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Does Overtime Matter for Firm Performance: Evidence from Taiwan?

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Abstract. By employing the unique data related to employee overtime complaints about the firms listed in the financial industry of Taiwan Stock Exchange, we explore whether firm performance would be affected by several overtime complaints issues including complaints of maximum working hours exceeded, overtime without pay, and overtime without records. We then reveal the following essential findings. First, the firms with employee overtime complaints would not enhance firm performance. Second, complaints of maximum working hours exceeded would have significant negative impacts on firm performance as compared with firm performance affected by either complaints of overtime without records or complaints of overtime without pay, indicating that employee's complaints about overtime should not be neglected by enterprises. Third, we still show that the firm with better financial performance such as higher net profit ratio and well-functioned board structure like small board size would have better firm performance.

Keywords. employee overtime complaints, board structure, firm performance

1. Introduction

According to the publication of Organization for Economic Cooperation and Development (OECD) related to total work hour survey in 2021 for 40 major countries, the total annual working hours of Taiwan was 2035 hours ranked as the 4th highest country in the world, indicating that Taiwanese working hours are rather high in the world.

Oliva and Sterman (2001) point out that temporary imbalance between service capacity and demand interact with overtime leads to the erosion of the service standards and loss of revenue, implying that the long working hours and overtime work might damage the revenue and service level for enterprises. Wharton and Blair (2002) also find that the Hong Kong finance professionals are likely to reduce working time due to overtime work often occurred as compared with American and British counterparts. In fact, overtime might have side effects since overtime work is harmful to the employees' health and well-being Yang et al., 2023; Xian, et al., 2022).

In addition, Caruso et al. (2004) report that the 9th to 12th hours of work is associated with fatigue, lower cognitive ability, and increased injuries. Furthermore, the overtime would be corrosive to the performance as well as work-life balance resulting in poor firm performance (Yang et al., 2023; Xian, et al., 2022) due to the conflict between high-performance practices and work-life balance policies (Oskarsson et al, 2021; Bouwmeester et al., 2021). As a result, the above phenomena arouse our interests to explore whether employee complaints about overtime indeed affect firm performance; in addition, by employing the unique data for various overtime complaints related to the firms falling into banking industry, we further explore whether different employee complaints as mentioned above would have different impacts on firm performance, which is the main motivation of this study.

In fact, firm performance is positively related to employee engagement and productivity (Beckmann, 2016; Woo, 2016 Goyal & Patwardhan, 2021; Hooi, 2021). As a result, we argue that modern business with corporate social responsibility should retain its employees by protecting the interests of employees since Ko and Choi (2019) confirm that a firm's overtime level is negatively related to employee satisfaction. However, we reveal that the firms falling in the banking industry of Taiwan Stock Exchange seldom have regular working hours without overtime which seems to conflict with the interests of the employees. As a result, the above phenomena arouse our interests for investigation. By hand-collecting employee complains data from Ministry of Labor including maximum working hours exceeded, overtime without pay, and overtime without records, we are interested in whether the banks with these complaints occurred would affect their firm performance. Thus, the purpose of this study is to explore whether these firms with these employee complaints would affect their firm performance, respectively.

We argue that this study may contribute to the existing literature as follows. First, to our best understanding, this study might pioneer to explore whether diverse employees overtime complaints would have different impacts on firm performance. Second, we explore whether firm performance would be affected by diverse overtime complaints including maximum working hours exceeded, overtime without pay, and overtime hours without records. Third, we investigate the linkage of human resource management and firm performance by hand-collecting firm-year data for the firms falling into the banking industry, which is rarely explored even unexplored in the existing literature of finance.

We reveal several essential findings as follows. First, the firms with employee overtime complaints would not enhance firm performance. Second, complaints of maximum working hours exceeded would have significant negative impacts on firm performance as compared with the firm performance affected by either complaints of overtime without records or complaints of overtime without pay, indicating that employee complaints about overtime should not be neglected by enterprises. Third, we still show that the firm with better financial performance such as high net profit ratio and well-functioned board structure like small board size would have better firm performance.

