

ITF PRO CIRCUIT REVIEW
STAGE ONE: DATA ANALYSIS

DECEMBER 2014





INTRODUCTION

In 2014 the ITF Professional Tennis department has been undertaking a detailed review of the Men's and Women's Pro Circuits. That review is in three stages:

1. Analysis with Tennis Australia's Data Science Team of all held player and tournament data from 2001 to 2013
2. A stakeholder survey, undertaken by University of Kingston, of players, National Associations, coaches and tournament organisers which prompted over 8,000 responses.
3. Two working groups comprising representatives from ITF, National Associations and ATP and WTA Tours tasked with reviewing the findings and assessing proposed changes to the professional tennis structure below Tour level.

POINTS TO CONSIDER

- Data between 2001 and 2013 was analysed
- Ranking lists used include all players ranked at any point during a year
- Player ranking bands are determined by the ranking band that each player spent the majority of the year in
 - (e.g. If a player was ranked between 101-250 for 10 weeks, 51-100 for 15 weeks, and 1-50 for 27 weeks they would be classified in the 1-50 ranking band)
- Significance implies that the profile of a year to year change [observed in a variable] is 90% assured owing to a systematic effect as opposed to chance
- Nominal currency represents currency values in the specific year
- Real currency represents currency values that account for inflation (CPI adjusted using 2001 as base year to compare over the specific time period set for analysis)

- AFR – Africa
- ASI - Asia
- CAC – Central America and the Caribbean
- EUR - Europe
- OCE - Oceania
- NAM – North America
- SAM – South America

SECTION ONE

ITF PRO CIRCUIT VISION & GOALS

‘To have a sustainable & successful circuit that supports entry into professional tennis’

1. attract emerging talent into professional tennis
2. retain the best players and deliver them to Tour level & beyond
3. provide opportunities in all member nations for professional players

GOAL 1

**Attract emerging talent into
professional tennis**

If emerging talent equals ITF ranked junior players, then over time:

- | | |
|----------|---|
| 1 | In relative terms, significantly fewer ITF juniors achieve professional rankings |
| 2 | The increase in number of ITF ranked junior players exceeds the number transitioning to a professional ranking |

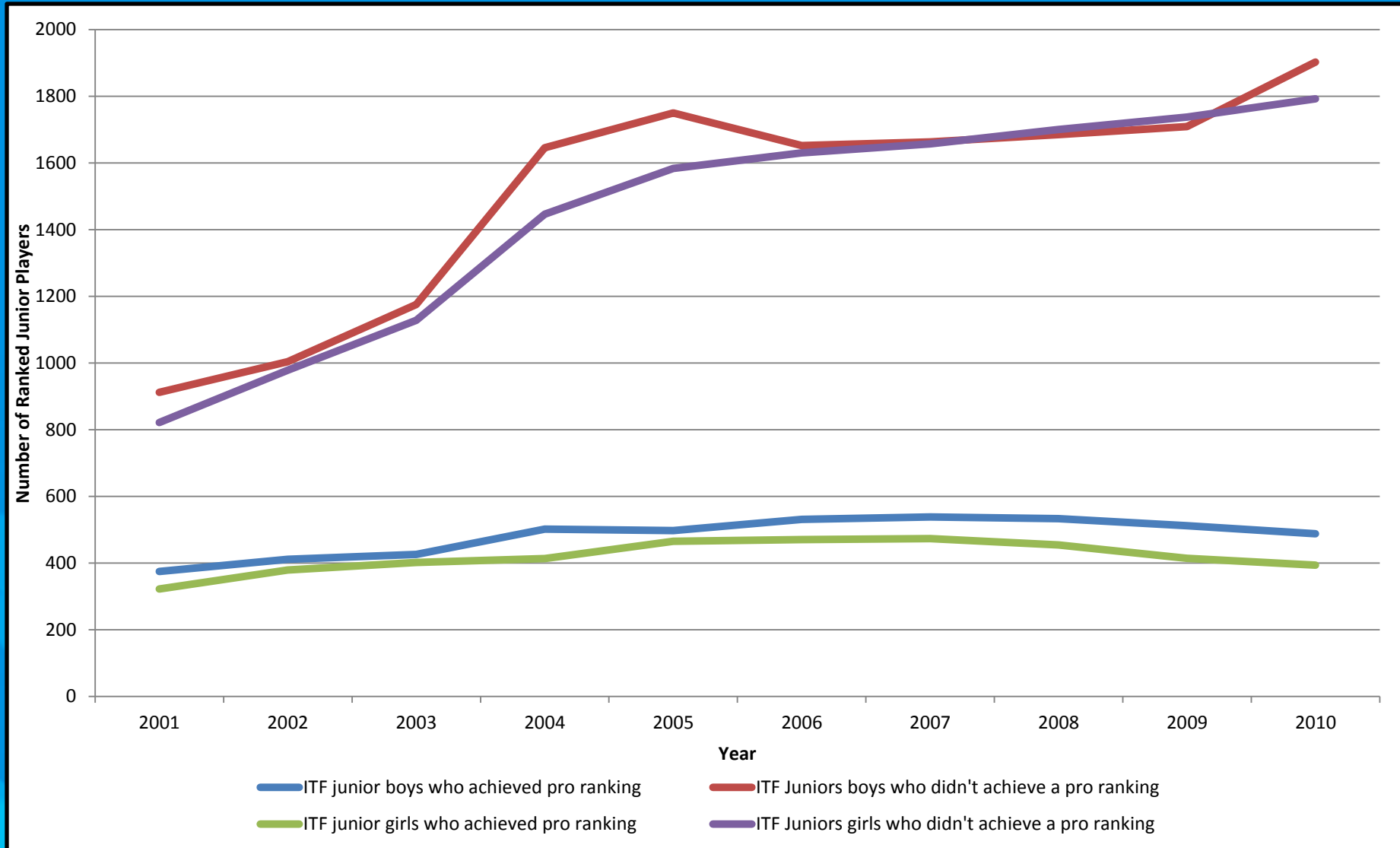
If emerging talent equals ITF ranked top 100 juniors, then over time:

- | | |
|----------|---|
| 1 | The same proportion of Top 100 ITF juniors transitions to a professional rank |
| 2 | Top 100 ITF ranked juniors are significantly more likely to transition to a professional ranking than other junior players |

If emerging talent equals pro ranked teenagers, then over time:

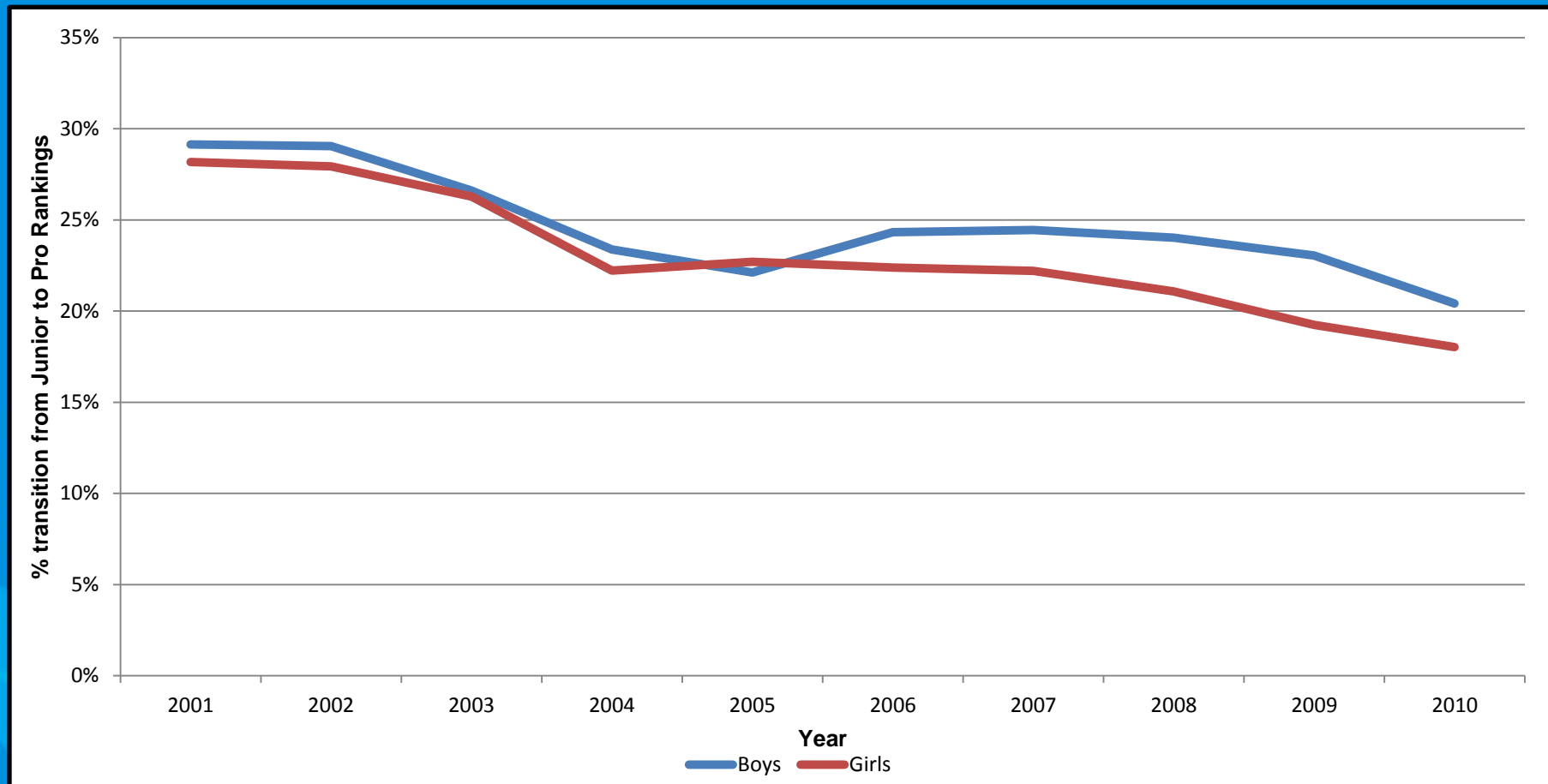
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|----------|--|
| 1 | The proportion of teenagers ranked in each ranking band has not changed |
| 2 | There is more emerging talent in the women's game |

THE NUMBER OF RANKED JUNIOR PLAYERS HAS INCREASED OVER TIME, HOWEVER, THE NUMBER OF JUNIOR PLAYERS TO TRANSITION TO A PRO RANKING HAS REMAINED THE SAME



Note: 2001-2010 timeframe used to allow junior athletes time to achieve a pro ranking (hence, not reported to 2013)

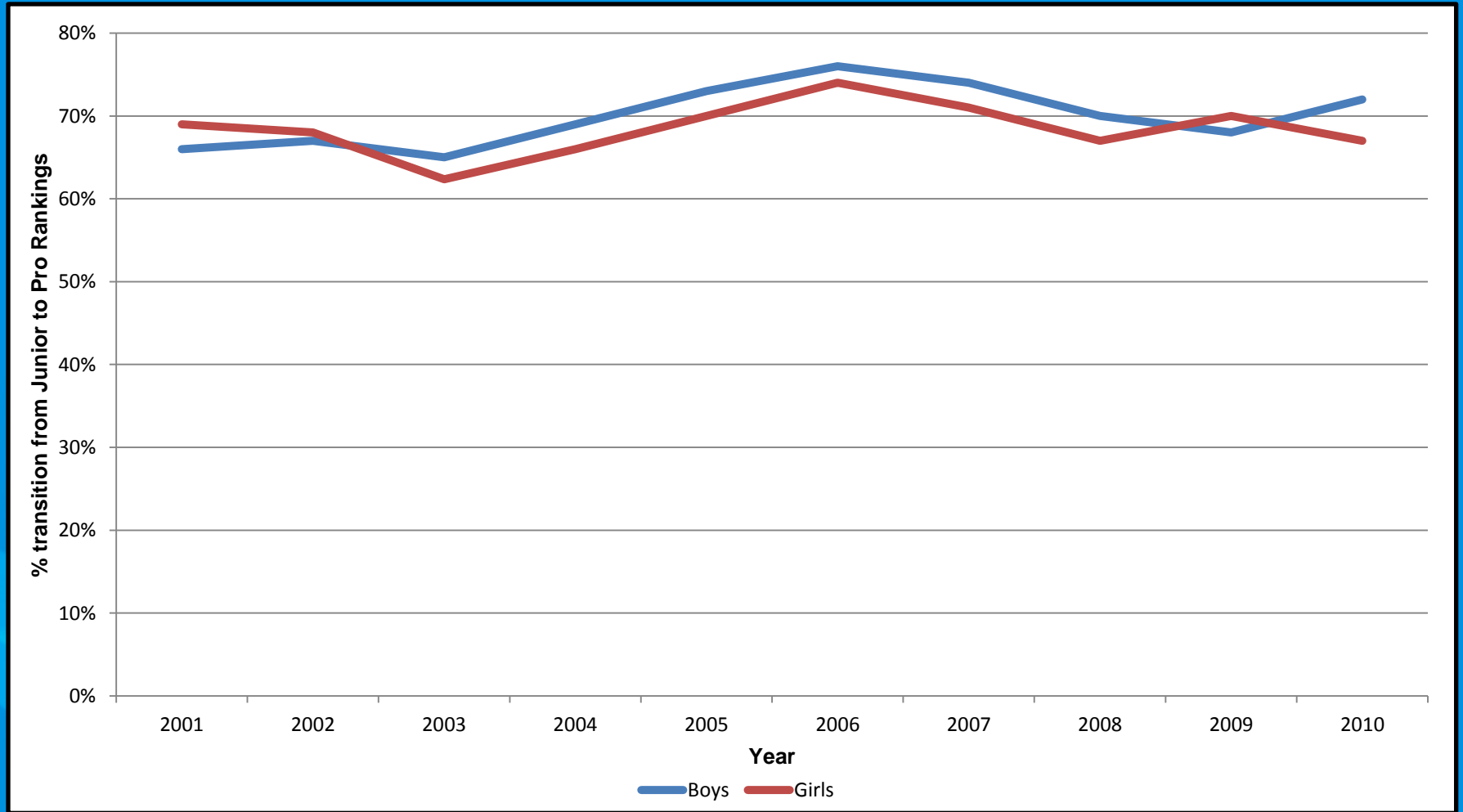
THE PERCENTAGE OF ITF JUNIOR MALE AND FEMALE RANKED PLAYERS WHO LATER ACHIEVE A PRO RANKING HAS SIGNIFICANTLY REDUCED OVER TIME



