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"THE WOMEN POWER: HOW FEMALE PRODUCERS CAN HELP NARROW THE GENDER PAY GAP"

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<u>Summary</u>

Introduction

As centuries passed, women made their way out of the shadow of men and now it has been a long time since women have joined the workforce alongside men. At the beginning they were stenographers, secretaries, nurses, midwives, occupations that at the time were seen more ladylike and always below men. As years passed by, women wanted more, they wanted to become managers, CEOs, doctors, mayors, congresswomen, Presidents. The turning points in history where female labour participation increased have been the World War II and the post-war period (1950-1990). Despite that wage for women have been lagging behind men's.

The **gender pay gap** is a problem that runs through our society in every single work field. It means that women that have the same characteristics and job as men are paid less. It has been studied and studied many times in economics in the past years and for many workplaces like in finance, sports, music, academic and also in education before entering the workforce. The result is still the same: there is a consistent disparity between women and men. We can find the reasons for this in many forms like simple and pure discrimination, stereotypes, the existence of "glass ceiling" for the most remunerative occupations. Economists have tried to explain it with rational theories like the taste-based discrimination by Becker (1957), the statistical discrimination by Arrow (1973), the human capital theory, gender role theory and so on.

Now, a lot of people would think that in certain industries such as Hollywood there would not be this problem of gender pay gap. Well, those people are wrong. The literature on this topic is not very vast but the few papers that studied it always find the same result: actresses are paid less than actors. In the past years proof of this came out: in 2014 the Sony hack revealed that different wages were granted for actresses and actors for the same work hours; in 2015 during her speech at the Oscar after winning for Best Supporting Actress, Patricia Arquette took the opportunity to advocate for equal pay saying that "It's our time to have wage equality once and for all and equal rights for women in the United States of America." and receive the applause from her fellow colleagues. And again in 2016 Michelle Williams received a lower salary for the reshooting of some scenes with respect to Mark Walberg. The reason why actresses are paid less can be attributed historically to how Hollywood used to be structured (star system) and presently to the method of payment currently in use (quote system). Another reason and most important is connected to representation. As of 2019 the percentage of female leading characters were almost as half as the male leading characters, although increasing. Behind the scene the situation is even more dramatic. Directors, producers, executive producers, writers, cinematographer, editors are still all male-dominated professions

with only small percentage of women. Since producers have a crucial role in decision-making for the movies and it has been proven that female CEOs have a positive effect on female employees' outcomes, the aim of this work is to investigate whether female producers can help actresses gain a higher salary. I have analysed a comprehensive dataset personally constructed by drawing up a list of stars for which I knew salaries were available and collected the related movie variables (budget, production company, director, producer year of release, producer gender).

Final results show that having a same gender producer increases a star's wage and interestingly enough this positive effect is the same for women and men. Moreover I find that the most important determinants for wages are: age, experience and genre of the movie. More precisely age has a quadratic nature as wages increase up to a certain point, only to decrease afterwards. Actresses also experience "genre-segregation" as they have leading roles in movie genres that pay lower salaries. Robustness check on the omitted variable bias using the Oster test, show that the bias is present and quite strong.

My work is divided as follow: Chapter I presents the existence and the magnitude of the gender pay gap in some relevant fields and the theories that have emerged through the years trying to explain it; Chapter II enters in more detail on what is the situation in Hollywood today for women, their representation and how this industry has functioned throughout the years from the star system to the quote system and how these changes affected actresses and actors salaries. It also gets into detail of what is the role of the producer nowadays and the scandal behind Harvey Weinstein. Chapter III includes data, some descriptive statistics about my sample and the methodology used for this work. Chapter IV shows the results and Chapter V exhibits my conclusions.

Chapter I: The Man

"I'm so sick of running as fast as I can, wondering if I'd get there quicker if I was a man" (Taylor Swift, "The Man", Lover, 2019). This lyric captures perfectly what women feel when they see that men earn more than them, they receive more job offers, get more promotions, that they are not subject to double standards or stereotypes (if they are white of course).

According to the U.S. Census Bureau the gender pay gap has narrowed over the last 50 years but still present. In 2016, median earnings for women was $40,675 compared with $50,741 for men. The largest was found within the finance and sales professions which are for the most dominated by males. On average, in the OECD countries, full time female employees have wages 13.5% lower than full-time male employees in 2018.

Even though it has narrowed through the years it's still present everywhere in our society and in every occupations: firms, universities, school, sports, music industry and Hollywood.

Being a secular problem, the economic literature on gender, the role of women in society and the factors behind a still present disparity with men, has grown over the years. Many studies use empirical evidence and/or experiments to comprehend what historical changes in society itself have had an effect on the rise of women participation and why, even though in convergence, the gender pay gap is still here. In this Chapter I will present the evolution of the women in the labour market and then the theories that have emerged (all intertwined with each other) in order to explain why we can't seem to get rid of the gender gap problem: discrimination, gender role theory, human capital theory, occupational segregation and undervaluation theory.

1.1 Evolution of women's workforce participation

Throughout history women have fought to find their rightful place in the society and to be treated like equal. Until the 20th century women did not have the right to vote and therefore to participate to one of the most important aspect of modern society. They were deemed to succumb to the whims of their fathers and their husbands once married. They were not allowed to use their property or their endowment until they had found a proper and suitable husband. Moreover the role of a woman was seen as a mother and a housewife whose only job was to stay at home and cook a delicious dinner for her husband when he would return from work. However during the World War II and the post-war period something changed.

Goldin and Olivetti (2013) find that mobilization of men to war have increased female labour participation during the 1940s.

Indeed, history tells us that the increase of female labour participation is a phenomenon mostly present during the post-war period. Olivetti and Petrongolo (2016), using an unbalanced panel of nineteen high-income countries, shows that female employment in the US was equal to 20% in the late 19th century and surpassed 60% at the beginning of the current century, while in other OECD countries female employment started only after the war and reached similar levels. However in Southern European countries, at the end of the 20th century, still displayed an employment rate below 60% accompanied to Japan which were still stagnant below 50%. Their conclusions show that on average female employment grows by half a percentage point per year between 1950 and 2005.

The reason why women entered into the workforce after the war can be traced to various causes being the most important one the wage convergence. The wage increase for women was due to important social and structural changes. For starter, new legislation were implemented in order to eliminate pay discrimination between women and men. The most important one was the Equal Pay Act in 1963 according to which "No employer having employees subject to any provisions of this section shall discriminate, within any establishment in which such employees are employed, between employees on the basis of sex by paying wages to employees in such establishment at a rate less than the rate at which he pays wages to employees of the opposite sex in such establishment for equal work on jobs the performance of which requires equal skill, effort, and responsibility, and which are performed under similar working conditions.". The post-war period was also characterized by technological changes (computerization) which increased the need and the value of non-manual/non-routine skills. Brynin and Perales, (2016) points out that this shift in skills had a great impact on rising female wages and on the convergence of wages. Technological progress helped increase labour participation by decreasing the hours women dedicated to home production.

Ngai and Petrongolo (2017) decided to study the combination of both forces. They show how the structural transformation i.e. the reallocation of labour from good to service industries, and the marketization of home production led to a rise in the service sectors which in turn had a positive outcome on female hours and wages. They find that marketization draws women's time into the market, and structural transformation creates the jobs that women are better suited for in the market. These two combined increased both women's relative wages and market hours. In the same years medical advances with the introduction of the birth control pill reduced fertility which has a negative effect on women's labour outcomes.

The consistent growth of women in the labour market helped change the social notion of what is the role of a woman in the society and reduced the gender stereotype which in turn led to an increase of women on leaderships positions like politics and business (Beaman et al., 2009).

1.2 The Economics of Discrimination

One important determinant that could cause wage to differ between women and men is discrimination.

A pure and simple definition of discrimination given by the Cambridge dictionary is: "Discrimination means treating a person or particular group of people differently, especially in a worse way from the way in which you treat other people, because of their skin colour, sex, sexuality, etc.". Even though we live in a "modern" society, each and everyone of us have experienced discrimination in a way or another, whether you are a woman, if you are black, if you belong to a different ethnicity, if you come from the south of your country maybe. I have to admit, I don't know why someone would just judge others for their aspect or their heritage. The reasons may come from history, that discrimination is among us because we have lived with it since the dawn of time and it's transmitted from generation to generation, and they can also come from fear (xenophobia, homophobia, etc.).

Being in the field of economics, here I present a series of theories that have tried to rationalized and explain discrimination, especially in the labour market.

The first ever economic theory comes from Becker (1957) and it's **called taste-based discrimination.** Becker points out that an individual or a firm has a bias against a certain group and choose to not hire them because they bring disutility to him by working with him. In this model employers are not interested in the actual productivity, and members of the discriminated group may have to work harder for the same wage or work the same for a lower wage. The fundamental implication of Becker's theory is that discrimination does not pay because discriminating firms are hiring the wrong workers and by doing so they do not produce the optimal amount of output to maximize their profits. In the end in a competitive market discrimination should disappear.

The second economic theory on discrimination came a few years later. Phelps (1972) and Arrow (1973) constructed some models to explain what it is called **statistical discrimination.** The main assumption is that the decision-maker is a rational individual who wants to maximize his profit by seeking the highest possible number of relevant information. Therefore, since there are unobservable characteristics that are important in the labour market like effort, these decision-makers use observable characteristics like gender or race as a proxy. They rely on group averages (real or fictional) -hence the name statistical- or stereotypes to

fill the unknown informations. So according to such theory this is the reason why inequality exists and persists even when economic agents are "rational" and non-prejudiced. Moreover there are two sources of statistical discrimination: the first is called "first moment" statistical discrimination that occurs when a woman is paid less than a man because she is believed to be less productive; the second is called "second moment" statistical discrimination which occurs when a discriminated individual is discouraged to obtain a higher education or to put a higher effort because of the existence of the "first moment" discrimination. It is basically a self-fulfilling prophecy where people subject to discrimination decide that it is pointless to prove to others (co-workers and/or employer) that they can reach higher productivity if their beliefs are already set.

Aigner and Cain (1977) expanded this theory by including risk aversion: decision-makers discriminate different groups not because of lower average productivity but because of higher variance in their productivity. For example women could be discriminated because their productivity may be more erratic due to maternity leaves. Arrow concludes that wage differential should disappear in the long run because discriminatory firms gain less profits and are driven out of the market. However other studies beg to differ: by employing search models they find that the difference in wages remain persistent both with employer discrimination and co-workers discrimination.

