

Trends in UFC Pay Per View Sales

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ABSTRACT

The Ultimate Fighting Championship (UFC) has been around since the early 1990's. It allows masters from all forms of martial arts to come together to see who is the best. It all started with an eight man single-elimination tournament named "War of The Worlds"[1]. With the success of this event the UFC was able to begin to do more and more pay per views. However, it is very hard to get people invested in the fights that are booked for the pay per view events. This is why the UFC must have stars that appeal to the casual viewer that allows them to tune in and buy the pay per view. For a few pay per views the UFC managed to break their own sales record but only with the help of stars like Brock Lesnar, Conor McGregor and Ronda Rousey. These fighters bring in the casual audiences that buy every pay per view that they are on. If the UFC wants to continue having success they must find more stars to fill the holes left by them.

1 INTRODUCTION

The Ultimate Fighting Championship (UFC) began in the early 1990's with the eight-man single-elimination tournament called "War of the Worlds".[1] This tournament gave martial-arts masters of various disciplines the opportunity to see which discipline was the best. This event was broadcast live on pay per view which would be later known as UFC 1: the Beginning[1]. Ever since the success of that event, the UFC began to have more and more pay per view events to see which martial art discipline was the best. This allowed more people to get exposed to different forms of martial arts than ever before. Not only were more people watching the UFC thanks to these pay per view events, but the UFC was gaining a significant amount of revenue from these events. This allowed the UFC to pay their fighters more money to fight on more significant events.[3] However, not all pay per view did well. In the beginning it was very hard for the UFC to make any money at all [3]. In 2002 the UFC nearly went out of business. However, business started to pick up after the premier of The Ultimate Fighter in 2005. This allowed many people who were not exposed to Mix Martial Arts (MMA) to watch it for the first time and become fans of the sport[4]. Due to the increase in the number of people who were paying to watch the pay per view, the UFC did not have to close down and they were able to pay their fighters the money that they deserve.[4]

As the UFC continued to grow and start to become a mainstream sport, the pay per sales started to become a very interesting statistic to look at. Many questions arise about why the sales fluctuate the way that they did. Was it because of the quality of the match up, or was it because of the month that the pay per view was held. Not everyone can put fighters together to create a great pay per view. It takes that right match up and the right star power, and many other qualities to put on a great show that people are willing to spend their hard earned money on.[2]

To answer these questions I found a data set that had every pay per view sale number from 2001 to 2017. After I look through the

data, I had to average out all the years and put them together to make a bar graph so it was easier to see the data. This made it easier to see the peaks and valleys that occurred during 2001 to 2017. After seeing that there were peaks in 2009, 2010, 2015 and 2016, I made three new tables that showed the pay per view events for 2009, 2010, 2015 and 2016 respectfully. Then I saw that the reason for the peaks was stars like Brock Lesnar, Conor McGregor and Ronda Rousey. These larger than life fighters help to draw record numbers for the UFC, while the rest of the fighters under contract failed to do so.[1] This also saw UFC pay per view sales dip when these fighters decide to leave or take a break from the UFC and go on to other things.

For the UFC to be successful they must promote fights that the most people are interested in seeing. The UFC sees a big jump in pay per view sales whenever a fighter gets the casual viewer to tune in and buy the pay per view. Examples of these types of fighters that have caught the attention of the casual fans include Brock Lesnar, Conor McGregor and Ronda Rousey. If the UFC wants to continue to see a growth in pay per view sales then they must develop more stars that can attract the casual fan to buy the pay per view or the UFC pay per view sales will continue to decrease as they were when Lesnar, McGregor, and Rousey left.

