressures. While these studies address the broader sustainability issues, they do not pinpoint the ranking threshold at which financial self-sufficiency becomes possible, an insight that could inform both policy reforms and individual career decisions.

4. Research gap and research questions

In summary, while the literature has made significant strides in highlighting the financial disparities and operational challenges within professional tennis, a precise understanding of the ranking threshold for financial break-even remains absent. Addressing this gap would provide invaluable insights into the sport's economic dynamics, aiding stakeholders in creating a more equitable and sustainable professional landscape.

While existing studies highlight economic disparities, they do not establish the precise ranking at which players achieve financial self-sufficiency through prize money alone. Priest (2022) mentions that "…Many lower-ranked players struggle to break even…" but it is not identified where the break even exactly is. This omission leaves stakeholders—such as tennis organizations, sponsors, and policymakers—without critical data to reform the sport's economic structure. Current research focuses on general patterns (e.g., prize money inequality, operational costs) but does not analyze rankings in granular detail. A study addressing the financial break-even point in professional tennis would fill this gap, offering actionable insights.

As part of this investigation, the research question should also be examined as to whether there are differences between women and men, or girls and boys.

5. Research Design, methodology and data collection

Research design

Similar as Brouwers et al. (2012), we use a a bottom-up analysis with a sample of the top 100 junior players of the year 2008, to identify how the ranking as well as the incomes and costs developed on their pathways. Following The Top 100 ITF Juniors´ year-end ranking of 2008 for girls and boys are used as the sample for the bottom-up analysis. The players included are all born between 1990 and 1993 and are therefore currently 31 to 34 years old. Since, as described above, this nearly corresponds to the typical age at the end of a career, it can finally be determined how high the proportion of players is who actually became professional tennis players or what the drop-out rate is for those who did not make it and for whom there is no return on investment. The chosen cohort is diverse, including players who achieved elite rankings, maintained mid-tier careers, or exited the sport prematurely.

The financial break-even analysis employed in this study combines cost-revenue analysis with cohort-based trajectory modeling (Kaplan, 2004; Lewis-Beck et al., 2004). This framework evaluates income and expenses to identify the ranking regions at which players achieve financial self-sufficiency.

By tracking a defined group over time, this approach captures the dynamic nature of financial success and sustainability in professional tennis (Singer & Willett, 2003). By using multiple data sources (rankings, financial records, estimated cost) enhances the validity and reliability of the findings (Denzin, 1978). The approach can be understood as comparative cost-revenue modelling, by evaluating earnings against operational expenses, a method which is widely used in sports economics (Szymanski, 2003).

Data Collection and Career Tracking

Data were collected from publicly available databases, including the International Tennis Federation (ITF), Association of Tennis Professionals (ATP), and Women's Tennis Association (WTA) websites. These sources provided comprehensive information on:

- Junior year-end rankings (2008 ITF Top 100 players).
- Professional career milestones, including highest rankings, year-end rankings, and tournament participation.
- Career prize money (ATP/WTA official records).
- Player demographics, such as date of birth and career duration.

To enhance reliability, data triangulation was employed by cross-referencing information from ITF, ATP, and WTA sources (Denzin, 1978).

Analytical Framework

Cost-Revenue Analysis Framework

This study employs a cost-revenue analysis to quantify the financial break-even point in professional tennis. This framework has been widely applied in sports economics to evaluate financial sustainability in individual sports (Andreff, 2011). It assesses the balance between operational costs and earnings, focusing on three key components:

Annual Operational Costs

Professional tennis players incur significant fixed costs related to travel, coaching, equipment, and tournament entry fees. These expenses, ranging from $53,000 to $105,000 annually, were estimated using benchmarks established in prior studies (Balliauw et al. 2017). Operational costs are a critical determinant of financial sustainability, particularly for players ranked outside the top 150, who typically face higher financial strain due to limited prize money earnings.

Career Earnings

Prize money data was derived from ATP/WTA official records, which provide reliable measures of income earned from professional tournaments.

