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Gender Disparity in Marvel's Cinematic Universe: An Analytical Data-driven Perspective

Executive Summary

This study examines gender representation and performance in female-led and female-directed films within the Marvel Cinematic Universe (MCU). Using a mixed-methods approach, quantitative data analysis and qualitative content review are combined to shed light on disparities in directing and lead roles. The research contextualizes gender dynamics within the MCU, emphasizing the need to explore gender disparities in a genre with significant cultural influence and global reach. The study's objectives focus on understanding the representation of women in prominent filmmaking roles within the superhero genre. Methodologically, data collection involved acquiring datasets from platforms like Kaggle, TheNumbers.com, and Wikipedia. Python programming facilitated data extraction and cleaning, compiling datasets on box office profits, production budgets, and directorial information. Key findings from rigorous data analysis reveal nuanced disparities in the representation of female directors and lead characters across MCU films. Statistical comparisons demonstrate variations in domestic box office profits based on the gender of directors, reflecting potential impacts of gender diversity on film performance. The discussion synthesizes results within broader industry contexts, considering external factors like the COVID-19 pandemic's impact on film performance and distribution strategies. It explores critical reception of female-led films and addresses challenges faced by female directors and lead actresses within the MCU. In conclusion, this study provides insights into the underrepresentation of women in key filmmaking roles within the MCU and its potential ramifications for film performance and audience reception. The findings underscore the imperative of promoting gender diversity and equitable representation in Hollywood. This summary was generated by ChatGPT.

Introduction

The Marvel Cinematic Universe, that many know and love, first started with the release of *Iron Man* in 2008, yet, unbeknownst to most current Marvel fans, this move was a risk for the Marvel Studios at the time. They had little idea the impact that it would have on the superhero movie genre forever. As of today, the Marvel Cinematic Universe, or MCU, has grossed over \$29.8 billion with over 33 films released and several original shows currently streaming¹. The success of the studio is one to boast about, especially with the studio having been bought by Disney Studios in 2009, just a year after the release of *Iron Man*². This success from the past almost 16 years marks a drastic change from Marvel Entertainment's bankrupt status in the 90s. By 1993, the comic book industry crashed, and Marvel's cinematic success was lacking, with *Howard the Duck* (1986) being called a "colossal flop." The Studio made to sell the cinematic rights of their most beloved comic book characters to multiple studios, like Sony, Fox, and Universal³. Of course, with time, the studio managed to purchase most of the character rights back to put out billion dollar-generating films, but they still took a gamble in 2007 with the cinematic production of a second-tier character, like *Iron Man*.

As a personal fan of Marvel movies, I can say that I am a major contributor to the overall gross of the cinematic universe, one of my favorite movies being the risky *Iron Man*. While the movie paid off, the studio

still had to prove its muster with the next line of origin movies for the Avengers arc of the MCU. This female Marvel fan went to almost every Marvel movie in theaters and was very excited for the release of the first female led movie, *Captain Marvel* (2019). The first female superhero origin movie being released only 11 years after the resurgence of Marvel Entertainment in 2008. However, at the point of *Captain Marvel's* release, at least 20 movies had been produced and released, not to mention that a few female superhero characters were previously introduced as mere side characters. Many female superheroes were introduced in original tv shows on Disney+, which will not be discussed in this study. For instance, Black Widow was first introduced in *Iron Man 2* (2010), without really fleshing out too much of the back story for her secret identity, Natasha Romanov, until *Avengers* in 2012⁴. She was the only female superhero in the Avengers team, with most of the other female Marvel characters being romantic interests for the titled superhero. To be fair, many of the original Marvel comic books highlighted male superheroes, but it was still a bit disappointing to realize the discrepancy in female character investment for the 21st century.

While I am passionate about Marvel characters and fictional stories with fantastical worlds, I am also quite aware of my place in the world as a woman. So, whenever I see more female representation in media, that isn't stereotypical or lackluster, I am always game to investigate. The same is for the opposite. In this report, I aim to explore the impact of the female status in the MCU movies, which includes not only fictional characters, but the actresses and directors that play a huge part in the production as well. Since I know that the business world is ultimately ran by money, the numbers that I will be looking at will be total investment and payoffs of these Marvel films, so that I can infer why the Disney and Marvel corporations make the type of decisions that they do regarding female representation.