2 LITERARY REVIEW

In the article [1], the authors discuss which celebrity fighters, such as Conor McGregor, Brock Lesnar, and professional wrestler CM Punk. Through statistical analysis of the UFC pay per view sales over several years, they were able to conclude that most fighters that have appeal to fans outside of the cage have a higher rate of drawing more people to buy pay per views, than fights whose sole focus is how they perform inside that cage. In the article [2], the authors discuss whether fans react differently to different weight classes, star fighters, to when the pay per view falls in a calendar year. Also it is discussed how the show The Ultimate Fighter did not have as big of an impact as people might have once thought. In article [3] it is explained how traditional sports views are different and also similar to views who watch the UFC. According to the authors the UFC has positioned themselves as the most popular Mix Martial Arts organization in North America and the future is looking really good for both the fighters and the promoters of the UFC. In article [4] the authors answer the question of who is the main attraction when it comes to UFC pay per view. Who do the audience want to see fight in the UFC. This article concluded that it was how the fighter performed in the ring that was more significant than star popularity regardless of fighter weight class. In article [5] the authors try and find a way through a combination of empirical regression analysis and industry expertise, for the UFC to become more successful after a recent setback in pay per view sales. This article concluded that it takes more than regression analysis to promote an event that the people want to see, it also takes knowledge of the fight game to put on a great event. In article [6] the authors try and understand the demand for the UFC by looking through

previous papers and research into the live attendances vs watching the fights on television. The article explores the effectiveness on pay per view sales on high tension rivalries. After reading through those articles my research questions are: Does star power effect whether a pay per view is brought or not, and does the UFC fans care if the star is a male or female and do fans care about what weight class the star is in?

3 METHODS

To answer these research questions that I had, I had to find a data set that contained all of the UFC pay per view sales over a number of years to see how they changed over a period of time. After searching the web I came across this data set¹. After downloading this data set, I imported it into my jupyter notebook² to clean and organize the data. Once loading into jupyter notebook, I saw that the data set had all the UFC pay per view sales from 2001 to 2017, first I found the average sales of every year and displayed them in a bar graph to see the trends throughout the eighteen year as seen in 9. After I saw the overall trends I wanted select individual years that had the highest overall average sale. These years happen to be 2009, 2010, 2015 and 2016. After I graphed the pay per view sales of those years as seen in 1,3,5, and 7, I went back to the data set, which had the main event to each pay per view event, to find out who were in the main the events that sold the most pay per views during those particular years. To do this I divided the data set years to make it easier to find out how was in the main event during the highest pay per view events during those years.

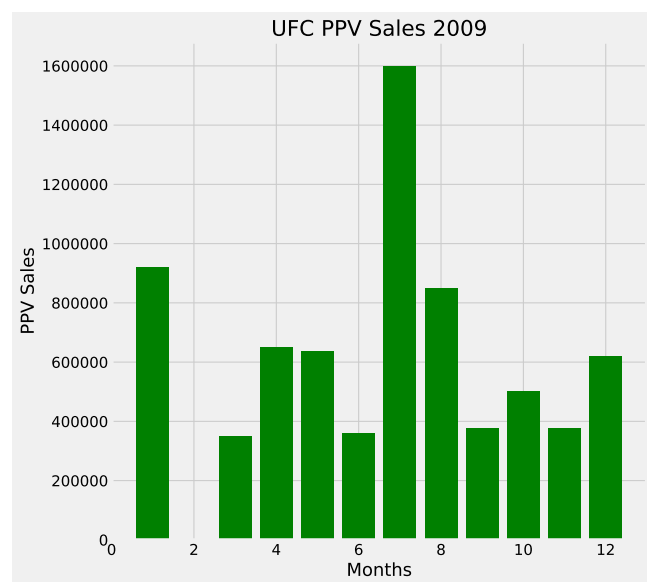


Figure 1: Average UFC PPV Sales from 2009

¹Here is the Web address of the data set: <https://www.kaggle.com/daverosenman/ufc-ppv-sales>

²Here is a link to my jupyter notebook: <https://github.com/JosephPawlowski1/Data-Science/blob/master/Joseph%20Pawlowski%20Midterm%20Project.ipynb>

