It's a man's world: culture of abuse, #MeToo and worker flows*

Cyprien Batut†, Caroline Coly‡, Sarah Schneider-Strawczynski §

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Abstract

Sexual harassment is a widespread issue in the workplace. In France, around 4% of women report some sort of harassment at work in the last 12 months. Harassment can deter women from entering the labor market but can also lead them to quit toxic workplaces at their expense. This paper is one of the first papers to study the link between sexual harassment and worker flows. First, we investigate which factors affect the likelihood of being harassed in the workplace. Second, we use the shock caused by the #MeToo movement in France to understand whether the change of norms it impulsed improved the working conditions of women. To do that, we use a representative survey of French employees that includes a self-administered questionnaire about instances of sexual harassment. We find that younger women working in low-paid jobs, either in the industry or accommodation and catering, are the most exposed to sexual harassment from colleagues. We also provide evidence that the risk of harassment at the establishment level is correlated with lower hourly wages. We exploit that information and exhaustive administrative datasets to construct a measure of harassment risk available for all French establishments. Using a triple-difference strategy, we find that #Metoo led to an increase in the relative quit rate of women in more at risk establishments. Social movements can help raise awareness on toxic working conditions and push victims to escape those situations.

JEL codes: J16, J81, J24, J52

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†Direction Generale du Trésor.

‡Paris School of Economics, École des Hautes Études en Sciences Sociales. *Corresponding author:*48 boulevard Jourdan, 75014 Paris. caro.coly@gmail.com; 01 80 52 19 43

§Paris School of Economics, Paris 1 Panthéon-Sorbonne University.

1 Introduction

Sexual violence and harassment are common and severe issues for women in the workplace. For instance, the 2019 AEA Professional Climate Survey in Economics[1] reported that respectively 43 % and 23 % of female respondents had experienced offensive sexual remarks directed at them and unwanted attempts to establish a dating, and romantic, or sexual relationship from another economist. The equivalent statistics were 13 % and 3 % respectively for male respondents. A detrimental working environment could impact women's careers choices and opportunities, and explain the under-representation of women in the economic profession[2], and in general, in the labor market.

This paper explores the pervasiveness of sexual harassment in the workplace and aims to understand its labor market effect on women. In 2017, the #MeeToo movement exposed the existence of a "culture of abuse" in the working environment of women. Starting with several actresses accusing the film producer Harvey Weinstein of rape and sexual harassment in work-related contexts, the #MeeToo movement took off worldwide as women shared their experiences of sexual violence in their daily and working life. On the labor market, a "culture of abuse" disproportionately impacting women could prevent them from accessing high-paying and prestigious careers. If employers lack evidence to enforce disciplinary action against harassers or prefer to turn a blind eye on the issue, then the only way out for women might be to quit their job. This double penalty (harassment and higher job turnover) could even deter women from entering the labor market or push them into safer and maybe less rewarding jobs. In this paper, we investigate the consequences of this culture of abuse on female workers' flows using the rise of the #MeeToo movement as an exogenous shock on social norms regarding violence against women in the workplace.

Overall, we expect the consequences of #MeToo for women on the labour market to depend on the reactions of the three main actors: women, men and employers. We argue we can observe their reactions through worker flows. To understand this, it is important to clarify the three main ways to terminate open-ended contracts in France. Employees can quit their job and, as it is a voluntary separation, have no right to unemployment benefits and there is no risk of legal action for the firm. On the contrary, if the employer lays off some employee, it needs to be motivated (economic reasons or individual wrongdoing) and the firm faces a risk of legal action. The laid-off employees are eligible to unemployment benefits and to a severance indemnity. Lastly, the employer and employees can reach a settlement to end the open-ended contract called termination by agreement. The employee will be eligible to unemployment insurance and to a negotiated indemnity but there will be no risk of legal action for the firm.

[1] https://www.aeaweb.org/resources/member-docs/final-climate-survey-results-sept-2019, last accessed in January 2021.

[2] According to Bayer and Rouse (2016), 56% of PhDs in STEM fields go to women, but it is still less 33% in economics and further along the road it gets worse, only 14% of Full professors in Economics are women.