Methodology

To accurately assess the representation and performance of female-led and female-directed films within the Marvel Cinematic Universe, I employed a mixed-methods approach, combining quantitative data analysis with qualitative content review.

Data Collection

To figure out what data I wanted to look at, I first tried to see if there were any free, accessible datasets with Marvel movie quantitative data. This was achieved through simple Google searches. Kaggle had a dataset⁵ that was easily downloadable, which had box office numbers, movie titles and release dates, and reviews from Rotten Tomatoes, which is a website for movie reviews (1 to 100 scale). The data was perfect and in CSV format, but it lacked data past December of 2021. After more searches for Marvel datasets focused on the finances, the findings were a bit lacking. Then I altered my search phrasing because I wanted to focus on production budgets of the movies, ideally marketing. *TheNumbers.com* had a large table⁶ with box office numbers and production budgets of all released movies up to at least April of 2024, which was what I was searching for. Since the data wasn't in a nice format, easily digestible for a data visualization program, like Power BI, I used Python and Jupyter Lab to convert the data into a csv format. Further searching gave me a Wikipedia Page¹ with the list of all current and upcoming Marvel MCU movies, but I knew that I would also have to make the data format more digestible for data visualization software. This table had directors for every movie, which was helpful when compiling the gender of the directors further on in the process. The information I gathered later on was the gender of the directors, at least according to Google. Then, I also put 2 more columns into the table on the csv: Title character name (ensemble if unclear), and their respective

gender (N/A when ensemble). When googling other phrasing for Marvel movies, I also tried to look up general box office numbers over the past few years, since I know that Covid greatly affected the attendance of movie theaters. I know that at least 1 of the female superhero origin movies was released during 2020, the height of Covid, which also created the surge of exclusive paid movie access on streaming platforms. I needed to provide context for any changes in movie attendance patterns that were not necessarily due to gender, but external reasons. “TheNumbers.com” also had a nice table for box office numbers per year⁷, which is what I ended up using to show Covid’s effect on movie gross profit. This table was also extracted through Python. All box office numbers from “TheNumbers.com” are for the North American movie territory (United States, Canada, Puerto Rico, and Guam). One of the last pieces of data I wanted to find out was the rumored salaries for many of the actors/actresses in the movies, but there was no dataset prepared. So, I had to do a little bit of research and use data from articles^{8,9,10}, which may not be the best sources, but were some of the only sources that had numerical data. I could not find salaries for every movie or every actor, but the salaries that I did, I put into an excel table and converted to csv. More information on Python usage will be in the next section.

Jupyter Lab and Python

As I had just finished a certification course in COURSERA, I tried to use some of my knowledge to start URL extraction with the first “TheNumbers.com” table⁶ of Marvel box office profits. I have placed my Python coding in separate pages on GitHub^{24,25,26}. While attempting to extract data, I utilized ChatGPT and its capacity to guide me in designing code whenever I had to fill my gaps in knowledge. “TheNumbers.com” website wasn’t operating as smoothly when calling with an API, so I had to ask ChatGPT for help with that and I got access to the html of the table’s page. From there, I used Python code to extract, clean, and convert the data into a csv. Only minor cleaning was done when I noticed duplicate rows of data. In the csv, I did have to reorganize the information because it wasn’t perfectly formatted as I wanted. I then replicated this entire process for the second “TheNumbers.com” table⁷ which included the yearly box office gross of the past 30 years about. No cleaning for this dataset was done in Python, only in the generated csv when I noticed a formatting issue in the headers (repeat of headers). It’s important to point out that I also normalized the data types, by making the dates into a consistent date format on excel and the profits into numbers format. This is true for both previous tables. The Wikipedia page¹ had multiple tables that continued with the same headers. In the html on Python, the table separations weren’t as clear, so the previous way of finding the table information and making a list from it, did not work. Let me clarify: one Wikipedia table was correctly generated, but one was not. I had to manually search the html for the correct section that I wanted to pull the data out of, and then used a different technique, which was provided for me by ChatGPT. Further normalizing was also done on the Wikipedia tables⁷, where I used the csv file to bring the two tables together on excel and saved the table as a csv from there. From this point, I now had 4 tables of data: one from Kaggle, 2 from “TheNumbers.com”, and one from Wikipedia.