The rest of the paper proceeds as follows. Section 2 reviews the relevant literature and hypotheses proposed. Section 3 introduces the data and methodology employed in this study. Section 4 presents the empirical results and analyses. Section 5 discusses our conclusions.

2. Literature discussion and research hypothesis

In this study, to familiarize ourselves with relevant studies, we conduct a survey of relevant literature. Due to firm performance related to the function of broad structure and the

performance shown in financial statements as well as the firms with overtime issue might be in accordance with corporate social responsibility. We then survey the relevant literature related to overtime issues, corporate social responsibility, and board structure, financial statements, and firm performance, as well as overtime issues and firm performance.

2.1. Overtime issues and human resource management

As for the relevant studies in term of overtime issues, Oliva and Sterman (2001) indicate that temporary imbalance between service capacity and demand interacts with overtime leads to the erosion of the service standards and loss of revenue. Wharton and Blair (2002) reveal that overtime work often occurred in finance professionals of Hong Kong as compared with American and British counterparts. White et al (2003) argue that there is a conflict between high-performance practices and work-life balance policies since Croucher (2004) reports that German finance employees are afraid to complain about stress and overwork because they fear to lose their jobs, even in the developed country, Germany.

In fact, overtime might have side effects since overtime work is harmful to the employees' health and well-being (Yang et al., 2023; Xian, et al., 2022). In addition, Caruso et al. (2004) report that the 9th to 12th hours of work is associated with fatigue, lower cognitive ability, and increased injuries. Spurgeon, Harrington, and Cooper (1997) also conclude that there is currently sufficient evidence to raise concerns about the risks to health and safety of long working hours. However, van der Meer and Wielers (2015) indicate that employees who have relatively good wages now or who have had relatively good wages in the recent past participate more often in unpaid overtime.

In addition, overtime work affecting individual and firm productivity is mentioned in the relevant studies (Beckman, 2016; Woo, 2016). Woo (2016) explores that estimating the impact of overtime working without considering labor productivity decline leads to overestimating the effectiveness of working overtime. Beckmann (2016) implies that self-managed working time (SMWT) improves both individual and firm productivity.

2.2. Corporate social responsibility

Regarding the relationship between corporate social responsibility (CSR) and firm performance, Ferrell, Liang, and Renneboog (2016) find that well-governed firms engage more in CSR and suffer less from agency problem. Lins, Servaes, and Tamayo (2017) also find that stock price performance of High-CSR firms is 4-7% higher than that of Low-CSR firms during the financial crisis, as revealed that High-CSR firms enjoy higher profitability, growth, and sales than Low-CSR firms. Rhou, Singal, and Koh (2016) also indicate that communicating with stakeholders by increasing the awareness of CSR would lead to better firm performance.

In addition, Mishra and Suar (2010) point out that good CSR increases financial performance as well as non-financial performance. Saeidi et al. (2015) also find that CSR has a competitive advantage and reputation to enhance financial performance. Shen and Chang (2009) find the companies enjoy more significant value on net income, net sales, and net profit by adopting more CSR activities. In other words, CSR companies at least will not deteriorate the firm performance and adopting more CSR initiatives in the consumer market is able to boost a firm's reputation (Xiao, et al., 2020; Gomez-Trujillo et al., 2020). Although CSR initiatives seem to be responsible by the private sector (Stahl et al., 2020; Latan et al., 2022), there are increasing demands of CSR regulations from public sector as well Manuel & Herron, 2020; Karwowski & Raulinajtys-Grzybek, 2021), since we argue that CSR might be regarded as corporate governance issues as well as a part of the basic standard of workers' work-life balance.