These theories have evolved through time and nowadays the new literature about discrimination distinguishes between different kinds of dimensions in which it can occur. First of all discrimination can be: overt and subtle. **Overt discrimination** means discriminate a person by race, gender or disability in an open manner and as we know this practise is now illegal in the labour market; **subtle discrimination** is defined by Jones, Peddie, et al., (2016) as "negative or ambivalent demeanor or treatment enacted toward social minorities on the basis of their minority status membership that is not necessarily conscious and likely conveys ambiguous intent". To better understand what it is, here is an example: a hiring manager of a firm can't look in the eyes the pregnant job applicant. The behaviour of the manager cannot be traced back to discrimination, it could also be that he just doesn't like to look people in the eyes, therefore the target person (in this case the pregnant woman) will always wonder why she received that treatment.

Also another dimension must be added when considering discrimination: formality and interpersonality. **Interpersonal discrimination** can appear in the form of disrespect, verbal or non verbal harassment, rudeness towards minorities, ect. What characterized this type of discrimination is that these behaviours can occur both at work and in social settings. **Formal discrimination** instead is job-related as for example not to hire a person because she/he

belongs to certain minority for which the employer has stigmatized stereotypes about their characteristics (it is similar to the statistical discrimination seen above). Jones, Arena et al. (2017) state that "discrimination can be difficult (subtle) or easy (overt) to detect and it can also be directly related to one's job (formal) or related to social dynamics more generally (interpersonal)". Therefore in a workplace, we could have four different dimension of discrimination: formal and subtle, formal and overt, interpersonal and subtle, interpersonal and overt (for more esplicative examples see Table 1 of Jones, Arena et al. (2017)). One would think that the subtle discrimination would cause little damage, but a recent research found out that it could actually be more harmful comparing to the overt discrimination in terms of employee well-being, job attitudes, and organizational outcomes (Jones, Peddie, Gilrane, King, & Gray 2016). What makes it more dangerous is the fact that being subtle, it is more difficult to actually attribute the discriminatory behaviour externally and the targets will keep wondering about the incident trying to find rational explanations and in the end blame themselves, which can be emotionally and cognitively stressful.

Lindsey and colleagues (2015) shows that women are able to separate interpersonal versus formal discrimination, but they are more likely to detect overt discrimination with respect to subtle discrimination. Moreover these women are more likely to take action against overt and formal discrimination rather than subtle and interpersonal.

I find this new way of discerning discrimination quite interesting, however this area of research is still growing and many questions still remain unanswered.

1.3 Gender role theory

According to this theory, individuals who are socially identified as males and females tend to occupy different roles within social structures and tend to be judged if they diverge from the expectations on how they ought to behave. This means that women may tend to choose education and therefore occupations that are seen more "socially acceptable" for a female to have like teaching, nursing and child caring. Also women may tend to self-select in these kind of occupations due to the fact that they are more "family-friendly" as the worked hours are reduced and they give the possibility to the mother to take care of her children and her house. These occupations tend to pay less especially for their working-time arrangements being characterized by high levels of part-time employment and low levels of overtime: if the share of part-time employment is 10% higher than the occupational average, the wages for women working in these occupations are 9% lower (Lauze and Strauß, 2016). In fact, Goldin (2014) strongly believes that the major driver of the gender pay gap that we still have is the more flexible hours that women tend to choose because, as she points out, the relationship between

time worked and earnings is nonlinear which makes flexibility costly. She goes on saying that much has to do with the degree of substitution among workers. She finds that some sectors such as banking, brokerage, healthcare and real estate are making their employers better substitute for each other and if the clients perceive a higher degree of substitution, linear payments can be put in place. Of course some occupations cannot be made more flexible as they require to be 24/7 on call like CEOs, surgeons, lawyers, etc.

It is important to point out that this most of the time it's not actually a choice i.e. a result of a woman's personal preference. Since we live in a society where gender stereotypes about men and women traits and skills are still very present, and women are still seen as the only one that can take care of children and these stereotypes are internalized during childhood passing from one generation to the next (Kleven, Landais and Søgaard, 2019), the self-selection into more "female-typical" occupations can also be a consequence of the division of labour within couples and the absence of institutional support for combining childcare at home with wage work (Steinber and Haans, 2012). Motherhood play a crucial role in wage inequality. Kleven, Landais and Søgaard (2019) find that "child penalty", defined as the percentage by which women fall behind men due to children, in the long-run is equal to 20%. The channels through which this happens are labour force participation, hours of work and the wage rate. Specifically, after the first child, women falls behind men in terms of occupation ranks and they are less likely to become managers. They also find that the gender inequality that can be attributed to children has increased over time to 80%. What is new and I find very interesting about this work is that the authors have found that the unexplained gap between women and men, which in most analyses is labeled as discrimination, is largely due to children. This does not mean that discrimination is not there, but implies that discrimination operates through the impacts of children. Lastly, they also show that child penalties are transmitted through generations: women who grew up in a setting where the father was the only worker of the house incur in a larger child penalty when they become mothers. This effect comes only from the maternal grandparents side. Policies and welfare implications should be implemented to decrease these child penalties as motherhood is a choice and as such it should not come as a trade-off with a woman's career.

1.4 Human Capital Theory

As we know from Becker (1962) and Rosen (1976), human capital theory argues that individual workers have a set of skills or abilities which they can improve or accumulate through training and education. So a reason why one workers have a higher wage than another is the difference in education. It is commonly assumed in the classical economic theory that

education is a indeed used as a signal to indicate a higher level of ability with respect to other individuals. It may also be the reason why so many people now decide to enroll into universities. This reasoning can be brought into the research for the existence of the gender gap: it is argued that the reason why women have a lower wage than men it's because they held a lower "human capital". As this can be true historically since women were not allowed to access to a higher education until the 20th century, now things have changed. The presence of women in university have increased over time and it has contributed to decrease the impact of education on the gender pay gap (Olsen et al. 2010). Nevertheless inequality still persist and it may be due to the differences in the prestige of the institute and in field of study for example the STEM subjects which are still male-dominated. Moreover some papers find a discrimination towards women within the education system itself. In Italy, in 2013, the proportion of women full professors was 21.1%, slightly above the EU average of 20.9% (EC 2016). In 2012 a new legislation (Gelmini Law) was introduced that changed the process through which academics could apply to become full professors in universities. The new process is based on two steps: first academics have to go through the ASN (*Abilitazione scientifica nazionale)* which is based on objective merit (publications, citations, etc.); second only the ones that passed the ASN can apply for a position. After the application it's the university who decides among the pool of candidates who gets the job. Therefore discrimination based on gender it's likely to occur as universities are not required to give a transparent procedure on how they select the candidate.

Previous works focused on the presence of discrimination in the ASN committee, but results are mixed: De Paola and Scoppa (2015), show that in chemistry and economics, a "mixed-gender committee helps, whereas women are likely to be less promoted when the committee is composed exclusively by men"; Bagues et al. (2017) on the other hand find that "having women in the selection committee does not favour women's applicants and women's promotion rates do not increase", however they explain that having women in the committee makes men evaluators become more severe towards women's applicants due to what they call the "backlash effect" and the "licensing effect".

Marini and Meschetti (2018) focus on the the step following the ASN and use data from 2013 to 2016 to understand if women are discriminated when it comes to appoint a full professor in university. They find that 19% of the men obtained the position, while among the women 15% became full professors. The difference becomes striking when they look at single disciplines being earth science, law and chemistry the highest. They used a logistic regression to see which are the factors that could predict this gender gap. They show that gender is still the strongest predictor and keeping productivity constant and controlling by the theoretical

available slots for promotions, women have around 24% less probability to get promoted. What they can conclude is that a gender gap exists in accessing a position as full professor in Italy, and this cannot be explained by scientific productivity and this gap is transversal since their analysis considers the entire population and all disciplines.

The bias towards women can be found not only in the academic labour market but also during the school years. There is a very new paper who studies whether exposure to teacher stereotypes affects student achievement. Carlana (2019) studies if the stereotype that boys are better than girls in math has an effect not only on the math performance, but if it also induces girls to self-select into less demanding high schools following the track recommendation of their teachers. She finds that the gender gap in math performance is highly influenced by teachers' implicit stereotype and that the latter especially affects girls with lower initial skills. Moreover math teacher stereotype influences the high school track girls have to choose leading to girls' underconfidence in male-typed domains. Luckily in my years of schooling I have always had female math teachers so I cannot say that I have been exposed to this bias but if, even implicitly, it starts at at such a young age, it could explain why women may have a lower human capital than men and self-select in less demanding and female-dominated jobs which turn in lower wages. Moreover in Italy standardized tests called INVALSI are used to evaluate the abilities of students into three subjects: math, italian and english. These tests are submitted five times during the formative years: grade 2, grade 5, grade 8, grade 10 and grade 13. Statistics show that for almost all grades females lag behind males in maths but have a strong advantage in italian. These results could perpetuate the stereotype that women are less capable than men in math and should stick to more feminine field of study. Unfortunately I did not find any research about whether these results come out because INVALSI are themselves biased tests, however there is a general concern that these standardized tests do not actually represents the real preparations of students, but rather they are just quizzes that reward good memory and not actual knowledge. Fortunately INVALSI are not used as method of judgment and they do not influence the GPA of a student (expect for grade 8). In the US instead standardized tests, along with HS GPA, are used for college admission: the SATs. They were designed by the College Board to predict the performance of secondary school students in college and they are not doing a good job at that. Women earn higher grades in college than men with identical SAT score which means that SATs underpredict the college performance of women relative to men. Keiser, Sackett et al. (2016) find that the difference is on average 0.24 points higher on the typical 4.0 scale. Controlling for course-taking patterns, they find that this difference accounts for only small part of the gender gap. The biggest factor instead was consciousness, meaning that women are more careful and

concern in what they are doing. This aspect is something that a standardized test cannot capture, therefore using them as selecting process for college admission could compromise the entry of women for top universities and/or fields that rely on a higher SATs bar.

1.5 Occupational segregation

This term refers to the unequal distribution of men and women in the occupational structure. Simply there are some occupations where the presence of the male workforce is higher than the female one. This process helps in sustaining and perpetuating social inequality because occupations dominated by white men tend to offer higher salaries, higher benefits, more job offers, more promotions. Segregation is difficult to analyse because of different definitions and databases and its effects are difficult to fully understand as segregation comes both from the supply side (women self-select into different kind of jobs with respect to men) and demand side (employer's prejudices towards women).

There are two types of segregation: **horizontal segregation** and **vertical segregation**. Horizontal segregation describes the fact that at the same occupational level (that is within occupational classes, or even occupations themselves) men and women have different job tasks. This leads to differences in terms of wages.

Vertical segregation instead describes the clustering of men at the top of occupational hierarchies and of women at the bottom. Vertical segregation creates a "glass ceiling" blocking women to obtain higher position within a firm and thus higher salaries.