Data Visualization

When figuring out which data visualization platform I wanted to use, two options came up: IBM Cognos Analytics and Power BI. While I am familiar with Tableau, I am not as experienced with it, so I tried Power BI. For some reason, the interface wasn’t working as smoothly with my data at the time, so I decided to switch to IBM Cognos Analytics as I have more experience with it since I took IBM courses on COURSERA. At first, IBM Cognos Analytics was very helpful with visualization, even if I had a few qualms. Then, I needed some calculations for statistics that I wanted to highlight and, since the syntax on the platform wasn’t easy to

understand, I then calculated it myself on excel and converted those stats into a csv. It took me quite a while to really perfect the dashboard because I had a lot of statistics, but once I finished the dashboard, I then converted it into a pdf and uploaded it onto GitHub.

Results

When making the dashboard, I really wanted to highlight the serious difference in the number of movies led by women, fictionally or directorially. While I understand that most of my generated statistics didn't show much of a difference in gross profits from female driven movies, there was still a disparity in female representation. I also wanted to mention that production budgets weren't the best numbers to look at since it seems that most movies have similar budgets. There are some data points that weren't included in the dashboard that I still wanted to highlight. In table 1, we can see that the average profits were quite similar between female and male directed movies, or at least were only 100 million off. It seems big because it is in the millions, but as an average, the MCU movies were not so different in the profit distribution. There will be more on that later. We can see that the median profits for a male directed movie is higher than a female directed movie. This is because 29 of the 33 released MCU films are directed by male directors with many of the several of the MCU films having high box office profits, especially the Avengers series.

Statistics: Domestic Office for Male and Female Directors	
Average Domestic Box Office Profits for Female Directed Movie	\$214,962,995.25
Average Domestic Box Office Profits for Male Directed Movie	\$380,104,437.71
Median for Female Directors	\$174,260,959.50
Median for Male Directors	\$334,201,140.00

Table 1. Statistics: North American domestic box office profits for Male and Female Directors. The currency is the U.S. dollar. This data was generated from the Kaggle dataset⁵.

In the dashboard itself ("Gender Disparity in Marvel's Cinematic Universe", p. 16), I show the percentage of movies directed by female directors, flat out. This percentage is 12%. To greater show what movies female directors oversaw, I laid out a bubble cluster chart. In this chart, the directors are inside of the bubbles and the colors dictate what the title character's gender is of the film they directed. Of the female directors, we can see that 2 of the red circles have female in it and they happen to correspond to female lead characters. The only female director bubble that isn't red is for an ensemble film. This film happens to be *Eternals* (2021). Now, the bubbles show that the female directors happen to direct most the female led movies, but the table to the left shows the actual counts of released movies with female lead characters. It shows 4 female title movies were directed by women, meanwhile, we know that 1 ensemble movie, in the N/A category, was directed by a woman. Since 12% of 33 Marvel movies is 4, we know that the other movie in the table's female character category, of which there were 5, must have been directed by a man. We can see this is true in the bubble chart with a male director in a red bubble, corresponding to a female lead. In the bottom of the dashboard, there is a heat map showing the context of the movie industry for the past 28 years or so. We can see a significant dip in domestic box office profits in 2020. There is a note in the dashboard for this, which describes the SAR-CoV-2 pandemic that happened in 2020. This graph is here to show that, perhaps, the female driven movies (lead character or director) released after during and after

2020 have lower profits than the others in the MCU because of the lasting effects of SARS-CoV-2, or COVID-19. There is no real way to check, but it is important to keep in mind.

The last graph is important to show the average domestic box office per gender of the director. It is simultaneously compared to the number of Marvel movies directed per gender. The count shows how big the distribution is when generating the average domestic box office profit, and the average domestic box office profit can imply the type of success that the movies have depending on the director. We see that the average domestic box office for a singular female director is about \$250 million(M) less than a singular male director. However, there are 23 data points in the single male director category making up the distribution compared to the 3 movies that make up the single female director category. There is a stark difference in counts of movies directed between genders, but there is a similarity in average domestic box office, especially between the “female, male” category and “male” category. They are only 80 million off. This shows that low movie count doesn’t mean that the domestic profits will be low. This only shows that there is a low female representation, despite any high profits. For example, 4 movies in the “male, male” category happen to generate an average profit of \$550M. Remember, these are domestic numbers, not international, so total overall gross will be higher for all Marvel movies, regardless of gender.