If #Metoo led women to be more likely to denounce harassment and fight back against their harasser while employers do not change their behaviour, we expect it would lead to less quits and/or more termination by agreement of women (empowerment scenario). If men change their behaviour and harass less (adaptation scenario), we should also observe less quits of women but less lay-offs of men as well. If due to the movement, employers want to reduce the probability of facing a sexual harassment scandal, they could decide to hire less women and potentially try to push the ones in place to quit (backlash scenario). To finish with, if employers change their behaviour and defend more women, men should be laid-off more and women quitting less (strong reckoning scenario). However, if there is only a weak reckoning where employers recognize the legal risks for them but don't want to take action on harassers, they will compensate women to leave and thus we should observe more terminations by agreements for women. These effects will depend on the prevalence of violence against women in the workplace and we could expect them to be stronger in establishments with higher sexual harassment risk.

Our paper is divided in two parts. We first use a representative survey of more than 12,000 employed French women, which includes a self-administered questionnaire about some instances of sexual harassment, to investigate the factors that may affect the likelihood of being harassed in the workplace with a probit model. We then use this prediction on two exhaustive labor market administrative datasets to construct a measure of harassment risk for all establishments in France. We relate this establishment level measure of harassment risk to different types of workers flows of women relative to men: hiring, layoff, termination by agreement and quit.

We then take advantage of the #Metoo shock in France to analyze whether it has impacted women's working conditions, and thus their labor market flows. To do so, we use a triple difference strategy comparing worker flows of women and men before and after #Metoo in high risk versus low risk establishments. To disentangle whether our effects are driven by women or men's worker flows, we also implement a difference-in-difference strategy comparing women's worker flows in high versus low risk establishments before and after #Metoo and then also run the same difference-in-difference for men's worker flows.

Using the representative Working Conditions Survey, we find that around 4% of women report having been sexually harassed or assaulted by a colleague in the last 12 months in France. This proportion doubles for women working in accommodation and catering or between the ages of 18 and 25. We provide evidence as well that the risk of harassment at the establishment level is correlated with lower hourly wages and lower gender pay gaps. We also find that the relative quit rate for women (compared to men) in high-risk (compared to low-risk) establishments is significantly higher. This corroborates the double penalty phenomenon faced by women who are not only more often victims of sexual harassment, but who have to quit their jobs in order to escape it.

Using our triple difference strategy, we find that #Metoo has led to an increase in the relative exit probability of women in high risk establishments. This is mainly driven by an increase in the relative quit probability. Results from our double difference strategy show that this is entirely driven by an increase in probability of exiting from women in high-risk establishments versus low-risk establishments whereas men's probability of exiting their establishments does not seem to be impacted by #MeToo. These results suggest that #MeToo increased awareness among women victims of toxic working conditions and, at least in the short term, that their working conditions did not change enough to prevent them from leaving.

In this paper, we contribute to two strands of the literature. First, we contribute to the literature that measures the incidence of sexual harassment in the workplace and their consequences on women. Male-dominated work settings are found to be more prone to the emergence of sexual harassment against women (McLaughlin et al., 2012; Kabat-Farr and Cortina, 2014; Folke and Rickne, 2020). We extend those analyses by looking at other characteristics of the victims such as their age, their occupation and their wage. We also relate to the literature on compensating pay-differentials (Hersch, 2011; Folke and Rickne, 2020). Similarly to Folke and Rickne (2020), we find that high risk of sexual harassment is associated with lower wages, suggesting that there is no compensation for such harassment. Besides the consequences for mental and physical health (McDonald, 2012), violence against women can have long-lasting effects on their career (Willness et al., 2007; McDonald, 2012; Siddique, 2018). For example, McLaughlin et al. (2017) shows that sexual harassment tends to increase the financial stress of victims by precipitating job changes. Our results do suggest that women tend to quit more than men in establishments that are at the top quintile risk of harassment.

We also relate to the literature that examines whether activist movements can change the norms and behavior of firms. For instance, Weber et al. (2009) showed that anti-genetic movements in Germany affected the commercialization of biotechnologies by pharmaceutical firms. In particular, our paper also contributes to an emerging literature that focuses specifically on the #MeToo movement. Levy and Mattsson (2019) found that, by changing norms, the #MeToo movement increased the reporting of sexual crimes to the police by 13 % during the first six months and that this effect persisted for at least 15 months. Focusing more on labor market outcomes, Cici et al. (2020) found that the productivity of female mutual fund managers significantly increased following #MeToo, suggesting that reducing the threat of sexual harassment improves productivity. More similar to us, Bernabe (2020) found that women's propensity to switch jobs was 20 % lower in US counties where the tone of news coverage on #MeToo was negative compared to the ones where it was neutral. To the best of our knowledge, we are the first to analyze the impact of #MeToo on worker flows such as hiring, quits, and layoffs within firms. In line with this literature, our results suggest that firms and employees do respond to external social pressure and that grassroots activist movements can be