Reason: the increase in number of ITF ranked junior players is outstripping the number of ITF ranked junior players who are transitioning to a ATP/WTA ranking

Note: 2001-2010 timeframe used to allow junior athletes time to achieve a pro ranking (hence, not reported to 2013)

THE PERCENTAGE OF TOP 100 ITF JUNIOR RANKED PLAYERS WHO LATER ACHIEVE A PRO RANKING HAS NOT SIGNIFICANTLY CHANGED OVER TIME



However, Top 100 ITF junior players are significantly more likely to transition to a ATP/WTA ranking compared to the entire ITF junior cohort

Note: 2001-2010 timeframe used to allow junior athletes time to achieve a pro ranking (hence, not reported to 2013)

THERE IS LIMITED EVIDENCE OF AN INCREASE IN THE NUMBER OF TOP 100 ITF JUNIORS TRANSITIONING TO THE PROFESSIONAL TOP 250 AND TOP 100 OVER TIME

Year	# Achieved Pro Rank	# Achieved Pro Top 250	# Achieved Pro Top 100	Time to Achieve Pro Rank	Time to Achieve Pro Top 250	Time to Achieve Pro Top 100
	1990	84	47	21	0	2.5
2000	96	47	23	0	3	4
2008	94	37	16	0	2.9	3.7

Year	# Achieved Pro Rank	# Achieved Pro Top 250	# Achieved Pro Top 100	Time to Achieve Pro Rank	Time to Achieve Pro Top 250	Time to Achieve Pro Top 100
	1990	84	48	30	0	1.4
2000	88	54	36	0	2.2	4.5
2008	94	46	18	0	2.5	3.6

Note: 2008 selected instead of 2010 to allow ample time for Top 100 junior players to transition. Only players who achieve professional, Top 250, and Top 100 rankings are including in the transitions times for those rankings respectively

THE PROPORTION OF TEENAGERS IN EACH RANKING BAND HAS REMAINED STEADY OVER TIME. THERE IS A GREATER PROPORTION OF TEENAGERS IN THE WOMEN'S GAME COMPARED TO THE MEN

Ranking Band	Male Teenagers	Female Teenagers
Top 50	1%	9%
51-100	1%	10%
101-250	2%	14%
251-500	6%	29%
501-1000	16%	52%
>1000	39%	69%

GOAL 2

**Retain best players and deliver them
to the Tours and beyond**

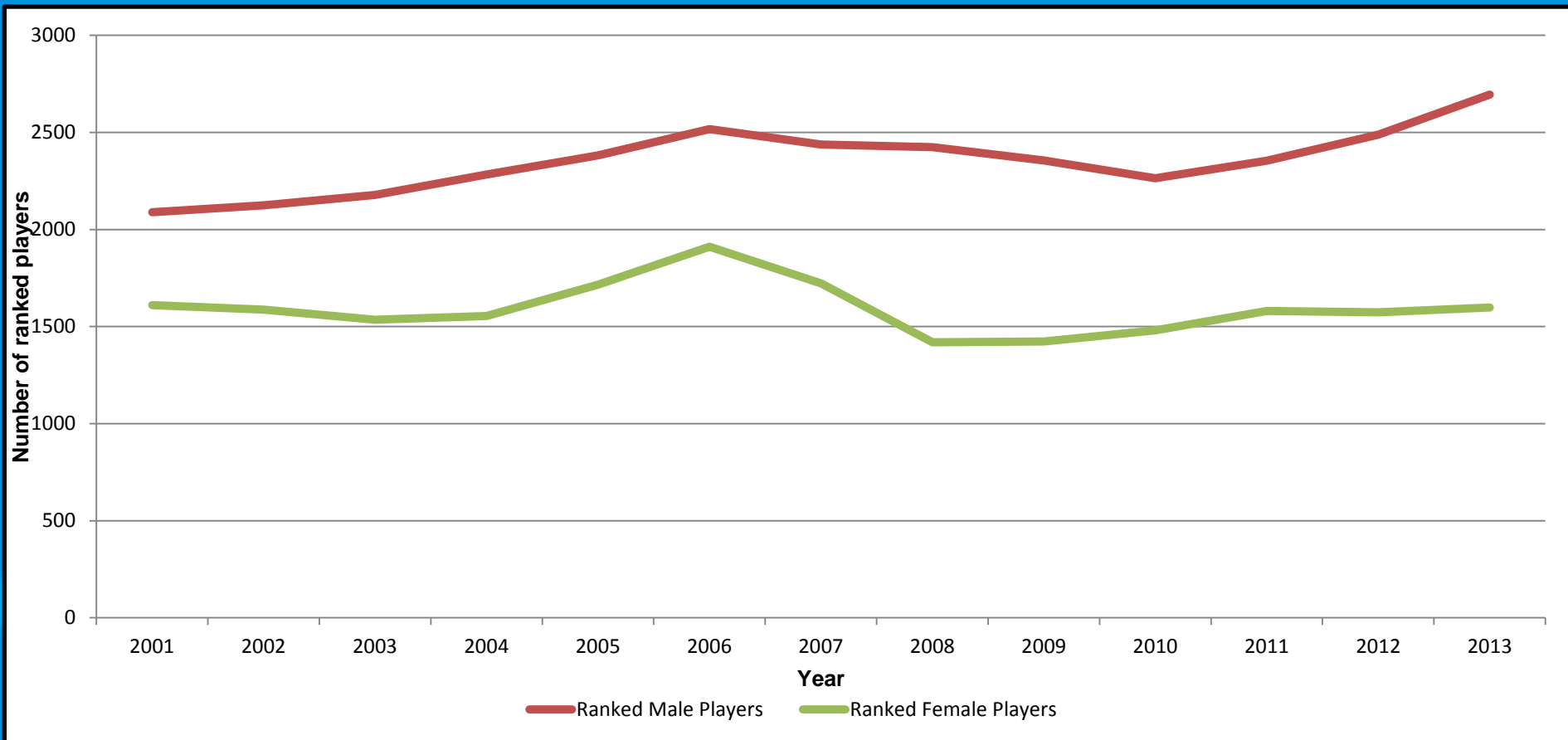
If retention relates to the growth and/or churn of rankings, then over time:

1	A growing number of male, but not female players, are ranked
2	A growing number of female, but not male players, are aspiring to achieve a ranking. However, the number of aspirant male players is significantly larger than female aspirants
3	Significantly more male ranked players are emerging from Asia

If delivery equals the number of players transitioning (through ranking bands), then over time:

1	The same number of unique players are being delivered
2	However, those players are taking longer to be delivered

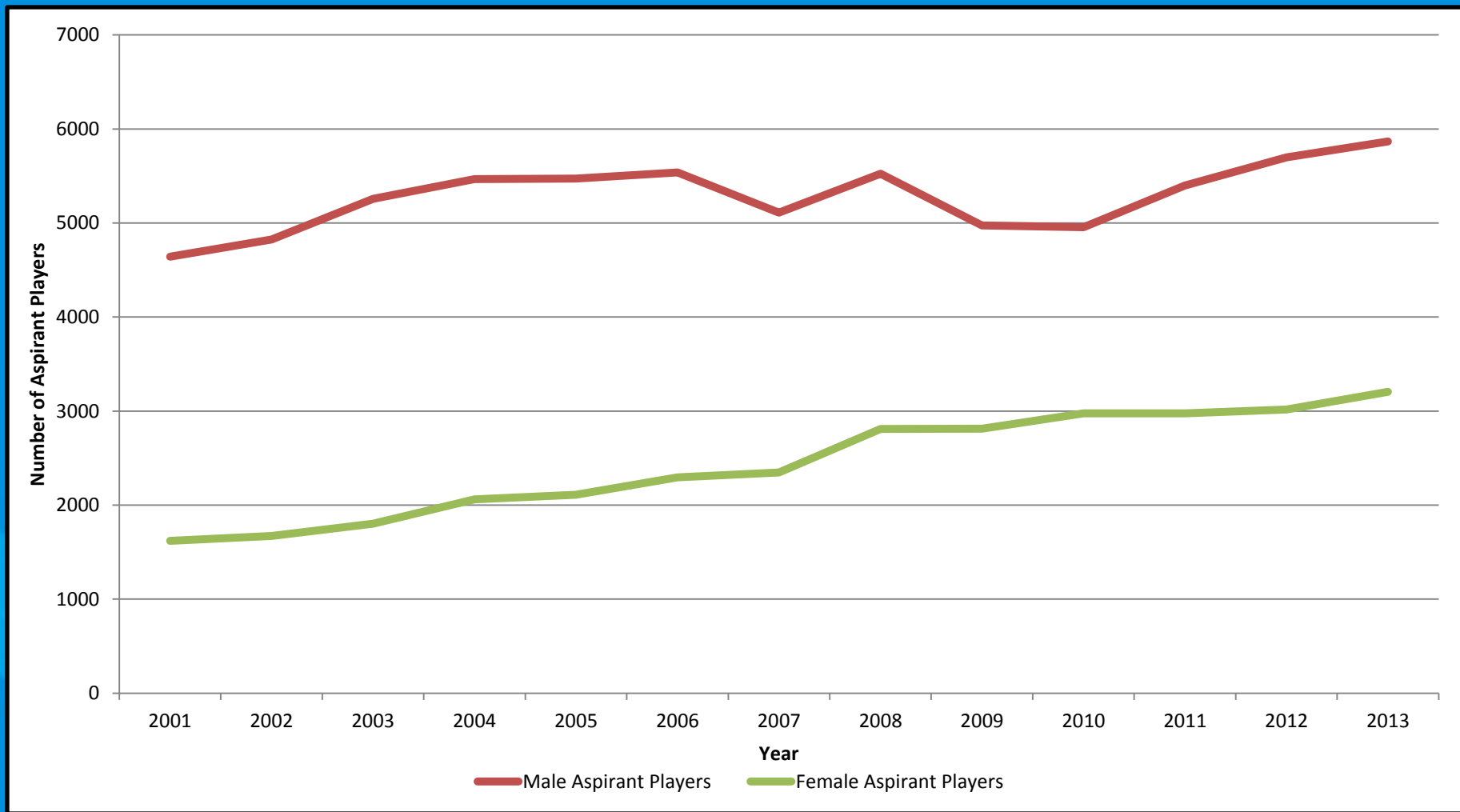
THE NUMBER OF RANKED PLAYERS HAS INCREASED IN MEN'S TENNIS BUT NOT IN THE WOMEN'S GAME