Most of the literature focuses on the gender gap and gender pay gap for the CEO position. Just to have some statistics at hand, according the latest *Fortune 500* list published late summer, as of June 1st, 33 out of 500 of the companies listed have a female CEO. In percentage this means just 6.6% and it is a considerable increase since last year (4,8%). Women leaders are still in small number even despite the fact that most of the studies find that that firm that have female CEOs or Chairs outperform firm led by men Peni (2014). When it comes to pay the results among papers are discordant. For example Keloharju, Knüpfer and Tåg (2016) which focus their attention on Sweden data on firm executives, find that the pay gap is equal to 27% and only one-eight of the gap can explained by observable gender differences in executives' and their firms' characteristics. If we move to the UK, Geiler and Renneboog (2015) discover that equal pay among the very top has been almost achieved, however female executive directors (CFO, COO, Deputy CEO) receive 15% lower salary and 20% lower bonuses. They also question whether the presence of female non-executive directors (Board members) reduces the gender pay gap and they find that it indeed the case. However they also stress that this result must be taken with caution because the presence of

female Board members and consequently the reduction of the gap could be due to the type of corporate culture.

1.6 Undervaluation theory

Grimshaw and Rubery (2007) define the undervaluation of women's work as: a) being paid less than men for equally demanding jobs, and b) being employed in jobs and industries that are undervalued. The first definition it's easier to understand and there are policies that try to solve that problem. The second definition however it is more difficult to capture as it posits that society economically undervalues certain jobs precisely because women do it. It has been found that this theory holds for the United States (England, 2010) and for the UK (Perales, 2013). Pay practices are socially constructed and wages reflect compromises between competing pressure and are shaped by institutional, social and economic contexts (Austen et al., 2013). Therefore being the value of work socially constructed and society sees certain work more "masculine" than others, this leads to women's work being undervalued. Moreover this view not only comes from already pre-existing legacies, but it is a process that it is still present and shaped by the action of employers, governments, trade unions and other social actors (Grimshaw and Rubery, 2007).

Since the gender pay gap has narrowed through the years, maybe this devaluation theory is becoming less relevant (Jackson, 2008) and given that the gap is of a different intensity between countries, it suggests that devaluation is not universal or uniform (Bettio, 2002); Ochsenfeld (2014) find that the effect of sex composition on wages vanishes when he controls for confounders, what really has an effect is the gender role theory.

These aspects seems to undermine the theory but as Brynin and Perales (2016) points out it also may be that it's the work of less skilled women to be undervalued. In any case, these conflicts in findings prove how difficult it is to empirically provide a correct measure of this theory, that's why recent researches put their focus on other determinants for the gender pay gap

Chapter II: Once upon a time… in Hollywood

This search for discrimination can be brought even into the world of movie superstars, the film industry. In recent years there has been a lot of talks about the situation of women in Hollywood. The allegations of harassment and sexual assault against producer Harvey Weinstein have put a light on how this industry still turns a blind eye to sexism and misogyny despite its liberal-leaning values. But this conversation isn't a new one, and it has its roots in deeper injustice, namely the fact that women hold a precarious position in the film industry, which is still largely controlled by men. According to the Center for the Study of Women in Television and Films, male characters represented in the top grossing 250 films of 2019 were around 63% against 37% of female character. The statistic increased in the last few years.. Moreover solo female protagonists are almost as likely to be found in independent features (55%) as in studio features (45%). This marks a shift from the previous year when females were more than twice as likely to appear in an independent feature (68%) as studio features (38%). An explanation could be that major studios understood that producing movies with females as leading character can bring money to the box office as well. It's important to specify that independent production company tend to produce features films with a more restrict budget while studios have at their disposal a more large amount of money to finance certain movies. If studios go on with this tendency and keep to increase female leading movies and there is indeed no discrimination,actresses' wages could get on the path to reach the same level as of their male counterpart.

The presence of men is dominant not only in front, but also behind the camera. This is the composition of women employed behind the scene on the top grossing 250 films of 2019:

- 13% of directors
- 19% of writers
- 5% of cinematographers
- 27% of producers
- 23% of editors
- 21% of executive producers

Even though the numbers are higher than they were in 2018, they still remain quite low, especially for directors. Women directors also fail to obtain award recognition. The Academy Awards have arrived to their 92st edition and yet Kathryn Bigelow still remains the only woman to ever win the Academy Award for Best Director. The problems start with the nominations themselves as only five women (Lina Wertmüller, Jane Campion, Sofia Coppola,

Bigelow, and Greta Gerwig) have ever been nominated in the same category and today in 2020 despite the recent increase in female directors no nomination was given for that category. Moreover Barbra Streisand is the only woman to be ever nominated for Best Picture at the Academy Awards.

And to think that when Hollywood was just born, women were the largest part of this industry. Estimates suggest that the gender composition of screenwriters during the silent era (early 1990s to 1927) ranged from 50% (Martin and Clark, 1987) to 90% (McCreadie, 1994) and it is generally agreed that these women shaped the narrative form and the conventions of the film scenario (Francke, 1994). With the arrival of the "studio system" and the Great Depression male writers were brought into this field. As result by the late 30' women accounted for less than 15% as screenwriter[1]. Some decades later, The Hollywood Writers Report of 2016 documents that in 2014 women make for 16.9% of sector employment. Still too few from the early days of the film industry. Today women in film and television are fighting to gain or re-gain their space and more access into this sector. The battle is not only fought from the inclusion point of view but also for equal pay. Actresses (maybe for their more visible role) are the first in line to speak up for gender discrimination among production companies when it comes to pay up salaries.

The latest research shows that women stars earn 1.1 million dollars less than their male counterpart with similar experience, taking into account other important earnings determinants such as box office and production budget (Sanchez and Paniagua, 2017). This finding must not come to a surprise as in the latest years we have assisted at continuous episodes of gender wage gap come to light. Back in 2014, after the Sony Pictures hack[2], Jennifer Lawrence spoke out about the issue when she found out that her male co-stars Christian Bale and Bradley Cooper who had both worked for 45 days, got 2.5 million upfront and 9% of the profits, while herself and her female co-star Amy Adams, who had worked the same amount of days, got paid only 1.25 million and got 7% of total profits for the movie "American Hustle". In an open letter she stated that she blamed herself because she "failed as a negotiator and gave up early" explaining that she didn't want to be "difficult" and "spoiled" asking for more money[3]. Indeed Bertrand (2011) and Croson and Gneezy (2009) show that women are less likely than men to engage in competitive interactions such as negotiations.

The glass barriers and pervasive stereotypes towards women are still very present in the film industry which it's still highly male-dominated. The reason it's not because there aren't

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[1] Statistics from the Writers Guild of America, West.
[2] "The Sony Pictureshack, explained", by Andrea Peterson, The Washington Post, 18 December 2014.
[3] "Jennifer Lawrence calls out in the wage gap", by Bourree Lam, The Atlantic, 15 October 2015.

enough qualified educated women: according to an article from LA Weekly[4], female students in the two top US film schools, USC's School of Cinematic Arts and NYU Tisch School females account for 46% and 51% respectively of graduate students.

As claimed by the Hollywood Diversity Report of 2015 film studio heads were 94% white and 100% male and film studio senior management was 92% white and 83% male. This over representation of males at the top could be a reason for the under representation of women at the bottom and for the gender pay gap. Other studies find that women presence at the top of firms like CEOs or senior management indeed increase the presence of women at the bottom and increase their probability to receive a promotion and thus increase their salary. I want to find out whether this reasoning can be done also in the industry of Hollywood, more precisely if having a female producer can help actresses obtain higher wages so as to decrease the gender pay gap.

2.1 How Hollywood changed through time: the star system

Before I begin my analysis, it is important to understand the industry I am taking in consideration, how it changed, how it has been shaped through time and how it became the Hollywood we know today.

In 1910 the first movie studio set foot in Hollywood and by 1915 many others movie studios relocated there from the East Coast. However the main reason was to escape the patents imposed by the MPPC[5] who had been created a monopoly on all aspects of filmmaking. Whoever was not part of the company could not be able to film as it was not in possess of the patent. Moving to Hollywood gave the opportunity to independent production companies to use cameras, projectors and other equipments freely. That was the end for the MPPC.

Once the motion pictures studios moved there, Hollywood exploded and became the heart of the cinema, both American and international. The 1930s and 1940s were called the Golden Age of Hollywood and it was characterized by the **studio system**. It was a system where the movie studios were in total control of the movies they made and they were completely vertically integrated from production to distribution and exhibition. A practice in use during those years was *"block booking"*. It meant that a studio would sell more than one films in just one unit. This would typically include only one movie with high budget and A-list stars that the theatres really wanted and the rest would be a mix of low budgeted movies. In this way studios could produce more movies and be sure that they would be seen. The biggest studios

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[4] "How Hollywood keeps out women" by Jessica P. Ogilvie, LA Weekly, 25 April 2015.
[5] The Motion Picture Patents Company was a trust of all the major US film companies in control of patents on motion pictures cameras.

at that time were divided in two groups. **'The Big Five'**: MGM, Paramount, Warner Bros., RKO and Fox and **'The Little Three'**: Universal, Colombia and United Artists. Hand in hand with the studio system came the **star system**. With this system movies stars, directors, writers and producers were employees of the studios and were bound to them in strict contracts. Contracts for emerging stars would often start with a salary between $75 and $250 a week and after six months the studio had the option to drop the artist or raise his or her salary. Each contract would endure for a maximum of seven years and during this period of time producers and studio executives were in complete control of their stars. Studios decided the star's pay, in which movies she or he would appear in and which role to play without the consent of the performer. They could also decide to loan their stars, like some kind of material good and not a human being, to other studios who would not only pay the salary for the star but also give an additional 75% of it to the lending studio. Because of this practise independent production companies could not afford certain major stars and this would incentivize the oligopoly already in place. Moreover the star had no legal right to break the contract as the withdrawal from it was an option only for the studios. In addition to the control of an actress/actor's career, studio also had power over a star's personal life. These contracts would create completely different personas and imagines for the actors and actresses. They dictated how one should dress, behave: men were supposed to be gentlemen and women be ladies. They could never leave their houses without dressing properly and without makeup. If a magazine story was not "proper" for their actor or actress they would pay off the journalist and promise another scoop. Most importantly, if actresses or actors decided to contest the decisions of the studio's executives they would face a period of suspension without pay, followed by a lower salary and an extension of the contract. Even after reaching stardom, stars still had little bargaining power especially when it came to salary. As example Marilyn Monroe, who became famous only after few years, still made the same salary as when she was a beginning starlet. The most famous dispute in those years was Bette Davis vs. Warner Bros. She sued her studio after they forbade her to be loaned to another company. She demanded a raise in salary from $100000 to $200000 per year, limiting her service for four pictures a year, etc. She lost the legal battle, which took place in London, and had to return to Warner Bros. The case showed that even the fame of actresses could do nothing against the power of the studios. After a few years, another similar case took place in Hollywood. This time Olivia de Havilland sued Warner Bros. for adding six months to her contract following a suspension. This time the Californian court deliberated in favour of the actress who then left her studio for Paramount. This episode led to the questioning of the studio system and the fight for existing stars to control their careers and seek more independence.