Year	Month	Day	UFC_Number	Opponent1	Opponent2	PPV
2009	1	17	93	Franklin	Henderson	350000
2009	1	31	94	GSP	Penn	920000
2009	3	7	96	Jackson	Jardine	350000
2009	4	18	97	Silva	Leites	650000
2009	5	23	98	Evans	Machida	635000
2009	6	13	99	Franklin	Silva	360000
2009	7	11	100	Lesnar	Mir	1600000
2009	8	8	101	Penn	Florian	850000
2009	8	29	102	Couture	Nogueira	435000
2009	9	19	103	Franklin	Belfort	375000

Figure 2: Table of every UFC PPV event and who fought in the main event in 2009

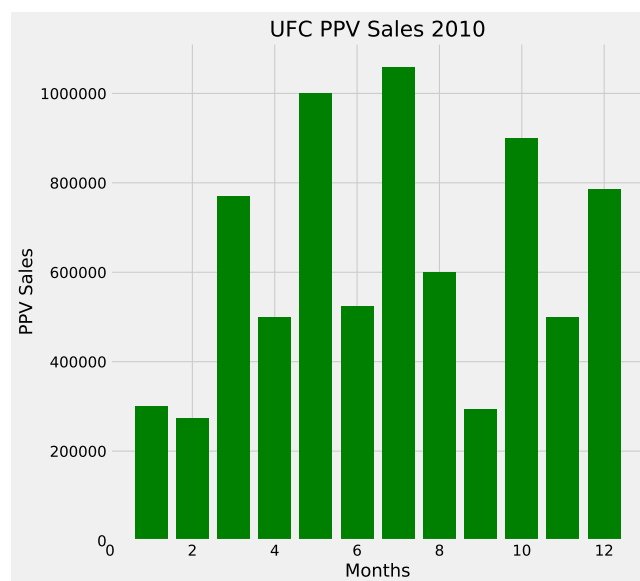


Figure 3: Average UFC PPV Sales from 2010

Year	Month	Day	UFC_Number	Opponent1	Opponent2	PPV
2010	1	2	108	Evans	T.Silva	300000
2010	2	6	109	Couture	Coleman	275000
2010	2	21	110	Nogueira	Velasquez	240000
2010	3	27	111	GSP	Hardy	770000
2010	4	10	112	Silva	Maia	500000
2010	5	8	113	Machida	Rua	520000
2010	5	29	114	Evans	Jackson	1000000
2010	6	12	115	Liddell	Franklin	525000
2010	7	3	116	Lesnar	Carwin	1060000
2010	8	7	117	Silva	Sonnen	600000

Figure 4: Table of every UFC PPV event and who fought in the main event in 2010

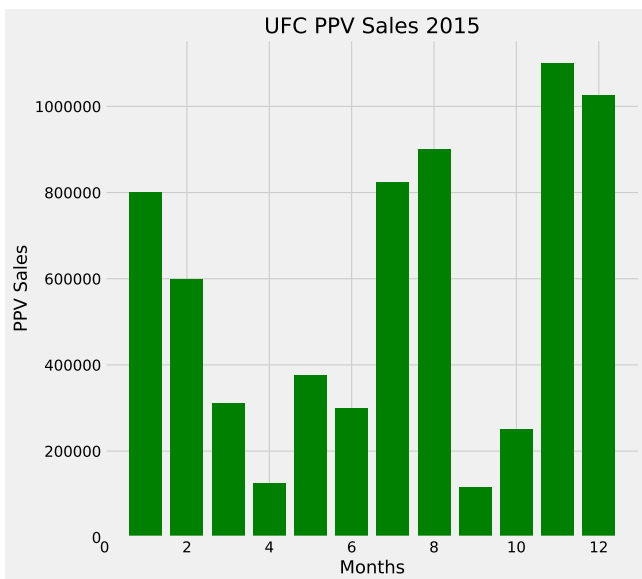


Figure 5: Average UFC PPV Sales from 2010

From the data set I was able to fix what pay per view had the most buys and the pay per view that had the least amount of buys and the fighters who were in the main event of those events. Also the data set gave me the month and year that each event took place. Only with a little data wrangle was I able to get the average pay per view sale for each year that the data set had.

