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An analysis of the design of the PGA TOUR's FedExCup

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Abstract

The FedExCup is a professional golf championship on the PGA TOUR that includes the first playoff system staged on any of the world's professional golf tours. The FedExCup, incorporating elements of theory on the design of individualistic sports competitions in its organisation and structure, enhances the PGA TOUR season by providing an additional competitive element and has to date been effective in meeting a number of its objectives. However, despite having the largest prize fund in golf and the seventh largest first prize in all team or individual sports, the FedExCup is evidently considered neither by top players nor by fans to be the most important competition in golf, thereby conflicting with theory on prize incentives in sport competition. The FedExCup cannot currently match the inherent importance and tradition of the major championship tournaments; however, its importance may be enhanced with a reorganisation of the finale tournament, 'The TOUR Championship', to a three day tournament and the introduction of new matchplay playoff competition between the top four players in the final standings after The TOUR Championship. This would serve to separate the two distinct competitions: (a) the competition for the event, and (b) the competition for the 'league title', and make them complementary rather than embedded. The objective of this restructure is to maintain all of the existing positive elements of the design of the FedExCup, but to also add a more dramatic context to its conclusion; critically it would make the competition more attractive to spectators and as a consequence, increase the perceived status of the FedExCup to a level more befitting of its prize fund.

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1. Introduction

The FedExCup is a professional golf championship on the PGA TOUR (formerly the Professional Golfers' Association of America's Tournament Players Division) that has been contested since its inaugural year in 2007 and includes the first playoff system staged on any of the world's professional golf tours. The aim of this research paper is to analyse the organisation and structure of the FedExCup, with an emphasis on theoretical economic factors relevant to the design of individualistic sports competitions, and to determine how effective the FedExCup is in meeting its objectives. It will examine how the FedExCup enhances the PGA TOUR season and it will also consider how its impact is negated by the inherent importance of major championship tournaments to both players and fans, thereby conflicting with the prize aspect of individualistic sports competition design theory. It considers in conclusion how the FedExCup might be reorganised in order to increase its perceived importance to both players and fans of the game.

2. A Brief Review of the Structure of the FedExCup

2.1. Background

The USPGA, originally founded in 1916, began to expand rapidly in the late 1950's and early 1960's with the advent of television coverage. Television exposure raised the profile of the sport and led to the increase in the value of broadcasting rights and sponsorship deals and ultimately accounted for a substantial increase in tournament prize money, a trend that escalated through to the 1970's as the careers of the likes of Arnold Palmer and Jack Nicklaus developed. From 1974 to 1993, the number of USPGA Tour events rose by 250% from 43 to 116, with annual Tour income rising from \$9.9m to \$23m. Over the same period, USPGA Tour assets grew from \$1m to over \$200m and total annual revenues increased from \$4m to \$229m (Bramley, 2009). As the game continued to grow, professional players began to receive additional earnings from product endorsement contracts, whilst individual

tournaments entered into an increasing number of naming rights contracts with title sponsors and the Tour itself developed several new corporate partnerships.

Tiger Woods turning professional in 1996 had a significant impact on golf television audiences (Farrell *et al*, 2000) and tournament prize money as a consequence. In 1997 the USPGA sold its television broadcasting rights on a four year contract for a record \$400m, which more than doubled the previous contract's estimated value at \$42m per annum. This, and subsequent more lucrative broadcasting contracts, led in the following years to an increase in tournament prize funds from approximately \$1.7m per event in 1997 to almost \$5m per event in 2006 (Bramley, 2009). It was against this background in the mid 2000's when the Tour, now known as the 'PGA TOUR', convened to create the FedExCup.

2.2. The FedExCup Explained

Prior to the introduction of the FedExCup, professional golfers on the PGA TOUR had several incentives to perform well over the course of a season, such as to earn sufficient world ranking points to enable entry into elite tournaments, or to qualify for the Ryder Cup and President's Cup team events, however the PGA TOUR schedule lacked a dedicated season long competition. Whilst the top thirty players in the Official Money List would qualify for the annual TOUR Championship and the player to have finished in first place in the Official Money List at the end of the season would receive the 'Arnold Palmer Award', there was no additional financial incentive for TOUR Championship qualification or for finishing first in the money list and wider fan interest in the sport would tend to dissipate in the autumn following conclusion of the major championships (Murray, 2013). The FedExCup brought a whole new competitive dynamic to the PGA TOUR season.

Introduced on the PGA TOUR in 2007¹, The FedExCup is a season long sequential golf championship, consisting of a series of qualifying tournaments leading to the FedExCup Playoffs. The fundamental multi-stage structure of the FedExCup mirrors a simplistic regular season and post-season format common to many professional sports competitions. However, where comparable competitions (e.g. all of the major US league sports) switch in the post season to head-to-head elimination, the equivalent of match play, the FedExCup Playoffs comprise a series of culls after each of three playoff tournaments, leaving thirty contestants in a fourth and final playoff tournament. The competition format for all but one regular season tournament and for all four Playoffs tournaments is stroke play.

The inaugural 2007 FedExCup consisted of 40 tournaments within a 47 tournament PGA TOUR season:

- 1-36: FedExCup qualifying tournaments ('regular season').
- 37-40: FedExCup Playoffs.
- 41-47: 'Fall Series' tournaments post conclusion of the FedExCup (and not qualifying for the following FedExCup regular season).

From the 2014 season, which began in October 2013, the 'Fall Series' tournaments are included in the following year's FedExCup in a new wraparound schedule bridging two calendar years, therefore increasing the number of qualifying tournaments and also enhancing the importance of the fall tournaments that had previously not counted for the FedExCup. The revamped 2013/14 PGA TOUR FedExCup season therefore consisted of 45 tournaments and, following the addition of two further qualifying tournaments, the 2014/15 season consists of 47 tournaments²:

- 1-43: FedExCup qualifying tournaments ('regular season').
- 44-47: 'FedExCup Playoffs'.

¹ See PGA TOUR statistics 2007-2014 season (PGA TOUR seasons)

² See 2014/5 schedule (PGA TOUR, 2014a).

Points System:

For each regular season tournament, players are awarded points corresponding with finishing positions, the spread of points awarded depending on the category of tournament. At the end of the regular season the top 125 players in the standings qualify for the FedExCup Playoffs, which comprise four 72-hole stroke play tournaments. Points awarded in the Playoffs are four times that of a standard tournament in the regular season, this multiple having been reduced from five times for the 2014/15 season. After each of the first three playoff tournaments the field is reduced; from 125 to 100 in week 1, from 100 to 70 in week 2 and from 70 to 30 in week 3, leaving the top 30 in the standings to progress to the fourth playoff tournament and contest 'The TOUR Championship' to decide the FedExCup. Prior to The TOUR Championship, points are reset in accordance with the standings, thereby in effect seeding the remaining thirty players but also compressing the points standings such that any competitor in The TOUR Championship enters with a mathematical possibility of winning the FedExCup, though with the top five players having the best chance. For the 2014/15 season the structure of the points reset has been amended in line with the reduction in points awarded in Playoffs (*for the full points system outline see Appendix 1*).

Table 2.1 FedExCup Playoffs schedule summary:

Tournament	1) The Barclays	2) Deutsche Bank Championship	3) BMW Championship	4) The TOUR Championship by Coca Cola
<i>No. Of Players</i>	125	100	70	30
<i>Halfway Cut</i>	Top 70 + ties	Top 70 + ties	None	None
<i>To Progress</i>	Top 100 in FedExCup standings	Top 70 in FedExCup standings	Top 30 in FedExCup standings	<i>Bonus Payout determined by final standings</i>

Note: Separate title sponsorship of individual tournaments by non-sport brands is a traditional marketing feature of professional golf tournaments.