Wolf (2014) shows that disclosure of CSR-related information would affect corporate value, which is also critical for the success of a firm's endeavors. However, Servaes and Tamayo (2013) comment that there is a lack of understanding social and environmental practices, thereby affecting firm value. As a result, Taiwan authorities regulate the firms listed on Taiwan Stock Exchange to disclose CSR activities based on Global Reporting Initiatives (GRI) since 2014.

2.3. Corporate governance, financial statements, and firm performance

As for the corporate governance with firm performance, Klapper and Love (2004) find there is a positive correlation between corporate governance and firm performance; however, Klein, Shapiro, and Young (2005) find no significant association between corporate governance and firm performance. In addition, Black and Kim (2012) indicate that outside directors and audit committees are widely considered to be central elements of good corporate governance. Qian and Yeung (2015) suggest that bank monitoring improve corporate governance, but bank financing through tunneling would be negatively associated with future firm performance.

Claessens et al. (2002) indicate that controlling shareholders who hold a large portion of shares are consistent with the interests of firms. McNulty et al. (2013) reveal that financial risks are low for firms with high directors' shareholding ratio. Jensen and Meckling (1976) noted that managers of a firm with high shareholding ratio are strongly motivated to promote firm performance. Fauzi and Locke (2012) reveal that board of directors, board committees, and managerial ownership have a positive impact on firm performance, but non-executive directors and blockholder ownership lower firm performance. Nguyen and Nielsen (2010) point out that the degree of independence determines the value of independent directors, indicating that independence is more valuable in crucial board functions.

Yermack (1996) indicate that a firm without a large board size would be beneficial for firm performance enhanced. O'Connell and Cramer (2010) reveal that board size is negatively related to firm performance even for small-scale firms. However, there is no relationship between the proportion of outside directors and firm performance (Bhagat & Black, 2002) as well as board independence and operating performance (Klein, 1998).

In terms of financial variables, Cai and Zhang (2011) declare that employing a high leverage has a significantly negative effect on stock prices. Jin and Jorion (2006) and Allayannis and Weston (2001) used the return on assets as the proxy for firm profitability, which may affect firm value. Barton and Simko (2002) affirmed that share prices for firms that exhibit good asset management would increase.

2.4. Overtime and firm performance

Regarding overtime and firm performance, Oliva and Sterman (2001) find that temporary imbalances between service capacity and demand for overtime could lead to permanent erosion of the service standards and loss of revenue. Hollman (1980) provides evidence that improper handling of overtime situations would have a significant effect upon labor-management relations in an organization since negative effects of overtime work on employee's health and performance are revealed in the relevant literature (Chillakuri & Vanka, 2021, 2022). In addition, Kim and Chung (2016) explore how Chinese firms vary in the extent to which they use illegal overtime and found that firms' use of illegal overtime is affected either by organizations' inner constituents who generate internal institutional pressures including HR personnel, labor unions, and migrant workers, or organizational characteristics that magnify external institutional pressures such as geographic location, company size and foreign

ownership. However, Lambooi et al. (2007) show that employees are more willing to work overtime when their employer has provided for training, when the employee recently was promoted, when the supervisor was supportive in the past and when co-workers approve of working overtime and behave similarly.

In reality, the extended work shifts are widely used by firms to alleviate staffing shortages and ensure cost efficiency during high workload (Barnes et al., 2016). As a result, there are about 40% of American and Japanese employees overwork up to 50 hours per week (Barnes, Jiang, & Lepak, 2016; Iwasaki, Takahashi, & Nakata, 2006). Even so, Chan and Siu (2010) explore overworked worker prefer to make less money, as a trade-off for a reduction in their excessive overtime.

After surveying the relevant studies, whether overtime issues would affect firm performance seems not explored comprehensively. By hand-collecting, the overtime data including complaints of maximum working hours exceeded, overtime without pay, and overtime without records for the firms falling into the banking industry of Taiwan, we then explore whether the firms with these employee complaints would affect their firm performance, respectively by proposing the following hypotheses:

Hypothesis 1: The firms with complaints of maximum working hours exceeded would affect firm performance.