From the late 1940s the studio system began to crumble. One reason was the invention of television. With entertainment available at home and the decrease in disposable income and hours worked, Americans preferred to spend their time and money on other kinds of hobbies. The decline of movie-goers forced the studio to cut on the production of movies. Another reason for the fall of the studio system was the introduction of a new regulation that prohibited the "block booking" which meant that now studio could not own theatres anymore, but they had to sell their movie to now independent cinemas. This shifted the focus of production companies from exhibition to distribution meaning a reduction in the production as well i.e. **package-unit production.** In practise studio would now produce only one or two movies per year. This change wiped out completely also the star system. Since studios were not sure anymore about the profitability of the movie, they would try to keep the production costs to the lowest as possible, meaning that now stars, the artistic department and the crew were not under strict contract but they would be hired only during the shooting of the movie. This new freelance labour gave more power to talent agents who would negotiate each deal differently depending on the requests of the star. Moreover, the more the popularity of the star grew, the more her/his salary would increase. In these years star wages increased a lot creating a disparity with lower popularity performers.

The 1960s the 70s and the years to follow were characterized by major transformations. All the major ex-Big Five studios were bought by companies even outside the film industry. This led to a creation of mass media conglomerates incorporating both cinema and television. For example Warner Bros. is currently owned by AT&T which is also the owner of HBO (a pay-per-view channel) and the owner of Verizon (a mobile telephone company). The only one to escape the conglomeration was the Walt Disney Company which in return turned herself in a conglomerate by creating her own distribution company (Buena Vista), buying ABC Network in 1996, building its owned themed park and later on buying other companies like Pixar, Lucas Films, Marvel Company and 20th Century Fox in 2019. Basically the industry moved from a vertically integrated sector to a horizontal integrated one.

2.2 The quote system

With the package-unit production a new system of payments of stars came into place: the **quote system.** Today the amount of money an actor is paid for a project depends on their existing "quote", which refers to how much they made on a previous project. This kind of system, although it seems benign it actually perpetuates the already existing gender pay gap if women are already being underpaid. Emma Stone in an interview declared: "if my male co-star, who has a higher quote than me but believes that we are equal, takes a pay cut so that I

can match him, that changes my quote in the future and changes my life."[6] Other important actresses have spoken about this problem, like Michelle Williams who was paid roughly $80 per day for a total of $1000 to reshoot the drama/thriller *"All the money in the world"* as opposed to her male co-star Mark Wahlberg who got $1.5 million dollars. This huge difference resulted into a $2 million donation by Wahlberg and his agency to Time's Up Defence Fund[7].

The fact that back in the 40s and now in 2000s women are the ones speaking up about inequality and injustice in this industry shows how little things have changed for actresses.

However a change may just be around the corner and the practice of "quote system" may come to an end as the State of California recently passed a new legislation Bill N. 168 in which it is declared that "An employer shall not rely on the salary history information of an applicant for employment as a factor in determining whether to offer employment to an applicant or what salary to offer an applicant." This law was introduced with the aim to diminish the gender pay gap by making illegal for a studio to ask previous compensations of actors, actresses, directors and so on. Sources from Forbes magazine[8] already stated that this new law, which came into force on January 2018, had already done its effects by increasing remunerations for women and people of colour form 12% and 20%. Top stars have not being affected as they already established their name and importance in the industry, but the impact would fall on the midlevel roles. However other sources from The Hollywood Reporter[9] says that the introduction of this new legislation just led to an elongated casting process due to more rounds of salary negotiations as studios have no intention to increase the budget. Other says that Hollywood may also find a way to avoid this new law as it did in the past. Altogether it's still too early to see the actual effects of this regulation but it's important to see that lawmakers are aware of the problem of gender pay gap that inflicts not only this industry but our society.

I think that the problem of the gender pay gap and quotes is eradicated in a more deeply problem: representation. How can an actress increase or improve her quote if there are no leading roles for her to play? Moreover how can we expect an increase in female leading characters if the percentage of female screenwriters is even lower? Or female producers willing to take a chance and produce that story? In 2008 the president of a major studio

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[6]"How Hollywood salariesreally work", by Margaret Heidenry, Vanity Fair, 12 February 2018.
[7]"'All the money in the world'triggerswage gap debate", by GreggKilday, The Hollywood Reporter, 11 January 2018.
[8]"No more quotes: how a salaryhistory law ischanging Hollywood for women", by Natalie Robehmed, Forbes, 11 April 2018.
[9]"How actors are benefiting from a "No quotes" law", by Leslie Goldberg, The Hollywood Reporter, 22 March 2018.

allegedly pronounced that the company would no longer produce movies with female leads. He suggested that such films were bad for the box office. Nevertheless women account for 50% of the moviegoers. Moreover in 2018 a study find that on average, female-led films lead global box office revenue at every budget level for 2014-2017[10]. Also films that passed the Bechdel test - where two female characters have a conversation about something other than a men - made more revenue at the box office at every budget level than films that fails the test[11]. We can conclude therefore that it is not certainly a problem of box office if there are so few leading female characters. It is a problem of lack of women behind the scene like screenwriters, producers, directors who have the incentive to bring to life female-centred stories.

2.3 The role of the producer

When we watch a movie the first thing we note are of course the stars. Then maybe the director, the writers and for the most passionate also the photography director. What we don't actually quite see it's the person who puts everything and everyone together: the producer. While yes, they are the ones that receive the award for best motion picture at the Oscars and the others award shows, we don't actually know their names or quite understand what is that they do.

A film producer is a person who oversees the entire film production, from development to distribution. She/he can work for a production company or be independent[12]. The producer has many roles to play depending on the stage of the film production she/he is in. A film production can be divided into: development and pre-production, production and post-production.

1) **Development and pre-production:** this is the earliest stage of the production process. First of all it's the job of the producer to find a story worth committing to and it can come from a book or from a third person whose idea if redeemed notable is bought by the producer to turn into a movie. Once the story is decided, the first thing to do it's to write a screenplay, so the producer -unless it's an original screenplay- has to find the screenwriters. Then he has to find the director, the cinematographer, the cast members and the other parts of the crew. He has to approve the locations found by the location manager and he has the final say on the timetable of the shooting. During this phase another important part it's the financing. If she/he works for a major

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[10]"Female-led filmsoutperformat box office for 2014-2017", research by CAA and Shift7.

[11] 40% of the films between 2014-2017 did not pass the test.

[12] These producers are outside the star system meaning that they don't have at their disposal the chain of distribution like the other major Hollywood Studios.

production company she/he will pitch the idea to the president of the studio and if she/he like the idea too, it will finance the movie. For independent producers things can be trickier. They are not big corporations with a lot of money at their disposal but they need to find financing through other sources like public national funds, regional funds, private loans, public TV or search for co-productions with other countries. Nevertheless both kind of producers have to keep under observation the amount of money needed for a movie and organize the given resources at the optimal level.

2) **Production**: This is the most important part of the production process because it is in this phase where the shooting takes place. The producer has to make sure that the movies stays on schedule and under budget. If the movie is particularly big, she/he cannot personally supervise all the parts of the production but she/he stays in contact with the creative parts of the movie. She/he has to deal with all the problems that may occur on the set with the stars or the creative staff.

3) **Post-Production:** In this phase the real movie gets put together as it is the moment for the montage and the editing. The producer with the director discuss order and selection of the scene and he has the last word on the final cut. She/he can also demand a reshooting of some scenes especially if the screening tests do not respond well. During the post-production in case of independent producer, she/he also has to work with the distributor to secure distribution of the movie which may include showing the final cut. She/he has to approve the marketing strategy put in place and review all the posters and trailers[13].

So the producer it's in every single stage of the production process and has the power to approve or change every aspect of the film along with the director.

But what happens when most of this power is held majorly by men? What happens when men exploit it with young actresses or young female co-workers? Well, 2017 was the year when this *"dark side of the force"* in Hollywood was exposed to the light after the unfolding of the scandal involving the ex-producer and multiple Academy Award winner Harvey Weinstein.

2.4 Sexual harassment at Hollywood: the Weinstein case.

Harvey Weinstein is or better was one of the greatest producers in Hollywood. His career starts in the late 70s at Miramax, an independent production company founded by him along with his brother. Ten years later Miramax established itself as the most successful independent production company at Hollywood and it certainly caught the attention of the

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[13] The marketing phase for blockbuster movies can begin also in pre-production.

major studios as Disney Studios decided to buy the company. The late 90s were the highlight of Miramax as it put out films like "Pulp Fiction", "The English Patient", "Shakespeare in love" for which won numerous awards and Academy Awards. Weinstein was and still is considered the one who helped opening up the market to independent features. In 2005 the Weinstein brothers left Miramax to create the Weinstein Company which continued to produce important movies until...

On the 5th of October The New York Times[14] exposed the so-called "mogul of Hollywood" on his sexual misconduct. According to the notorious newspaper, the producer paid off sexual accusers for decades trying to hide his horrible behaviour. The New York Times continue quoting documents and anonymous sources on how "there is a toxic environment for women at this company" and how the board of his company (which includes his brother) knew about all the allegations and they preferred to turn a blind eye and let the money solve the problem. The main accusation is that Weinstein would invite not only aspiring actresses but also member of his staff to his hotel room in Los Angeles using work reasons, only to discover that he had other interests. Actress Ashley Judd described the encounter as a coercive bargaining as she was in the middle of shooting a movie for Miramax when the episode happened. She had the strength to refuse and left the meeting. It is important to point out that saying no it isn't always easy. Harvey Weinstein was multi-Academy Awarded Hollywood producer who had the power to open and especially close important doors. In fact from a 2015 memo a former staff member who subsequently was paid for her silence wrote "I am a 28 year old woman trying to make a living and a career. Harvey Weinstein is a 64 year old, world famous man and this is his company. The balance of power is me: 0, Harvey Weinstein: 10."