In accordance with the final FedExCup standings, a bonus pool of \$35m is distributed to the top 150 players as per Table 2.2 (includes 25 players who do not qualify for the playoffs).

Table 2.2 FedExCup Bonus Distribution (top 10 plus selected other positions):

Position	Payout	Position	Payout
1	\$10,000,000	15	\$250,000
2	\$3,000,000	20	\$225,000
3	\$2,000,000	25	\$200,000
4	\$1,500,000	30	\$175,000
5	\$1,000,000	31	\$165,000
6	\$500,000	55-70	\$110,000
7	\$700,000	71-80	\$80,000
7	\$600,000	81-100	\$75,000
9	\$550,000	101-125	\$70,000
10	\$500,000	126-150	\$32,000

(PGA TOUR, 2014b)

2.3. Objectives of the FedExCup

Whilst the objectives of the FedExCup are not formally quoted on the PGA TOUR website, the list hereunder compiled by Connolly and Rendleman (2012, p. 2-3) considers the main critical objectives of the FedExCup as understood from press releases of the PGA TOUR and supporting comments made by PGA TOUR commissioner Tim Finchem since the competition's inception.

1. The points system should identify and reward players who have performed exceptionally well throughout the regular season and in the Playoffs. As such, among those who qualify for the Playoffs, performance during the regular season should have a bearing on the final FedExCup standings.
2. The Playoffs should build toward a climactic finish, creating a playoff type feel, holding fan interest and generating significant TV revenue throughout the playoffs.
3. The points system should be structured so that the winner is not determined prior to the final tournament.
4. The points system should give each participant in the final tournament a mathematical chance of winning the FedExCup.
5. The points system should be easy to understand.

3. Literature Review

3.1. Economic Theory: Individualistic Sporting Contests

3.1.1. Competitive Balance and Uncertainty of Outcome

In his seminal study of the economic design of sports contests Szymanski (2003) argues that for individualistic sporting contests players enter the competition to establish who is the best, because this is what the spectators are most interested in, and they compete for a prize that is usually measured in terms of both status and money. Demand for the contest depends to a large extent on the quality of the players competing and the amount of effort they contribute to winning. He argues that individualistic sporting contests conform naturally to a standard contest model, the most basic example of which being a simple footrace organised by a profit-maximising entrepreneur. Individualistic sporting contests should therefore be designed in such a way that all competitors are incentivised to contribute maximum effort. An effective competition design ensures that having the most talent is not a guarantee of success and that effort is rewarded appropriately. In a subsequent analysis Szymanski (2009, p. 47) also suggests that fans prefer to watch a close contest rather than a predictable one – “the uncertainty of outcome hypothesis”. Cairns et al (1986) had previously identified that sporting contests are characterised by three main degrees of unpredictability or ‘uncertainty of outcome’, namely (i) short-run uncertainty of outcome (for one given contest), (ii) long-term uncertainty of outcome (for a season or championship) and (iii) seasonal uncertainty of outcome (long-term over a number of seasons or championships). Szymanski (2009) explains the various forms that this can take: (i) in a match between two teams fans will be less attracted if everyone expects one team to win easily rather than if a close match is expected; (ii) more broadly fans will prefer a league or championship where a number of teams remain in contention until the end of the season rather than where there is a runaway winner; and (iii) a league or championship that is won by different teams every year is likely to be more attractive than if it is dominated by one team or a small number of the same teams. In an analysis of spectators of English football,

Szymanski (2001) had identified that fan preference for a close contest is more relevant to the spectator who has no loyalty or attachment to one team or competitor. Competitive balance is therefore a critical factor in the motivation of these uncommitted fans, labelled “couch potatoes”, to watch the sport, as committed fans are less concerned with the level of competitive balance. Thus it is argued that spectators of individualistic sports, such as golf, are more likely to be uncommitted and are therefore more influenced by competitive balance.

In individual golf tournaments, as competitor fields are large and asymmetric i.e. there are favourites and long shots (Szymanski 2003), short-run uncertainty of outcome tends to be high. Shmanske (2005) finds that in betting markets only a small portion of the variation of outcome in golf tournaments is explained by the odds, illustrating high levels of short-run unpredictability due to the large and asymmetric nature of the competitor fields³. However, the study is limited in that the possibility is left open that other variables not included in the analysis might have predictive power over and above that of the odds. Such variables may include player performance in certain wind conditions or player past success on a particular type of golf course. Section 4 reviews how the above theoretical elements apply to the FedExCup.

3.1.2. Key Competition Design Factors For Individualistic Sports

Szymanski (2003, p. 1146-1147) outlines that the design of asymmetric individualistic sports competitions is influenced by four factors:

- (i) The impact of prizes on incentives to perform (depending on discriminatory power, effort functions and the size of the prize fund);
- (ii) The impact of the distribution, or spread, of the prize fund (second prize, third, etc);
- (iii) The impact of the structure of the contest (number of contestants, simultaneous or sequential contests, and so on);
- (iv) The impact of pre-screening and handicapping.

³Currently on the PGA TOUR competitor fields can comprise up to 156 players.

These factors are applicable to golf tournaments and to a seasonal golf championship such as the FedExCup. Section 4 reviews how these factors and theoretical elements discussed in this section apply to the FedExCup.

3.2. Studies of the FedExCup

The design of the FedExCup from the perspective of economic theory on the design of sports competitions is a relatively unresearched field, however there have been three particularly informative studies undertaken on the FedExCup since 2010.

Hall and Potts (2010) suggest a restructuring of The TOUR Championship finale to a four-day match play tournament limited to the top 28 players in the standings involving eight rounds of 18-hole match play, with players seeded according to their respective positions in the FedExCup points standings, and with one round played each morning and another in the afternoon. The first round would be limited to those seeded 21-28 (seed number 21 plays against seed 28, seed 22 plays against seed 27, etc), with the four winners advancing to round 2. The next four highest seeds (17-20) enter in round 2, with the lowest seeded round 1 winners playing against the highest seeds (e.g. if seed 28 wins he plays against seed 17; the next lowest seeded remaining player would compete against seed number 18, etc). This process would continue through round 5, with players seeded 1-4 not entering the competition until round 6. The final eight players would continue match play for three more rounds, with the eventual winner of the match play competition becoming FedExCup champion. The method of screening stronger contestants by having them enter in later rounds is similar to that which is implemented in some domestic cup competitions in football, e.g. the English FA Cup. The choice of the match play format was considered to reflect the belief of various stakeholders in professional golf that the match play structure is closer to the spirit of a playoff than the existing stroke play format. These authors also argued that their strongly seeded match play design would provide a good chance of an exciting climax,

with the added advantages of: (i) providing all participants with reasonable chance to win the FedExCup; (ii) rewarding players for consistently strong performance during the season; and (iii) guaranteeing participation of marquee players during network television coverage late in the event; thereby satisfying FedExCup objectives whilst also providing a potentially more exciting climax than the existing format.

Following this study, Connolly and Rendleman (2011) undertake an analysis of selection efficiency in the FedExCup. By focusing primarily on The TOUR Championship finale, they seek to determine selection and seeding efficiency by examining if the structure of the FedExCup Playoffs appropriately identifies the relative skills of all participants and results in even distribution of FedExCup prize money. The data used in the analysis is from player scores taken from the 2003-2009 PGA TOUR seasons, limited to players who recorded more than 90 scores, providing a total of 119,060 observations of 18-hole scores for 354 active PGA TOUR players over 321 stroke play tournaments. The data is applied to an empirical model of skill and random variation in performance with a detailed tournament simulation, where the effects of both the tournament qualification (seeding) process and the structure of the tournament playoff and finals are explored. Using this data and model, they initially assess the extent to which the first three FedExCup playoff tournaments deliver the right players into The TOUR Championship and place them into appropriate seeding positions. They then estimate how well the finals structure performs in placing players in proper finishing positions (selection efficiency). The analysis is undertaken by employing a combination of traditional efficiency measures (predictive power, the mean skill level of the winning player and the mean skill ranking of the winner) and new measures of general tournament selection efficiency developed by the authors (Spearman rank order correlation; Spearman's footrule; two skill-based regression slopes relating finishing position to player skill and distribution of prize money; CR statistic measure of miss-order of player skill to prize payout).