4 RESULTS

After looking over the data set and the article I can concluded that star power does play a massive role is whether a paper view sales are high or low. According to 9 there are peaks in 2009, 2010, 2015 and 2016.

Year	Month	Day	UFC_Number	Opponent1	Opponent2	PPV
2015	1	3	182	Jones	Cormier	800000
2015	1	31	183	Silva	Diaz	650000
2015	2	28	184	Rousey	Zingano	600000
2015	3	14	185	Pettis	Dos Anjos	310000
2015	4	25	186	Johnson	Horiguchi	125000
2015	5	23	187	Johnson	Cormier	375000
2015	6	13	188	Velasquez	Werdum	300000
2015	7	11	189	McGregor	Mendes	825000
2015	8	1	190	Rousey	Correia	900000
2015	9	5	191	Johnson	Dodson	115000

Figure 6: Table of every UFC PPV event and who fought in the main event in 2015

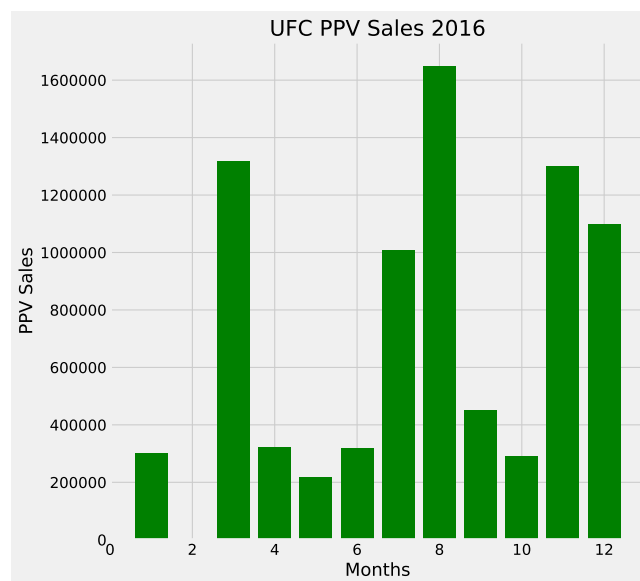


Figure 7: Average UFC PPV Sales from 2016

Year	Month	Day	UFC_Number	Opponent1	Opponent2	PPV
2016	1	2	195	Lawler	Condit	300000
2016	3	5	196	McGregor	Diaz	1317000
2016	4	23	197	Jones	St. Preux	322000
2016	5	14	198	Werdum	Miocic	217000
2016	6	4	199	Rockhold	Bisping	320000
2016	7	9	200	Tate	Nunes	1009000
2016	7	30	201	Lawler	Woodley	240000
2016	8	20	202	McGregor	Diaz	1650000
2016	9	10	203	Miocic	Overeem	450000
2016	10	8	204	Bisping	Henderson	290000