Inferring that there may be greater scope for retention in the men's game

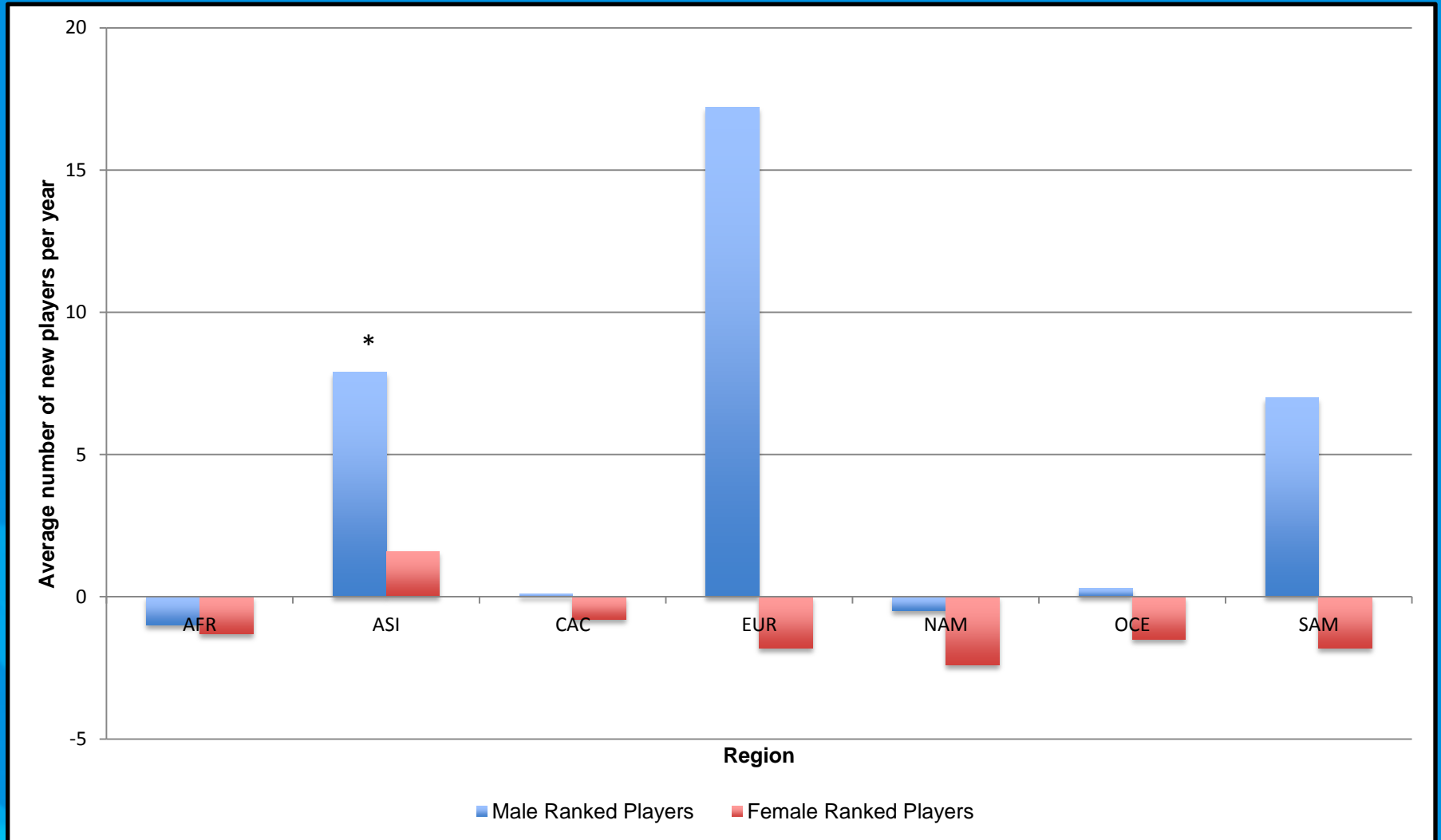
Note: Mean growth, 51 male players per year, and, -1 female players per year.

THE NUMBER OF ASPIRANT PLAYERS HAS SIGNIFICANTLY INCREASED IN FEMALE TENNIS BUT NOT IN THE MALE GAME



Aspirant players are defined as those players who played at least 1 pro circuit singles event in a year (qualifying and/or main draw) but did not achieve a ranking

ONLY AVERAGE ANNUAL GROWTH (IN RELATIVE TERMS) IN RANKED MALE PLAYERS FROM ASIA HAS SIGNIFICANTLY CHANGED (INCREASED) OVER TIME



THE NUMBER OF RANKED PLAYERS PER REGION AND RANKING BAND HAS NOT CHANGED SIGNIFICANTLY IN ANY REGION OR RANKING BAND OVER TIME

REGION	GENDE R	1-50	51-100	101-250	251-500	501-1000	>1000
AFR	MALE	1	0.3	4	8	17	46
	FEMALE	0.5	0.7	2	3	18	11
ASI	MALE	1	2	9	20	55	128
	FEMALE	4	5	18	42	100	60
CAC	MALE	0	0	1	4	11	32
	FEMALE	0.2	0.2	1	2	8	8
EUR	MALE	37	35	99	158	301	519
	FEMALE	38	35	102	155	341	190
NAM	MALE	5	4	15	17	40	84
	FEMALE	6	5	19	26	65	33
OCE	MALE	1	1	5	12	22	35
	FEMALE	1	2	7	12	22	17
SAM	MALE	7	7	21	38	64	133
	FEMALE	1	1	7	17	40	30

Therefore, the growth in ranked male players must be accumulated by non-significant changes in each ranking band over time. Note: Average data is reported.

THE TURNOVER OR CHURN OF RANKED PLAYERS IN EACH RANKING BAND HAS NOT SIGNIFICANTLY CHANGED OVER TIME

Ranking band	Gender	Average total players (2001-13)
1-50	Male	74
	Female	76
51-100	Male	70
	Female	67
101-250	Male	189
	Female	182
251-500	Male	300
	Female	306
501-1000	Male	569
	Female	568
>1000	Male	798
	Female	249

Meaning that effectively the same number of players are being delivered to the Tours

HOWEVER, IF WE CONSIDER “DELIVERY” TO EQUAL “TRANSITION TIME”, THEN THE DELIVERY IS TAKING LONGER IN BOTH THE MEN’S AND WOMEN’S GAME

Men's	Year	Year end age	Age at 1 st rank	Age at top 100	Transition time to top 100
	2000	25.7	17.3	21.0	3.7
	2010	26.9	17.0	21.5	4.6
	2013	28.2	16.9	21.7	4.8

Women's	Year	Year end age	Age at 1 st rank	Age at top 100	Transition time to top 100
	2000	24.0	15.8	19.2	3.4
	2010	25.3	15.7	19.8	4.0
	2013	25.4	15.9	20.0	4.1

Note: The inception of the age eligibility rule in the women’s game in 1995 may have had an effect on the longer transition times in 2000, 2010, and 2013

GOAL 3

Provide opportunities in all member nations for professional players

A. If opportunities can be inferred through rankings, then over time:

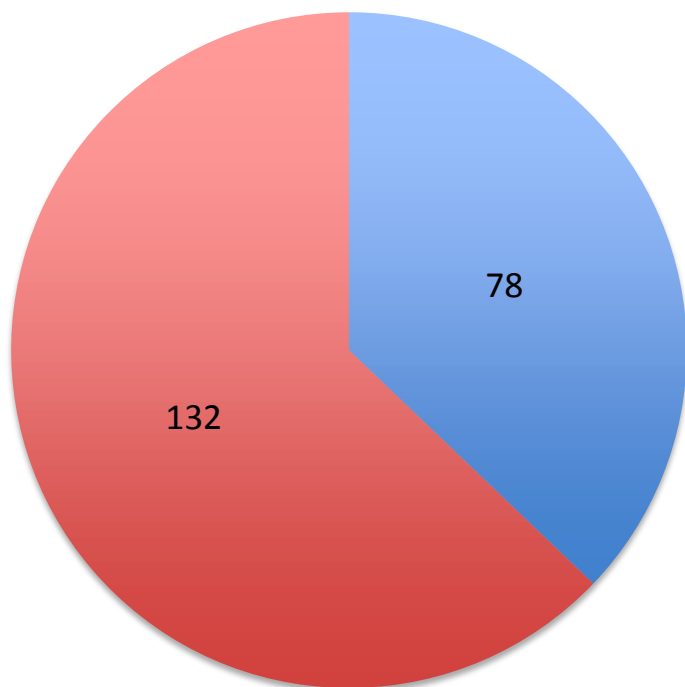
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| 1 | A similar number of member nations have provided opportunities to professionally ranked players |
| 2 | But not all member nations have provided opportunities |

THERE HAS BEEN NO SIGNIFICANT CHANGE IN THE NUMBER OF NATIONS REPRESENTED ON THE RANKING LISTS

Ranking band	Gender	Average countries represented (2001-13)
1-50	Male	27
	Female	29
51-100	Male	34
	Female	37
101-250	Male	51
	Female	52
251-500	Male	64
	Female	60
501-1000	Male	80
	Female	70
>1000	Male	93
	Female	62
Entire Ranking List	Male	99
	Female	78

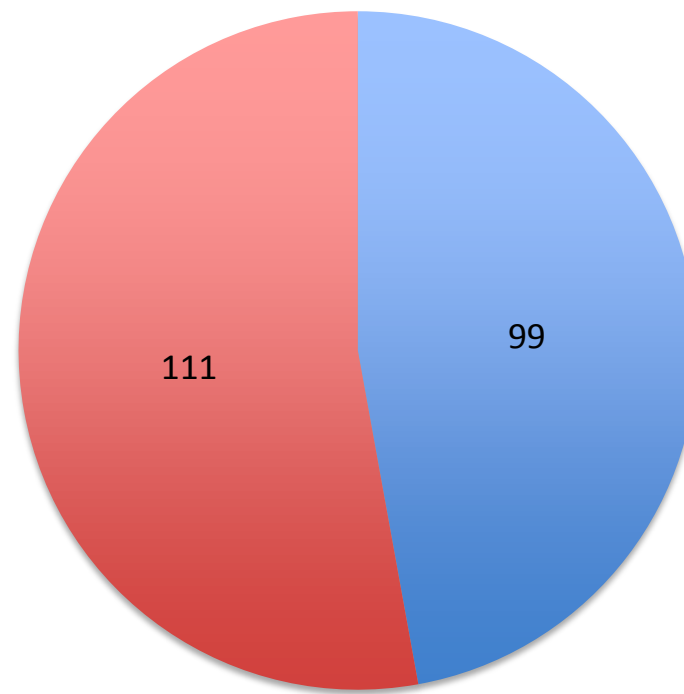
SO, NOT ALL MEMBER NATIONS HAVE RANKED PLAYERS. THIS HAS NOT SIGNIFICANTLY CHANGED OVER TIME

Women's Game



■ Member nations with ranked players
■ member nations without ranked players

Men's Game



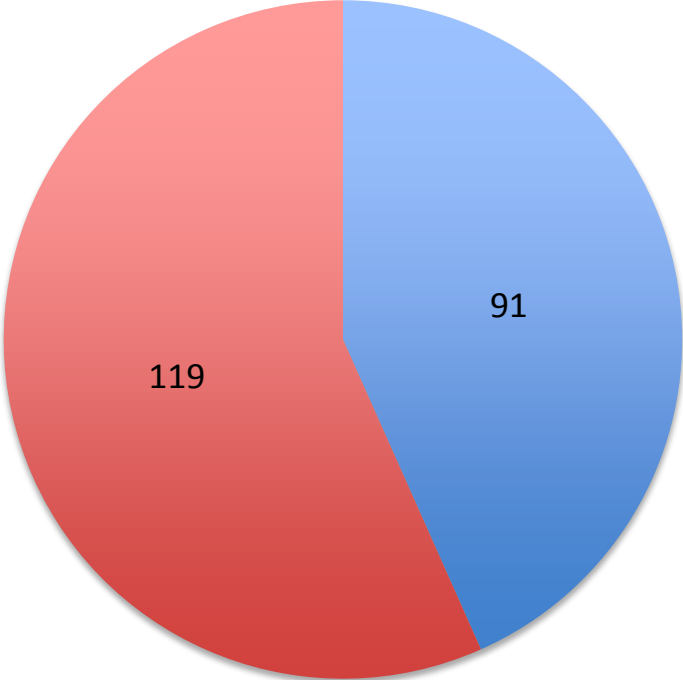
■ Member nations with ranked players
■ member nations without ranked players

B. If opportunities equal the number of tournaments offered, then over time:

- | | |
|----------|---|
| 1 | Not all member nations have provided opportunities for professional players |
| 2 | The number of member nations providing opportunities for professional players is decreasing |
| 3 | Professional players have significantly more ITF events and therefore opportunities to compete in (independent of nation/region) |
| 4 | The Europe Effect: only Europe has provided significantly more opportunities (through ITF events) for professional players |

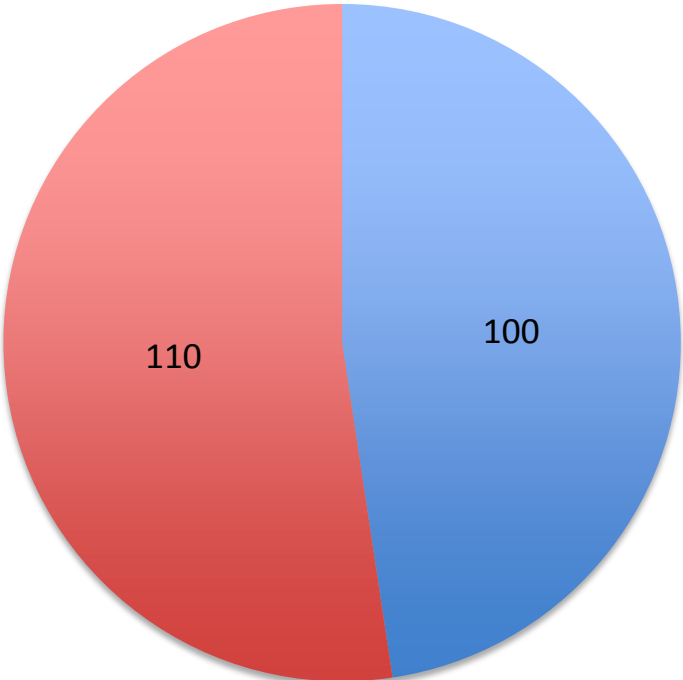
NOT ALL MEMBER NATIONS HAVE TOURNAMENT OPPORTUNITIES. THE NUMBER WITH THOSE OPPORTUNITIES IS SIGNIFICANTLY REDUCING OVER TIME

Women's Game



- Countries with professional tournaments
- Countries without Professional tournaments

Men's Game



- Countries with professional tournaments
- Countries without Professional tournaments

THE NUMBER OF ITF EVENTS – BUT NOT OTHERS – ARE INCREASING SIGNIFICANTLY OVER TIME

MEN'S TENNIS	CURRENT	AVERAGE (2001-2013)	Rate of change (per year)
FUTURES	637	451	30 *
CHALLENGERS	149	151	1
ATP TOUR	65	66	-0.6

WOMEN'S TENNIS	CURRENT	AVERAGE (2001-2013)	Rate of change (per year)
10K-40K ITF EVENTS	487	353	19.5 *
50K-125K ITF EVENTS	66	57	2.9
WTA TOUR	56	59	-0.8

IN THE MEN'S GAME, ONLY EUROPE HAS SEEN A SIGNIFICANT CHANGE IN THEIR COMPETITION CALENDAR (IE. INCREASE IN FUTURES)

REGION		Futures	Challengers	ATP+
AFR	2001	13	2	1
	2013	49	6	1
ASI	2001	36	11	9
	2013	66	17	8
CAC	2001	19	5	1
	2013	22	6	1
EUR	2001	132*	75	36
	2013	381	68	34
NAM	2001	33	19	16
	2013	40	19	13
OCE	2001	9	2	6
	2013	10	6	4
SAM	2001	33	24	4
	2013	69	27	4

Average data is reported. *Indicates significant change over time ($p < 0.1$). *Pro-tour includes ATP 250/500/1000, Championship Series, International Series, Masters Series, World Series and World tour finals events.