Using these same measures of selection efficiency, the authors also assess five different possible formats for The TOUR Championship, including the present format (as of 2011) and the elaborate match play format that had been proposed by Hall and Potts (2010), and conclude that from a purely mathematical standpoint the present format is the most efficient in terms of selection and seeding. They find that the top ranked player entering The TOUR Championship has a 51% probability of winning the FedExCup as against 31% under the Hall and Potts format, though with a caveat applying to both studies that the results are less predictable if a dominant player (e.g. Tiger Woods) is excluded. Whether or not the more efficient existing structure would be favoured over the more volatile Hall and Potts format would depend on what balance of unpredictability of outcome versus the rewarding of leading players for strong seasonal performance would be deemed appropriate by the PGA TOUR organisers.

In a subsequent analysis of tournament selection efficiency introducing new selection measures, Connolly and Rendleman (2012) find that the points reset prior to The TOUR Championship finale and weighting of Playoffs points five times more heavily than regular season events caused less efficiency, more unpredictable results and are therefore critical elements in creating an exciting and dramatic Playoffs series. This weighting of playoffs points at five times that of a standard regular season tournament was reduced to four times for the 2014/5 season, along with a proportionate reduction to the pre TOUR Championship points reset values, (PGA TOUR, 2014c), therefore the study has not assessed the modified system that is now in place.

4. Analysis and Findings

4.1. The Effectiveness of the Design of the FedExCup

This section considers how the FedExCup is effective in meeting the objectives outlined in section 2.3 by incorporating the elements of theory on the design of individualistic sports competitions discussed in section 3 in its organisation and structure. Whilst the seasonal impact of the FedExCup is considered, the main focus of the argument concentrates on the FedExCup Playoffs rather than on the regular season.

4.1.1. Competitive Balance and Uncertainty of Outcome

For the FedExCup, whilst short-run uncertainty of outcome applies to each individual regular or playoff tournament, as a season-long sequential competition it also adds long-term uncertainty of outcome to the PGA TOUR season that previously had not existed. Furthermore, for the FedExCup Playoffs, the top ranked field of contestants by Official World Golf Ranking ('OWGR') provides a high quality and well balanced contest, evidencing effort contributed by the top players. However, the results show that the very top ranked players by OWGR do not always win the FedExCup (See Appendix 2), thus evidencing that inherent in the contest is a combination of long-term uncertainty of outcome and competitive balance, concepts that Walters and Hamil (2011) determine as being synonymous with one another.

4.1.2. Golf - An Individualistic Sport

The FedExCup incorporates the competition design factors outlined by Szymanski (2003) as listed in section 3.1.2 in order to meet its objectives in the following ways:

(i) Prize fund as incentive to perform

- The first prize bonus payout is the largest first prize in individual sport and the seventh largest first prize awarded in all of sport for any regular team or individual competition (the highest being the UEFA Champions League) (Forbes.com, 2013). The FedExCup

is the most financially lucrative competition in golf, therefore it is clearly not lacking in financial incentive. As demonstrated in Appendix 2, the world ranking positions of the top five players in the final standings indicate that the bonus payout does incentivise the top players to perform well in the Playoffs. With regard to individual playoff tournaments, Appendix 3 illustrates that winning a playoff tournament tends to lead to a high overall finish in the final FedExCup standings. Each individual playoff tournament offers its own separate purse, which may act as an incentive in itself in the context of that tournament alone, however it is difficult to assess the individual playoff tournaments as separate from the Playoffs as a whole, since each individual playoff tournament in the context of the Playoffs offers the potential for a higher finishing position in the final overall standings and therefore a higher bonus payout.

- Both the overall FedExCup results and the results of the individual playoff tournaments also align to Ehrenberg and Bognanno's (1990) finding that prize-funds raise the importance of golf tournaments and attract higher quality fields, while also incentivising higher ranked players to perform better in the more important tournaments. Table 4.1 below shows that for the 2014/15 season the first prize-funds for each of the individual playoff tournaments are less than those of the major championships, but the major championships do not include a bonus payout structure, therefore the FedExCup Playoffs ultimately offer superior financial reward. The quality of the FedExCup Playoffs field also shows that the bonus fund effectively deters players from entering substitute tournaments worldwide.

Table 4.1 - Largest Tournament First Prize Funds for the 2014/15 PGA TOUR season

The list below details the prize money awarded to the winner of the specified tournament for the 2014/15 PGA TOUR season.

The Masters*	\$1,800,000
PGA Championship*	\$1,800,000
The Players Championship	\$1,800,000
Open Championship*	\$1,665,787 (GBP/USD)
US Open*	\$1,620,000
WGC Cadillac Doral	\$1,570,000
WGC Cadillac Matchplay	\$1,530,000
WGC Bridgestone	\$1,530,000
4 x FedEx Cup Playoffs	\$1,440,000
WGC HSBC Champions	\$1,400,000

*Denotes Major Championship

Compiled from: PGA TOUR Schedule 2014/15 (PGA TOUR, 2014a)

Whilst the individual tournaments comprising the FedExCup Playoffs are not the most lucrative on the PGA TOUR, it is the FedExCup bonus prize fund that sets it apart from other PGA TOUR competitions in terms of a prize-fund incentive, with the FedExCup champion receiving \$10,000,000. Prior to the 2014/15 season the first prize fund of €1,440,000 for Playoffs tournaments was aligned with the four major championships, however major championship prize money was increased in 2014/15 (Porath, 2014).

(ii) Impact of the distribution, or spread, of the prize fund

The final standings of the FedExCup since its inception indicate that the spread of the bonus fund incentivises players in contention for the top positions to supply more effort, such is the marginal increase in payout towards the top places, whilst also motivating players lower in the standings to perform well to advance to each of the four playoff stages and to ultimately attain a greater bonus.

(iii) Impact of contest structure

Structure of Playoffs Points

- Up to 2013/14, the structure of the points system for the Playoffs rewarded players for strong performance five-fold relative to the regular season. As demonstrated in Appendix 3, results indicate that winners of playoff tournaments have ultimately tended to finish high in the final standings. As highlighted, from the 2014/15 this multiple will reduce to four times, still a sufficient weighting in favour of strong playoff performance.

Emphasis on The TOUR Championship

- The reducing field structure of the Playoffs, with thirty players contesting The TOUR Championship, provides the climactic finale that is desired by the PGA TOUR. The unpredictability of the outcome of The TOUR Championship, contested by a talented and balanced field, identifies with Szymanski's (2009) assertion that the best contest in individualistic sports involves a small number of highly motivated contestants. Furthermore, the effect of the points reset, in its amended format in operation since 2009, creates a final shootout-like scenario evocative of the spirit of playoffs as it exists in other sports, whereby the contestants reach the final on merit, but must still perform well in the finale in order to achieve a satisfactory final position. The points reset provides a mathematical possibility to any player in the final field of thirty to win the FedExCup, though giving the leading players, the top five in particular, the best chance. On six of the eight FedExCup seasons to date, the winner of The TOUR Championship has won the FedExCup. The effect of the points reset system and the non-linear spread of playoff tournament points is that the probability of The TOUR Championship winner finishing top of the final FedExCup standings is high, thus the importance of The TOUR Championship is enhanced so as to reflect a playoff in the traditional sporting sense. The structure of the competition is therefore effective in ensuring that the outcome is not determined prior to The TOUR Championship.