Break-Even Calculation:

The break-even formula used in this study calculates financial sustainability as follows:

$$\textbf{\textit{Balance = Total Career Prize Money − (Years on Circuit × Annual Costs)}}$$

A positive balance indicates that a player's earnings cover operational costs, while a negative balance highlights financial deficits. This approach is consistent with frameworks employed in financial modeling for individual sports (Corral, J., & Gomez-Gonzalez, C. 2019).

Integration of Demographic and Career Data

To contextualize financial outcomes, the study incorporates demographic and career progression data, such as age, gender, ranking trajectories, and career duration. Gender-specific analyses provide insight into systemic differences, such as career longevity and earning potential, drawing on evidence from prior work on gender disparities in sports economics (Allison, 2018).

Statistical Methods

A combination of descriptive and inferential statistics ensures a robust analysis of the data:

Descriptive Statistics

Summary statistics (e.g., mean, median, standard deviation) were calculated to provide an overview of the sample's financial characteristics, such as career high rankings, prize money, and duration on the professional circuit. This approach is widely used in sports studies to describe population characteristics (Hoye et al., 2018).

Inferential Statistics

Mann-Whitney U Test: This non-parametric test was applied to analyze gender-based differences in career outcomes, such as career high rankings and career duration. It is

particularly suitable for small, non-normally distributed datasets (Field, 2013). Confidence Intervals: Confidence intervals were calculated to provide reliable estimates of variability in financial outcomes, ensuring the robustness of the conclusions drawn from the data (Gelman & Hill, 2007).

These statistical methods ensure that findings are both descriptive and inferentially robust, enabling deeper insights into the financial dynamics of professional tennis.

6. Results

Analyzing the pathway of the 2008 Top 100 juniors we see that 97% of the girls reached a WTA ranking, as well as 96% of the boys reached an ATP Ranking.
The rankings were spread over the whole range, from rank 1 to rank 1491. The average career high ranking is 356,21 (SD: 344,052) and the Confidence Interval (CI) is 95% [307,23; 405,18].

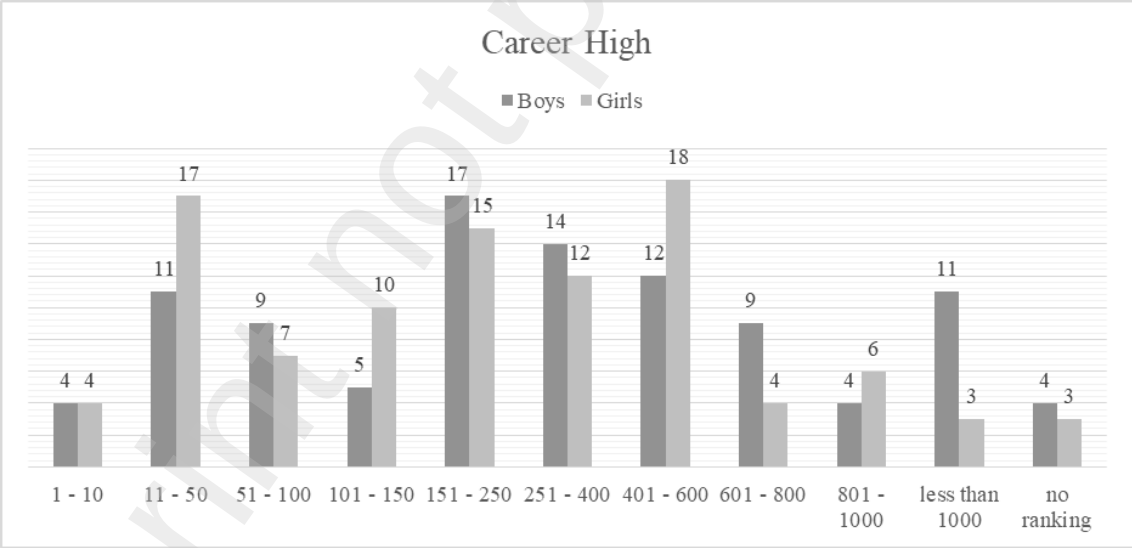


Figure 1: ATP or WTA career high of the 2008 Top 100 juniors

The investigation of gender-specific differences with regard to the variable "Career High Ranking" using the Mann Whitney U-Test shows that the gender of the Top 100 juniors has no effect on their later career high on the professional tour (U = 3976,50, Z = -1,640,

p =.101).