IN THE WOMEN'S GAME, ONLY EUROPE HAS SEEN A SIGNIFICANT CHANGE IN THEIR COMPETITION CALENDAR (INCREASE IN 10K-40K ITF EVENTS)#.

10k-40K ITF Events in AFR and ASI, as well as 50K-125K ITF Events in ASI are trending towards significance

REGION		10K-40K ITF Events	50K-125K ITF Events	WTA Events
AFR	2001	9	0	1
	2013	63	2	1
ASI	2001	29	5	5
	2013	67	15	11
CAC	2001	11	0	1
	2013	16	0	2
EUR	2001	147	11	30
	2013	262	29	23
NAM	2001	33	15	14
	2013	30	17	12
OCE	2001	9	0	8
	2013	11	2	5
SAM	2001	15	0	2
	2013	1	1	2

Note: The capped weekly number of women's ITF events allowed in Europe has increased from 6 in 2001 to 11 in 2013 which may help to explain the growth in the European competition calendar.

**Indicates significant change over time ($p < 0.1$). Average data is reported. Refer to Appendices for graphical representation and detail on a Regional Level*

WORTH NOTING: IF A NATION INCREASES THE NUMBER OF ITF EVENTS OFFERED, IT IS ASSOCIATED WITH AN INCREASE IN THAT NATION'S NUMBER OF PROFESSIONALLY RANKED PLAYERS (WITH THE EXCEPTION OF AFRICAN FEMALE PLAYERS)

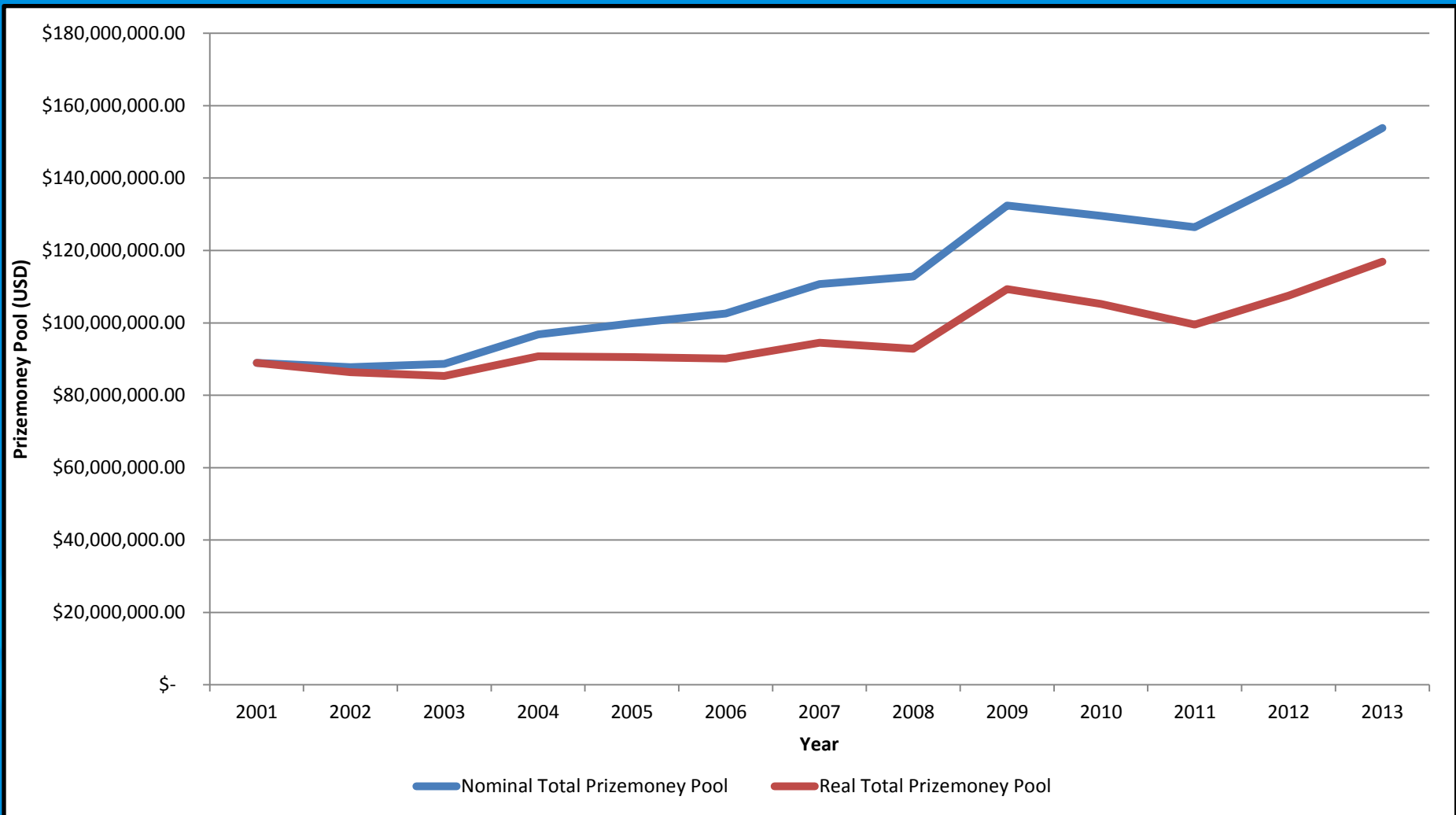
REGION	GENDER	Correlation ⁺ (tournaments vs. ranked players)
AFR	Male	0.51*
	Female	0.10
ASI	Male	0.62*
	Female	0.59*
CAM	Male	0.64*
	Female	0.68*
EUR	Male	0.64*
	Female	0.45*
NAM	Male	0.73*
	Female	0.61*
OCE	Male	0.49*
	Female	0.54*
SAM	Male	0.73*
	Female	0.53*

**Kendal rank correlation (tau) *Significant correlation. Refer to Appendices for graphical representation and detail on a Regional Level*

C. If opportunities equal the prize money offered, then over time:

- 1 The opportunity in both the men's and women's game is growing**

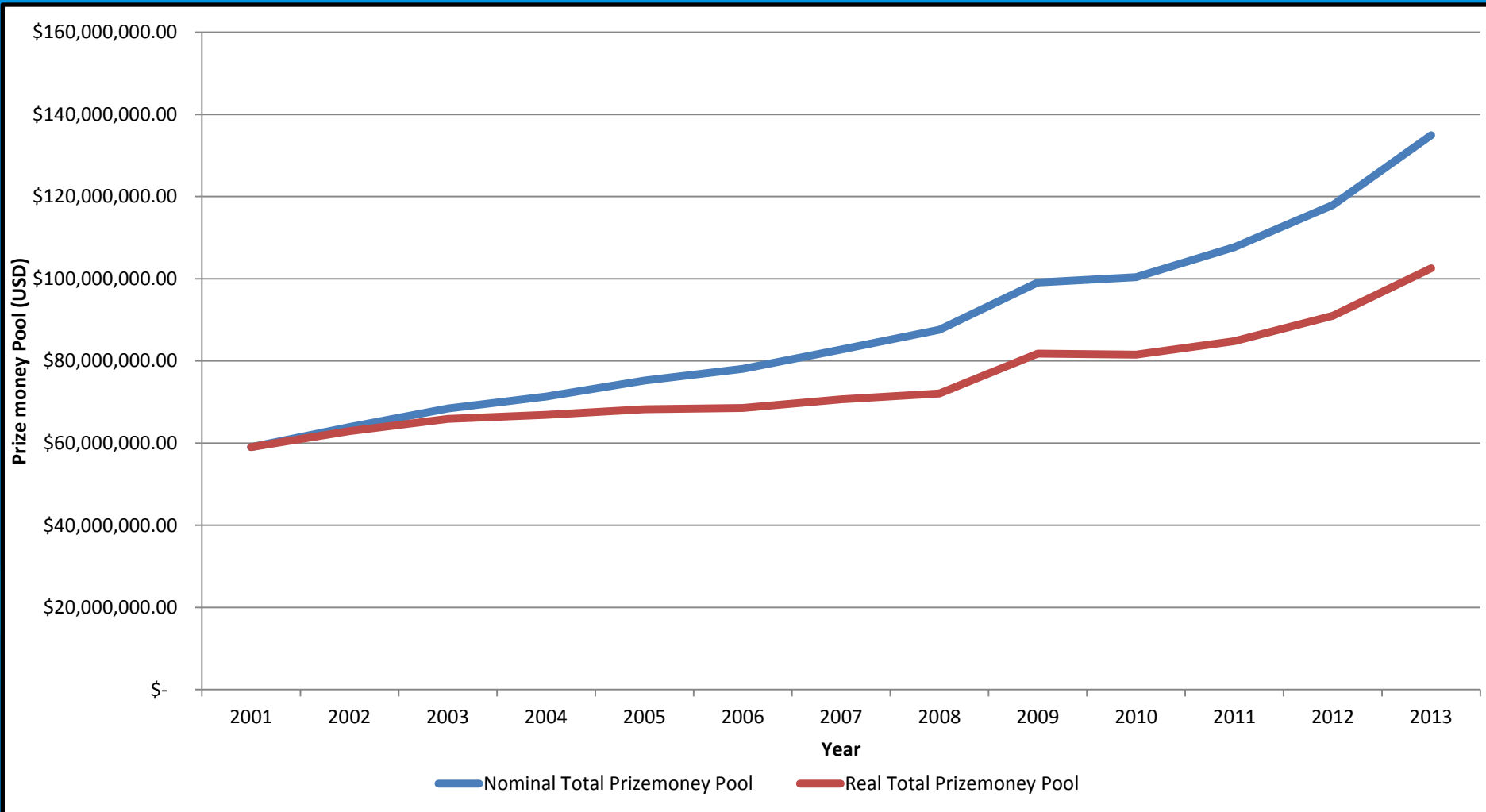
IN NOMINAL AND REAL TERMS, THE TOTAL MEN'S PRIZE MONEY POOL HAS INCREASED OVER TIME



There has been a 73% and 32% increase in total nominal and real men's prize money respectively

Note: 2001 used as the base year to compare over the specific time period set for analysis

IN NOMINAL AND REAL TERMS, THE TOTAL WOMEN'S PRIZE MONEY POOL HAS INCREASED OVER TIME



There has been a 129% and 74% increase in total nominal and real women's prize money pool since 2000 respectively

SECTION TWO

PLAYER OPPORTUNITY

- 1 Only the average number of tournaments played by female players ranked between 251-1000 has significantly changed (increased) over time**
- 2 The number of ITF Futures played, and primarily the number of 10K events played, has increased over time for male players ranked >250.**
- 3 The ‘Europe Effect’ also helps to explain the increase in the number of female 10K ITF events played in over time**
- 4 On average, males and females play 33% and 31% of their tournaments in their home country respectively. Hence, the majority of tournaments are played away**

ONLY THE AVERAGE NUMBER OF TOURNAMENTS PLAYED BY FEMALE PLAYERS RANKED BETWEEN 251-1000 [*] HAS SIGNIFICANTLY CHANGED (INCREASED) OVER TIME

Ranking band	Gender	Average tournaments
1-50	Male	21
	Female	20
51-100	Male	26
	Female	23
101-250	Male	25
	Female	22
251-500	Male	22
	Female	18 *
501-1000	Male	16
	Female	12 *
>1000	Male	9
	Female	8

MALE PLAYERS RANKED >250 HAVE PLAYED SIGNIFICANTLY MORE (>40%) FUTURES TOURNAMENTS OVER TIME

Ranking bands	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
Top 50	0	0	0	0	0	0	21
51-100	0	0	3	1	1	1	20
101-250	1	1	10	2	2	1	9
251-500	5	5	7	1	1	0	2
501-1000	9	4	2	0	0	0	1
>1000	5	3	1	0	0	0	0

This can be explained by European males ranked >250, as well as Asian males ranked 501-1000, playing significantly more 10K Futures over time. This further reinforces the 'Europe Effect' on the calendar.