(iv) Impact of pre-screening

- The points reset applied to the top thirty players remaining in the FedExCup standings prior to The TOUR Championship effectively handicaps the higher positioned players and provides all thirty contestants in the field with the mathematical possibility of winning the FedExCup, perhaps most emphatically exemplified by Bill Haas in 2011 (See *Appendix 4*). This system ensures that the winner of the FedExCup cannot be decided prior to the final tournament, therefore ensuring that there is a degree of uncertainty of outcome in the finale. This uncertainty is enhanced by the complexity involved in respect

the permutations that can result in a player winning the FedExCup. Connolly and Rendleman (2011, p. 4-5) summarise the effect of the points reset as follows:

“Although the final points reset guarantees that any player among the top five in FedExCup points who wins The TOUR Championship will also win the FedExCup, when a top player does not win The TOUR Championship, it is very difficult to determine who will actually win the Cup”.

The level of volatility caused by the points reset is illustrated in detail by examples (ii) and (iii) in Appendix 4, where in both cases the leaders in the standings entering The TOUR Championship had a substantial lead prior to the points reset, but ultimately did not win the FedExCup due to the effect of the reset.

4.1.3. Additional Elements

As the FedExCup prolongs general interest in the golf season where previously it had waned in the autumn (Murray, 2013), broadcasting rights and sponsorship contracts are important to note. In 2011 the PGA TOUR signed a nine year television contract, shared between major broadcasters NBC, CBS and Golf Channel (Sports Business Daily, 2011). Given the absence of a substitute elite professional golf tour in the USA, the PGA TOUR benefits from strong bargaining power in respect of its broadcasting rights - a monopolistic position that exists in many sports, as originally identified by Neale (1964). The FedExCup Playoffs are broadcast live and live broadcasting can boost the interest and confer the importance of a sporting competition. The broadcasting deal therefore enables the PGA TOUR to generate additional revenue via the FedExCup. Revenue is also derived from the competition's main sponsor: FedEx, a global leader in express transportation and distribution and a highly reputable US company. For its financial year ending May 2014, FedEx recorded revenue of \$46 billion and had over \$15 billion of shareholder equity on its Balance Sheet (FedEx, 2014). Such is its diversity, scale and importance, FedEx is considered a barometer of the US economy (Hwang, 2012). FedEx's association with the FedExCup under an alignment based sport marketing strategy is mutually beneficial for FedEx and the PGA TOUR in terms

of brand perception. In 2012 FedEx extended its sponsorship of the FedExCup until 2017, ensuring the continuation of the \$35m bonus payout pool (Sports Business Daily, 2012). In addition, the individual playoff tournaments have title sponsorship agreements with globally recognised brands Barclays, Deutsche Bank, BMW and Coca-Cola.

4.2. FedExCup: Key Flaws

4.2.1. Lack of Fan Interest

Television viewership figures in the USA for The TOUR Championship indicate that other tournaments are considered more important by fans of golf. As illustrated in Figure 4.3 below, in the three seasons up to and including 2014, the final round of The TOUR Championship has not drawn more than 2.8m viewers, whereas the final rounds of The Masters and US Open have drawn a minimum of 11.0m and 4.6m viewers respectively (including unusually low figures in 2014 due to relatively unexciting finales in both cases). The final round of the 2014 PGA Championship drew 8.2m viewers due to the exciting finale involving three top ranked players. The final round of the 2013 Open Championship, broadcast in the morning in the US, drew 4.4m viewers due to the contention of US fan favourite Phil Mickelson (Sports Business Daily, 2013). This is clear indication that despite its superior prize fund, the FedExCup is perceived by fans to be less important than major championship tournaments.

Furthermore, there is evidence that other regular season tournaments can attract greater television audiences than the FedExCup finale in specific circumstances, particularly if fan favourite Tiger Woods is involved in a head-to-head finale against another top player. The final round of the 2012 AT&T National featured a head-to-head scenario between long term rivals Tiger Woods and Phil Mickelson, drawing 5.7m viewers (Yoder, 2012). The final round of the 2013 Players Championship featured a similar head-to-head scenario between Tiger Woods and Sergio Garcia, with an additional theatrical element of a prior disagreement

between the two players serving to intensify the contest, drawing 7.6m viewers (PGA TOUR, 2013). These examples indicate that despite its superior prize fund, the FedExCup is perceived to be less important than tournaments where top players are in contention against one another in the finale, as the perceived importance of that tournament becomes enhanced for golf fans irrespective of the prize fund.

Furthermore, for the 2012 season, none of the four Playoffs events featured in the top ten golf telecasts for the year (Paulsen, 2012a) and the final round of The TOUR Championship recorded a lower rating than even the other three Playoffs tournaments (Paulsen, 2012b). In 2014, the final round of The Tour Championship recorded a lower rating than the third round, whilst also recording a lower rating than the final rounds of the first two playoff tournaments, The Barclays and The Deutsche Bank Championship, and a lower rating even than the third round of The Deutsche Bank Championship (Paulsen, 2014).

Given the objective of generating significant broadcasting revenue from the Playoffs, as outlined in section 2.3, these viewership trends should be concerning to the PGA TOUR and its sponsors. Further matters of concern to the organisers and sponsors emerged in 2014 when world number one Rory McIlroy indicated that he felt compelled to compete in the BMW Championship for the sake of the sponsors of the Playoffs, despite having a preference for skipping the tournament in order to remain fresh ahead of the finale tournament and subsequent Ryder Cup (Reiterman, 2014) and when Phil Mickelson withdrew from the Playoffs completely in order to prepare for the Ryder Cup, despite still being in contention to reach The TOUR Championship at the time of his withdrawal (Hawkins, 2014).

Figure 4.3: TOUR Championship comparison with major championships staged in the USA

The following tables illustrate the viewer ratings and viewership figures in the USA (based on Nielsen data) for the specified tournament and round:

The Tour Championship (FedExCup Playoffs finale)

Year	Telecast	Rating	Viewership
2014	Final Round	1.4	2.0m
	Third Round	1.5	2.1m
2013	Final Round	1.4	2.0m
	Third Round	1.2	1.6m
2012	Final Round	2.0	2.8m
	Third Round	2.0	2.8m

Compiled from: <http://www.sportsmediawatch.com/2014/09/pga-tour-2014-tv-ratings-fedex-cup-tour-championship-nbc-viewership/>, accessed January 2015.

The Masters (major championship)

Year	Telecast	Rating	Viewership	Telecast Rank*
2014	Final Round	6.8	11.0m	-
	Third Round	3.9	5.9m	-
2013	Final Round	9.4	14.7m	#23
	Third Round	5.8	8.5m	#43
2012	Final Round	8.0	13.5m	#28
	Third Round	5.0	7.3m	-

Compiled from: <http://www.sportsmediawatch.com/2014/04/the-masters-cbs-averages-lowest-rating-since-1957-sunday-ties-34-year-low/>, accessed January 2015.

US Open (major championship)

Year	Telecast	Rating	Viewership	Telecast Rank*
2014	Final Round	3.0	4.6m	-
2013	Final Round	5.4	8.4m	#44
2012	Final Round	6.0	9.6m	-

Compiled from: <http://www.sportsmediawatch.com/2014/06/u-s-open-final-round-sets-record-low-with-3-0-rating/> (and from 'most watched telecasts' sources below), accessed January 2015.

PGA Championship (major championship)

Year	Telecast	Rating	Viewership	Telecast Rank*
2014	Final Round	5.3	8.2m	(N/A)
2013	Final Round	3.9	5.5m	-
2012	Final Round	3.4	4.9m	-

Compiled from: <http://www.sportsmediawatch.com/2014/08/pga-championship-hits-five-year-high-top-golf-event-since-the-masters/>, accessed January 2015.