After the article came out Hollywood fell into chaos. More actresses came forward, important names too such as Angelina Jolie, Gwyneth Paltrow (she won the Oscar for Best Actress for "Shakespeare in love" produced by Miramax), Uma Thurman and many more. Harvey was sacked by the board of his own company and later he faced charges of sexual misconduct and rape both in New York, Los Angeles and London. In March 2018 The Weinstein Company filed for bankruptcy and in July of the same year its assets were bought by Lantern Capital creating Lantern Entertainment containing all of the TWC's 277-film library. Following this sale The Weinstein Company was completely shut down.

After the scandal unfolded many organization in support of women sexually harassed were created like the MeToo Movement and the Time's Up movement and many actresses have

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[14]"Harvey Weinsteinpaid off sexualharassmentaccuserd for decades" by Jodi Kantor and Megan Twohey, The New York Times, 5 October 2017.

contributed not only economically but also by advocating for awareness of this problem in all aspects of society and by encouraging women to speak-up.

Chapter III: Data and methodology

3.1 Data

The data employed in this study consists of actresses and actors whose salaries are of public availability. My sample includes 988 salaries alas movies from 1970 to 2019 for 87 actors (60%) and 58 actresses (40%) for a total of 145 individuals. Usually a star salary is composed by a fixed and a variable compensation. The latter depends on the film's final box office revenues and the corresponding cash break even point which is indicated in the star's contract. Since the variable compensation presents substantial measurement error (Sanchez and Paniagua, 2017), I focus only on the fixed compensation part of salaries.

I collected also informations about the single actress/actor regarding: the age she or he had at the moment of the movie, the experience measured in how many other movies she or he had done before the one for which I have the salary, whether she or he had ever won an oscar before that movie. I also gathered other important data regarding the movies such us: budget, box office (home), director gender, producer gender, the production company/distributor, genre, year of release and whether the actress/actor was also a producer of the movie.

All data were personally collected from Internet Movie Database. I drew up a list of actresses and actors for which I knew salaries were of public availability basing it on lists that I have found in other researches. Since these studies were a bit dated, I also searched salaries for stars which have become very famous in a relative small amount of time, like Chris Evans, Chris Pratt, etc. For some salaries I turned myself to Variety and Forbes. After collecting the informations about salaries and personal star characteristics, I gathered relevant data on the movies listed still from IMDb.

3.2 Descriptive statistics

The data allows me to have a look at wage trends in the long run. Figure 1 display how mean wages evolved through the years from 1970 to 2019. It is evident that wages have increased through the years. This pattern is in line with how Hollywood has changed: actresses and actors have acquired more and more power in the industry. They have increase their bargaining power by being able to negotiate their contracts on the spot with the help of their agents and they are more aware of the economic value that they can bring to the box office[15]. Moreover studios' capacity to generate income has also changed throughout these years especially thanks to distribution fees. Others sources of income are tax credit relief both in the

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[15] However it is not always the case that a movie with a popular cast do well at the box office.

US and abroad, worldwide theatrical release, product placement agreements with brands. But the most important it's the right licensing. Thanks to this studios can sell the movie right to pay-TV, cable networks, streaming services and can use it for DVDs, Blu-rays, toys, hotels, theme parks and so on (Epstein, 2012).

Figure 1. Stars' average wages, 1970-2019
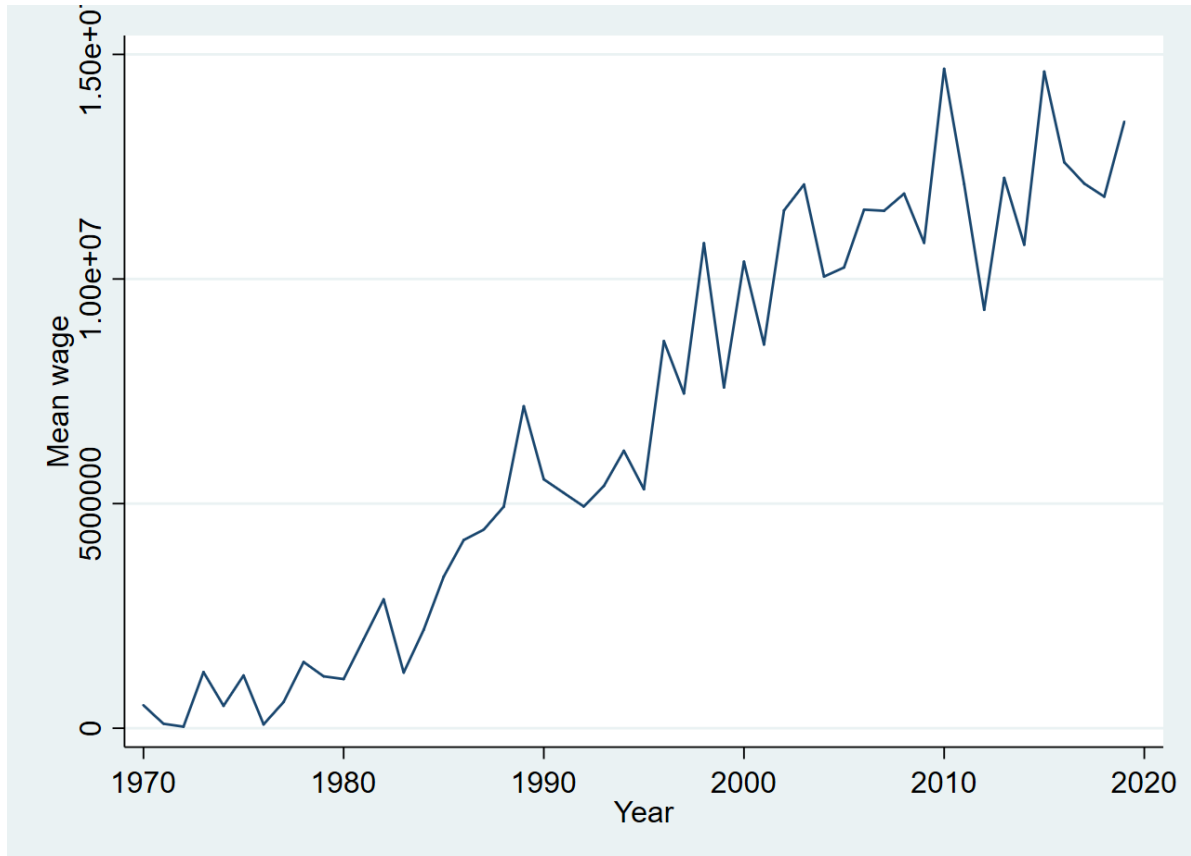
Just because wages increased in the last decades, it doesn't mean it has increased equally. There is a substantial difference between stars, especially between actresses and actors. Figure 2 shows how mean wages have increased through the years for both groups. What can be seen is that over the same time period wages for both sex have indeed increased but actresses still earn less than actors. The gap is substantial and persistent through time. This persistence is interesting as the existing literature shows that US female to male wage ratio has been converging over the last decade reaching 79,3% in 2010 (Blau, Feber and Winler, 2010). Looking at some statistics, the mean salary for actresses is around 6.3 million dollars while for actors is roughly 10 million dollars. The overall mean salary is about 7 million dollars.

Figure 2. Actresses and actors mean salaries, 1970-2019
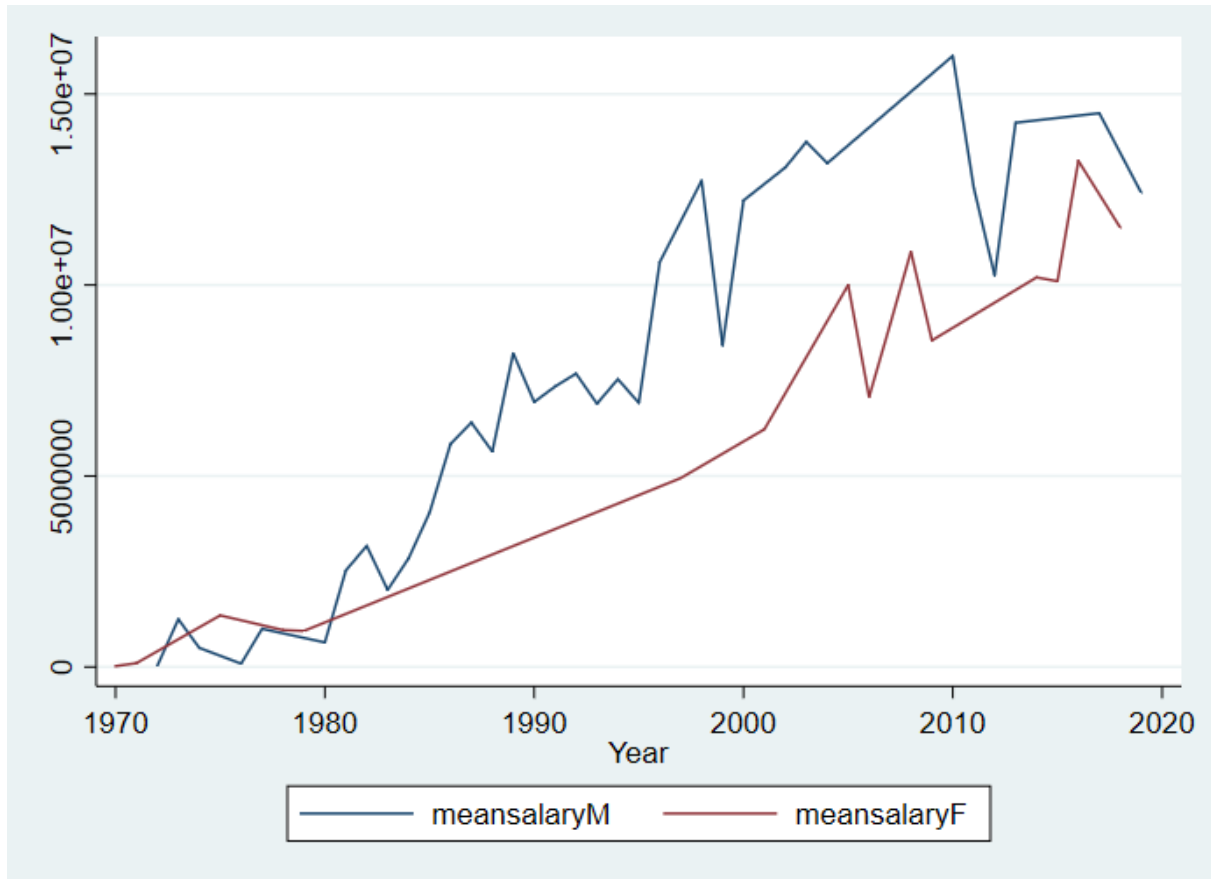
One explanation could be that different kind of movies pay differently. I divided the movies in 5 different genres: Action, Comedy, Thriller, Drama and Rom-Com. I have decided to insert the last one as a genre of its own because actresses tend to be casted more as leading roles in romantic comedies and I was curious to see whether this was true in my sample and the salaries associated with this particular category of movies.