The average age of the career high differs (Figure 3), with an average age of 21,49 (SD: 3,71) in the girls´ sample and 22,74 (SD: 2,96) in the boys´ sample. This difference is also statistically significant as a Mann Whitney U-Test shows (U = 3384,50, Z = -3,195, p =.001). This means that female players reach their career high at a younger age than male players.

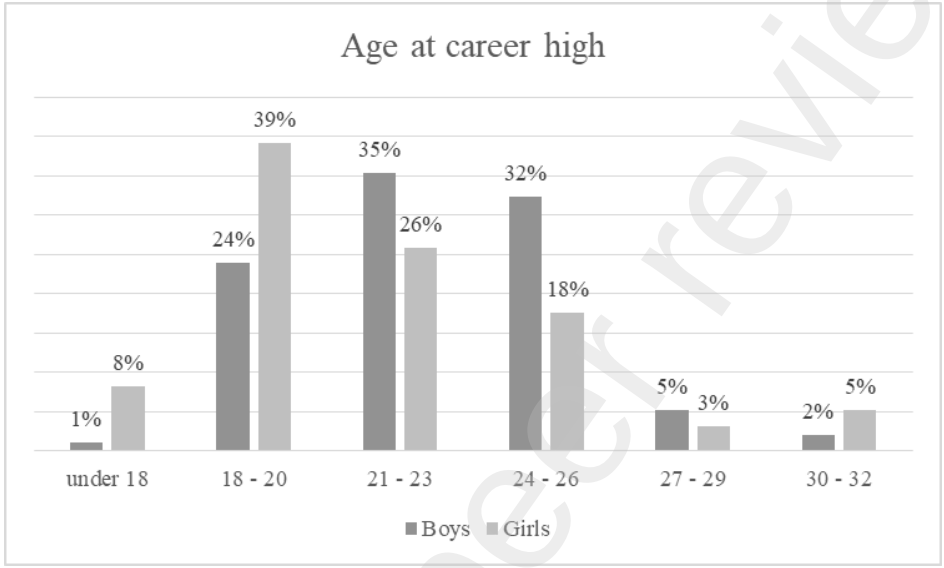


Figure 2. Age at ATP or WTA career high

The analysis of the career end age shows that 26 of the boys and 20 of the girls in the sample still have active rankings by the end of 2023, while 70 „boys“ and 76 „girls“ have already finished their careers (Figure 4). The average age at career end for the female players is 25,81 years (SD: 4,85), while the male players have an average age of 27,21 years (SD: 4,57). This difference is again statistically significant (U = 3680,50; Z = -2,309; p =.021).

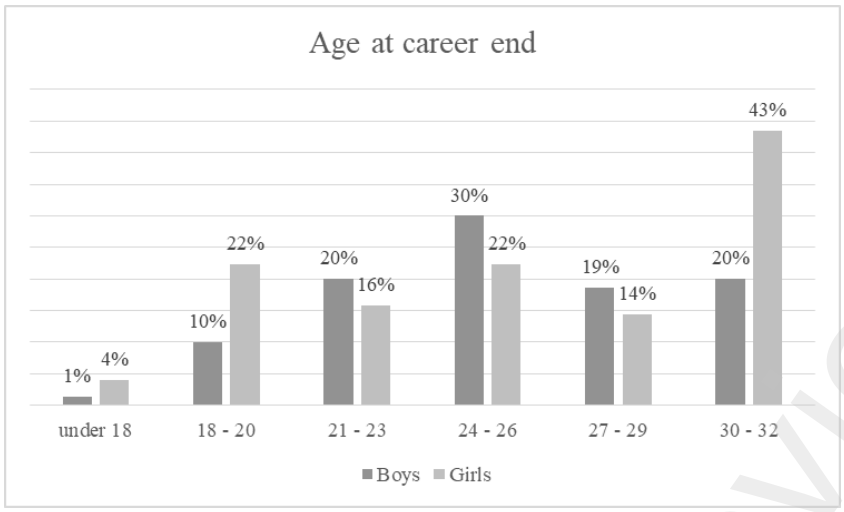


Figure 3: Age at ATP or WTA career end

From the values presented, it can also be derived how many years a player (from the age of 18) has spent on the professional circuit. We see that the female players spend an average of 7,86 years (SD: 4,68) and the male players an average of 9,24 years (SD: 4,51) on the WTA and ATP tours, and this is again a statistically significant difference (U=3691; Z=-2,39; p=0,17).