*The 'Telecast Rank' column indicates the rank of the specified telecast in the 'most watched sports telecasts' for a specified period in the USA *if* the specified telecast featured in the top rankings.

2014 data was impacted by Winter Olympics and the FIFA World Cup.

This data is compiled from *Most watched telecasts of 2011-2014*:

- <http://www.sportsmediawatch.com/2015/01/most-watched-sporting-events-2014-nfl-super-bowl-world-cup-olympics-bcs-nba-finals-world-series/>,
- <http://www.sportsmediawatch.com/2013/07/the-most-watched-sporting-events-of-2013-so-far/>,
- <http://www.sportsmediawatch.com/2012/07/halftime-the-50-most-viewed-sporting-events-of-2012-so-far/>,
- <http://www.sportsmediawatch.com/2011/07/halftime-top-100-sporting-events-on-broadcast-and-cable-in-2011/>, accessed January 2015.

4.2.2. Possible Causes of Lack of Fan Interest

(i) Scheduling

One possible contributing factor to the low ratings of The TOUR Championship may be that its conclusion takes place on a Sunday afternoon in September and therefore its viewership ratings may be impacted by a scheduling clash with the NFL (Fitzpatrick, 2013), however this could only offer a partial explanation for the perceived relative unimportance of The TOUR Championship compared with other tournaments.

(ii) Major Championship Tradition

As evidenced by the television ratings analysis of major championships in section 4.2.1, golf fans appear to place increased importance on the major championships. There is evidence to indicate that this is also true of the competitors, particularly the top ranked players. It is widely considered that the major championships are the premier events in golf (Forbes.com, 2012). Dominant players such as Tiger Woods aim to peak for the major championships (Brown, 2013) and Woods' quest to equal or surpass Jack Nicklaus' record of eighteen major championship titles is considered a pertinent issue amongst both fans and the media (ESPN.com, 2013). An analysis of the results of the FedExCup since 2007, as shown in Figure 4.4 below, demonstrates a noteworthy trend of inconsistency in the respect that the winners of major championships in a given season do not always feature prominently in the final FedExCup standings in that same season. In the years 2008, 2009, 2010 and 2011 none of the major championship winners featured in the top ten of that year's final FedExCup standings. Only in 2007, 2013 and 2014 did more than one major championship winner finish in the top ten of the FedExCup and only once has a major championship winner in a given year gone on to win that season's FedExCup; Tiger Woods in 2007. In 2008, Pádraig Harrington won two major championships, was voted PGA TOUR Player of the Year (Halleran, 2008), but did not qualify for The TOUR Championship and finished 50th in the final FedExCup standings.

Figure 4.4: Major Championship winners' performance in FedExCup in same season

This table shows the winners of the four major championship tournaments for the specified year and each player's final position in the FedExCup standings in the same year.

Year	The Masters	US Open	Open C'Ship	PGA C'ship
2014	Bubba Watson	Martin Kaymer	Rory McIlroy	Rory McIlroy
	5	16	3	3
2013	Adam Scott	Justin Rose	Phil Mickelson	Jason Dufner
	4	10	9	19
2012	Bubba Watson	Webb Simpson	Ernie Els	Rory McIlroy
	13	16	26	2
2011	Charl Schwartzel	Rory McIlroy	Darren Clarke	Keegan Bradley
	32	NE*	NE	20
2010	Phil Mickelson	Graeme McDowell	Louis Oosthuizen	Martin Kaymer
	13	NE	NE	NE
2009	Angel Cabrera	Lucas Glover	Stewart Cink	Y.E. Yang
	25	17	28	23
2008	Trevor Immelman	Tiger Woods	Padraig Harrington	Padraig Harrington
	16	70**	50	50
2007	Zach Johnson	Angel Cabrera	Padraig Harrington	Tiger Woods
	7	47	29	1

***NE** denotes that the player did not enter the FedExCup.

**In 2008 Tiger Woods was injured and could not complete the FedExCup season.

FedExCup standings compiled from: See Appendix 5 for sources on FedExCup results.

Results show that top ranked players tend to finish high in the FedExCup standings, however there remains a trend indicative of major champions supplying less effort to win the seasonal competition if they have already achieved a major championship victory in that season. This may suggest that the primary goal for top players is not financial gain, but to win major championships, therefore indicating that the FedExCup prize fund may not fully incentivise major champions. Whilst major championship prize money has been increased for the 2014/15 season, the additional financial incentive is unlikely to affect the perceived importance of the majors for both fans and players.

(iii) Excessive Uncertainty of Outcome

The points reset system was first amended for the 2009 season to avoid a scenario occurring whereby the outcome is already determined prior to The TOUR Championship, which was the case in 2008 and would have been the case in 2012 under the original system. Subsequently in 2013 the PGA TOUR began to consider amending the points system to reduce what was perceived to be excessive resulting volatility in respect of the final outcome and to make it fairer to the most consistent players (Hoggard, 2013). As seen in section 2.3, among the objectives of the FedExCup is to reward players who have performed exceptionally well throughout the regular season and that performance during the regular season should have a bearing on the final FedExCup standings. The post-2009 system has largely served this objective for most competitors, but evidently not for the leading player. As discussed in section 4.1.2 and illustrated in Appendix 4, the points reset dramatically affected the 2011 and 2012 competitions in particular, when the players leading the standings entering The TOUR Championship ultimately finished second in the final standings, having built up a substantial advantage over the eventual winner prior to the points reset. As a result, the amendment of the Playoffs points multiple reduced from five times to four times and the corresponding adjustment to the points reset values has been applied for the 2014/15 season, a modification that is designed to reward season-long performance yet maintain the desired element of volatility in the finale series (PGA TOUR, 2014c). Without any adjustment made to the regular season points system, the modification appears to be Playoffs focused and further analysis will be necessary in order to determine whether the modification can be effective in rewarding season-long performance. Of concern is that if the Playoffs points system is perceived to be unfair it may have a demotivating effect on players, despite the magnitude of the bonus pool, and may also result in reduced spectator interest. This presents the question as to whether professional golf is suited to a fair playoff format given the inherent complexity owed to the number of contestants involved.

(iv) Understanding of the Points System

Section 2.3 outlined one of the objectives of the FedExCup as: ‘the points system should be easy to understand’, however it remains commonly inferred that the points system is not easy to understand (Fitzpatrick, 2013) and may complicate the golf fan’s enjoyment of the competition. Furthermore, for the fan who does not fully understand the points system, confusion is increased by the embedded nature of the competitions for The TOUR Championship and the overall seasonal FedExCup. However, assessment of the points system as explained in section 2.2 and detailed in Appendix 1 should clarify that the system, whilst elaborate, is not difficult to understand and therefore it is possible that media portrayal of its complexity is excessive. Whilst the system is relatively more complex than playoffs systems and end-of-season scenarios in other sports, perhaps the more pertinent issue is of a perceived complexity and that the average golf fan is more unwilling to study the system in order to understand it, rather than a case of it being difficult to understand.

5. Recommendations

5.1. Summary

In this research paper it has been argued that the FedExCup, incorporating elements of theory on the design of individualistic sports competitions in its organisation and structure, is in a broad sense effective in meeting most of its objectives. However, critical failings of the FedExCup have been identified: (i) a low level of spectator interest relative to major tournaments and certain head-to-head situations between top players undermining the objective of generating significant television revenue; (ii) evidence that top players do not treat the FedExCup as important as major championships and other tournaments despite the bonus prize incentive; (iii) the potential impact of excessive volatility on the leading player entering The TOUR Championship caused by the reset, which in turn may negatively affect fans’ perceptions of the fairness of competition; and (iv) golf fans’ lack of full understanding of or unwillingness to understand the points system, confused further by the embedded

nature of The TOUR Championship and the overall competition. In light of the failings identified it is argued that the FedExCup is evidently considered neither by top players nor by spectators to be the most important competition in professional golf, despite having the sport's largest prize fund, thereby conflicting with economic theory on prize incentives in sports competitions.