Actor/Actress	Character	Superhero Name	Gender	Film Title	Reported Earnings (Gross Profits may be included)
Benedict Cumberback	Steve Strange	Doctor Strange	Male	Doctor Strange in the Multiverse of Madness	\$7,500,000
Bri Larson	Carol Danvers	Captain Marvel	Female	Captain Marvel	\$5,000,000
Chadwick Boseman	T'Challa	Black Panther	Male	Captain America: Civil War	\$700,000
Chadwick Boseman	T'Challa	Black Panther	Male	Black Panther	\$2,000,000
Chris Evans	Steve Rogers	Captain America	Male	Captain America: The First Avenger	\$1,000,000
Chris Evans	Steve Rogers	Captain America	Male	Avengers: Endgame	\$15,000,000
Chris Hemsworth	Thor Odinson	Thor	Male	Thor: Love and Thunder	\$20,000,000
Chris Pratt	Peter Quill	Starlord	Male	Guardians of the Galaxy	\$1,500,000
Chris Pratt	Peter Quill	Starlord	Male	Avengers: Infinity War	\$5,000,000
Jeremy Renner	Clint Barton	Hawkeye	Male	Avengers: Endgame	\$15,000,000
Paul Rudd	Scott Lang	Antman	Male	Avengers: Endgame	\$8,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Iron Man	\$500,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Avengers: Endgame	\$75,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Iron Man 2	\$10,000,000

Robert Downey Jr.	Tony Stark	Iron Man	Male	Avengers	\$50,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Iron Man 3	\$50,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Avengers: Age of Ultron	\$65,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Captain America: Civil War	\$64,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Spider-Man: Homecoming	\$10,000,000
Robert Downey Jr.	Tony Stark	Iron Man	Male	Avengers: Infinity War	\$75,000,000
Scarlett Johansson	Natasha Romanov	Black Widow	Female	Black Widow	\$40,000,000
Tom Holland	Peter Parker	Spider-Man	Male	Spider-Man: No way Home	\$10,000,000

Table 2. Salaries of multiple lead actors in several Marvel movies. These numbers don't always include the gross profits from the movie, but there is no indication of which salary does include them because these salaries are reported on the internet from news sources. These salaries are compiled by me by using a Yahoo article¹⁰, an article that uses Business Insider numbers⁹, and a Comic Book Resource web article⁸.

In Table 2, I have listed multiple salaries for many of the lead actors in the MCU films. There is an abundance of data on Robert Downey Jr.'s salaries, so he has many rows of data attached to his name. There are only 2 actresses with data because those salaries happened to be accessible on Google. There is a \$35M difference in salary between Brie Larson and Scarlett Johansson. These movies that they were paid for were technically their title films, but Scarlett Johansson had appeared in previous MCU movies, while this was Brie Larson's first appearance in the MCU. This could explain the large difference in salaries, plus Scarlett Johansson had a dispute with Disney and was awarded more money. More on this will be included in the discussion. When looking at Robert Downey Jr.'s salaries, there is a large range: \$500k to \$75M. While the actor was established already in the movie industry, the movie that paid him \$500k, *Iron Man*, was a risk for Marvel and had paid the actor a lower price because of this. It's also helpful to mention that Robert Downey Jr. had a scandalous past and wasn't as safe a choice as some other unproblematic actors at the time. The movie where he was paid \$75M is the last movie he ever appears in the MCU because his character dies. He had been in many films before that, which possibly contributed to his higher salary. When comparing Scarlett Johansson's salary of \$40M with Robert Downey Jr.'s \$75M, we can see a stark difference. There are always reasons, but this is just an observation. Brie Larson was paid quite similarly to some of her fellow MCU actors: Chris Pratt with \$5M, Paul Rudd with \$8M, Benedict Cumberbatch with \$7.5M. If we compare their superhero origin movies, Brie Larson was paid more than Chris Evans, with his salary being \$1M for *Captain America: The First Avenger* (2011), Chris Pratt, with his salary being \$1.5M for *Guardians of the Galaxy* (2014), and Chadwick Boseman, with his salary being \$2M for *Black Panther* (2018). It's important to mention, however, that those actors weren't as far along in their careers as Brie Larson was when she got the part. Chadwick Boseman may be the exception. These salaries are only reportedly true, however, so they may not be as accurate as the actual salary paid. There is not a lot of salary information online for many of these actors' movies.