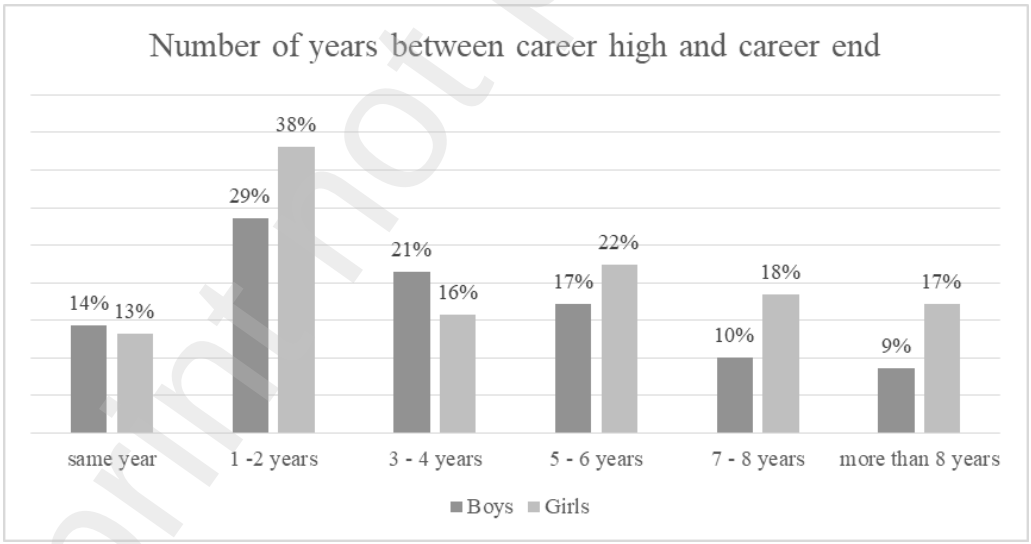


Figure 4: Number of years between ATP or WTA career high and career end

With a view to the prize money earned over the course of a career pathway, the large differences in the rankings achieved are also reflected economically. The mean of the sample´s career prize money is 1.772.817,52 US Dollar (SD: 4.614.618,15 USD).