The modification of the Playoffs points system for 2014/15 season may not be sufficient to increase spectator interest to the desired level. Other than this modification, there is no suggestion from the PGA TOUR as to what a suitable alternative structure might entail. The Bleacher Report, a reputable online sports magazine, recommends staging the Playoffs on more difficult courses and changing schedule in an effort to reduce loss of viewership to NFL telecasts, but also concedes that the FedExCup will most likely never rival the importance of major championships (Fitzpatrick, 2013).

Ideally with the benefit of the 2014/15 results following the most recent amendment to the points system, further study is required to address questions raised in this paper in terms of the importance of major championships from both player and fan perspectives, the reasons for viewership ratings trends and criticisms of the points system. Further studies would most likely identify that both players and fans will continue to regard the major championships as more important than the FedExCup, despite the superior monetary award. However, the PGA TOUR may still wish to consider alternative designs to the FedExCup, the Playoffs in particular, in order to enhance its appeal.

5.2. The Reorganisation of the FedExCup

Since it is The TOUR Championship that is the focal point of the Playoffs, the following reorganisation of The TOUR Championship might be considered:

- The TOUR Championship is reduced to three rounds and FedExCup points for The TOUR Championship are distributed at the end of the third (final) round.
- Positions 5 to 30 in the FedExCup are finalised and players receive the appropriate bonus payouts.
- The players in the top four positions in the standings enter an extra day's match play competition⁴ comprising 18-hole morning semi-finals structured as follows: *Player 1 v Player 4* and *Player 2 v Player 3*. This match play competition would not form part of The TOUR Championship, since The TOUR Championship would have concluded on Saturday, but is played on the same golf course on what is currently the final Sunday of the existing finale tournament week.
- The winners of each morning semi-final match contest the final in the afternoon, with the losers contesting a third/fourth place playoff.

This system maintains all of the theoretic elements as described that make the existing system effective, but also has the following advantages:

- Compresses The TOUR Championship to a shorter and more concentrated three-day contest. Given that the field comprises of just thirty players, a three-day rather than a four-day stroke play tournament may enhance spectator interest in The TOUR Championship. The primary focus of The TOUR Championship in respect of the overall FedExCup would become to determine which players would qualify for the Sunday matchplay semi-finals. Any player in the field would have a mathematical chance of finishing in the top four. By adding uncertainty of outcome in respect of the top four positions over three rounds, a new climactic dimension is added to the Saturday's play.
- Under both the existing points system and the new system for 2014/15, the player leading the FedExCup standings entering The TOUR Championship cannot finish any

⁴ An alternative match play system is proposed by Hall and Potts (2010), but this is an extensive eight round format for the top 28 in the standings and is therefore fundamentally different to the structure recommended here.

lower than fourth position in the final standings, therefore ensuring that the leading player is guaranteed to reach the Sunday match play semi-finals.

- The match play finale contested by the top four players introduces a head-to-head scenario, which as discussed (section 4.2.1) tends to draw increased viewership, while also limiting the volatility that can occur in the final round under the existing format.
- The separation of the two distinct competitions: (a) the competition for The TOUR Championship, and (b) the competition for the FedExCup title, makes them complementary rather than embedded, therefore reducing the confusion that currently exists in respect of the overall FedExCup standings on the final Sunday.

This reorganised system is designed to enhance the appeal of the FedExCup finale to golf fans, which may in turn result in an increase in its perceived importance within professional golf to a level more befitting of its bonus prize fund. However, the proposed revised restructure does present complications such as the following:

- Under the current format, the top five players entering The TOUR Championship are guaranteed to win the FedExCup if they win The TOUR Championship. Under the proposed new format, the best reward for one of those players winning The TOUR Championship is a number one seeding for the Sunday matchplay semi-finals, therefore potentially conflicting with the objective of rewarding players for continual strong performance up to that stage.
- It does not eliminate the question of excessive volatility since the player who finishes in fourth position in the final FedExCup standings after The TOUR Championship may still go on to win the FedExCup.
- Whilst the creation of a head-to-head scenario via a match play finale is designed to enhance the appeal to spectators, it must be acknowledged that two of the head-to-head scenarios highlighted in section 4.2.1 involved Tiger Woods. Suggesting the level of identification in golf fans with Tiger Woods is a strong motivational factor for viewership

and that if Tiger Woods is not competing, a head-to-head scenario involving other top players may not necessarily create the same level of fan interest. An argument against this criticism would be that the major championships consistently achieve higher ratings than the FedExCup Playoffs regardless of whether Tiger Woods is in contention, most recently the 2014 PGA Championship.

6. Conclusion

The FedExCup cannot currently match the inherent importance and tradition of the major championships; however, a reorganisation of the FedExCup can make it more attractive to spectators. In this regard it is recommended that the PGA TOUR might consider a reorganisation of The TOUR Championship to a reduced three-day tournament concluding on Saturday and an additional Sunday matchplay finale to the FedExCup between the top four players in the standings after a shortened TOUR Championship. The objective of this proposal is to maintain many of the existing positive elements of the design of the FedExCup, but to also add an alternative sense of drama to its conclusion, thereby potentially making it more attractive to spectators and as a consequence increasing the perceived status of the FedExCup to a level more befitting of its prize fund.

In order to support the conclusions and recommendation in this study, further more detailed analysis would be required to examine: (i) the relationships between player performance and financial incentives (for all players and for major championship winners in the same year); (ii) the relationships between spectator interest in tournaments and financial prizes; and (iii) the reasons for the level of viewership interest in all PGA TOUR tournaments, with the relevant variables to be considered in each area. Furthermore, the proposed Sunday match play finale should be compared with the other alternative formats assessed in the studies of Hall and Potts (2010) and Connolly and Rendleman (2011, 2012) in order to determine the comparative level of unpredictability caused by the proposed new format.

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Appendix 1 – FedExCup Points System

1a - Breakdown of points for regular season by categorisation of tournament

1b - Breakdown of points for each of the four FedExCup Playoffs tournaments

1c - Reset of FedExCup points for the TOUR Championship (final 30 players) with examples

1d - FedExCup bonus payout structure

Appendix 1 information is compiled from:

PGA TOUR. (2014b). "FedExCup 101: What You Need To Know" (Overview and explanation of the FedExCup). PGA TOUR. <http://www.pgatour.com/fedexcup/fedexcup-overview.html>, accessed January 2015.

Appendix 1a - Breakdown of points for regular season by categorisation of tournament

Position	PGA TOUR Event	World Golf Championships Events	Masters, THE PLAYERS, U.S. Open, British Open & PGA	Additional Event
1	500	550	600	300
2	300	315	330	165
3	190	200	210	105
4	135	140	150	80
5	110	115	120	65
6	100	105	110	60
7	90	95	100	55
8	85	89	94	50
9	80	83	88	45
10	75	78	82	40
11	70	73	77	37
12	65	69	72	35
13	60	65	68	32
14	57	62	64	31
15	56	59	61	30
16	55	57	59	30
17	54	55	57	29
18	53	53	55	29
19	52	52	53	28
20	51	51	51	28
21	50	50	50	27
22	49	49	49	27
23	48	48	48	26
24	47	47	47	26
25	46	46	46	25
26	45	45	45	25
27	44	44	44	24
28	43	43	43	24
29	42	42	42	23
30	41	41	41	23
31	40	40	40	22

32	39	39	39	22
33	38	38	38	21
34	37	37	37	21
35	36	36	36	20
36	35	35	35	20
37	34	34	34	19
38	33	33	33	19
39	32	32	32	18
40	31	31	31	18
41	30	30	30	17
42	29	29	29	17
43	28	28	28	16
44	27	27	27	16
45	26	26	26	15
46	25	25	25	15
47	24	24	24	14
48	23	23	23	14
49	22	22	22	13
50	21	21	21	13
51	20	20	20	12
52	19	19	19	12
53	18	18	18	11
54	17	17	17	11
55	16	16	16	10
56	15	15	15	10
57	14	14	14	9
58	13	13	13	9
59	12	12	12	8
60	11	11	11	8
61	10	10	10	7
62	9	9	9	7
63	8	8	8	6
64	7	7	7	6
65	6	6	6	5
66	5	5	5	5
67	4	4	4	4
68	3	3	3	3
69	2	2	2	2
70	1	1	1	1

Note: In cases in which more than 70 players finish the event, points will be awarded below 70th place, decreasing by 0.02 points per position (0.01 points for additional events).