If we look at the mean salary per genre (Figure 3) we see that the highest salaries are given by "Action", "Comedy" and "Thriller" movies. Of course Action and Thriller pay relative more than the other genres because they yield a higher risk for the star in making the movie[16] and also a higher budget to pay for the stunts and all the special effects. From Figure 4 in the Annex, I can see that it is indeed the case.

Since these two genres pay more in terms of salary, it is interesting to see how actresses fill in. If I look at how many actresses have a leading role for those genre I see that the share for "Action", "Comedy" and "Thriller" are 7,39%, 5,06% and 1,82% respectively. Actors have instead 25,20%, 14,78% and 2,23%. The differences in Action, Comedy and Thriller seems to

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[16] Just think about Tom Cruise who does his own stunts and gets paid almost 55 million dollars for the "Mission Impossible" movies.

be one explanation for why actresses have lower earnings. Sanchez and Paniagua (2017) find that 11% of the gender gap they discover can be explained by sex segregation by movie genre.

Figure 3: mean salary by genre
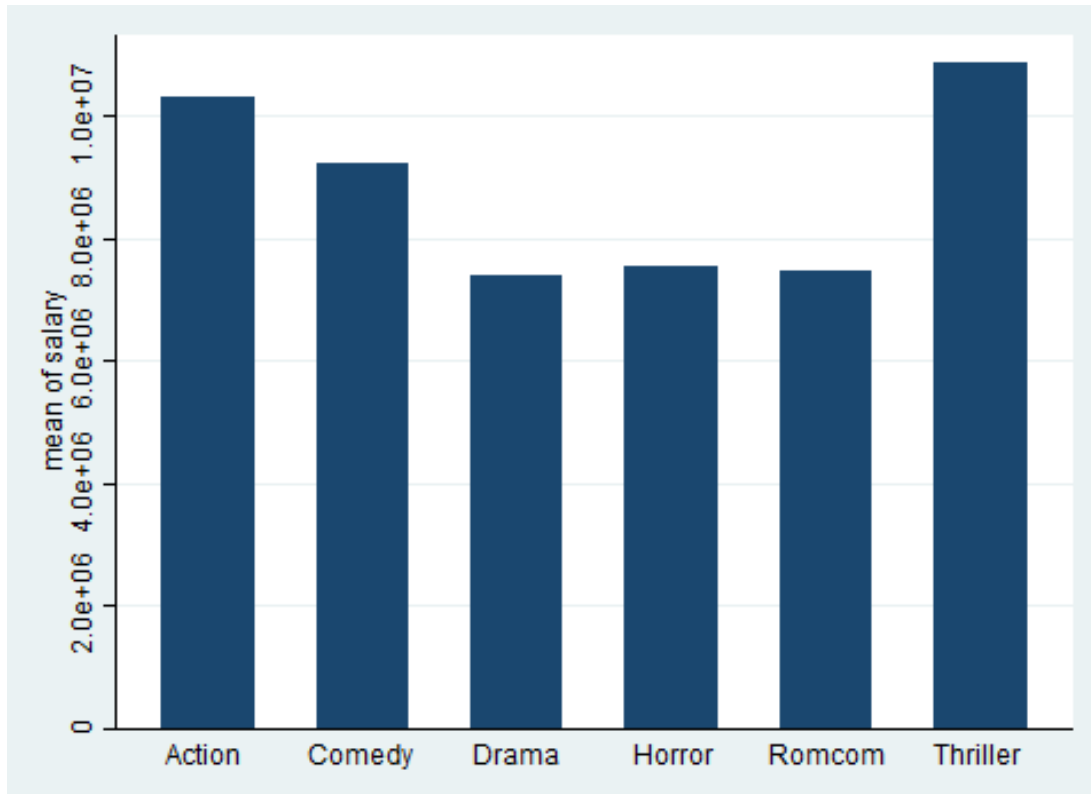
Since my research question is whether there is a gender pay gap in Hollywood and if the salaries for actresses have an improvement by having a female producer as a boss, here I present some descriptive statistics regarding the producer data I have. Most of the time it is not just one producer who is in charge of a movie but it is a team of producers, especially for the so called blockbuster movies. For this reason I divided the gender of producers into three types: only male (M), only female (F) and both male and female (MF). In my sample 4,55% of the movies are produced by female only, 70,85% by male only and 24,60% by both sexes. Seeing the previous statistics about the number of female behind the scene it comes to no surprise that I have so few movies produced by females. Being too few I've decided to consider the movies produced by both sexes as movies produced by female and gave them the value of 1 when I constructed the dummy variable for the gender of the producer.

It is interesting to see what these female producers decide to produce. According to my sample the movies are divided as followed: 8,81% Action, 4,86% Comedy, 7,69% Drama, 1,32% Horror, 5,16% Rom-Com and 1,32% Thriller.

Action appears to be the most produced genre[17], followed by Drama in which actresses are the most represented and then RomCom and Comedy. Thriller and Horror seems to lag far behind by female producers. The reason could be that maybe they are not interested in producing such stories or studios do not trust women to produce certain genre. What it's interesting is that the percentage of Action movies that female producers have done is quite close to the percentage of Action movies in which actresses have starred in. There could be a relationship between the two? Could it be that because of the presence of female producers in these genre of movies it increased the presence of actresses as well? Could this reasoning be applied also to wages? Having a female producers can help actresses narrow the gender pay gap? That's what I'm about to find out.

3.3 Methodology: a fixed effects estimation

Since I want to examine whether having a producer of the same sex as the star increases the star's salary, with particular attention to actresses, I exploit my panel data to construct a first regression equation based on star fixed-effects.

$$w_{ij} = a_i + \beta_1 SS_j + \beta_2 X_{ij} + \beta_3 Y_j + \varepsilon_{ij}$$

where w_{ij} is my dependent variable that represent the logarithm of a star i wage for film j. a_i are the star fixed effects. SS_j is my main independent variable called "Samesex" which is a dummy that takes value 1 if the sex of the produce and the star coincide for that movie j, 0 otherwise. X_{ij} is a vector of controls containing movie-variant star characteristics such as age, experience, if the star was also a producer for that movie and if she or he had won an Oscar for best performance before that film. Y_j instead is a vector of controls containing specific movie characteristics such as genre, budget, year of release, production/ distribution company and director gender. An alternative or additional analysis that I thought of doing was to see the impact of same sex between star and director on star wages. Unfortunately the number of female directors are too few to properly estimate such effect. Also note that the box office was not included in this regression because it is likely to be a bad control as it can be an outcome itself. Movie goers could be more inclined to go watch a movie because that particular star is in it or some movie goers could have a bias towards movies with female leading characters or

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[17] I want to point out that Action movies constitutes the higher part of my sample (33%)

since more than 50% of the movie-goers are female, these movies attract more viewers generating a higher box office. At last, ε_{ij} is the error term.

Since my main interest is to see if the presence of a female producer can help reduce the gender pay gap, in the second regression equation I add some interaction variable to see if and at what extent there is such an effect:

$$w_{ij} = a_i + \beta_1 SS_j + \beta_2 SS_j * Female + \beta_3 SS_j * Experience + \beta_4 SS_j * Female \\ * Experience + \beta_5 X_{ij} + \beta_6 Y_j + \varepsilon_{ij}$$

- SameSex*Female: it capture the gain (if there is any) of having a female producer for actresses.
- SameSex*Experience: since experience have such an important effect on wages, it's interesting to see if it changes the effect of the producer gender on wages as the actress or actor starts to be casted in more movies.
- SameSex*Experience*Female: it combines the two interactions above to see the gain of having a female producer for an experienced actress.

Results for both regressions are showed in the next chapter.

Chapter IV: Results

Table 1 shows the results for a series of different regressions adding different controls in each specification. To draw statistical inference, standard errors are clustered at actors level. Also I have excluded stars for which I had only one movie observation.

In Column 1 I have the logarithm of the budget, the genre and the production company as controls. It can be seen that my independent variable Samesex is positive but not statistically significant, however the budget is highly significant which means that a higher budget leads to a higher wage. This result is pretty intuitive and looking at the statistics showed above in Chapter II it seems that female leading role movies are more produced by independent companies rather than studios. This could be one explanation to why gender pay gap is still consistent among Hollywood. The genres are all significant at 1% and positive but adding more controls as I go on with the columns "Thriller" and "Horror" drop in significance to 5%, "Drama" as well to 10%, Comedy loses significance and "RomCom" is positive at 1% which means that an increase in the RomCom movies will increase the salary by 34%. As for production companies most of them, specially the Big Six, are negative but not significant which means that belonging to a certain production company does not necessarily mean higher salary, what's important is the budget and what movies is produced.

In Column 2 I added age. This control is movie variant as it captures the age the star had at the moment of the movie. It is important to take into account the age of stars, as for instance female movie stars are on average 6 years younger when they enter the industry (Lincoln and Allen, 2004) and on average they win awards at a younger ages than their male counterparts (Lincoln, 2007). Also, there are double standards of aging for women and men and society evaluate older women more harshly (Cruikshank, 2003), especially in the Hollywood industry where attractiveness plays an important role. Age-squared is also added to see if the effect of age gets weaker or stronger. SameSex remains positive and becomes statistically significant at the 1% level, which means that having a producer of the same sex as the star increases the star's wage of 16,5%. Age is significant as well and have a positive effect on wages but age-squared shows that there is point beyond which as actresses and actors become older their wages start to decline. It is indeed true that older actresses (more with respect to old actors) find harder and harder to find roles for them or more precisely leading roles which pay a higher salary. This result is consistent with the already existing literature.

Column 3 adds three more controls: Academy Award winner, if the star was a producer of the movie and the director gender. Let's see how they behave.

First, the variable "Winner" is a dummy which takes the value of 1 if the actress/actor has won an Oscar at the moment that specific movie was made, 0 otherwise (for example Gwyneth Paltrow won the Oscar for "Shakespeare in Love" in 1999, so all the movies before that have value 0, all the ones that were released two years after the victory have value 1). I've decided to include this because winning an Academy award for Best Actresses or Best Actors could send a signal to filmmakers and film producers that that actress or actor is one of the best at what they do. Moreover such acknowledgement could enhance stars to ask for larger salaries having a higher bargaining power if the producer want an Academy Award winner among her/his cast. The effect is positive but not significant. Sanchez and Paniagua (2017) find a similar result with their OLS estimation and FE estimation but using a semi-logarithmic estimation the result is that receiving an extra best leading role award increases wages by 36%.