Hypothesis 2: The firms with complaints of overtime without pay would affect firm performance.

Hypothesis 3: The firms with complaints of overtime without records would affect firm performance.

3. Data and models

3.1. Data

We collect the overtime data from the violation cases of Labor Standard Law in Taiwan for the firms falling into the financial industry of Taiwan published by the Ministry of Labor from 2017 to 2022, which is seldom concerned in the relevant studies. Aside from overtime data, we collect the board structure, financial statements, and other controlling variables from Taiwan Economic Journal (TEJ), the database widely employed for deriving the relevant data for the firms listed in Taiwan Stock Exchange.

In this study, we collect 236 firm-year data for the firms falling into the financial industry over the data period 2017-2022. The data collected include firm performance variables including Tobin's q, ROE, and ROA, the overtime variables including maximum working hours exceeded DM, overtime without pay DM, and overtime without records DM, board structure variables including directors' shareholding ratio, managers' shareholding ratio, directors' pledge ratio, board size, and independent directors, financial and other controlling variables including net profit ratio, banking industry DM, and firm size. In addition, in order to be familiar with the variables employed in this study, we define the variables employed in Table 1.

Table 1 Definitions of the variables employed.

Firm value	(book value of debt + market value of equity) / book value of assets
ROA	Net income over total assets
ROE	Net income over total equity
Complaints of maximum working hours exceeded DM	Set to 1 if a firm is complained for maximum working hours exceeded; otherwise, set to 0.

Complaints of overtime without pay DM	Set to 1 if a firm complains about overtime on without pay; otherwise, set to 0.
Complaints of overtime without record DM	Set to 1 if a firm complains about overtime without record; otherwise, set to 0.
Directors' shareholding ratio	Total directors' shareholdings over total shares outstanding
Managers' shareholding ratio	Total Managers' shareholdings over total shares outstanding
Directors' pledge ratio	Directors' pledged shares over total directors' shareholdings
Board size	Total directors on the board
Independent directors	Total independent directors number
Net profit ratio	Net profit over net sales
Financial industry	Set to 1 if a firm falling into banking industry; otherwise, set to 0
Firm size	ln (MV)

3.2. Models

Before processing our models, we use the variance inflation factor (VIF) tests to determine whether multicollinearity problems have existed among these independent variables. The VIF values for these variables are all less than 3, indicating that the variables employed might not have multicollinearity problems.

We then use multiple regression models in the beginning. However, considering the firm-year observations employed in this study, the panel data models would be more appropriate than multiple regression models. However, because of the defects of panel data models proposed by Petersen (2009), we then employ the model proposed by Petersen (2009) to determine the relative accuracy given the structure of the panel data. Thus, we employ Petersen regression models to examine whether firm value would be affected by these overtime issues after concerning board structure, financial statements, and other controlling variables.

Firm value $i,t = \beta_0 + \beta_1$ complaints of maximum working hours exceeded DM $i,t + \beta_2$ complaints of overtime without pay DM $i,t + \beta_3$ complaints of overtime without record DM $i,t + \beta_4$ directors' holding ratio $i,t + \beta_5$ managers' holding ratio $i,t + \beta_6$ directors' pledge ratio $i,t + \beta_7$ board size $i,t + \beta_8$ independent directors $i,t + \beta_9$ net profit ratio $i,t + \beta_{10}$ banking industry DM $i,t + \beta_{11}$ firm size $i,t + \varepsilon_{i,t}$

4. Empirical results and analysis

4.1 Descriptive statistics analysis

Table 2 reports the means, standard deviations, maxima, and minima of the dependent and independent variables employed in this study.