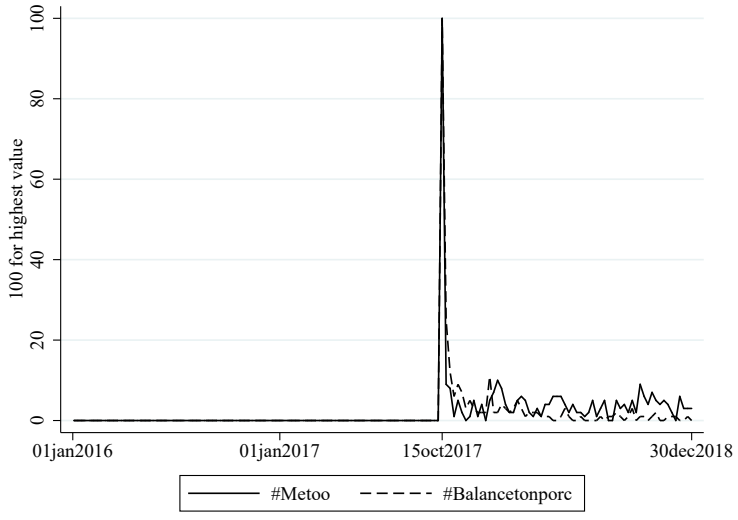
efficient.

The remainder of the paper is structured as follows. Section 2 explains the context of #Metoo in France. Section 3 describes the data that we use. In section 4, we present our main findings about the prevalence of sexual harassment in the workplace in France. Section 5 investigates whether women benefited from #Metoo and section 6 concludes.

2 Context: #Metoo in France

On October 15th 2017, after media revelations about Harvey Weinstein, the actress Alyssa Milano re-popularized the #Metoo hastag, which was born in 2007, to invite women to share their stories of sexual violence. This led to an outflow of anonymous and non-anonymous testimonies on general and social medias, raising awareness about sexual harassment issues. In France, the journalist Sandra Muller launched an equivalent, #balancetonporc, on October 14th 2017, which was widely followed with more than 931 000 tweets within a year. Its first stated objective is to name and shame offenders but its broader objectives were to launch a public discussions about the best ways to stop sexual harassment and push victims to speak out. As much as the harassers themselves, what was denounced was a widespread culture of abuse in some environments and the silence of the institutions in charge of policing them.

Figure 1: Google searches for "#Metoo" surged after October 2017



Source: Google trends. Note: The results reflect the proportion of searches for the "#MeToo" keyword in a specific region and time period, relative to the region with the highest usage of that keyword (value of 100). Thus, a value of 50 means that the keyword was used half as often in the region concerned, and a value of 0 means that there is insufficient data for that keyword.

The #Metoo and #balancetonporc phenomenons were very strong and generated overnight an important

reckoning about sexual harassment issues in the workplace in most developed countries. In Figure 1, we show the weekly frequency of Google searches for #MeToo and #balancetonporc between 2016 and 2018. It clearly shows an absence of searches followed by a sharp increase from October 15th 2017.

To verify that there were not already ongoing discussions on the topic in the weeks preceding #MeToo, we also look at google searches for "harcèlement sexuel" (sexual harassment in French). As can be seen in gure A.1 in appendix, we observe the same spike on the week of October 15th, 2017, which brings further evidence for the exogeneity of our shock.

3 Data

We use three main data sources. First, we use the 2016 Working Conditions survey [3]. From October 2015 to June 2016, a representative sample of about 27,700 employed individuals were interrogated about their working conditions. The survey covers a lot of different subjects and is divided into two parts. The rst part is composed of questions about professional activity, organization of working time, work organization, health, family life pathway and career path. The second part is self-administered and contains more sensitive questions about their personal life, dif culties at work, work relations and sexual harassment. About 7% of the sample does not answer to the self-administered part.