Movie Title	Gender of Title Character	Audience Score
Captain Marvel	Female	45
Black Widow	Female	91
Black Panther: Wakanda Forever	Female	94
The Marvels	Female	82
Iron Man	Male	91
The Incredible Hulk	Male	70
Iron Man 2	Male	71
Thor	Male	76
Captain America: The First Avenger	Male	75
Iron Man 3	Male	78
Thor: The Dark World	Male	75
Captain America: The Winter Soldier	Male	92
Guardians of the Galaxy	Male	92
Ant-Man	Male	85
Captain America: Civil War	Male	89
Doctor Strange	Male	86
Spider-Man: Homecoming	Male	87
Thor: Ragnarok	Male	87
Black Panther	Male	79
Ant-Man and the Wasp	Male	81
Spider-Man: Far From Home	Male	95
Shang-Chi and the Legend of the Ten Rings	Male	98
Spider-Man: No Way Home	Male	98
Doctor Strange in the Multiverse of Madness	Male	85
Thor: Love and Thunder	Male	76
Ant-Man and the Wasp: Quantumania	Male	82
The Avengers	N/A	91
Avengers: Age of Ultron	N/A	83
Guardians of the Galaxy Vol. 2	N/A	87
Avengers: Infinity War	N/A	91
Avengers: End Game	N/A	90
Eternals	N/A	78
Guardians of the Galaxy Vol 3	N/A	94

Table 3. Ratings of MCU movies from RottenTomatoes.com from the Kaggle dataset⁵. These are audience scores, which are ratings from average person who have seen the movies. These are not critic ratings. The gender of the lead character is also included. The scores are out of 100.

In table 3, there are 3 columns: MCU movie, the gender of the title character and the audience scores from Rotten Tomatoes. For *Captain Marvel*, the audience score is a low 45 out of 100. The other 3 movies with female leads have rather high ratings. The next lowest movie compared to *Captain Marvel* is *The Incredible Hulk* (2008) with 70 out of 100. This is a rather interesting observation, which I will delve into in the

discussion. All other movies have ratings above 70, even for those with a rather rocky beginning like *Eternals*¹¹. The first female lead movie that was released was *Captain Marvel*, and this movie also had the first female director in the MCU.

Overall, there are clear differences in female representation and treatment, but there doesn't seem to be enough quantitative data to really make the direct comparison with male directed or male title movies. However, I will continue to do so.

Discussion

To begin, I'd like to return to the distribution of the domestic box office profits of the Marvel films. These profits are displayed graphically on the dashboard (p. 16) with some key statistics in table1. I wish to shed light on why the male directed films seem to have lower average and median statistics than expected, since some movies had record high profits. This is due to the wide distribution of movie profits when Marvel was starting out making movies versus later dominating the Superhero genre with the Avengers films. Some examples of lower grossing films are *Iron Man* with Jon Favreau as the director and a domestic profit margin of \$318M. One of the lowest grossing films at \$134M happened to be *The Incredible Hulk*, released that same year, also with a male director. These examples show that the data range for male directors can have a low minimum, despite successes like *Avengers: Endgame* (2019) directed by the Russo brothers, with a domestic profit of \$858M. These domestic box office numbers are from the Kaggle dataset⁵. Meanwhile, with only 12% of released movies having at least 1 female director, the distribution of movies with female directors has fewer data values to choose from with the range being low at \$85M and high at \$426M. There are only four movies that were directed by women in the MCU. Three of these have female leads and the other is an ensemble movie. There is one other movie that has a female lead and was directed by a male director: *Black Panther: Wakanda Forever* (2022). However, this is a sequel of a film with a male lead, T'Challa, whose actor, Chadwick Boseman, unfortunately passed before the sequel could be finished. Realistically, if the actor had not passed away, then the lead of this sequel would have been male, reducing the number of female lead movies in the MCU from 4 to 3. I believe this is important because it shows the intentions of Marvel Entertainment and Disney Studios, who seem to sidetrack many of the beloved female characters into part of the team or a villain of her own story like they did with Scarlet Witch. I will not delve into the plot of these characters, but as a fan, this does stand out to me. All in all, just because a movie was directed by a woman, it doesn't mean that the profits were low. As I stated in the results section of this paper, the count of movies corresponding to the director's gender does not totally indicate an expected profit to be low or high. It simply shows that some movies were more widely received than others. It still shows the lack of varied distribution for female directors because male directors have produced 29 out of the 33 released movies if I don't count the female and male director partnership for *Captain Marvel*.