Second, the "Producer" control was added because sometimes stars may also have a big role in the decision of the movie by becoming their own producers. Therefore they can also decide to decrease their fixed salary since they will gain earnings from the producer's fee. This is also non-significant.

Third and last the "Director Gender" is not significant as well. It means that directors don't have decisional power over compensation for their stars.

Column 4 includes the same controls but year dummies are added. I divided the year of release in 5 different groups: real old movies (1980-2000) and from 2001 onward the years were divided by a 5 years interval (i.e. 2001-2005, 2006-2010, 2011-2015, 2015-2019). Adding this control, the coefficient for Samexsex stayed positive but decreased to 14.7% gaining a 5% significance.

At the end, in Column 5 I add "Experience" to my set of controls. I counted the number of films they had appeared in before the movies that I had included in my dataset. Experience is statistically significant at 1% with a positive effect on wages of 3.86%. This result not only is consistent with other studies but it's pretty intuitive. The more the actress or the actor stars in movies, the more they gain not only visibility and popularity but also increase their quote. The coefficient for my independent variable remains positive and significant at 5% equal to 14,6%.

Table 1. Effect of producer gender on same sex star's wage

Dependent Variable	(1) wage	(2) wage	(3) wage	(4) wage	(5) wage
SameSex	0.138	0.165***	0.165***	0.147**	0.146**
	(0.0867)	(0.0612)	(0.0624)	(0.0598)	(0.0589)
Ln(Budget)	1.063***	0.627***	0.625***	0.536***	0.517***
	(0.0738)	(0.0648)	(0.0649)	(0.0596)	(0.0597)
Comedy	0.425***	0.215**	0.211**	0.187**	0.133
	(0.108)	(0.0893)	(0.0888)	(0.0826)	(0.0819)
Drama	0.278***	0.128*	0.129*	0.108	0.0969
	(0.0977)	(0.0721)	(0.0721)	(0.0697)	(0.0686)
Horror	0.751***	0.506***	0.495***	0.464***	0.432***
	(0.216)	(0.169)	(0.169)	(0.158)	(0.157)
Romcom	0.682***	0.449***	0.433***	0.361***	0.340***
	(0.144)	(0.0974)	(0.0971)	(0.0917)	(0.0894)
Thriller	0.590***	0.349***	0.346***	0.278**	0.262**
	(0.159)	(0.130)	(0.130)	(0.121)	(0.120)
Age		0.384***	0.387***	0.445***	0.398***
		(0.0389)	(0.0397)	(0.0401)	(0.0442)
Age2		-0.00354***	-0.00358***	-0.00390***	-0.00387***
		(0.000437)	(0.000443)	(0.000417)	(0.000429)
Winner			0.0742	0.00577	0.0206
			(0.219)	(0.200)	(0.188)
Producer			-0.107	-0.0982	-0.0869

	(1)	(2)	(3)	(4)	(5)
			(0.0967)	(0.0941)	(0.0924)
Director Gender			-0.0879	-0.0415	-0.0398
			(0.126)	(0.119)	(0.116)
Experience					0.0386^{**}
					(0.0161)
Constant	-3.564^{***}	-4.789^{***}	-4.609^{***}	-4.912^{***}	-3.558^{***}
	(1.324)	(0.996)	(1.024)	(0.981)	(1.131)
Production Companies	YES	YES	YES	YES	YES
Year Dummies				YES	YES
Observations	980	980	980	980	980
R^2	0.432	0.645	0.645	0.671	0.677

Standard errors in parentheses
$^{*}\ p < 0.10,\ ^{**}\ p < 0.05,\ ^{***}\ p < 0.01$

So far I have seen that having a producer of the same sex as the actress/actor increases their wages. Table 2 shows the results for the second regression with the interactions variables.

Column 1 takes in consideration only the SameSex*Female interaction. I can see that SameSex drops in significance to 10% and the coefficient is equal to 12,3% while the interaction term, although positive, it's not significant. This means that the positive effect generated by having a producer of the same gender is not led by women but rather it's "gender constant" meaning that both women and men are favoured when they have a producer of their gender.

Column 2 drops the SameSex*Female interaction and adds the SameSex*Experience. The beta for my independent variable jumps to 39,8% and becomes significant. The interaction variable is significant but negative. This means that experience is an important control to take into consideration and the given negative sign shows that the positive effect of SameSex doesn't involve experienced stars. After a certain number of movies, actresses and actors don't need producers to boost their wages as they become more famous and they are able to demand an increase themselves with their agents.

Column 3 comprehend both interaction terms seen above plus SameSex*Female*Experience.
The variable SameSex is positive and significant at 5% which means that having a producer of the same sex as the star, for both sexes, increases the star's wage by 35,6%. SameSex*Female is still positive but not significant, while SameSex*Experience is still negative but drops in significance. SameSex*Experience*Female is negative and non-significant showing once again that there is no difference between experienced actresses and actors.

Table 2. Effect of female producers on actresses' wages

	(1)	(2)	(3)
Dependent Variable	wage	wage	wage
SameSex	0.129[*]	0.398[***]	0.356[**]
	(0.0684)	(0.124)	(0.143)
SameSex*Female	0.0419		0.305
	(0.127)		(0.299)
SameSex*Exp		-0.0128[***]	-0.0103[*]
		(0.00487)	(0.00527)
SameSex*Exp*Female			-0.0183
			(0.0135)
Experience	0.0386[**]	0.0448[***]	0.0443[***]
	(0.0161)	(0.0154)	(0.0157)

Winner	0.0217	0.00418	0.0286
	(0.188)	(0.192)	(0.191)
Producer	-0.0889	-0.0714	-0.0707
	(0.0927)	(0.0924)	(0.0928)
Age	0.397***	0.397***	0.403***
	(0.0441)	(0.0425)	(0.0429)
Age2	-0.00387***	-0.00385***	-0.00391***
	(0.000429)	(0.000424)	(0.000417)
Director Gender	-0.0356	-0.0296	-0.0817
	(0.115)	(0.111)	(0.106)
Ln(Budget)	0.517***	0.523***	0.513***
	(0.0598)	(0.0595)	(0.0598)
Comedy	0.134	0.116	0.109
	(0.0821)	(0.0824)	(0.0828)
Drama	0.0972	0.102	0.100
	(0.0688)	(0.0672)	(0.0671)
Horror	0.429***	0.432***	0.412***
	(0.157)	(0.164)	(0.156)
Romcom	0.338***	0.331***	0.326***
	(0.0892)	(0.0888)	(0.0862)
Thriller	0.263**	0.263**	0.249*
	(0.121)	(0.120)	(0.126)
Constant	-3.545***	-3.805***	-3.658***
	(1.127)	(1.149)	(1.135)
Production Companies	YES	YES	YES
Year Dummies	YES	YES	YES
Observations	980	980	980
R^2	0.677	0.680	0.682

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

4.1 Robustness check: the Oster test

One problem that econometricians have to face when they construct a regression and analyse data is the omitted variables bias. The omitted variable bias occurs when some characteristics, that are correlated with both the independent and dependent variable, are not inserted in the regression because the effect on the dependent variable is unknown or because data are not available.

To check whether the bias from omitted variables is still there after adding controls, I exploit the Oster test developed by Emily Oster in 2016. The Oster test evaluates the degree of omitted variable bias under the assumption that the observed controls are good approximation for the unobserved controls. It tells me if and how my beta would have changed if I had been able to add more relevant controls to my regression. This test works only after linear models therefore I perform it with the OLS estimation of the last regression where the beta for SameSex was equal to 0,356. In this regression all control variables are included and also a set of star dummy.

Oster (2016) also defines Rmax, the overall R-squared of the model. Her study explains that Rmax should be set at $1.3*\hat{R}$ (R-squared from the regression) and since my R-squared is equal to 0.77, the result is equal to 1 which is the defaulted Rmax in Stata. Oster (2016) also set the bound of $\delta=1$ which suggests that the unobservables are as important as the observables.

The estimates are computed using the Stata command *psacalc*. Table 3 shows the results for β for 3 different Oster tests when I change the *mcontrols* respectively: actors dummies (Column 2); actor dummies plus age and age-squared (Column 3); actor dummies, age and age-squared and year dummies. These numbers tell me that there is an omitted variable bias and if the unobservable controls had been included in the regression, the beta would have become equal to 41.84 which is quite high.

Table 3. Oster Test

Variable: SameSex	Baseline Model	(2)	(3)	(4)
Estimates of β	0.355	21,65	45,28	41,84

In the previous regressions I had decided to not insert the box office revenues for each film since I thought it would be a bad control. To see if I was wrong in my reasoning, I have

decided to re-do the OLS estimation and include the box office, more precisely its logarithm, in the regression.

In the Annex, Table 4 shows the results. Column 1 presents the OLS estimation without Box Office, Column 2 with it. As it can be seen the beta coefficient for SameSex does not change by much (0,004 points higher) and remains positive and significant. Box Office it's actually negative but not significant which means that the box office has no effect on the actress/actor salary. Performing the Oster test in this new regression, the results stay the same.

Sanchez and Paniagua (2017) instead, find that box office has a positive and significant effect. I do not agree with them as it has been proved many times that all-stars movies not always mean higher box office. For example in 2019 *"Dark Phoenix"* starring Sophie Turner, Jessica Chastain, James McAvory, Michael Fassbender and Jennifer Lawrence grossed a total loss of 100 million dollars and it was also part of the profitable Fox's *"X-Men"* franchise. Again in the same year, *"Cats"* starring big names like Dame Judy Dench, Sir Ian McKellen, Idris Elba, Taylor Swift, James Corden and Rebel Wilson sunk at the box office becoming one of the largest loss for Universal. Having a famous cast does not mean that the movie will be good, what counts is the story and how it tells it.

Chapter V: Conclusions

Many papers, many studies in the past years have tried to understand the problem of the gender pay gap which persists in the majority of the developed countries. Women are paid less than men because they are subject to more stereotypes and discrimination which in turn confine them in more female-typical and family-friendly occupations with lower wages. Even when they enter in male-dominated fields they are underrepresented at the top occupations creating a "glass-ceiling". A reasonable explanation for the gap can be the difference in human capital between the two genders. It was true back in the days but now no more. The percentage of women enrolling into universities is getting higher and higher and they are as good as men, if not better. Plus if the bias toward girls is already present in school and colleges itself, they may decide to enroll again in more female-typical fields which will turn in conclusions to female-dominated occupation with lower wages. It's like a dog biting its tail. Some governments tried to aid women by implementing policies that punishes discriminatory behaviours. However as explained by the latest literature, subtle discrimination has even more negative and detrimental effect than overt discrimination. Unfortunately it is very hard to demonstrate this kind of discrimination and denounce it.