Table 2 Descriptive statistics

This table reports the means, medians, standard deviations, minima, and maxima of the dependent and independent variables. We explore whether firm performance would affect diverse overtime issues after incorporating board structure, financial statement, and others as controlling variables. The dependent variable employed includes Tobin's Q defined as the sum of market value of equities and book value of liabilities over book value of assets, ROA defined as net income over total assets, and ROE defined as net income over total equity. The independent variables are classified into several categories as follows: The overtime category

includes complaints of maximum working hours exceeded DM by setting to 1 if a firm is complained for maximum working hours exceeded; otherwise, set to 0, complaints of overtime without pay DM by setting to 1 if a firm is complained about overtime on without pay; otherwise, set to 0, complaints of overtime without record DM by setting to 1 if a firm complains about overtime without record; otherwise, set to 0. Board structure category includes directors' shareholding ratio defined as total directors' shareholdings over total shares outstanding, managers' shareholding ratio defined as total managers' shareholdings over total shares outstanding, directors' pledge ratio defined as directors' pledged shares over total directors' shareholdings, board size defined as total directors on the board, and independent directors defined as total independent directors' number on the board. Financial and other categories include net profit ratio defined as net profit over net sales, banking industry DM by setting to 1 if a firm falling into banking industry; otherwise, set to 0, and firm size is measured as the logarithm of the market value.

	No	Ave	Mean	SD	Min.	Max.
Firm value	236	1.022	.9847	.1592	.71	2.19
ROA	236	1.434	0.735	2.662	-16.01	15.28
ROE	236	9.164	8.267	5.279	-20.57	31.16
Complaints of maximum working hours exceeded DM	236	.123	0	.2955	0	1
Complaints of overtime without pay DM	236	.189	0	.3671	0	1
Complaints of overtime without record DM	236	.076	0	.2474	0	1
Directors' shareholding ratio (%)	236	22.046	20.458	18.1272	.98	81.62
Managers' shareholding ratio (%)	236	.292	.172	.35682	0	2.28
Directors' pledge ratio (%)	236	14.523	0	25.3663	0	98.53
Board size	236	12.126	12	3.3746	4	20
Independent directors	236	2.965	3	.6973	0	4
Net profit ratio (%)	236	19.192	22.345	23.5564	-138.46	192.67
Banking industry	236	.769	1	.4224	0	1
Firm size	236	18.049	18.018	1.5953	13.32	20.24

As for the variables of board structure, the directors' shareholding ratio average is about 22%; however, the minimum and maximum values are 0.98% and 81.62% respectively, which might indicate that some financial firms have corporate governance issues. Similarly, we also find that the maximum directors' pledge ratio is as high as 99.53%, implying that the shareholders of some firms may have financial pressure likely resulting in corporate governance issues as well. In addition, we expect that financial firms would recruit more independent directors; nevertheless, some firms would not recruit independent directors as shown that the minimum value is 0. Thus, recruiting independent directors might be regulated by the authority.

Regarding the variables of financial statements, the average of the net profit ratio is about 21%, while the minimum and maximum values are -138.46% and 192.67% respectively. The results show that these listed banks perform extremely distinct in profitability.

4.2. Multiple regression models

To begin with, we employ multiple regression models to explore whether firm performance would be affected by several overtime issues after incorporating the variables in terms of board structure, financial statements, and others as controlling variables. The results of multiple regression models are presented in Table 3.

Table 3 Multiple Regression Models

We explore whether diverse firm performance would be affected by several overtime variables after controlling board structure, financial, and other controlling variables in Equations (1a)-(1c). The firm performance variables include ROA, ROE, and Tobin's q. The independent variables include complaints of maximum working hours exceeded DM, complaints of overtime without pay DM, complaints of overtime without record DM, directors' shareholding ratio, managers' shareholding ratio, directors' pledge ratio, board size, independent directors, net profit ratio, banking industry DM, and firm size. The standard errors of the estimated coefficients are shown in parentheses, and the t-statistics are based on the standard errors that are adjusted by the two-way clusters existed in firm and year (White, 1981) in Columns (1a) – (1c). Statistical significance values at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively.