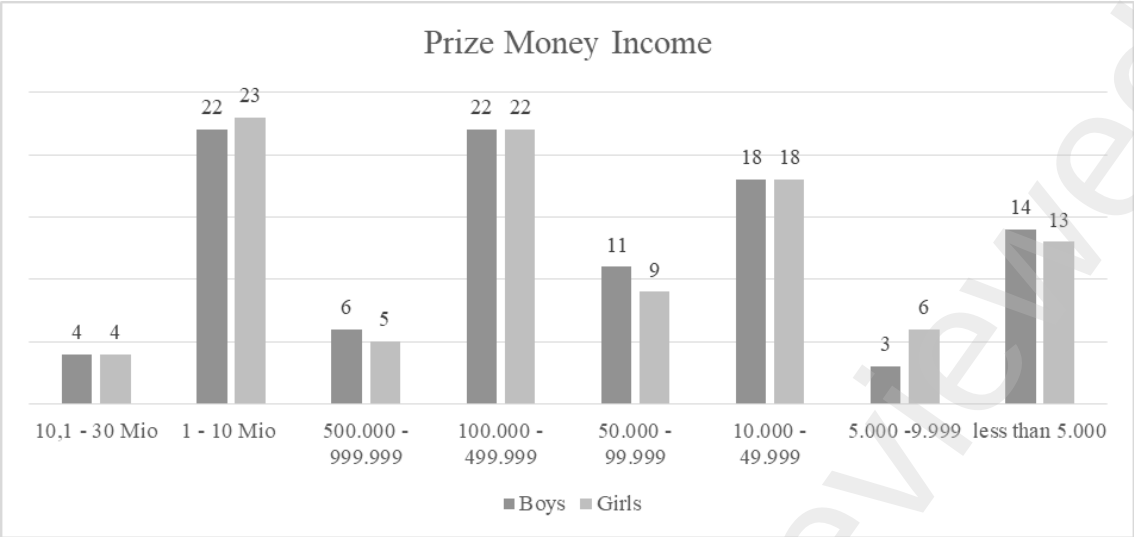


Figure 5. Prize money earned over the course of a career pathway

In order to be able to roughly evaluate the economic balance, the costs that a player incurs annually must first be estimated. Even if the costs vary depending on the tournament locations and the staff employed, we use the cost calculation of Balliauw et at. (2017) as a basis for approximately estimating the annual expenses. They show cost calculations which result in yearly operational costs between 53.435 US Dollar and 104.520 US Dollar.

For our calculations, we use the minimum of costs and calculate the balance in the following way:

Balance of prize money income and operational costs =

Total career prize money- (years on the professional circuit ×53.435 USD)

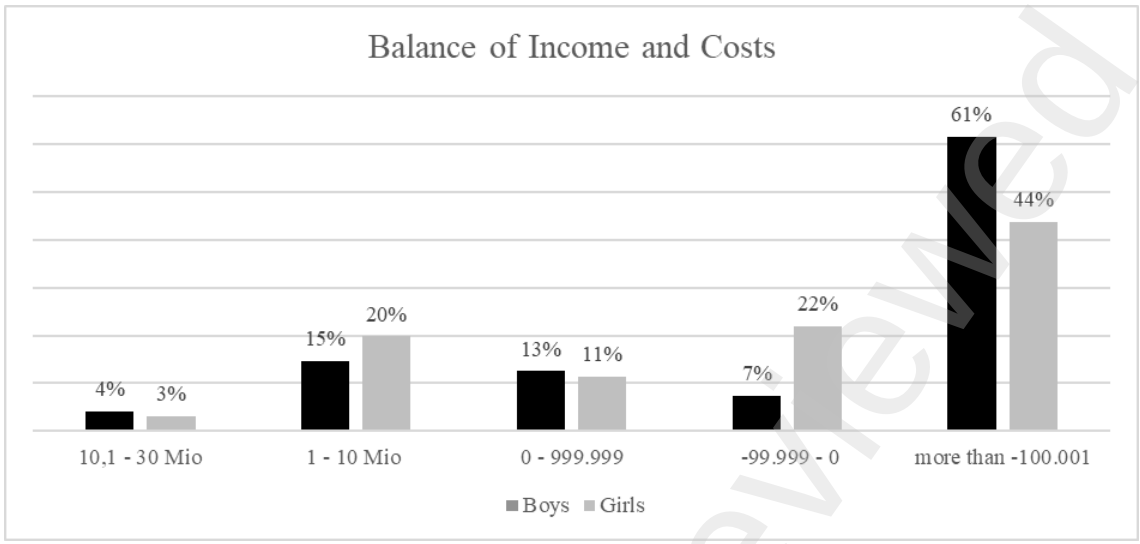
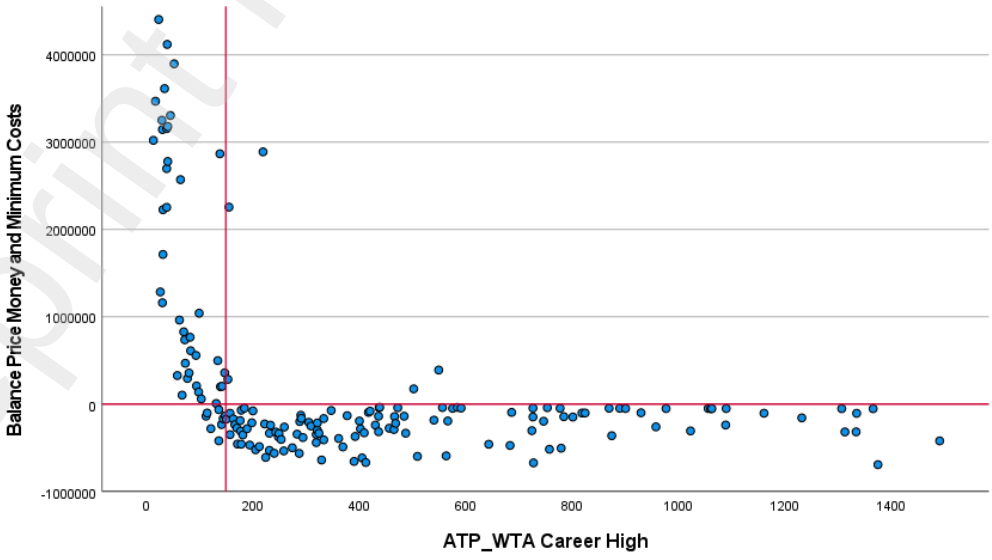