It's important to also talk about the effect that the pandemic in 2020 had on movie performance. This data can be seen briefly on the dashboard (p. 16), but more details will be discussed here. In 2019, the domestic box office profits for the North American movie industry were around \$13 billion, but they dropped significantly to around \$2 billion in 2020⁷. So, it was not only the MCU that was affected, but the entire industry as well. Just to briefly explain the effect of the pandemic around the world, movie theaters and cinemas closed due to low attendance, many movie productions were halted, delayed, or cancelled totally, yet streaming services actually increased in popularity¹². One movie that was greatly affected by the Covid

pandemic was *Black Widow* (2021), the second female title movie to be released by the MCU after *Captain Marvel* the year before. It was released in the middle of 2021 due to delays from Covid-19, but at the time of the pandemic, no one knew when we would ever return to normal life. This meant that there wasn't low attendance for a month or two, but instead the rest of the year was affected by the pandemic and even the years following. In 2024, the domestic box office has still not recovered because currently, the number sits at \$7 billion. However, in 2020, Disney had already created their streaming service, Disney+, and decided to release *Black Widow* there along with the traditional cinematic release in theaters. The movie was brought on the streaming service for a month for \$30 with every purchase, but once bought, it was free to rewatch¹³. Currently, the movie is free to access.

For the lead actress in *Black Widow*, Scarlett Johansson, this release on Disney+ was not ideal. While the movie brought in \$60M worldwide for the streaming service with most being from the U.S.¹⁴, Scarlett Johansson had her concerns with the profits and decided to act. The actress launched a lawsuit when Disney decided to do a hybrid release of the movie, where it would be released in theaters and on the streaming service. She claimed that her profits were based on the box office success of the film, but at the time, the film "suffered a precipitous decline of 67% in its second week on release", which was the "worst recorded" by any MCU movie¹⁵. Johansson wanted to change her contract, and Disney was originally very distressed with this lawsuit because Disney's decision was based on the pandemic's effect on the industry. They also disclosed that Johansson was originally making \$20M for the movie upfront. Johansson in return called the studio "misogynistic"¹⁵. The lawsuit was eventually settled, and it seems the amount doubled as we reportedly have record that her salary was \$40M. While her actions may be controversial for some people, I think it's important to look at her original salary of \$20M. In table 3, we see that Robert Downey Jr., a repeat actor in the MCU, was reportedly paid higher than \$40M each for 6 of his 9 Marvel movies. I'd like to explain this significance. He had been featured in many movies and considered an integral part of the Avengers team. This might make you consider that his higher salary was earned. I won't be going against that, but Scarlett Johansson, a popular Hollywood actress and household name, had also been featured in many MCU movies before her title film, bringing her MCU contribution to a total of 8 movies. She was first in *Iron Man 2* and was the only female superhero of the cast in *Avengers*, which dominated the box office. Personally, I saw that film many times in theaters, and it was important that she was in that film to represent female superheroes, the few that were present at the time.