Dependent Variables	(1a) ROA	(1b) ROE	(1c) Tobin's
Independent Variables			
Complaints of maximum working hours exceeded DM	-.0034 (.00252)	-.01234* (.00703)	-.01586 (.01402)
Complaints of overtime without pay DM	.00198 (.00245)	.00430 (.00647)	-.00845 (.01291)
Complaints of overtime without records DM	.00368 (.00331)	.00720 (.00823)	.01134 (.01715)
Directors' shareholding ratio (%)	-.00008 (.00009)	.00031 (.00015)	.00039 (.00032)
Managers' shareholding ratio (%)	.00616 (.00515)	.01569* (.00951)	.03713* (.01927)
Directors' pledge ratio (%)	.00008 (.00013)	.00006 (.00015)	-.00039 (.00029)
Board size	-.00022 (.00042)	- (.00081)	- (.00218)
Independent directors	.00159 (.00225)	.00864** (.00356)	.02187 (.01377)
Net profit ratio (%)	.00053*** (.00019)	.00126*** (.00021)	-.00025 (.00061)
Banking industry DM	.01161** (.00542)	.03998*** (.00829)	.10722** (.03676)
Firm size	-.00868*** (.00223)	-.00243 (.00273)	-.02393* (.01444)
Constant	.13658*** (.03141)	.06727 (.04231)	1.3711*** (.21741)
Yearly dummy	Yes	Yes	Yes
R-squared	0.2628	0.2319	0.1241
Coefficient estimates	OLS	OLS	OLS
Standard errors	White	White	White

Table 3 shows that the complaints of overtime exceeding maximum working hours DM negatively affect ROE, indicating that the firms with complaints of maximum working hours exceeded would not weaken firm performance. Besides, the results also reveal that

complaints of overtime without pay DM and the complaints of overtime without records might not have significant positive impacts on firm performance. We argue that the occurrence of overtime issues in Taiwan might be due to the decades of long working hour environment in Taiwan; in addition, many employees might care about their job security result in maximum working hours exceeded in Taiwan. In spite of the above concern, the results still reveal that the firms with these overtimes issues might not be beneficial for the firm performance enhanced.

As for the other controlling variables, we reveal that the firm with higher manger shareholding, small board size, higher net profit ratio, and independent directors recruited would enhance the firm performance, which seems consistent with the previous studies (Jensen & Meckling, 1976; Yermack, 1996; O'Connell & Cramer, 2010; Jin & Jorion, 2006; Allayannis & Weston, 2001) and recent studies (Pucheta-Martínez & Gallego-Álvarez, 2020, Ne et al., 2022 ; Chen et al., 2022 ; Amedi et al., 2020 ; Ni et al., 2023 ; Rahaman et al., 2022; Chen & Keefe, 2020; Wu et al., 2022). Besides, we reveal that the firms falling into the banking industry have better firm performance than non-banking financial firms such as security and insurance firms.

4.3. Petersen regression models

Due to the defects of the panel data models proposed by Petersen (2009), we employ the model proposed by Petersen for grasping the relative accuracy after taking the structure of the data into account, which would be beneficial for the robustness of our empirical results. We then present the results employed by Petersen models in Table 4.

Table 4 Petersen Regression Models

We explore whether diverse firm performance would be affected by several overtime variables after controlling board structure, financial, and other controlling variables in Equations (2a)-(2c). The firm performance variables include ROA, ROE, and Tobin's q. The independent variables include complaints of maximum working hours exceeded DM, complaints of overtime without pay DM, complaints of overtime without record DM, directors' shareholding ratio, managers' shareholding ratio, directors' pledge ratio, board size, independent directors, net profit ratio, banking industry DM, and firm size. The standard errors of the estimated coefficients are shown in parentheses, and the t-statistics are based on the standard errors that are adjusted by the two-way clusters existed in firm and year (Petersen, 2009) in Columns (2a) – (2c). Statistical significance values at the 10%, 5%, and 1% levels are denoted by *, **, and ***, respectively.