We use the answers on the sexual harassment questions to identify in which types of establishments women are more likely to declare that they have been harassed. For that purpose, we restrict the sample to employed women between 18 and 65 years old, which leaves us with 11,488 observations, and focus on three main questions:

1. “In the past 12 months, have you experienced any of the following dif cult situations at work? One or more people systematically behave with you in the following ways: They insistently make sexual propositions to you” [4]

2. “In the past 12 months, have you experienced any of the following dif cult situations at work? One or more people systematically behave with you in the following ways: Saying obscene or degrading things to you.” [5]

3. “In the past 12 months, in the course of your work, have you been physically or sexually assaulted by

[3] Enquête Conditions de Travail 2016

[4] “Au cours des douze derniers mois, vous est-il arrivé de vivre au travail les situations dif ciles suivantes ? Une ou plusieurs personnesse se comportent systématiquement avec vous de la façon suivante: Vous fait des propositions à caractère sexuel de façon insistante ?”

[5] “Au cours des douze derniers mois, vous est-il arrivé de vivre au travail les situations dif ciles suivantes ? Une ou plusieurs personnesse comportent systématiquement avec vous de la façon suivante: Vous dit des choses obscènes ou dégradantes ?”

your colleagues or superiors?"[6]

For the first two questions, additional questions were asked to know more about the perpetrators of those behaviours: (a) "The individual(s) who has(ve) had the described behaviour is (are): one or more persons of your firm" [7] and (b) "The individual(s) who has(ve) had the described behaviour is (are): one or more clients, customers or patients." [8] In the main part of our analysis, we want to focus on behaviours committed by colleagues or superiors. Our measurement of sexual harassment is a dummy variable that takes the value 1 for women who either answer affirmatively to question (1) and question (a), or question (2) and question (a), or question (3). Our dummy takes the value 0 for women who answer "no" to all our 3 questions or for women that answer yes for one of our two first questions but no to (a).

French law defines two types of sexual harassment [9]. It can be either a severe pressure exerted to obtain a sexual act, e.g. layoff blackmail, and in that case it does not need to be repeated; or it can be undesired and repeated sexual remarks or behaviours. Sexual assault on the other hand is defined as "any sexual act committed with violence, constraint, threat or surprise" [10]. We could hence be missing some instances of sexual harassment where a severe pressure was exerted to obtain a sexual act only once as none of the questions in the questionnaire corresponds to that specific case. However, this is the least common type of sexual harassment (Waldo et al., 1998; Fitzgerald and Cortina, 2018).

All our questions about sexual harassment are self-administered by surveyed individuals, which increases privacy and is thus likely to decrease under-reporting bias (Cullen, 2020).

We also use the MMO database from 2015 to 2018. The MMO[11] (Déclarations des Mouvement des Main d'Oeuvre) is a database produced by DARES, the statistical office of the French labor ministry. All establishments of more than 50 employees must fill in a survey giving details of each entry and exit from the establishment: recruitment on permanent or fixed-term contracts, transfer to another establishment, quits, dismissal for economic or other reasons, retirement, termination by agreement, etc. This dataset has the advantage of differentiating between the entries and exits of establishments and their motivations but also to give the sex of the person concerned by the movement. It hence allows us to measure with a daily precision the number of each type of worker flow for both women and men within an establishment.

Finally, we also work with the DADS 2015 ("Declaration Annuelle des Donnees Sociales"), an exhaustive

[6] "Au cours des douze derniers mois, dans le cadre de votre travail, avez-vous été victime d'une agression physique ou sexuelle de la part de vos collègues ou de vos supérieurs ?"
[7] La ou les personnes ayant eu les comportements décrits est(sont) : une ou plusieurs personnes de votre entreprise.
[8] La ou les personnes ayant eu les comportements décrits est(sont) : un ou plusieurs de vos clients, usagers, patients
[9] art. L. 1153-1 of labor law
[10] Art. 222.21 CP
[11] The DMMO are proprietary data of the DARES that can be accessed by researchers provided they follow the procedures described in here.

database linking employees and employers. We hence have information on the sector and type of activity of the establishment. The DADS uses forms sent by all private companies for the payment of employer contributions. Firms report periods of employment, the corresponding wage for each position held and the occupation of the worker. It allows us to measure within each establishment the gender wage gap, the proportion of women, the number of employees and other useful statistics in 2015.

4 Sexual harassment in France

In this section, we review what we can say about the prevalence of sexual harassment in French rms thanks to French administrative datasets. At the heart of our approach lies the concept of "harassment risk" i.e. the probability of being harassed in the last 12 months that we compute for each establishment in our sample.