FEMALE PLAYERS RANKED >500 HAVE PLAYED SIGNIFICANTLY MORE (80-120%) ITF EVENTS OVER TIME; AND MORE SPECIFICALLY, PLAYERS RANKED >1000 HAVE PLAYED SIGNIFICANTLY MORE (80%) 10K ITF TOURNAMENTS.

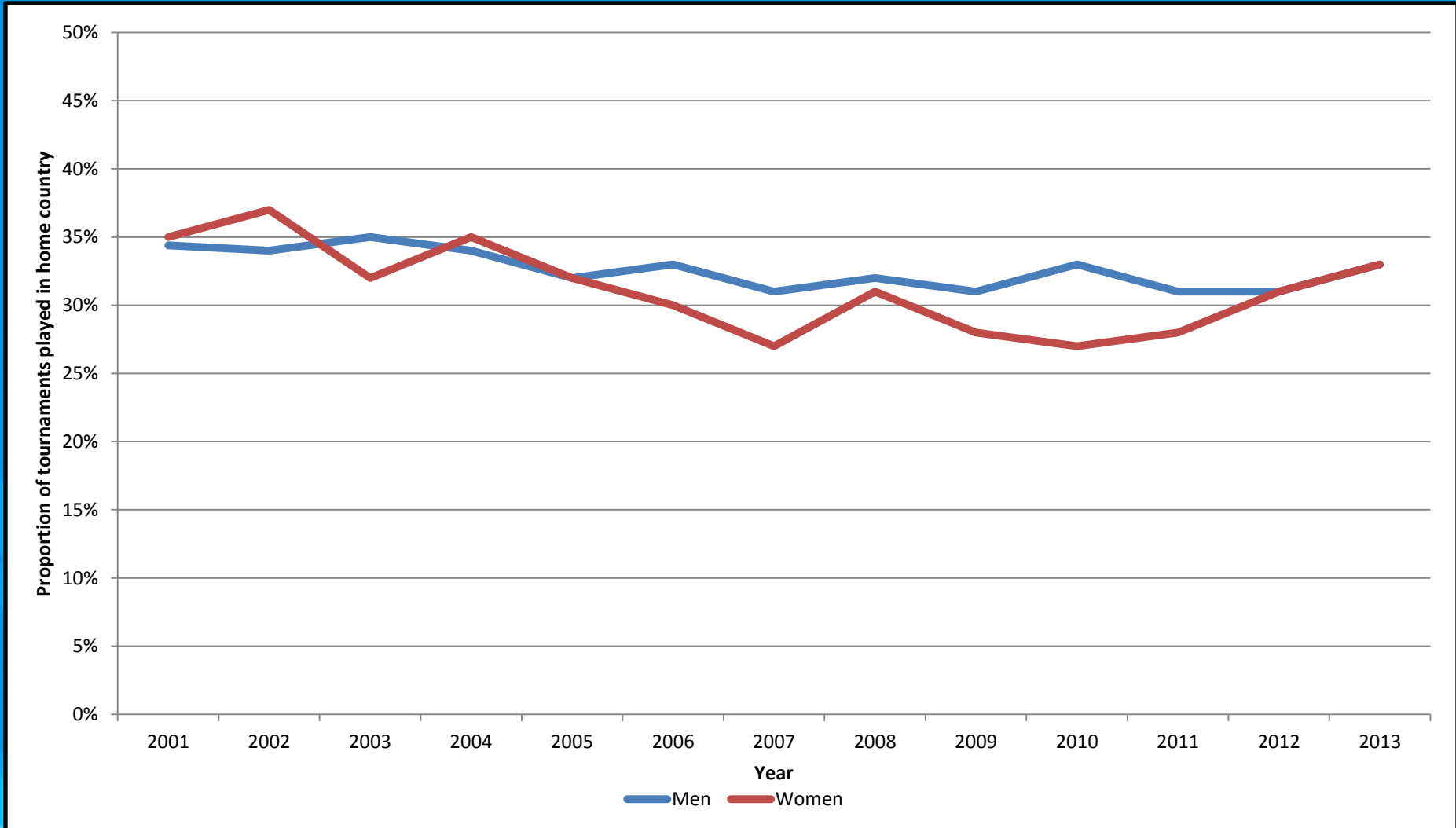
Ranking Band	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
Top 50	0	0	0	0	0	20
51-100	0	1	1	1	2	20
101-250	0	5	4	2	1	10
251-500	4	8	3	1	1	2
501-1000	7	3	1	0	0	1
>1000	5	2	0	0	0	0

This can be explained by:

1. European female 501-1000 players, and North American and Asian female >1000 players, have played significantly more ITF events over time

2. the 'European Effect' as it is only European females that have significantly increased the number of 10K ITF events played over time

PLAYERS TRAVEL FOR OPPORTUNITIES. THE AVERAGE PROPORTION OF HOME (AS COMPARED TO AWAY) COUNTRY TOURNAMENTS IN WHICH PLAYERS COMPETE HAS REMAINED STEADY OVER TIME



IF WE TAKE A CLOSER LOOK, JUST HOW “GLOBAL” ARE PLAYERS’ SCHEDULES? HOW MANY COUNTRIES DO PLAYERS COMPETE IN PER REGION?

Ranking Band	Gender	Countries in AFR	Countries in ASI	Countries in CAC	Countries in EUR	Countries in NAM	Countries in OCE	Countries in SAM
1-50	Male	0	2	0	10	7	2	1
	Female	0	3	1	8	7	2	0
51-100	Male	1	3	1	11	8	2	2
	Female	0	3	1	9	8	3	1
101-250	Male	1	2	2	10	7	2	3
	Female	0	3	1	7	8	2	1
251-500	Male	1	3	2	7	5	2	3
	Female	1	3	2	6	5	2	2
501-1000	Male	1	2	2	4	3	1	2
	Female	1	2	2	3	2	2	2
>1000	Male	1	1	1	2	1	1	2
	Female	1	2	1	3	1	2	2

Male 501-1000 and >1000 players have played in significantly more countries in Europe over time

IF WE TAKE A CLOSER LOOK, JUST HOW “GLOBAL” ARE PLAYERS’ SCHEDULES? HOW MANY TOURNAMENTS DO PLAYERS COMPETE IN PER REGION?

Ranking Band	Gender	Tournaments in AFR	Tournaments in ASI	Tournaments in CAC	Tournaments in EUR	Tournaments in NAM	Tournaments in OCE	Tournaments in SAM
1-50	Male	0	2	0	11	7	2	1
	Female	0	3	1	9	8	2	1
51-100	Male	1	3	1	12	9	2	3
	Female	0	4	1	10	9	3	1
101-250	Male	1	3	2	10	8	2	3
	Female	0	3	1	8	9	3	1
251-500	Male	1	3	3	7	6	2	3
	Female	1	3	2	7	5	2	2
501-1000	Male	1	3	2	5	3	2	3
	Female	1	2	2	4	3	2	2
>1000	Male	1	1	1	3	2	1	2
	Female	1	2	2	3	2	2	2

Female 251-500 players have played significantly more tournaments in Asia over time

IF WE TAKE A CLOSER LOOK, JUST HOW “GLOBAL” ARE PLAYERS’ SCHEDULES? HOW MANY TOURNAMENT SWINGS DO PLAYERS COMPETE IN PER REGION?

Ranking Band	Gender	Swings in AFR	Swings in ASI	Swings in CAC	Swings in EUR	Swings in NAM	Swings in OCE	Swings in SAM
1-50	Male	0	0	0	1	2	1	0
	Female	0	0	0	1	3	1	0
51-100	Male	0	0	0	2	4	1	0
	Female	0	1	0	2	3	1	1
101-250	Male	0	1	0	2	3	1	1
	Female	0	1	1	2	4	1	0
251-500	Male	1	1	1	3	3	1	1
	Female	0	1	1	2	3	1	1
501-1000	Male	1	1	1	2	2	1	1
	Female	0	1	1	1	1	1	1
>1000	Male	0	1	0	1	1	0	1
	Female	1	1	1	1	1	1	1

The number of tournament swings that players compete in per region has not significantly changed over time

**THE AVERAGE LENGTH OF THE TOURNAMENT SWINGS THAT PLAYERS COMPETE
IN PER REGION HAS NOT SIGNIFICANTLY CHANGED OVER TIME**

Region of Swing	Men (weeks)	Women (weeks)
AFR	2.6	2.8
ASI	2.5	2.5
CAC	3.1	3.0
EUR	2.7	2.4
NAM	2.7	2.6
OCE	2.8	2.6
SAM	2.9	2.8

SECTION THREE

PLAYER EARNINGS

1 Tennis is characterised by its distribution of prize money

2 The increased numbers of professional players has diluted the effect of prize money increases in the game

CURRENT PROFESSIONAL TENNIS LANDSCAPE

In 2013 there were 8,874 male and 4,862 female players.
Of these 3,896 male and 2,212 female players earned no
prize money

Players competed for an approximate total of \$162m of
prize money in the men's game and \$120m in the
women's game

IN A 'TENNIS WORLD' WITH PERFECT EQUALITY

In 2013, each player would earn:

\$32,638 in the men's game

\$45,205 in the women's game

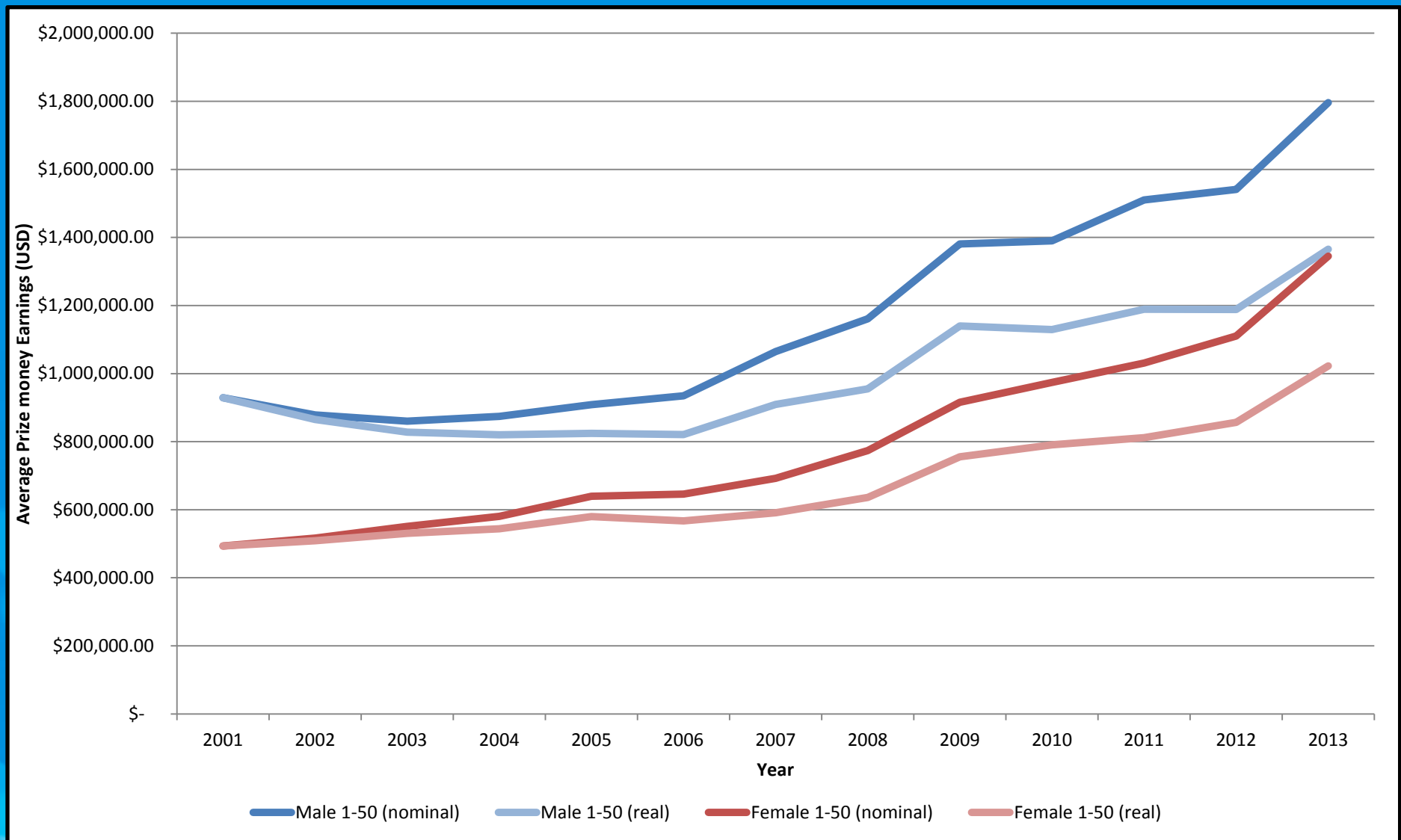
However, in reality...