Ties – Points will be distributed to those in tying positions using the same method currently used to distribute prize money when there is a tie. That is, the total points for each tying position will be summed and distributed equally to each player in the tying positions.

Appendix 1b - Breakdown of points for each of the four FedExCup Playoffs tournaments

Pos.	Points Awarded	Pos.	Points Awarded	Pos.	Points Awarded	Pos.	Points Awarded
1	2,000	23	192	44	108	65	24
2	1,200	24	188	45	104	66	20
3	760	25	184	46	100	67	16
4	540	26	180	47	96	68	12
5	440	27	176	48	92	69	8
6	400	28	172	49	88	70	4
7	360	29	168	50	84	71	3.92
8	340	30	164	51	80	72	3.84
9	320	31	160	52	76	73	3.76
10	300	32	156	53	72	74	3.68
11	280	33	152	54	68	75	3.6
12	260	34	148	55	64	76	3.52
13	240	35	144	56	60	77	3.44
14	228	36	140	57	56	78	3.36
15	224	37	136	58	52	79	3.28
16	220	38	132	59	48	80	3.2
17	216	39	128	60	44	81	3.12
18	212	40	124	61	40	82	3.04
19	208	41	120	62	36	83	2.96
20	204	42	116	63	32	84	2.88
21	200	43	112	64	28	85	2.8
22	196						

Appendix 1c - FedExCup Reset Points for The TOUR Championship (final 30 players)

Position	TOUR Championship reseed points	Position	TOUR Championship reseed points
1	2,000	16	304
2	1,800	17	288
3	1,600	18	272
4	1,440	19	256
5	1,280	20	248
6	1,120	21	240
7	960	22	232
8	800	23	224
9	640	24	216
10	480	25	208
11	384	26	200
12	368	27	192
13	352	28	184
14	336	29	176
15	320	30	168

Appendix 1d - FedExCup bonus payout structure

Top 30 Bonus Distribution

Position	Bonus Payout	Position	Bonus Payout
1.	\$10,000,000	16.	\$245,000
2.	\$3,000,000	17.	\$240,000
3.	\$2,000,000	18.	\$235,000
4.	\$1,500,000	19.	\$230,000
5.	\$1,000,000	20.	\$225,000
6.	\$800,000	21.	\$220,000
7.	\$700,000	22.	\$215,000
8.	\$600,000	23.	\$210,000
9.	\$550,000	24.	\$205,000
10.	\$500,000	25.	\$200,000
11.	\$300,000	26.	\$195,000
12.	\$290,000	27.	\$190,000
13.	\$280,000	28.	\$185,000
14.	\$270,000	29.	\$180,000
15.	\$250,000	30.	\$175,000

Other Bonus Distribution

Position	Reset Points	Position	Reset Points
31.	\$165,000	46.	\$129,000
32.	\$155,000	47.	\$128,000
33.	\$150,000	48.	\$127,000
34.	\$145,000	49.	\$126,000
35.	\$142,000	50.	\$125,000
36.	\$140,000	51.	\$120,000
37.	\$138,000	52.	\$115,000
38.	\$137,000	53.	\$114,000
39.	\$136,000	54.	\$113,000
40.	\$135,000	55-70.	\$110,000
41.	\$134,000	71-80.	\$80,000
42.	\$133,000	81-100.	\$75,000
43.	\$132,000	101-125.	\$70,000
44.	\$131,000	126-150.	\$32,000
45.	\$130,000		

Appendix 2 - Top Five in Final FedExCup standings and Position in World Rankings at start of FedExCup Playoffs

The tables below detail the top five players in the FedExCup for each year and their corresponding world ranking at the start of the FedExCup Playoffs, i.e. four playoff tournaments previously. This indicates that some of the top ranked players have tended to perform well in the FedExCup, therefore evidencing a degree of incentivisation, yet that the very highest ranked players do not always win it is reflective of uncertainty of outcome.

2007

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Tiger Woods	1
2	Steve Stricker	14
3	Phil Mickelson	3
4	Rory Sabbatini	13
5	K.J. Choi	11

2008

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Vijay Singh	5
2	Camilo Villegas	42
3	Sergio Garcia	4
4	Anthony Kim	16
5	Jim Furyk	14

2009

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Tiger Woods	1
2	Phil Mickelson	2
3	Steve Stricker	6
4	Jim Furyk	14
5	Sean O'Hair	20

2010

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Jim Furyk	6
2	Matt Kuchar	23
3	Luke Donald	10
4	Charley Hoffman	139
5	Dustin Johnson	24

2011

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Bill Haas	41
2	Webb Simpson	33
3	Luke Donald	1
4	Dustin Johnson	9
5	Justin Rose	37

2012

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Brandt Snedeker	29
2	Rory McIlroy	1
3	Tiger Woods	3
4	Nick Watney	35
5	Phil Mickelson	20

2013

Final FedExCup Rank	Player	World Ranking at start of Playoffs
1	Henrik Stenson	10
2	Tiger Woods	1
3	Steve Stricker	13
4	Adam Scott	4
5	Zach Johnson	24

2014

Final FedExCup Rank	Player	World Ranking at start of FedExCup Playoffs*
1	Billy Horschel	59
2	Chris Kirk	45
3	Rory McIlroy	1
4	Jim Furyk	6
5	Bubba Watson	8

Comment:

In 2009, 2013 and 2014 three players ranked in the top ten at the start of the FedExCup Playoffs ultimately finished in the top five of the FedExCup standings, providing slightly stronger indication than other years that the top talent in the game is incentivised to compete. However, in 2013 and 2014 the players ranked 10th and 59th respectively in the world at the start of the Playoffs ultimately won the FedExCup, showing that the FedExCup continues to achieve objectives of uncertainty of outcome within a balanced and high quality field. There has not been consistent evidence to suggest that top players treat the FedExCup with equal importance to major championships. The number one ranked player in the World Rankings entering the Playoffs ultimately won the FedExCup only on two occasions, Tiger Woods in 2007 and 2009, and not since 2009.

FedExCup results compiled from: See Appendix 5 for sources on FedExCup results

World Ranking data compiled from: Official World Golf Ranking website:

2007: <http://dps.endavadigital.net/owgr/doc/content/archive/2007/owgr33f2007.pdf>

2008: <http://dps.endavadigital.net/owgr/doc/content/archive/2008/owgr33f2008.pdf>

2009: <http://dps.endavadigital.net/owgr/doc/content/archive/2009/owgr34f2009.pdf>

2010: <http://dps.endavadigital.net/owgr/doc/content/archive/2010/owgr34f2010.pdf>

2011: <http://dps.endavadigital.net/owgr/doc/content/archive/2011/owgr34f2011.pdf>

2012: <http://dps.endavadigital.net/owgr/doc/content/archive/2012/owgr33f2012.pdf>

2013: <http://dps.endavadigital.net/owgr/doc/content/archive/2013/owgr33f2013.pdf>

2014: <http://dps.endavadigital.net/owgr/doc/content/archive/2014/owgr33f2014.pdf>

- accessed January 2015.