Figure 8: Table of every UFC PPV event and who fought in the main event in 2016

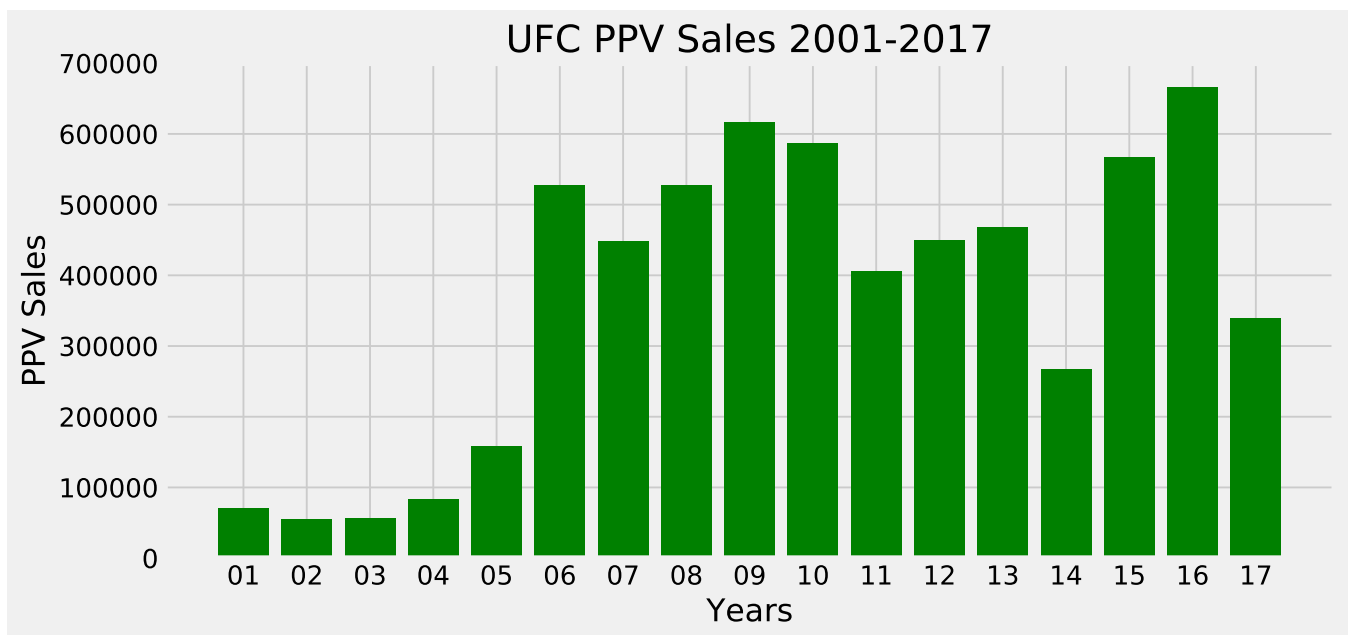


Figure 9: Average UFC PPV Sales from 2001-2017

This is the result of star fighters fighting in the main events of some the pay per view events during those years. The stars that fought in those main events, according to 9, are Brock Lesnar in 2009 and 2010, Conor McGregor in 2016 and Ronda Rousey in 2015 and 2016. Lesnar had a very large fan base from his time in World Wrestling Entertainment (WWE). These fans followed him to the UFC and tuned into every pay per view that he was on. This resulted in a peak in sales for the UFC in 2009 [4]. McGregor, even though he did not come from the WWE, though he success in the UFC and his ability to draw people to watch the fight through his press conference was able to draw lots of people to watch most of his fights in 2016[5]. The UFC created a whole womens division for Rousey and named her the champion back in 2012. After few year she started to become an unbeatable champion and the mainstream media started to take notice. This caused many causal fans to tune into her pay per view fights and therefore increase the number of sales in 2015 and 2016.[2]

Year	Month	Day	UFC_Number	Opponent1	Opponent2	PPV
2016	8	20	202	McGregor	Diaz	1650000
2009	7	11	100	Lesnar	Mir	1600000
2016	3	5	196	McGregor	Diaz	1317000
2016	11	12	205	McGregor	Alvarez	1300000
2016	12	30	207	Nunes	Rousey	1100000
2015	11	15	193	Rousey	Holm	1100000
2010	7	3	116	Lesnar	Carwin	1060000
2006	12	30	66	Liddell	Ortiz	1050000
2015	12	12	194	Aldo	McGregor	1025000

Figure 10: Average UFC PPV Sales from 2001-2017

Also from 9 I can see that there was a drop in sales in 2011 and 2017. The reason behind the lose of pay per sales in 2011 is because Lesnar decided to leave the UFC and go back to the WWE. [4] Since the UFC lost one of their major stars, the UFC pay per view went down. This also happen with McGregor and Rousey in 2017. McGregor took time off of the UFC to fight Floyd Mayweather in a boxing match [1] and Rousey, after she lost a couple of fight in a row took time off and decied to go to the WWE. [1] This proves that with out popular stars, the UFC can not sell as many pay per views. To answer my second research question, it does not matter whether the star fighter is a Heavy weight like Lesnar[4] or a welter weight like McGregor[5] if you popular fighter, then people are going to tune in to see you fight. Also UFC fans do not care if the star fighter is a female or male. Rousey is a female fighter[2] and has one of the highest selling pay per view according to 10