4.1 Main stylized facts

To start with, we use the sample of 11,488 women from the survey “Conditions de Travail 2016” to identify which type of women are harassed and in which type of establishment. First of all, younger women tend more to declare to have been a victim of sexual harassment in the last 12 months as it can be seen in Figure 2a. The average harassment probability for women from 18 to 25 years is close to 8%, 3 points higher than the average probability for all women (3.9%). Harassment probability is 4 times lower for women from 26 to 30 years old, and remain close to the average (4%) for any other age category.

Figure 2: Stylized Facts – Harassment of women in the workplace

(a) Young women declare more harassment situation

(b) Women earning less declare more harassment situation

(c) Women in low skilled occupation declare more harassment situation

(d) Probability of harassment of women by sector

Source: 2016 Working Conditions Survey.

A second stylized fact is that women in two occupations have a much higher probability of being harassed: skilled blue-collar workers and unskilled employees with contact to the public [12] as showed in gure 2c. Harassment probability is almost twice as high for women in these occupation than for others. On the contrary, women in quite a few other occupations, often of "higher" standing, enjoy a much lower than average harassment probability.

As a result, as can be seen in Figure 2b there is an almost linear relationship between income and harassment probability. Women in the last quintiles of wage are two times less likely to declare having been harassed in the last 12 months than women in the rst one. Overall, young women in low paying jobs seem to be especially vulnerable to sexual harassment. The characteristics of the establishments are also important determinants. Figure 2d shows that women working in accommodation and catering are the most exposed

[12] Occupations 56 and 61 in the NAF17

to sexual harassment. Other characteristics of workers and firms such as the seniority of the worker, the share of women, and the size of the establishment do not seem to matter as can be seen in figures B.1 to B.3. Unlike Folke and Rickne (2020), we do not find that women declare more sexual harassment in gender-mixed and male-dominated establishments. This can be explained by a difference in the construction of the sexual harassment variable. While we focus on questions that are consistent with the legal definition of sexual harassment in France, Folke and Rickne include a question about "sexist hostility", which ask whether respondents faced "condescending and ridiculing statements about women", into their sexual harassment variable.

To understand whether the difference in our respective results could be driven by this different definition of our sexual harassment variable, we look at a similar question in our survey: "At work, I hear derogatory remarks or jokes about women". We create a dummy variable misogyny that takes value 1 if the respondent answered by "always", "often" or "sometimes" and 0 by "never". Figure B.4 plots the probability of hearing such remarks depending on the share of women in the establishment. It is clear from this figure that the higher the share of men, the more likely women are to hear such comments. Women have a probability of hearing misogynistic comments three times higher in male-dominated workplaces than in female dominated workplaces. Even in gender-mixed workplaces, the probability of hearing such remarks remain high at around 45%.

Those results have important implications. Having a higher share of women in the workplace can decrease the misogynistic environment but does not reduce the probability of facing sexual harassment.

4.2 Harassment risk and women outcomes

In this part, and in the rest of the paper, we use these stylized facts to compute an exhaustive measure of harassment risk we can relate to French administrative datasets. To do that, we run the following probit model on our sample of women in the Working Conditions Survey:

$$SexualH_{ij} = \sum_{k=18}^{65} {}_{ik}:(Age_i = k) + \sum_{k} {}_{ik}:(Job_i = k) + \sum_{k} {}_{ik}:(Quintile_i = k) + \sum_{k} {}_{jk}:(sector_j = K) + :ShareWomen_j +$$

where $SexualH_{ij}$ =1 if the woman i declared having been sexually harassed in firm j, $Quintile_i$ corresponds to her wage quintile, Job_i to her socio-economic profession, $ShareWomen_j$ to the share of women in the establishment and $sector_j$ to the sector of the establishment.

We then use the result of this probit model to compute a probability of harassment risk for every woman

in the DADS and aggregate those probabilities to calculate an harassment risk at the establishment level.

In gure 3a, we can observe that a lower gender wage gap is correlated with a higher harassment risk at the establishment level. This can be partly explained by the fact that high harassment risk establishments are also establishments with lower hourly wages as can be seen in gure 3b.

Figure 3: Harassment of women and pay-gap

(a) When harassment risk is high, the gender gap is lower

(b) But when harassment risk is high, hourly wages (in euros) are also lower

Source: 2016 Working Conditions Survey and DADS 2015.