Figure 6: Balance of prize money income and operational costs

Based on these values (Figure 6), we see that 32% of the boys and 34% of the 2008 Top 100 ITF Juniors players close their professional careers with a positive financial balance. Conversely, this means that more than 68% close their professional careers with a negative financial balance.

In combination with the previously described results showing that between 29% (boys) and 38% (girls) achieve a ranking better than 150, the results confirm that the ranking region of 150 in the ATP or WTA world rankings can be seen as the "break-even" to finance one's life through professional tennis. This also corresponds to the quotes from professional players in the practical sources mentioned at the beginning.

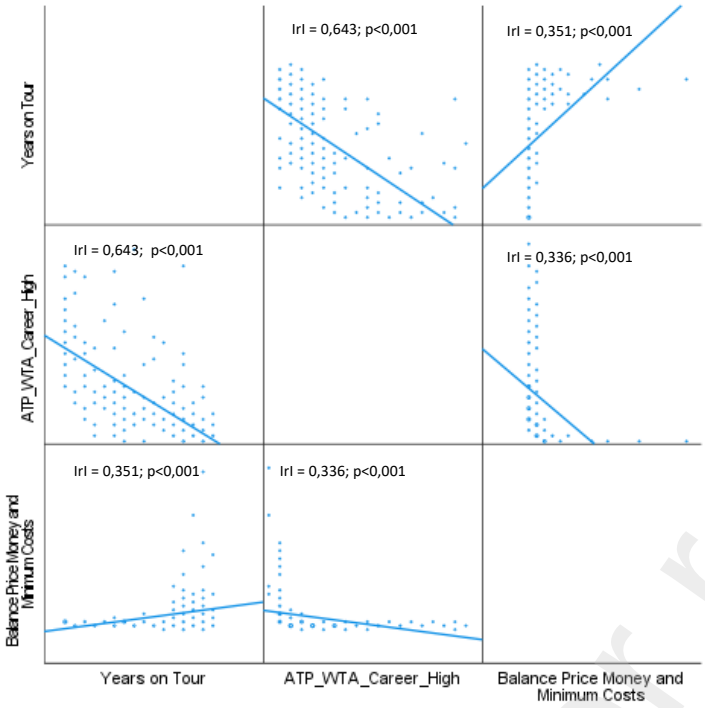


The graphic visualization also shows that - unless you make it into the top 150 of the WTA or ATP - it is almost impossible to end your career with a positive financial balance. Of the outliers in the sense of the three players who managed to achieve a financially positive career balance despite a singles ranking outside the top 150, two players were able to place themselves in the top 3 and one player in the top 50 of the WTA and ATP doubles rankings, which enabled them to generate the corresponding additional income.

The regression analysis shows that the career duration can be explained using the independent variables ATP/WTA Career High and the balance of price money and costs.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std.-Error	Beta		
1	(Constant)	11,632	0,427		27,244	< 0,001
	ATP/WTA Career High	-0,008	0,001	-0,591	-10,118	< 0,001
	Balance Price Money_Costs	1,593 E-7	0,000	0,152	2,602	0,010
Dependent variable: Years on tour						
Independent variables: ATP/WTA Career High; Balance Price Money_Costs						
	R = 65,8 %; R Square = 43,3 %; Adjusted R Square = 42,7 %					
	F = 71,509	P < 0,001				

The strong correlation between the career high ranking and career length can be interpreted in such a way that the negative financial balance that arises outside the top 150 and gets higher with each year on the tour can lead to careers ending earlier than physically necessary - be terminated.