The Top 1 % of ranked male players [top 50] earned 60% of the total prize money pool

The Top 1 % ranked female players [top 26] earned 51% of the total prize money pool

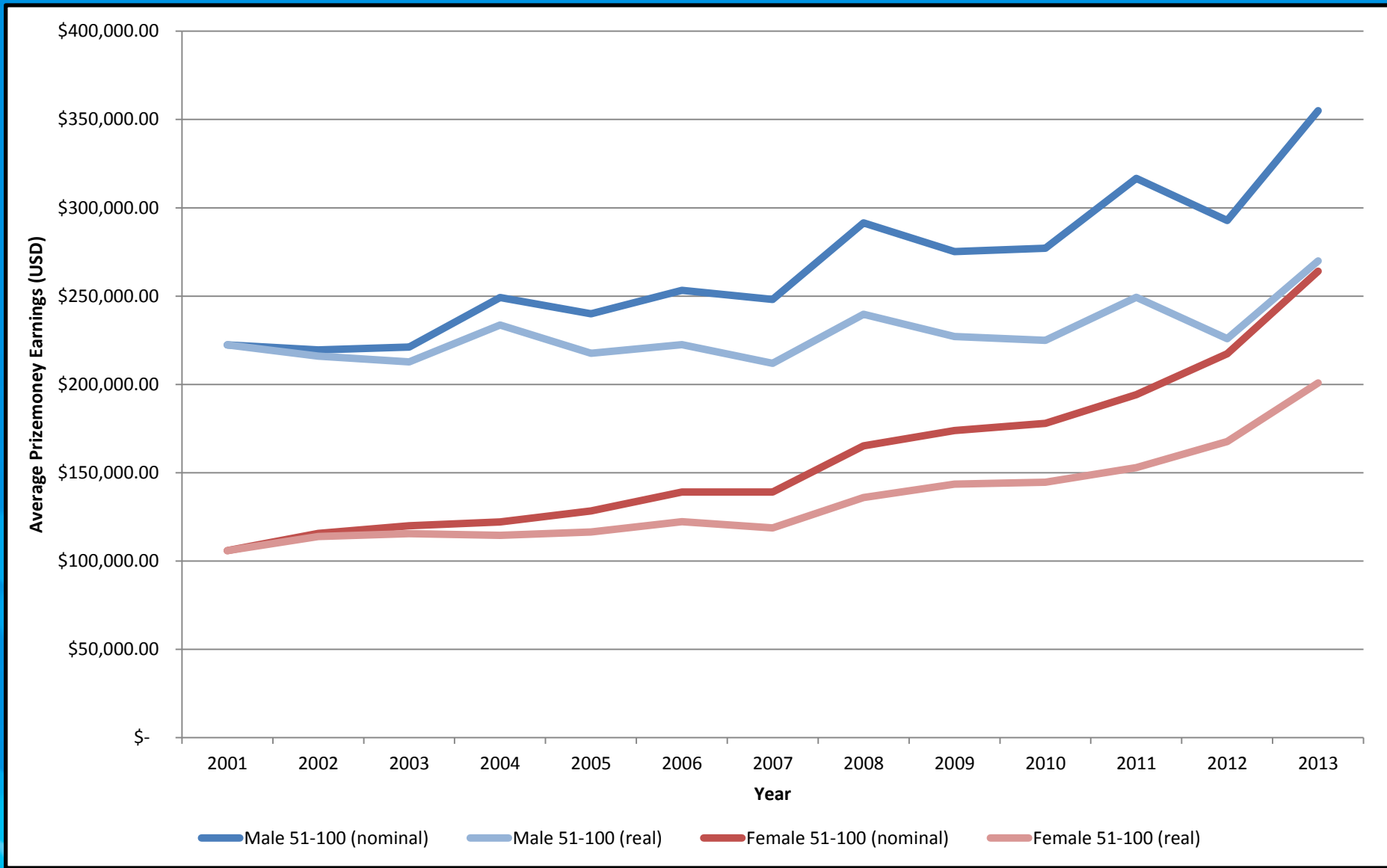
Are players in different ranking bands earning more or less over the period of this study?

	Men	Women
Top 50 Av. Nominal prize money earnings	Significantly increased	Significantly increased
Top 50 Av. Real prize money earnings	No significant change	Significantly increased

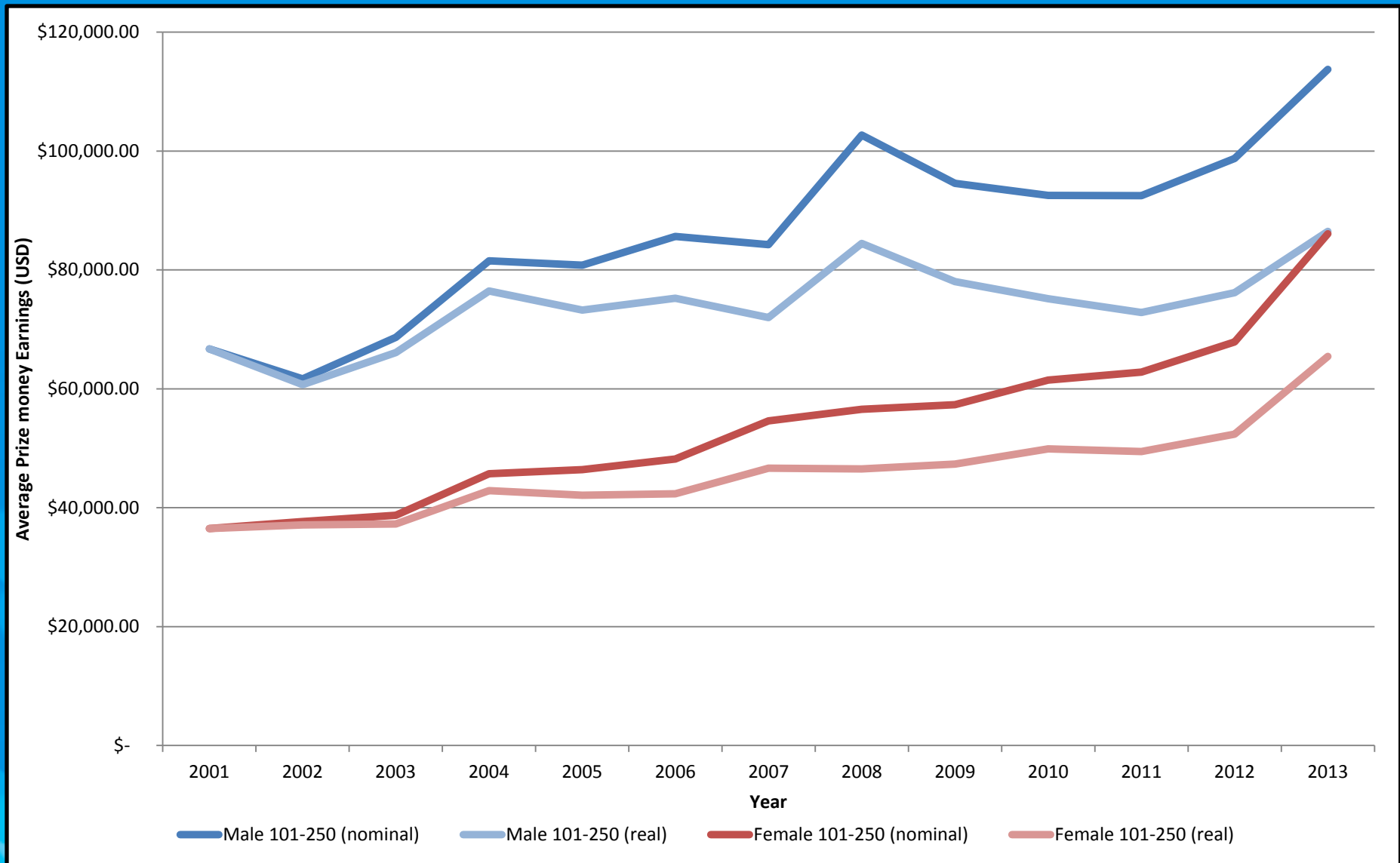


Real = CPI adjusted value of the US dollar. Using 2001 as the base year to compare over the specific time period set for analysis

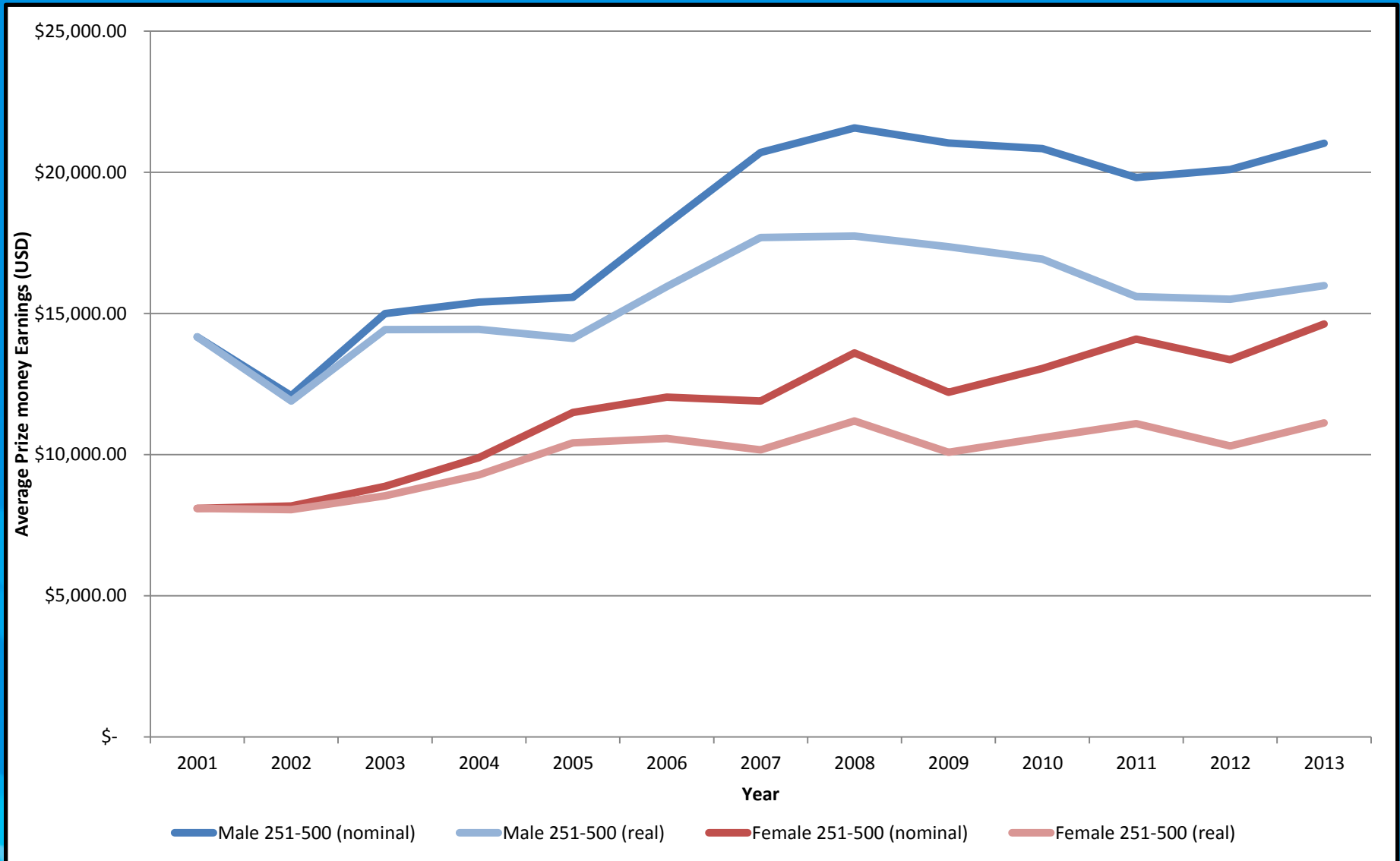
	Men	Women
Top 51-100 Av. Nominal prize money earnings	No significant change	Significantly increased
Top 51-100 Av. Real prize money earnings	No significant change	Significantly increased