5 DISCUSSION

To put on a successful UFC pay per view, according to my research a big star must be on the card. Without it, your pay per view will suffer the consequences. This is not an easy thing to accomplish. Fighter whether they are popular or not can only fight a few times

a year with out doing major damage to their bodies and their minds. Fighting takes a lot out of you both mentally and physically.[1] This is a problem that promoters have to face on a daily basis.[6] How can they put on a compelling show for the fans if the UFC only has one or two stars that can only fight a few times a year. This is why the UFC must spend time to create more stars that they can use while other stars are resting or recovering from an injury. When people watch any type of entertainment, they want to attach themselves to people who they can relate to and root for.[6] This same logic can be found in the UFC. Before The Ultimate Fighter reality show, no one watched the UFC because they could not relate to the people who were fighting. However after the show aired, more and more people were exposed to the product and were able to latch on to a fight who they like and following him through his journey to and in the UFC. Without stars the UFC could not survive. As seen in 9 there are many peaks and valleys when it comes to UFC pay per view sales. This could only be the result of UFC superstars coming and leaving the UFC. If you look at the top UFC pay per views as seen in 10, almost every main event has either Lesnar, McGregor, or Rousey fighting in the main event. This can not be a consistence. This only proves that in order for the UFC to build their pay per view sales, they must use big name stars or else they will see low sales as they did in 2014 and 2017. Also to be successful and generate sales in the UFC, you must be as good or even better outside the octagon then you are inside the octagon.[1] For example, Brock Lesnar was very successful in the WWE during his initial run. This resulted in the fan following him the UFC and with his success in the UFC, the sales of the pay per view that he was on set records at the time. Also Conor McGregor, was able to gain fan support though the way that he talk during press conferences. This allowed people to become more invested and see if he could back his words up inside the octagon. Another example is Ronda Rousey. She help pave the way for women in the UFC and people wanted witness here making history live on pay per view every time that she fought. In order to increase pay per view sales to the record number that they once had, the UFC has to book superstars that the public can get behind, like a Lesnar, a McGregor, or a Rousey. The records highs do not come from the quality of of the match rather it comes from popularity of the fighter who is fighting.

6 CONCLUSION

For the UFC to have successful pay per view sales they either have talent that gained mainstream appeal from outside the UFC or have home grown talent that also has mainstream appeal fighting in the main event of every pay per view. However, if they use talent that is not originally from the UFC, then they run the risk that that talent eventually leaving the UFC for other ventures like how Lesnar left the UFC to go back to the WWE.[4] Also even if they use talent that gained their fame from inside the UFC, like McGregor, they also might eventually leave the UFC to fight elsewhere like McGregor left to fight in a boxing ring.[5] It does not matter whether the star in the UFC is a heavy weight or a welter weight, if the fighter has something that can attract a casual fan to watch, then the sales number will increase substantially. the only way for the UFC to survive the coming and going of star fighters is to be always be prepared with the next star fighter. If the UFC always have

mainstream stars waiting to fight at the next pay per view, then the casual fan will have no choice but to buy the pay per view and increase the sales number. However, if the UFC fails to have more than one or two mainstream stars at a time, then it will suffer as they try and find a suitable replacement. This will result in the loss of money for the company. Also with less fans tuning in to the pay per view, the amount of casual fans that are likely to return to the watch any UFC event will decrease as well. [5] If the UFC wants to go on for another twenty years, they must find a way to attract casual viewers and the only way to attract those people is to have over the top fighters that appeal to a mainstream audience. Only then will the UFC have success.

7 REFERENCES

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