We then look at both the quit rate of women and their relative quit rate compared to men depending on the quintiles of harassment risk of the establishments. Figures 4a and 4b show that women quit more their jobs in high risk establishments. Both their quit rate and their relative quit rate rise sharply for the last quintile of establishment harassment risk. This provides further support for the double penalty hypothesis: not only women face more often sexual harassment, but they also have to quit more their jobs to escape it.

Figure 4: Harassment of women and quit rates

(a) Women's quit rate rises sharply in more at risk establishments

(b) Women's relative quit rate rises sharply in more at risk establishments

Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016.

5 #Metoo and worker flows

In this section, we investigate whether the importance of the reckoning around #Metoo in France in 2017 changed women's working conditions, especially in plants where harassment risks are high. As shown in subsection 2, #Metoo in France provides an exogenous shock to study a change of norms relating specifically to sexual harassment in the work environment.

5.1 Empirical strategies

To study this change, we implement a triple difference strategy where we compare relative movement probabilities of women (with respect to men) before and after #MeToo in high vs low harassment risk establishments. Using a triple difference strategy is preferable to a double difference strategy where we would use men in the same establishment as a control group. This would require the strong assumption that men are completely unaffected by the #MeToo movement. However, if sexual harassment is punished more heavily by firms following the movement, using men as the control group would bias our results. We thus estimate the following equation:

$$Y_{igt} = \beta_1 D_i T_{gt} + \lambda_{ig} + \mu_{it} + \alpha_{gt} + \varepsilon_{igt} \quad (1)$$

where Y_{igt} is the monthly probability of at least one exit/entry of a certain type (quit, lay-off, termination by agreement, hire, ...) in establishment i for gender g in month t. T_{gt} is a dummy equal to 1 when t October 2017 and gender is female and D_i is equal to 1 for establishments which are in the last decile in

terms of harassment risk. $!_{ig}$, $_{it}$, and $_{gt}$ are a set of xed effects that control respectively for establishment gender policy, establishment speci c time trends, and national gender speci c trends. Our coef cient of interest is $_1$, which measures the relative impact of the #Metoo movement on movement probabilities between women and menin high harassment risk establishment compared to low harassment risk establishment. Our identi cation for this strategy relies on the hypothesis that the relative movement probabity of women in high risk establishment would have evolved in the same way as in low risk establishments without #Metoo.

To disentangle whether the changes observed are driven by changes in women's worker ows, men's worker ows or both, we then implement a difference-in-difference strategy where we compare the worker ows of women (resp. men) in high risk establishments to the ones of women (resp. men) in low risk establishments. We thus estimate the following equation separately for both women and men:

$$Y_{it} = {}_2{:}T_t \quad D_i + !_i + {}_t + {}_{it} \tag{2}$$

where Y_{it} is the monthly probability of at least one exit/entry of a certain type for females (resp. males) in establishment i and time t. T_t equals 1 when t October 2017 andD_i equals 1 when the rm is in the last decile of harassment risk. we also include establishment xed effects, $!_i$, and months xed effects, $_t$.

5.2 Results

Table 1: Triple difference estimation of women's relative work ows in high- and low-risk harassing establishments before and after #Metoo (Equation (1))

	(1) Entry	(2) Exit	(3) Termination by agreement	(4) Quit	(5) Layoffs
$D_i \quad T_{igt}$	0.00138	0.02731***	0.00197	0.01065**	0.00596
	(0.00396)	(0.00432)	(0.00240)	(0.00382)	(0.00324)
N	1857960	1857960	1857960	1857960	1857960
R^2	0.664	0.645	0.591	0.660	0.635

Note: * p < 0:05, ** p < 0:01, *** p < 0:001. Standard errors are presented in parentheses.

Table 1 presents the results of our triple difference strategy. We nd a positive and signi cant effect of #MeToo on the relative exit probability of women in high harassment risk establishments (column 2). This

effect is mainly driven by the fact that they quit more their job following #MeToo as can be seen in column 4. Women's relative probability of quitting in high-risk establishments compared to low-risk establishments rises by one percentage point after #MeToo. We nd no effect on the termination by agreement nor on lay-offs of women compared to men.

Figure 5 presents the dynamic effects on the relative monthly probability of exit and clearly shows that after October 2017, there is a clear increase in the relative probability of exit for women in high risk establishments. This is consistent with an empowerment scenario, where women realize they have bad working conditions and decide to leave once they observe no change. We also observe no pre-trends, which supports our identi cation hypothesis.