While female characters were continually introduced in later films, *Black Widow* was still the main female character in all ensemble films for the Avengers series. She never got her own film, until her character died in *Avengers: Endgame*. She was always part of the team or a side character, helping the male title superhero with his journey. We do not know her pay for the Avengers films, but we can assume that, after her successful career in the MCU, \$20M wasn't the pay she was expecting for her last film. Do I think she went about her pay in the wrong way? No, not when comparing her last salary being \$35M lower than Robert Downey Jr.'s. Others may look down upon her actions, but if she was confident enough to call out the Disney Studios for being "misogynistic" then I'm not going to fault her for it. Johansson clearly had standards for her treatment as an important and valued part of the MCU. Without *Black Widow*, there would simply not have been a female superhero in the MCU, until *Guardians of the Galaxy* in 2014. This was an ensemble film, but Gamora, played by Zoe Saldana, was the *only* female superhero of the team. The difference between 2008, *Iron Man's* release, and 2014, *Guardians of the Galaxy's* release, is only 6 years. However, about half of the world's population is made up of women. For little girls, female superheroes and strong women in media are important to see. This is why *Captain Marvel's* release in 2019 was very important, and more female lead

movies should have been released after that. Or even before. However, the stats are still at a meager 4 out of 33 released films. One of the four is an ensemble film, *The Marvels* (2023), but the ensemble is made strictly of women and so this movie counts as a female lead movie.

One observation that could affect Disney and Marvel's decision to not put out as many female driven films could have a great deal to do with the audience reception of *Captain Marvel*, which released in 2019. Before I go into that, I'd like to make a comparison between *The Incredible Hulk* and *Captain Marvel*. *The Incredible Hulk* movie was notoriously known as the worst Marvel movie in the MCU. I have actually never seen it, despite being a fan of the MCU. I can make an inference on its bad effect of the MCU by pointing out that the Hulk character never had another movie as the lone lead and was featured in only ensemble films with the original actor replaced by Mark Ruffalo. Looking at the audience scores for these two movies, *The Incredible Hulk* has a rating of 70, while the female led film is at a pitiful 45. To me, with a perceived context of this previously held belief about the breakout Hulk film, the stark contrast in ratings is unbelievable. Now, I want to correct my previous statement because it being the worst film was what I had always heard. However, according to Wikipedia, the reception was mixed. People generally had favorable reviews for the movie with some people enjoying its action and revival of the character, while others criticized the effects and the plot when comparing it to *Iron Man*, which was a smash hit the year before¹⁶. So, overall, a 70% rating makes perfect sense, even if it is still not a regularly referenced or brought up movie when discussing the MCU. It seems that people preferred it as a standalone, but it did not deliver as expected for the MCU. Of course this was the second MCU movie, so it not performing as hoped compared to *Iron Man* is no big deal. One could argue that *Captain Marvel's* reception was also mixed. But if I could describe the reception of *Captain Marvel*, you, the reader, would be astounded at how harsh it gets.

This was the first female directed movie, partnered with a man, and first female superhero titled movie to be released for the MCU. The audience ratings were not ideal for this movie. I remember attending the movie and I was very excited, but it was a bit lackluster in my opinion. However, I probably would have rated it at 68 or 70. The current Rotten Tomatoes rating for *Captain Marvel* is 45, which is in Table 3. In fact, the reception was so negative from "fans" that there were articles written on the subject. One article is from *The New York Times*¹⁷. Apparently, negative comments were accumulating even before the movie was released. These were targeted both at the movie and at the actress, Brie Larson. It was so bad in fact, that around the initial time of this hate bandwagon, Rotten Tomatoes, a popular movie review site, had changed their rules and regulations to eliminate prerelease reviews. They said it was due to an "uptick in non-constructive input, sometimes bordering on trolling¹⁸," but the site never stated what movie or movies caused this trolling. We can assume *Captain Marvel*, which is what *The New York Times* also did in their article. One cause of this hatred was due to the growing movement of the cinematic industry to bring in more racial and gender-specific representation. Commenters also seemed to hate how Larson was very outspoken about the lack of diversity in the movie world. In fact, some of her comments can be seen as very feminist and people could perceive this in a negative way. Before the release, the review on Rotten Tomatoes dropped to 27 percent, half the rating it is now. This was a "want to see" score, but after the site's changes and the "want to see" scores removal, the initial audience rating was still the worst for all MCU movies so far: 63¹⁷. It's important to mention that despite these efforts, the movie was a success for the opening weekend and weeks to come. This negative trolling did not only attack *Captain Marvel*, but many other films perceived to be feminist or politically correct.