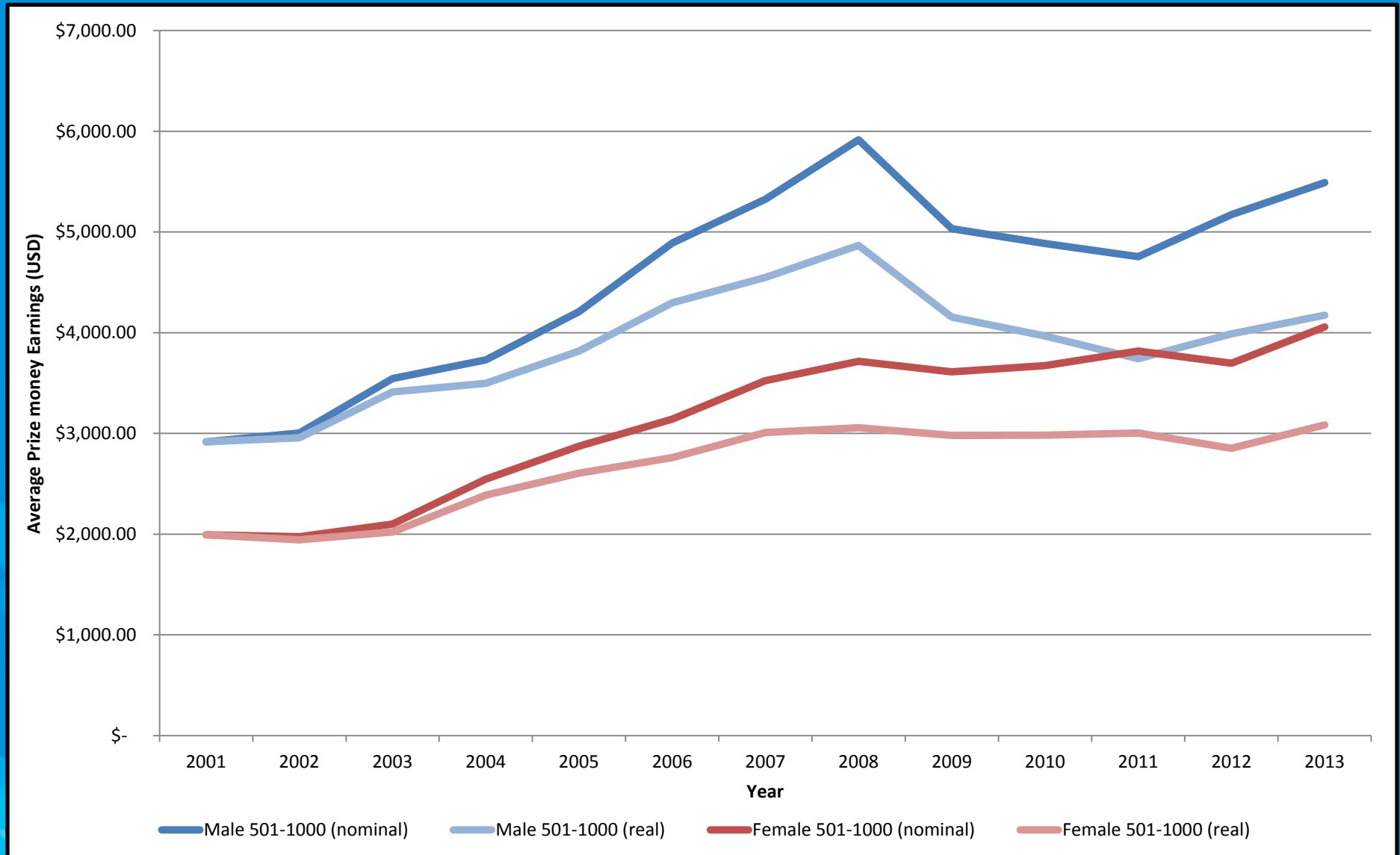
	Men	Women
Top 101-250 Av. Nominal prize money earnings	No significant change	Significantly increased
Top 101-250 Av. Real prize money earnings	No significant change	Significantly increased



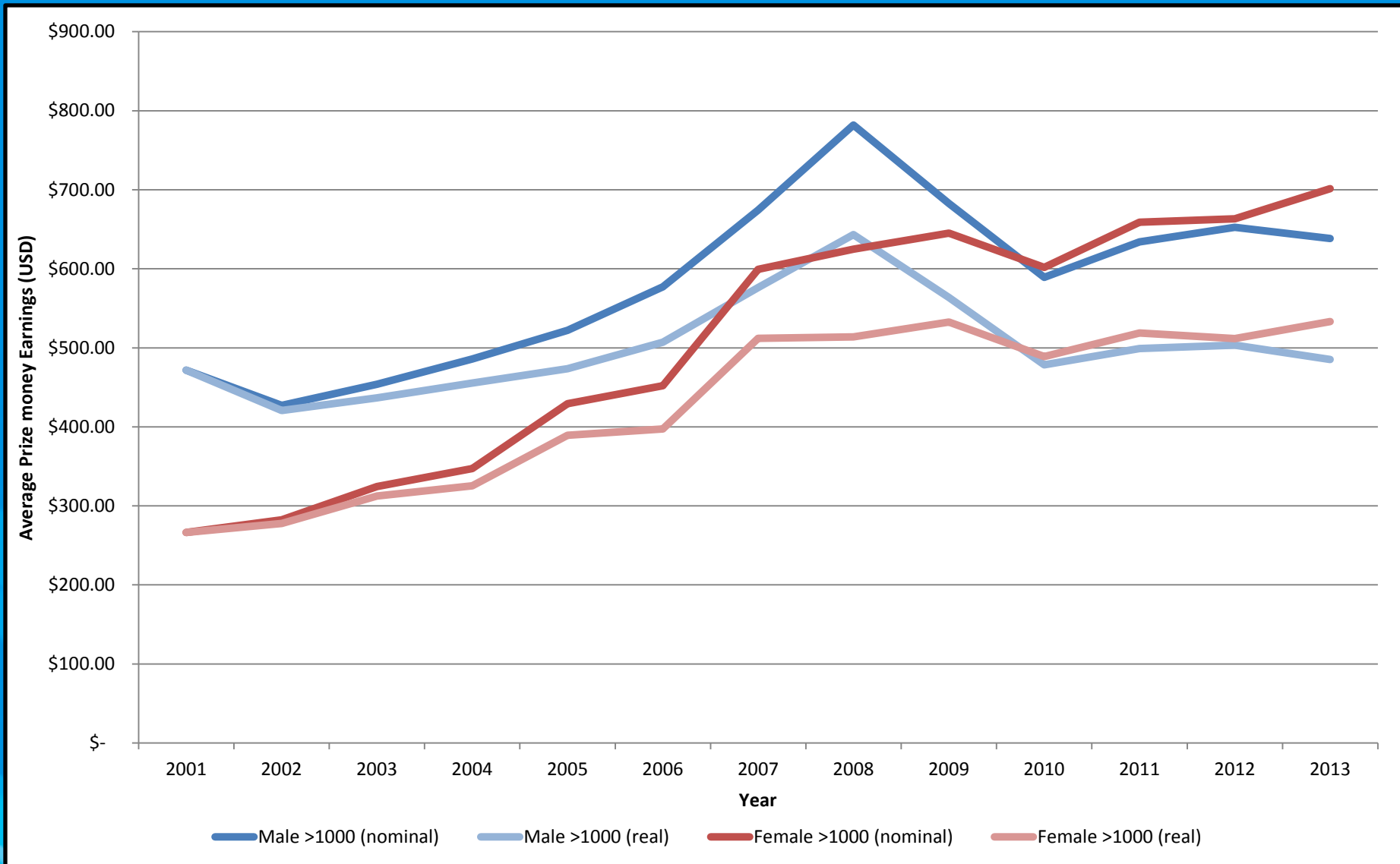
	Men	Women
Top 251-500 Av. Nominal prize money earnings	No significant change	Significantly increased
Top 251-500 Av. Real prize money earnings	No significant change	No significant change



	Men	Women
Top 501-1000 Av. Nominal prize money earnings	Significantly increased	Significantly increased
Top 501-1000 Av. Real prize money earnings	No significant change	No significant change



	Men	Women
>1000 Nominal prize money earnings	No significant change	No significant change
>1000 Real prize money earnings	No significant change	No significant change



SECTION FOUR

PLAYER COSTS

- 1 The average cost of playing tennis in 2013 was **\$38,800** for men and **\$40,180** for women. However, this logically varies depending on ranking band and region.
- 2 The 2013 breakeven point for men, where cost = prize money earnings, was **336**. Therefore, assuming that all players incur the same expense, only players ranked inside **336** would actually earn more than they spend.
- 3 The 2013 breakeven point for women, where cost = prize money earnings, was **253**. Therefore, assuming that all players incur the same expense, only players ranked inside **253** would actually earn more than they spend.

PLAYING EXPENSES INCLUDE

- Flights
- Accommodation
- Food
- Restringing
- Laundry
- Clothing and Equipment
- Transport (airport transfers)

See appendices for playing expenses calculations

What are the annual playing expenses without support team costs?

ANNUAL EXPENSE: FOR MEN BY REGION AND RANKING BAND (WITHOUT SUPPORT TEAM EXPENSES)

Ranking Band	TOP 50	51-100	101-250	251-500	500-1000	>1000	Average
AFR	\$58,195.90	\$52,912.03	\$44,571.59	\$36,316.63	\$26,826.43	\$14,494.51	\$38,886.18
ASI	\$70,580.52	\$54,496.47	\$49,954.17	\$33,655.48	\$24,640.59	\$15,892.41	\$41,536.61
CAC	\$52,574.47	\$54,849.79	\$53,802.08	\$37,507.35	\$30,897.10	\$16,986.77	\$34,798.32
EUR	\$50,005.16	\$48,356.03	\$41,103.04	\$35,685.33	\$24,510.09	\$13,355.69	\$35,502.56
NAM	\$40,083.70	\$43,814.01	\$39,989.76	\$36,381.33	\$21,616.85	\$16,201.38	\$33,014.51
OCE	\$41,189.92	\$71,736.18	\$53,094.69	\$49,891.92	\$38,971.42	\$24,194.84	\$46,513.16
SAM	\$55,391.59	\$57,784.00	\$44,178.32	\$40,164.99	\$27,778.69	\$15,448.50	\$40,124.35
Average	\$52,574.47	\$54,849.79	\$46,670.52	\$38,514.72	\$27,891.60	\$16,653.44	\$38,816.44

ANNUAL EXPENSE: FOR WOMEN BY REGION AND RANKING BAND (WITHOUT SUPPORT TEAM EXPENSES)

Ranking Band	TOP 50	51-100	101-250	251-500	500-1000	>1000	Average
AFR	\$52,767.68	\$55,258.90	\$55,402.40	\$40,684.55	\$27,580.50	\$17,380.41	\$41,512.41
ASI	\$60,072.19	\$51,151.06	\$42,543.33	\$33,758.29	\$19,307.82	\$18,072.25	\$37,484.16
CAC	\$70,748.91	\$52,605.29	\$50,091.40	\$42,823.17	\$28,848.13	\$22,919.63	\$44,672.76
EUR	\$53,290.16	\$47,726.89	\$39,545.22	\$32,579.99	\$23,971.30	\$16,084.03	\$35,532.93
NAM	\$41,888.39	\$43,171.64	\$39,411.16	\$29,390.21	\$17,696.19	\$17,651.77	\$31,534.89
OCE	\$55,530.26	\$53,555.91	\$51,104.06	\$41,984.12	\$34,359.04	\$27,500.02	\$44,005.57
SAM	\$58,066.21	\$64,454.24	\$48,916.03	\$45,784.83	\$36,380.13	\$25,612.82	\$46,535.71
Average	\$56,051.97	\$52,560.56	\$46,716.23	\$38,143.60	\$26,877.59	\$20,745.85	\$40,182.63

What are the annual playing expenses without support team costs if we break down the ranking bands into groups of 50?

ANNUAL EXPENSE: FOR MEN BY REGION AND RANKING BAND

	101-150	151-200	201-250	251-300	301-350	351-400	401-450	451-500
AFR	\$50,236.59	\$42,200.02	\$49,196.08	\$38,971.60	\$48,178.96	\$45,565.66	\$39,902.53	\$33,622.13
ASI	\$47,175.03	\$48,613.60	\$45,236.13	\$35,336.58	\$34,800.30	\$33,104.83	\$35,127.29	\$27,255.35
CAC	\$54,793.09	\$44,154.92	\$38,861.03	\$34,866.00	\$30,360.05	\$18,708.10	\$37,500.03	\$31,239.78
EUR	\$38,772.18	\$37,178.51	\$35,778.11	\$29,894.39	\$28,052.58	\$28,213.52	\$24,779.45	\$25,710.97
NAM	\$30,557.24	\$31,700.25	\$31,945.55	\$25,843.64	\$30,354.32	\$27,628.12	\$24,631.65	\$24,693.98
OCE	\$48,254.47	\$47,194.62	\$45,682.92	\$45,938.66	\$44,807.72	\$41,595.17	\$45,203.11	\$52,470.29
SAM	\$45,421.27	\$42,242.09	\$41,333.24	\$31,327.06	\$30,709.65	\$28,864.33	\$27,328.14	\$28,055.10
Average	\$45,029.98	\$41,897.72	\$41,147.58	\$34,596.85	\$35,323.37	\$31,954.25	\$33,496.03	\$31,863.94

ANNUAL EXPENSE: FOR WOMEN BY REGION AND RANKING BAND

	101-150	151-200	201-250	251-300	301-350	351-400	401-450	451-500
AFR	\$47,841.38	\$48,727.51	\$50,046.81	\$49,283.09	\$81,003.29	\$39,610.25	\$84,834.83	\$26,543.70
ASI	\$44,727.94	\$42,378.07	\$41,755.98	\$34,745.85	\$33,965.67	\$35,546.35	\$32,093.24	\$29,277.39
CAC	\$46,358.24	\$53,308.20	\$33,776.31	\$19,068.08	\$26,938.28	\$37,933.29	\$49,497.95	\$44,554.47
EUR	\$54,863.10	\$54,570.84	\$53,964.53	\$48,572.62	\$45,327.68	\$47,184.96	\$45,614.97	\$41,928.83
NAM	\$31,022.60	\$29,907.98	\$24,880.60	\$26,283.71	\$23,762.77	\$24,399.11	\$23,636.24	\$19,614.17
OCE	\$43,748.64	\$41,967.30	\$42,533.25	\$37,431.51	\$35,968.52	\$37,125.53	\$38,331.88	\$38,606.69
SAM	\$50,985.88	\$48,377.83	\$50,902.39	\$39,222.37	\$46,217.42	\$42,032.05	\$40,134.35	\$37,127.00
Average	\$45,649.68	\$45,605.39	\$42,551.41	\$36,372.46	\$41,883.38	\$37,690.22	\$44,877.64	\$33,950.32

SO WHAT ARE THE BREAKEVEN RANKS IN THE MEN'S AND WOMEN'S GAME WITHOUT SUPPORT TEAM COSTS?