Figure 5: Dynamic effects on the relative monthly probability of exit

Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016. Note: The gure presents dynamic effects for the triple difference strategy.

Looking at the double difference results in graphs 6a and 6b , we see that the effect on the exit probability is driven by women's higher exit rate in high risk establishments following #MeToo.

Figure 6: Dynamic effects for equation 2

(a) Women's exit probability in high vs low risk establishment

(b) Men's exit probability in high vs low risk establishment

Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016.

We then look at the heterogeneity of results along several dimensions and present the results in figures C.1 to C.3. Figure C.1 shows that the effect on the monthly probability of at least one exit is almost twice the size in establishments with a male CEO compared to the ones with a female CEO although the difference between the two is not statistically significant. However, the magnitude of the standard error are quite large for the interaction coefficient of female CEO as they are much fewer establishments with a female CEO. Looking at the effects depending on the size of the establishment, we observe an inverse u-shaped relationship. As the size of the establishment increases up to 500-999 employees, the effect on exits seems to increase but then declines and becomes insignificant for establishments larger than 1000 employees. This could be explained by the fact that in very large establishments, women could escape sexual harassment by switching jobs within the same firm. Finally, looking at the heterogeneity by sector in figure C.3, we observe unsurprisingly that the effect on exits is not significant in the French public sector where civil servants are guaranteed their job for a lifetime and where it might hence similarly be less costly to ask for a transfer to a different unit than to loose such a status.

5.3 Robustness

As a robustness check, we use a randomisation inference procedure where we randomise both (1) the date of the shock and (2) being in the last decile of harassment risk for an establishment. We generate 200 placebo treatment statuses and run equation 1 with these. Results for the outcome on exits are presented in figure 7 and show further support for our main findings. Most randomized estimation results coefficients are around zero and not significant; and all of them are very different from our true estimation coefficient.

Figure 7: Randomisation inference results for exit

Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016-2018.

We also run the same regression as equation 1 using as outcome the log of the ratio of the number of worker ows on the number of workers in the establishment and nd similar results as shown in table D.1.

6 Conclusion

Violence against women can be a severe problem in the workplace. Besides, it often results in a double penalty for women who have to change employment when facing this situation. The #MeToo movement allowed to shed light on this problem and triggered vigorous debates in the society.

We study the impact of #Metoo on practices in the workplaces through an event analysis using establishment data on worker ows. Worker ows re ect the quality of working conditions and how they evolved for women and men after the onset of the movement can tell us a great deal of its consequences on women working conditions and overall about the prevalence of violence against women in the French labor market.

Our results provide evidence for increased awareness from women on their bad working conditions as they quit more their jobs compared to men in high risk establishments. This shows that social movements, although they do not seem to change the norms around “culture of abuse” that dominates in some work-

places, at least in the short term, can still help raise awareness and help women escape toxic situations they would have stayed longer in otherwise.

References

Bayer, A. and Rouse, C. E. (2016). Diversity in the economics profession: A new attack on an old problem. Journal of Economic Perspectives, 30(4):221–42.

Bernabe, A. (2020). The impact of news coverage on women's labourmarket decisions: Evidence from the metoomovement.

Cici, G., Hendriock, M., Jaspersen, S., and Kempf, A. (2020). # metoo meets the mutual fund industry: Productivity effects of sexual harassment. Finance Research Letters, page 101687.

Cullen, C. (2020). Method Matters: Underreporting of Intimate Partner Violence in Nigeria and Rwanda. The World Bank.

Fitzgerald, L. F. and Cortina, L. M. (2018). Sexual harassment in work organizations: A view from the 21st century.

Folke, O. and Rickne, J. (2020). Sexual harassment and gender inequality in the labor market,. Working Paper Series 4/2020.

Hersch, J. (2011). Compensating differentials for sexual harassment. American Economic Review, 101(3):630–34.

Kabat-Farr, D. and Cortina, L. M. (2014). Sex-based harassment in employment: New insights into gender and context. Law and Human Behavior, 38(1):58.

Levy, R. and Mattsson, M. (2019). The effects of social movements: Evidence from# metoo. Available at SSRN.

McDonald, P. (2012). Workplace sexual harassment 30 years on: A review of the literature. International Journal of Management Reviews, 14(1):1–17.

McLaughlin, H., Uggen, C., and Blackstone, A. (2012). Sexual harassment, workplace authority, and the paradox of power. American sociological review, 77(4):625–647.