Also it was found that women suffer a great deal from "child penalties", therefore legislators should also focus on implementing policies to incentivize firms both private and public to become more family-friendly and avoid working women to suffer wage losses because they are also mothers.

This problem doesn't even spear the industry where almost everything seems to be perfect, where both women and men work side-by-side with high level salaries: Hollywood. Some actresses spoke out about the discrepancy they have found with their male counterparts like Jennifer Lawrence, Patricia Arquette, Emma Stone, Michelle William, Meryl Streep and many others. Few papers that studied the case have always found a gender pay gap and part of it is due to discrimination. Discrimination in Hollywood comes to no surprise if we think about the fact that the last years have been characterized by the exposure of the sexual misconduct of some top executives, producers and so on. This industry is highly male-dominated and statistics show that the presence of women is still really low especially behind the scene. Female producers represented only 27% of the 250 top-grossing films and producers are the ones who decide which movie to create (subject to the approval of the president of the studio if she/he is not an independent producer). Since many studies find that female bosses can help female colleagues in terms of promotions and thus wages, I was

curious to see whether this reasoning can be done also in Hollywood and thus investigate if female producers have an effect in increasing actresses' wages and if this could lead to a decrease in the gender gap. Therefore I personally collected salaries data corresponding to 988 movies for 145 Hollywood stars. I exploited a fixed effects model with stars' fixed characteristics and added some movie variant controls such as age, experience, budget, director gender, genre, production company, year of release, Oscar winner and if the star was a producer of her/his own film. Results were quite interesting. Well, first of all the time pattern of the salaries showed that they have increased through the decades for both genders but actresses always stayed behind actors. Second some genres held higher salaries like Action, Comedy and Thriller in which women are the less represented. Producers female in my sample seems to prefer to produce mainly Action and Drama movies. Turning to my results, in the first regression I find that having a producer of the same sex as the star can increase her/his salary by 14,6% after adding all controls. Consistent with the already existing literature age, experience and budget have the higher impact on salaries but the effect of age disappears after the star has reached a certain age which is different for women and men (34 vs 51). This means that 25-years old Saoirse Ronan has only 9 years left, while 24-years old Thimotée Chalamet has still more than 20 years of career to go.

In the second regression I added interactions terms to single-out the effect for actresses. Now having a producer of the same sex leads to an increase of 35,6% in a star's salary, however the positive effect is not driven by women but rather both genders have an advantage in having a producer of the same sex but only at the start of their careers.

Unfortunately there are some econometric limits: the omitted variable bias is strong with this work. The Oster test shows that the beta estimation, if more controls are added, becomes quite large meaning that there are unobservable variables which needs to be taken into consideration. I tried to see if the problem or at least part of it could be solved by adding the box office as control but results show that the beta coefficient for the independent variable would be more or less the same and the problem of omitted variable would still be present. I am not surprise of the presence of this bias as in the Hollywood industry there are a lot of variables that are impossible to observe because some data are not disclosed to the public. For example the salary for each star could vary also because contracts may include specific demands or agreements that would reduce or increase the pay.

Even though my results show absolutely no difference in increase in wages between actresses and actors when they have a same gender producer, what I really want to stress with my work is that Hollywood even with its liberal-leaning values has still much to learn and fix. First of all it needs to increase movies with female lead characters and especially change the

representation of women in this movies. In most of these movies, female characters are still represented as the damsel in distress with no job or a very precarious job whose life only revolves around her love affairs, whose main purpose in life is to find a man to settle with. Why is that? Because romance sell and production companies are too afraid to step up and go out of their bubble. My results, consistent with other studies, show that there is a gender segregation of actresses for genre that are more "female-typical" like RomCom and Drama which have lower salaries whereas Action, Thriller and Horror, where starring women are only a small fraction, display higher salaries. Increasing female leading characters in these genres could be a solution to narrow the gender pay gap.

A certain representation of female characters could also have social effects. Being the cinema and television a huge part of our everyday life, especially for the new generations that have TV shows and movies literally in the palm of their hands, the representation of women like that can lead young girls and boys to keep having a stereotyped vision what a woman is and should be. Women can do action, thriller, horror, everything. It's the talent, the story that matters not the gender. Luckily, in the last two years or so I have seen a change, although small and more concentrated in TV, in how women are portrayed: a few examples are "Wonder Woman", "Captain Marvel" and "Black Widow". Despite that what I really wanna see in the future are strong female characters without superpowers or special abilities that struggle with everyday normal life decisions. They can have husbands and boyfriends but that aspect of her life does not have to become the centre of the story. As female producers appears to not be the driver key to close the gender gap, female writers or female directors could as they are the ones who write the story which in the ends it's all that matters.

Maybe researchers should focus more on why Hollywood has so few women among their ranks and why actresses experience this problem of genre segregation.

Among all the fields and occupations on which I could have written and studied about gender differentials, I have chosen Hollywood because I am a young woman who wants to follow the film industry as career path and I wanted to look closely at what challenges I'd come to face. My main interest is to create movies as producer. I am aware that this industry is still largely male-dominated and in the last years the "dirty clothes" of Hollywood have come out like the Weinstein case, but I hope to be part of the wind of change that this scandal has brought and increase women representation not only on the screen but also behind it.

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Annex

Table 4. OLS regression with and without Box Office

	(1) wage	(2) wage
SameSex	0.356**	0.360**
	(0.154)	(0.155)
SameSex*Female	0.305	0.314
	(0.324)	(0.321)
SameSex*Exp	-0.0103*	-0.0104*
	(0.00570)	(0.00576)
SameSex*Exp*Female	-0.0183	-0.0190
	(0.0146)	(0.0145)
Experience	0.0443**	0.0448***
	(0.0170)	(0.0169)
Winner	0.0286	0.0272
	(0.207)	(0.204)
Producer	-0.0707	-0.0703
	(0.100)	(0.101)
Age	0.403***	0.401***
	(0.0465)	(0.0470)
Age2	-0.00391***	-0.00390***
	(0.000451)	(0.000454)
Director Gender	-0.0817	-0.0747
	(0.115)	(0.113)
Ln(Budget)	0.513***	0.532***
	(0.0647)	(0.0681)
Comedy	0.109	0.103
	(0.0896)	(0.0904)
Drama	0.100	0.0915
	(0.0726)	(0.0726)
Horror	0.412**	0.407**
	(0.168)	(0.172)
Romcom	0.326***	0.318***
	(0.0932)	(0.0947)

Thriller	0.249*	0.236*
	(0.137)	(0.138)
Ln(Box Office US)		-0.0314
		(0.0308)
Constant	-2.853**	-2.545*
	(1.293)	(1.348)
Production Companies	YES	YES
Year Dummies	YES	YES
Star Dummies	YES	YES
Observations	980	980
R^2	0.775	0.776

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

List of stars

Name	Number of movies
Adam Sandler	12
Al Pacino	6
Alec Baldwin	3
Ali MacGraw	2
Alicia Silverstone	2
Angela Basset	4
Angelina Jolie	13
Anne Hathaway	2
Anthony Hopkins	4
Antonio Banderas	2
Arnold Schwarzenegger	20
Ashley Judd	3
Ben Affleck	12
Ben Stiller	5
Bill Murray	3
Brad Pitt	15
Brenden Fraser	4
Brittany Murphy	2
Bruce Willis	14
Bryce Dallas Howard	3
Burt Reynols	7
Cameron Diaz	12
Catherine Zeta-Jones	4
Charlize Theron	1
Cher	6
Chevy Chase	4
Chris Evans	7
Chris Hensworth	6
Chris Pine	6
Chris Pratt	2
Chris Tucker	4
Clint Eastwood	8
Colin Farrel	7
Courtney Cox	5
Daniel Craig	6
Daniel Day Lewis	1
Daniel Radcliff	6
Danny Glover	2
Debra Winger	2
Demi Moore	9
Denzel Washington	11
Diane Keaton	8
Drew Berrymore	4
Dustin Hoffman	6
Dwayne Johnson	5
Eddie Murphy	12
Edward Norton	5
Ellen De Generis	1

Emma Watson	7
Ethan Hawke	3
Freddie Prinze Jr.	2
Geena Davis	2
Gene Hackman	4
George Clooney	14
Glenn Close	4
Gwyneth Paltrow	4
Halle Berry	7
Harrison Ford	12
Hilary Duff	4
Hilary Swank	1
Hugh Grant	3
Jack Black	2
Jack Nicholson	15
Jackie Chan	5
Jake Gyllenhaal	1
James Franco	3
Jane Fonda	9
Jason Biggs	3
Jason Lee	1
Jason Patric	2
Jean-Claude Van Damme	6
Jeff Bridges	2
Jennifer Aniston	16
Jennifer Garner	2
Jennifer Lawrence	11
Jennifer Lopez	14
Jim Carrey	13
Joaquin Phoenix	6
Jodie Foster	8
John Travolta	17
Johnny Depp	16
Jude Law	5
Julia Roberts	16
Kate Hudson	6
Kate Winslet	2
Keanu Reeves	7
Keira Knightley	2
Kevin Costner	6
Kevin Spacey	1
Kim Basinger	13
Kirsten Dunst	6
Kurt Russell	6
Leonardo DiCaprio	12
Lindsay Lohan	6
Lucy Liu	4
Mark Wahlberg	13
Martin Lawrence	5
Matt Damon	10
Matthew McConaughey	3
Matthew Perry	4

Meg Ryan	5
Mel Gibson	9
Melanie Griffith	3
Meryl Streep	13
Michael Douglas	7
Michael J. Fox	5
Michelle Pfeiffer	7
Mike Myers	6
Naomi Watts	1
Neve Campbell	8
Nicolas Cage	15
Nicole Kidman	19
Orlando Bloom	7
Owen Wilson	9
Pierce Brosnan	4
Queen Latifa	3
Rachel McAdams	4
Reese Witherspoon	11
Renée Zellweger	6
Richard Gere	7
Robert De Niro	15
Robert Downey Jr.	8
Russell Crowe	7
Ryan Gosling	11
Ryan Phillippe	6
Samuel L. Jackson	3
Sandra Bullock	11
Sarah Jessica Parker	2
Sarah Michelle Gellar	3
Scarlett Johansson	4
Sharon Stone	8
Shia LaBeouf	5
Silvester Stallone	23
Steve Carell	4
Steve Martin	3
Susan Sarandon	3
Tom Cruise	23
Tom Hanks	11
Tommy Lee Jones	5
Uma Thurman	14
Val Kilmer	5
Vin Diesel	6
Vince Vaughn	4
Will Ferrell	6
Will Smith	15

Total	
Observations	988

Figure 4. Mean salary per genre