(Breakeven points are the rankings at which singles and doubles prize money earnings equal cost. Note: This does not take into account player endorsements and other income outside of tennis.)

BREAKEVEN POINTS: FOR MEN BY REGION AND RANKING BAND.

(The breakeven number represents the ranking required to meet the cost associated with that ranking band and region)

Ranking Band	TOP 50	51-100	101-250	251-500	500-1000	>1000
AFR	277	289	316	348	394	540
ASI	256	286	297	361	405	502
CAC	289	285	286	341	368	482
EUR	297	302	330	350	406	567
NAM	333	323	333	348	435	497
OCE	330	254	389	297	336	420
SAM	284	279	320	331	387	510

THE BREAKEVEN POINT FOR A MALE PLAYER, INDEPENDENT OF REGION AND RANKING BAND, IS 336

BREAKEVEN POINTS: FOR WOMEN BY REGION AND RANKING BAND.

(The breakeven number represents the ranking required to meet the cost associated with that ranking band and region)

Ranking Band	TOP 50	51-100	101-250	251-500	500-1000	>1000
AFR	231	228	228	252	299	368
ASI	219	232	250	273	342	359
CAC	199	231	233	250	294	318
EUR	231	242	255	279	311	386
NAM	250	250	255	293	363	363
OCE	228	231	232	250	367	299
SAM	222	213	237	244	262	305

THE BREAKEVEN POINT FOR A FEMALE PLAYER, INDEPENDENT OF REGION AND RANKING BAND, IS **253**

What are the breakeven ranks in the men's and women's game without support team expenses if we break down the ranking bands into groups of 50?

BREAKEVEN RANK: FOR MEN BY REGION AND RANKING BAND

	101-150	151-200	201-250	251-300	301-350	351-400	401-450	451-500
AFR	289	299	290	305	290	294	300	362
ASI	291	290	293	352	355	363	354	393
CAC	285	295	306	355	370	461	320	368
EUR	309	320	335	376	385	385	404	399
NAM	370	367	366	398	370	389	405	405
OCE	290	291	294	294	295	299	295	287
SAM	294	299	299	368	370	383	391	385
Average	295	299	299	355	352	366	362	366

BREAKEVEN RANK: FOR WOMEN BY REGION AND RANKING BAND

	101-150	151-200	201-250	251-300	301-350	351-400	401-450	451-500
AFR	235	234	233	234	184	249	183	302
ASI	239	240	240	267	271	266	281	293
CAC	236	231	273	344	301	259	234	239
EUR	228	229	231	235	237	236	237	240
NAM	284	288	308	302	311	309	311	336
OCE	240	240	240	260	265	261	258	255
SAM	233	235	23	250	236	240	243	261
Average	237	237	240	262	240	259	237	271

SECTION FIVE

APPENDICES

APPENDIX 1:

**Number of tournaments, by type,
played by males from each ranking
band and region**

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 50 MALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
AFR (n = 2)	0	0	0	1	0	0	21
ASI (n = 1)	0	0	1	1	2	2	26
CAC (n = 0)							
EUR (n = 37)	0	0	0	0	0	0	22
NAM (n = 5)	0	0	0	0	0	0	19
OCE (n = 1)	0	0	0	0	0	0	16
SAM (n = 7)	0	0	0	0	0	0	20

There have been no significant changes in tournaments played by Top 50 players over time from 2001 to 2013

N = average number of players from each region each year

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 51-100 MALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
AFR (n = 1)	0	0	4	3	1	2	20
ASI (n = 2)	0	0	4	1	1	1	20
CAC (n = 0)							
EUR (n = 35)	0	0	2	0	2	1	22
NAM (n = 4)	1	1	4	1	1	0	20
OCE (n = 2)	0	0	5	1	1	4	22
SAM (n = 7)	0	0	2	1	1	1	20

There have been no significant changes in tournaments played by Top 51-100 players over time from 2001 to 2013

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 101-250 MALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
AFR (n = 4)	0	2	7	2	2	1	9
ASI (n = 9)	1	1	12	1	2	1	9
CAC (n = 1)	3	2	11	2	2	2	7
EUR (n = 99)	1	1	10	1	2	2	9
NAM (n = 15)	0	1	10	1	2	1	11
OCE (n = 5)	0	2	8	1	1	1	10
SAM (n = 21)	1	1	11	2	2	1	8

There have been no significant changes in tournaments played by Top 101-250 players over time from 2001 to 2013

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 251-500 MALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
AFR (n = 8)	6	5	5	1	1	0	2
ASI (n = 20)	4	6	7	1	1	0	2
CAC (n = 4)	8	4	6	1	1	1	2
EUR (n = 158)	6	5	7	1	1	1	2
NAM (n = 17)	4	5	10	1	1	0	3
OCE (n = 12)	3	8	7	1	1	0	3
SAM (n = 38)	7	4	8	1	1	0	2

European male players in the 251-500 ranking band have played significantly more 10K Futures tournaments over time from 2001 to 2013. All others have remained constant

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 501-1000 MALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
AFR (n = 17)	7	4	1	0	0	0	1
ASI (n =55)	6	5	2	0	0	0	0
CAC (n = 11)	9	3	2	0	0	0	0
EUR (n = 301)	10	4	2	0	0	0	1
NAM (n = 40)	7	4	3	0	0	0	1
OCE (n = 22)	6	7	2	0	0	0	1
SAM (n = 64)	11	3	2	0	0	0	0

European and Asian male players in the 501-1000 ranking band have played significantly more 10K Futures tournaments over time from 2001 to 2013. All others have remained constant

HOW MANY TOURNAMENTS, BY TYPE, DO >1000 MALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10k Futures	15k Futures	35 and 50k Challengers	75k Challengers	100k Challengers	125k Challengers	ATP and GS Tournaments
AFR (n = 46)	4	2	0	0	0	0	0
ASI (n = 128)	4	3	1	0	0	0	0
CAC (n = 32)	6	2	1	0	0	0	0
EUR (n = 519)	7	3	1	0	0	0	0
NAM (n = 84)	5	3	1	0	0	0	0
OCE (n = 35)	4	5	1	0	0	0	0
SAM (n = 134)	8	2	1	0	0	0	0

European male players in the >1000 ranking band have played significantly more 10K Futures tournaments over time from 2001 to 2013. All others have remained constant

APPENDIX 2:

**Number of tournaments, by type,
played by females from each
ranking band and region**

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 50 FEMALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
AFR (n = 2)	0	0	0	0	0	23
ASI (n = 4)	0	1	0	0	0	21
CAC (n = 1)	0	1	3	1	0	20
EUR (n = 38)	0	0	0	0	0	21
NAM (n = 6)	0	0	0	0	0	15
OCE (n = 1)	0	0	1	0	0	22
SAM (n = 2)	0	0	0	0	2	20

There have been no significant changes in tournaments played by Top 50 players over time from 2001 to 2013

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 51-100 FEMALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
AFR (n = 1)	0	1	2	3	0	22
ASI (n = 5)	0	1	1	1	2	20
CAC (n = 1)	0	1	5	0	3	21
EUR (n = 35)	0	0	1	1	2	20
NAM (n = 5)	0	0	2	1	1	20
OCE (n = 2)	0	2	1	1	1	21
SAM (n = 2)	0	1	2	1	2	20

There have been no significant changes in tournaments played by Top 51-100 players over time from 2001 to 2013

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 101-250 FEMALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
AFR (n = 3)	1	6	5	2	1	12
ASI (n = 18)	0	5	4	1	1	10
CAC (n = 2)	0	5	6	2	5	8
EUR (n = 102)	0	6	4	2	2	9
NAM (n = 19)	0	4	5	2	1	11
OCE (n = 7)	0	7	3	1	1	10
SAM (n = 7)	1	7	4	2	1	9

There have been no significant changes in tournaments played by Top 101-250 players over time from 2001 to 2013

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 251-500 FEMALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
AFR (n = 3)	4	8	2	1	1	2
ASI (n = 42)	3	8	3	1	1	2
CAC (n = 2)	4	8	3	1	1	2
EUR (n = 155)	5	9	2	1	1	1
NAM (n = 26)	2	6	5	1	1	2
OCE (n = 12)	2	10	2	0	1	3
SAM (n = 17)	7	9	2	0	0	1

There have been no significant changes in tournaments played by Top 251-500 players over time from 2001 to 2013

HOW MANY TOURNAMENTS, BY TYPE, DO TOP 501-1000 FEMALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
AFR (n = 8)	6	2	0	0	0	1
ASI (n = 100)	7	3	1	0	0	0
CAC (n = 8)	7	3	0	0	0	1
EUR (n = 341)	9	3	1	0	0	0
NAM (n = 65)	4	3	2	1	0	1
OCE (n = 22)	4	6	1	0	0	1
SAM (n = 40)	10	3	0	0	0	0

European female players in the Top 501-1000 ranking band have played significantly more ITF events over time from 2001 to 2013. All others have remained constant

HOW MANY TOURNAMENTS, BY TYPE, DO >1000 FEMALE ATHLETES FROM EACH REGION PLAY IN A YEAR?

Region	10K ITF Events	25K ITF Events	50K ITF Events	75K ITF Events	100K ITF Events	WTA and GS Events
AFR (n = 11)	3	1	0	0	0	0
ASI (n = 60)	5	2	0	0	0	0
CAC (n = 8)	5	2	0	0	0	0
EUR (n = 190)	8	2	0	0	0	0
NAM (n = 33)	4	2	1	0	0	0
OCE (n = 17)	4	5	0	0	1	0
SAM (n = 30)	8	1	0	0	0	0

European female players in the >1000 ranking band have played significantly more 10K ITF events over time from 2001 to 2013.

Asian and North American female players in the >1000 ranking band have played significantly more ITF events over time from 2001 to 2013. All others have remained constant

APPENDIX 3:

Playing Expenses



FLIGHTS

The following matrix was used to calculate domestic and international flights from region to region. Flight costs are derived from average 2014 flight costs from countries within each region to all countries with available flights. The average number (2001-2013) and regions of tournaments played by athletes from each ranking band and region were used to determine total annual flight costs.

	TO AFR	TO ASI	TO CAC	TO EUR	TO NAM	TO OCE	TO SAM
FROM AFR	\$723.71	\$662.22	\$1,600.75	\$610.24	\$911.78	\$1,553.20	\$1,524.53
FROM ASI	\$1,511.94	\$630.78	\$1,599.16	\$941.59	\$756.14	\$1,208.69	\$1,929.15
FROM CAC	\$2,043.90	\$1,482.82	\$532.07	\$1,226.69	\$341.17	\$2,300.53	\$627.88
FROM EUR	\$942.81	\$727.66	\$1,176.07	\$178.43	\$710.05	\$1,755.10	\$1,158.44
FROM NAM	\$1,221.58	\$1,025.71	\$378.42	\$786.15	\$87.82	\$1,276.91	\$562.24
FROM OCE	\$1,774.13	\$880.85	\$1,669.18	\$1,273.13	\$982.13	\$814.06	\$1,570.22
FROM SAM	\$1,731.34	\$1,747.77	\$996.28	\$1,411.38	\$1,009.17	\$2,127.61	\$337.79

Data obtained from www.skyscanner.com and quoted in US dollars

ACCOMMODATION & AIRPORT TRANSFERS

The accommodation and airport transfer costs were obtained from 2013 ITF tournament factsheets. The minimum single room rate and airport transfer costs were used and an average for each region obtained. These figures were multiplied by 7 to obtain a weekly value, and then multiplied by the average number of tournaments played in each region by players from different regions and ranking bands (2001-2013).

Region	Airport transfer	Room Rate
AFR	\$23.81	\$87.52
ASI	\$16.73	\$55.17
CAC	\$19.38	\$86.69
EUR	\$23.62	\$88.17
NAM	\$40.06	\$86.07
OCE	\$21.88	\$98.20
SAM	\$14.25	\$39.48



FOOD, RESTRINGING & LAUNDRY

The food, restringing, and laundry costs were obtained using aggregated data from a questionnaire distributed to previous professional tennis players and coaches. Each value was quoted weekly and multiplied by the average number of tournaments played in 2001-2013 by players from different regions and ranking bands. The value, quoted in US dollars, was then adjusted for each region based on the Human Development Index of countries within each region.

Ranking Band	Weekly food expense	Weekly restringing expense	Weekly laundry expense
Top 50	\$600	\$400	\$0
51-100	\$400	\$200	\$0
101-250	\$300	\$150	\$20
251-500	\$300	\$125	\$20
501-1000	\$250	\$100	\$20
>1000	\$250	\$100	\$20



CLOTHING & EQUIPMENT

The clothing and equipment costs were obtained using aggregated data from a questionnaire distributed to previous professional tennis players and coaches. The value, quoted in US dollars, was then adjusted for each region based on the Human Development Index of countries within each region.

Ranking Band	Annual cost of clothing and equipment
Top 50	\$1500
51-100	\$1500
101-250	\$2000
251-500	\$3000
501-1000	\$3000
>1000	\$2000