It is hard to see the forest for the trees when met with all this criticism, but there were many people rushing to defend the movie against these attacks, with people commenting on the haters' lack of security in themselves. It seems that the positive remarks weren't so biased as to not point out the movie's faults, but they still did not totally write off the movie. One person to defend Brie Larson was her costar and highly regarded actor Samuel L. Jackson. He stood up for her and stated that "incel dudes" hate strong women, Brie Larson being one of the stronger ones he knows¹⁹. While she may have been a strong person, this movie seemed to have a great impact on the actress' life as well. When searching "hate towards Brie Larson" on Google, there are many forums and blogs describing the hate. So, did the actress succumb to the hate. No, in fact she discussed this in her own Youtube video about her mental health. She said that playing an inspirational character, like Captain Marvel, had "helped her on her journey toward self-confidence"²⁰. Larson has still been seen wrestling with her reception in the MCU, asking in an interview if people even wanted her to keep playing the character²¹. I can never understand people taking apart actors simply because they do not like the film or character, but this leads to causes of concern for future female lead movies in any films with a predominantly male fanbase. I can only infer that Disney and Marvel took notice of this because the domestic box office for *The Marvels* was much lower and, while I do not have numbers for the marketing, I do know that I never really saw much marketing for the movie. Or if I did, the comments surrounding it were not bursting with excitement. So, I simply can assume that the marketing team did not put in as much effort for *The Marvels* due to the past circumstance with Brie Larson and *Captain Marvel*. I can only quote someone who wrote of a similar observation in their blog²²:

It [*The Marvels*] underperformed because Disney was scared it might be called "woke" and that drove the marketing to discourage audiences who are interested in seeing projects that are diverse and progressive. Disney succeeded in making it look generic, in convincing people it was "safer" and more uneventful than they anticipated. Who the hell goes to see a film because the marketing makes it look less eventful and more cowardly than they expected?

To bring this back to female directors, there is still not enough female representation for directors in the entire Hollywood industry. It is getting better, but there is still progress to be made. In 2023, "women accounted for 22% of all directors, writers, producers, executive producers, editors and cinematographers working on the 250 top-grossing films"²³. This is disappointing in two ways: the blatant lack of progress, and in the fact that female moviegoers, like me, are not surprised. Should we really have expected any different? And, could it be due to lower reception for these movies? Not when the *Variety* article²³ explicitly states that Greta Gerwig's *'Barbie'* was the "year's biggest box office winner" and "made history as the highest-grossing movie directed by a woman." For the MCU specifically, I highly doubt that Marvel fans will not attend a movie because the director is a woman. With that said, it seems that the reception for Marvel movies is more critical for breakout female leads. Additionally, most of the films with female leads happen to be directed by women. There is no separating the two, at least now. So, there is an impact on the director herself even if it is just a personal one, and who can say why Disney and Marvel haven't decided to pursue a female director for a male led movie yet. Once again, I would not count *Eternals* because it was an ensemble movie and wasn't the most anticipated movie, unlike the Avengers series.

Conclusion

Did I prove without a reasonable doubt that Marvel and Disney use the monetary impacts of female movies to make their decisions? No because these movies are still successes despite haters. Did I prove that there was a severe lack of representation for women in the MCU? Yes, through a mix of audience reception and

simple percentages of female directors and characters. Ultimately, this journey was a complex one. What I perceived to be one case, proved to be another especially for domestic box office of movies like *Captain Marvel* and reception of movies like *The Incredible Hulk*. There was data to be found for the MCU, but it simply was not enough to show exactly the effect of female representation in the greater scheme of the superhero genre. Data-driven insights revealed a complicated narrative, reflecting both progress and persistent challenges for female-led and female-directed films within the MCU. The discussion of pivotal films like *Captain Marvel* and *Black Widow* illuminated the impact of audience reception on industry decision-making. People seem to be quick to criticize women in the filmmaking world, and actresses are fighting back. Brie Larson and Scarlett Johansson are outspoken, yet still find success in their careers. Not every woman can say the same in their experiences. This is all to say that Marvel and Disney have a lot of work to do to make up for their lack of effort with the female population. Girls are not just princesses but are kick-ass superheroes and spies. Women are not just their bodies but are brain and brawn. We are not just meant to be character development for a man. I only hope that my daughters and granddaughters can see more characters like Black Widow and Captain Marvel, especially of a diverse background. The phrase is "Art imitates life," so it ultimately should. Shouldn't it?

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Gender Disparity in Marvel's Cinematic Universe