Appendix 3 – Playoff tournament winners and final FedExCup positions

The following results show that the winners of FedExCup Playoffs tournaments tend to finish in the top five of the final standings, with just two exceptions (Heath Slocum in 2009 and Hunter Mahan in 2014). This shows how the points system rewards tournament wins in the playoffs. This relationship between winning a playoff tournament and ultimately receiving a higher bonus payout shows that players are financially incentivised to perform well in each playoff tournament. Note that the winner of The TOUR Championship has won the FedExCup every year except 2008 (pre points reset change) and 2009.

Playoff Tournament 2007	Winner	Final FedEx Cup Rank
The Barclays	Steve Stricker	2
Deutsche Bank Championship	Phil Mickelson	3
BMW Championship	Tiger Woods	1
TOUR Championship	Tiger Woods	1

Playoff Tournament 2008	Winner	Final FedEx Cup Rank
The Barclays	Vijay Singh	1
Deutsche Bank Championship	Vijay Singh	1
BMW Championship	Camilo Villegas	2
TOUR Championship	Camilo Villegas	2

Playoff Tournament 2009	Winner	Final FedEx Cup Rank
The Barclays	Heath Slocum	8
Deutsche Bank Championship	Steve Stricker	3
BMW Championship	Tiger Woods	1
TOUR Championship	Phil Mickelson	2

Playoff Tournament 2010	Winner	Final FedEx Cup Rank
The Barclays	Matt Kuchar	2
Deutsche Bank Championship	Charley Hoffman	4
BMW Championship	Dustin Johnson	5
TOUR Championship	Jim Furyk	1

Playoff Tournament 2011	Winner	Final FedEx Cup Rank
The Barclays	Dustin Johnson	4
Deutsche Bank Championship	Webb Simpson	2
BMW Championship	Justin Rose	5
TOUR Championship	Bill Haas	1

Playoff Tournament 2012	Winner	Final FedEx Cup Rank
The Barclays	Nick Watney	4
Deutsche Bank Championship	Rory McIlroy	2
BMW Championship	Rory McIlroy	2
TOUR Championship	Brandt Snedeker	1

Playoff Tournament 2013	Winner	Final FedEx Cup Rank
The Barclays	Adam Scott	4
Deutsche Bank Championship	Henrik Stenson	1
BMW Championship	Zach Johnson	5
TOUR Championship	Henrik Stenson	1

Playoff Tournament 2014	Winner	Final FedEx Cup Rank
The Barclays	Hunter Mahan	6
Deutsche Bank Championship	Chris Kirk	2
BMW Championship	Billy Horschel	1
TOUR Championship	Billy Horschel	1

Compiled from: See Appendix 5 for sources on FedExCup results

Appendix 4 – Examples of impact of points reset

Example (i) provides insight into the reason for the amended point reset system introduced in 2009 in place up to and including 2013/14. Examples (ii) and (iii) illustrate volatility caused by the points reset.

Example (i) - Vijay Singh 2008

In 2007 and 2008 the points reset occurred at the start of the FedExCup Playoffs. In 2008, by virtue of winning the first two playoff tournaments and finishing tied 44th in the third, Vijay Singh had amassed enough points ahead of The TOUR Championship such that he could not be overtaken in the final standings, even if he chose not to play in The TOUR Championship, effectively rendering The TOUR Championship meaningless in terms of the race for the overall FedExCup title (Fitzpatrick, 2008). This prompted the PGA TOUR to defer the points reset to The TOUR Championship from 2009 onward.

Example (ii) – Bill Haas 2011

The table below illustrates that having entered The TOUR Championship the 25th ranked player for the season, after the points reset Bill Haas won the FedExCup by winning The TOUR Championship as a result of Webb Simpson's 22nd place finish in the tournament.

2011 FedExCup

Player	Webb Simpson	Bill Haas
FedExCup position after third playoff tournament	1	25
FedExCup Points season total after third playoff tournament: <i>pre-points reset</i>	5,261	1,788
Reset points prior to TOUR Championship	2,500	260
TOUR Championship final position	22	1
Final FedExCup Points Total	2,745	2,760
Final FedExCup Position	2	1
Bonus Payout	\$3,000,000	\$10,000,000

2011 – compiled from:

Standings pre-points reset: http://www.golftoday.co.uk/tours/fedex_cup/week38_11.html

Final standings: http://www.golftoday.co.uk/tours/fedex_cup/week39_11.html

TOUR Championship leaderboard: <http://espn.go.com/golf/leaderboard?tournamentId=917>

Example (iii) – Brandt Snedeker 2012

The table below illustrates how the final standings of the 2012 FedExCup were dramatically impacted by the points reset, again demonstrating the volatility caused by the points reset system:

2012 FedExCup

Player	Rory Mcllroy	Brandt Snedeker
FedExCup position after third playoff tournament	1	5
FedExCup Points season total after third playoff tournament: <i>pre-points reset</i>	7,299	3,357
Reset points prior to TOUR Championship	2,500	1,600
TOUR Championship final position	Tied 10	1
Final FedExCup Points Total	2,827	4,100
Final FedExCup Position	2	1
Bonus Payout	\$3,000,000	\$10,000,000

2012 – compiled from:

Standings pre-points reset: http://www.golftoday.co.uk/tours/fedex_cup/week36-12.html

Final standings: http://www.golftoday.co.uk/tours/fedex_cup/week38-12-final.html

TOUR Championship leaderboard: <http://espn.go.com/golf/leaderboard?tournamentId=1060>

Appendix 5 – FedExCup Results

Full results for all years are not available on the PGA TOUR website, though detailed standings for 2014 are available and an overview of each previous year:

2014: Detailed Standings FedExCup Playoffs:

<http://www.pgatour.com/stats/stat.02671.2014.html>

Winners Archive 2007 – 2014:

<http://www.pgatour.com/fedexcup/winners.html>

2013: <http://www.pgatour.com/fedexcup/reviews/2013-fedexcup-playoffs-review.html>

2012: <http://www.pgatour.com/fedexcup/reviews/2012-fedexcup-playoffs-review.html>

2011: <http://www.pgatour.com/fedexcup/reviews/2011-fedexcup-playoffs-review.html>

2010: <http://www.pgatour.com/fedexcup/reviews/2010-fedexcup-playoffs-review.html>

2009: <http://www.pgatour.com/fedexcup/reviews/2009-fedexcup-playoffs-review.html>

2008: <http://www.pgatour.com/fedexcup/reviews/2008-fedexcup-playoffs-review.html>

2007: <http://www.pgatour.com/fedexcup/reviews/2007-fedexcup-playoffs-review.html>

Full FedExCup results for 2007-2014 are available at Golf Today (www.golftoday.co.uk):

2014: http://www.golftoday.co.uk/tours/fedex_cup/week43-14.html

2013: http://www.golftoday.co.uk/tours/fedex_cup/week38-13.html

2012: http://www.golftoday.co.uk/tours/fedex_cup/week38-12-final.html

2011: http://www.golftoday.co.uk/tours/fedex_cup/week39_11.html

2010: http://www.golftoday.co.uk/tours/fedex_cup/week39_10.html#

2009: http://www.golftoday.co.uk/tours/fedex_cup/final_09.html

2008: http://www.golftoday.co.uk/tours/fedex_cup/final_08.html

2007: http://www.golftoday.co.uk/tours/fedex_cup/week37_07.html

These results have also been checked against results available at ESPN.com:

http://espn.go.com/golf/statistics/_/year/2013/sort/cupPoints

- 'season' auto-filter

Note there is an error on the ESPN site for 2011 (results are not final)

All links accessed January 2015.