Dependent Variables	(2a) ROA	(2b) ROE	(2c) Tobin's q
Independent Variables			
Complaints of maximum working hours exceeded- DM	-.00342* (.00177)	-.01244*** (.00434)	-.01596** (.00711)
Complaints of overtime without pay-DM	.001858 (.00221)	.00430 (.00583)	-.00845 (.00989)
Complaints of overtime without records-DM	.00361 (.00376)	.00722 (.00755)	.01169 (.02442)
Directors' shareholding ratio (%)	-.00002 (.00009)	.00023 (.00029)	.00031 (.00051)

Managers' shareholding ratio (%)	.00676 (.00647)	.01579** (.00756)	.03717** (.01643)
Directors' pledge ratio (%)	.00005 (.00006)	.00007 (.00020)	-.00032 (.00029)
Board size	-.00021 (.00064)	-.00351** (.00151)	-.00821*** (.00256)
Independent directors	.00159 (.00376)	.00865 (.00628)	.02180 (.02283)
Net profit ratio (%)	.00053*** (.00012)	.00123*** (.00025)	-.00026 (.00064)
Banking industry DM	.01172 (.00982)	.03992** (.01318)	.10815 (.06706)
Firm size	-.00878 (.00464)	-.00233 (.00587)	-.02496 (.02530)
Constant	.136782*** (.0662)	.06618 (.08221)	1.28216*** (.38607)
R-squared	0.2531	0.2545	0.1235
Coefficient estimates	OLS	OLS	OLS
Standard errors	Cluster F & T	Cluster F & T	Cluster F & T

Table 4 presents similar but slightly different results in Table 3. Complaints of exceeding maximum working hours DM shows significant negative relations with firm performance represented by ROA, ROE, and Tobin's q, indicating that the firms with complaints of exceeding maximum working hours might not be beneficial for firm performance enhanced. In addition, the firms with higher managers' shareholding ratio, small board size, and higher profitability would have higher firm performance. The revealed results imply that the firms with better financial performance such as higher net profit ratio and well-functioned board structure like small board size and higher managers' shareholding ratio would have better firm performance. In addition, the firms falling into the banking industry would have better firm performance as compared with non-banking industry as well.

5. Conclusion

In this study, we explore whether the firms falling into financial industry with overtime issues would affect firm performance. In fact, the issue in terms of human resource management issues such as overtime issue existed has been ignored for a long time due to the priority of economic development. In addition, we argue that the issues in terms of the linkage between human resource issues and financial performance seem rarely concerned in the relevant studies even though we document that this issue concerned by employees should be put more stress by employers and authorities.

By employing the unique data related to employee overtime complaints about the firms listed in the financial industry of Taiwan Stock Exchange, we explore whether firm performance would be affected by several overtime complaints issues including complaints of maximum working hours exceeded, overtime without pay, and overtime without records. We then reveal the following essential findings. First, the firms with employee overtime complaints would not enhance firm performance. Second, complaints of maximum working hours exceeded would have significant negative impacts on firm performance as compared with firm performance

affected by either complaints of overtime without records or complaints of overtime without pay, indicating that employee's complaints about overtime should not be neglected by enterprises. Third, we still show that the firm with better financial performance such as higher net profit ratio and well-functioned board structure like small board size would have better firm performance.

In addition, we argue that this study may contribute to the existing literature as follows. First, to our best understanding, this study might pioneer to explore whether diverse employees overtime complaints would have different impacts on firm performance. Second, we explore whether firm performance would be affected by diverse overtime complaints including maximum working hours exceeded, overtime without pay, and overtime hours without records. Third, we investigate the linkage of human resource management and firm performance by hand-collecting firm-year data for the firms falling into the banking industry, which is rarely explored even unexplored in the literature of finance.

Furthermore, this study has two implications. First, we suggest the human resource management should be paid more attention by these financial firms since the firms with few employee complaints would be beneficial for the firm performance enhanced. Second, our revealed results might provide some insights into the authority in regulating overtime policies in the future.

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