McLaughlin, H., Uggen, C., and Blackstone, A. (2017). The economic and career effects of sexual harassment on working women. Gender & Society, 31(3):333–358.

Siddique, Z. (2018). Violence and female labor supply.

Waldo, C. R., Berdahl, J. L., and Fitzgerald, L. F. (1998). Are men sexually harassed? if so, by whom? Law and human behavior, 22(1):59.

Weber, K., Rao, H., and Thomas, L. (2009). From streets to suites: How the anti-biotech movement affected german pharmaceutical firms. American Sociological Review, 74(1):106–127.

Willness, C. R., Steel, P., and Lee, K. (2007). A meta-analysis of the antecedents and consequences of workplace sexual harassment. Personnel psychology, 60(1):127–162.

Appendices

A Google search trends for "harcèlement sexuel"

Figure A.1: Google searches for "harcèlement sexuel" surged after October 2017

Source: Google trends.

B Additional descriptive statistics

Figure B.1: Probability of harassment by seniority

Note: 2016 Working Conditions Survey

Figure B.2: Probability of harassment by size of the establishment

Source: 2016 Working Conditions Survey & DADS 2015

Figure B.3: Probability of harassment by share of women in the rm

Note: 2016 Working Conditions Survey & DADS 2015

Figure B.4: Probability of hearing misogynistic comments by share of women in the rm

Note: 2016 Working Conditions Survey & DADS 2015

C Heterogeneity

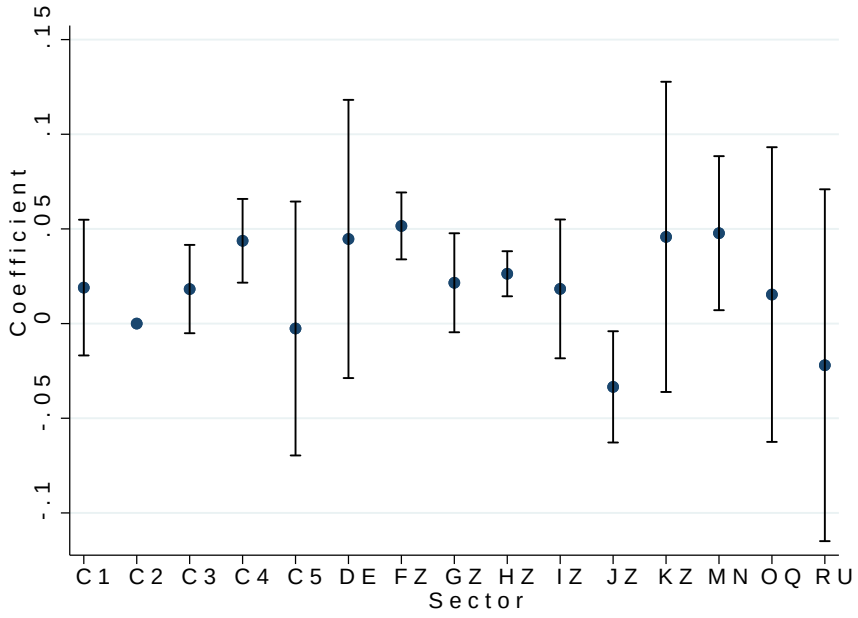
Figure C.1: Heterogeneity on the monthly probability of exit by gender of the CEO

Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016-2018.

Figure C.2: Heterogeneity on the monthly probability of exit by size of the establishment

Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016-2018.

Figure C.3: Heterogeneity on the monthly probability of exit by sector



Source: 2016 Working Conditions Survey, DADS 2015, and DMMO 2016-2018.

D Robustness check

Table D.1: Triple difference estimation of women's relative workflows in high-and low-risk harassing establishments before and after #Metoo (Equation (1))

	(1)	(2)	(3)	(4)	(5)
	Entry	Exit	Termination by agreement	Quit	Layoffs
$D_i \quad T_{igt}$	-0.00487	0.05080***	0.00469	0.01923*	0.01593*
	(0.01007)	(0.01093)	(0.00485)	(0.00902)	(0.00710)
N	1857960	1857960	1857960	1857960	1857960
R^2	0.655	0.626	0.566	0.649	0.612

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors are presented in parentheses. The outcome of interest here is the log((flow/N)+0.001) where flow is the number of workers from a certain type of worker flows (exit, entry, ...) and N is the number of workers in the establishment.