7. Summary and Implications

The results show that a top junior ranking does not guarantee reaching a professional ranking region in which income covers current expenses or overcompensates for the expenses incurred during the junior circuit. Although the majority of top junior players achieve a professional ranking, only about a third reach a ranking region where they can finance their lives from tennis. For around two-thirds, the attempt to become a tennis professional results in a financial loss.

The bottom-up analysis provided empirical evidence supporting the occasional practical statements that a Top 150 ranking can be seen as a threshold or the break-even-point for being able to finance one's life from tennis. In a player interview, participation in Grand Slam tournaments was mentioned as an important basis for financing a year on the professional tour (Becker, 2019) . The fact that the main draws of the Grand Slam tournaments contain 128 players can therefore be used as a possible explanation for the ranking region of 150 for the break-even point, whereby it is assumed that a few players do not play (due to for example injury) and one is therefore considered top 150 players can usually expect a starting place in the main draw.

The investigation shows only a few marginal aspects of gender-specific differences. The study found male players´ careers tend to last longer than female players´ careers. One possible reason for this could be the higher prize money on the ATP Tour compared to the WTA Tour. Mercer & Edwards (2020) shows this applies especially outside the Grand Slam Tournaments (at smaller ATP and WTA tournaments), where women's prize money is considerably lower than the men´s prize money. This discrepancy could be one reason that especially in critical ranking regions male players can sustain their careers financially longer than female players. Given the critical ranking region (approx. ATP/WTA 150) under which the career means a financial deficit, it can be assumed that economic aspects also play a role in the correlation between career high ranking and career length. General gender-specific differences in development processes have been proven in numerous studies. Independent of sport, girls typically go through and complete all physical development steps (including growth, muscular and hormonal changes) earlier than boys (Flanagan et al., 2015). These generally earlier development processes may be one reason why female players reach their career high earlier than male athletes both on the junior circuit and in the professional circuit.

8. Limitations and future Research

Some limitations that need to be taken into account in the context of our investigations are discussed below. Furthermore, further research questions are derived from the results.

Limitations

The financial calculations for pursuing a professional career were conducted at an average level, relying on values reported in the existing literature. However, these projections should be regarded as approximate estimates due to significant variability among players. Such variability arises from factors like geographic location, which influences the accessibility and cost-efficiency of travel infrastructure, potentially creating either favorable or unfavorable conditions.

Furthermore, the scope of these estimates was limited to expenses incurred after entry into the professional circuit. These costs were offset against prize money earnings reported during the same period. Notably, the costs associated with the "development

years"—those spent on the junior circuit during adolescence—were excluded from the analysis, as they are not typically offset by prize money earnings.

On the income side, our calculations only accounted for officially reported prize money earnings. Other potential sources of revenue, such as sponsorship income, were intentionally excluded. Sponsorships are generally unrealistic for players who lack media visibility, particularly those outside the top echelons of the sport. Additionally, many professional players in specific ranking brackets may supplement their earnings by competing in club matches across one or multiple countries. However, such income was also excluded from our analysis, as it is neither publicly available nor universally applicable to all players.

Future Research Questions

The financial calculations for pursuing a professional career were conducted at an average level, relying on values reported in the existing literature. However, these projections should be regarded as approximate estimates due to significant variability among players. Such variability arises from factors like geographic location, which influences the accessibility and cost-efficiency of travel infrastructure, potentially creating either favorable or unfavorable conditions. Furthermore, the scope of these estimates was limited to expenses incurred after entry into the professional circuit. These costs were offset against prize money earnings reported during the same period. Notably, the costs associated with the "development years"—those spent on the junior circuit during adolescence—were excluded from the analysis, as they are not typically offset by prize money earnings. On the income side, our calculations only accounted for officially reported prize money earnings. Other potential sources of revenue, such as sponsorship income, were intentionally excluded. Sponsorships are generally unrealistic for players who lack media visibility, particularly those outside the top echelons of the sport. Additionally, many professional players in specific ranking brackets may supplement their earnings by competing in club matches across one or multiple countries. However, such income was also excluded from our analysis, as it is neither publicly available nor universally applicable to all players.

Data Availability Statement

The data that support the findings of this study could be provided if requested

Disclosure Statement

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