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GENDER PAY GAP AND DISCRIMINATION IN TAIWANESE AUDITING INDUSTRY

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ABSTRACT

This study investigates the salary differentials between male and female employees of audit firms in Taiwan. We employ the transcendental logarithmic (translog) revenue function to estimate the productivities of employees and then compare them with compensations of employees. Total samples are divided into national, regional and local audit firms in terms of market segmentation. This study confirms that gender salary gap exists in the auditing industry and compensations of male employees are higher than that of female ones. Specifically, male employees are over-compensated in the national firms but female employees are over-compensated in both regional and local audit firms. Consequently, this study argues that sex discrimination against female employees exists in the national firms but sex discrimination against male employees exists in the regional and local. With the brand new findings, this study contributes knowledge to the literature of gender and salary.

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KEYWORDS: Audit Firms, Market Segmentation, Gender Salary Differentials, Productivities, Sex Discrimination

INTRODUCTION

A multitude of prior researchers investigate the critical and engaging issue, gender salary differentials. Due primarily to data unavailability, limited prior studies relate to the investigation of gender salary gap with mixed results (Hunton, Neidermeyer and Wier, 1996; Schaefer and Zimmer, 1995; Trapp, Hermanson and Turner, 1989; Whiting and Wright, 2001). Also, the surveys of differentials in salaries reveal different perceptions by male and female employees in audit firms (Hunton et al., 1996; Trapp et al., 1989). Following and extending this line of research, this study examines the male-female salary differentials for Taiwanese audit firms in different market segments. Gender salary differentials do not imply sex discrimination. It is the difference in human capital that determines the male-female salary gap (Green and Ferber, 2005). From the perspective of labour demand theory, employees' productivities depend on their contributions to an organization.

Audit firms are typically a professional service organization and provide services by auditors with expertise (Gibbins and Wright, 1999; Morris and Empson, 1998). Prior studies state that market segmentation exists in the auditing industry (Chen, Chang and Lee, 2008; DeFond, Francis and Wong, 2000; Ghosh and Lustgarten, 2006). Audit firms in the same market segments have similar groups of clients and are more homogeneous than the entire firms of the industry. As a result, this study divides total samples into three categories, national, regional and local audit firms. This classification better reflects the practices observed and provides more stable and determinate evidences related to the male-female salary differentials. Practically, employees of audit firms include managers, auditor-in-charges (senior auditors), and audit staffs (Arens, Elder and Beasley, 2012). In investigating the gender salary gap, most prior studies focus their subjects on a single industry or economy and report a significant salary gap favouring men. To the best of our knowledge, few examine this issue under market segmentation. This

motivates us to divide audit firms into three sub-samples and then compare the productivities and compensations of employees to address the question.

Based on the 2004-2009 Survey Report of Audit Firms in Taiwan, we document that gender salary gap exists in the auditing industry and salaries of male employees are higher than that of females in the three sub-samples. When productivities are compared with compensations, male employees are over-compensated and female employees are under-compensated in national firms. In contrast, the males are under-compensated but the females are over-compensated in both regional and local audit firms. This study argues that sex discrimination against females exists in the national firms while sex discrimination against males in both regional and local firms. With results, this paper contributes knowledge to the literature by providing evidence on male-female salary gaps. The remainder of this study is organized as follows. Section 2 reviews the literatures and develops the hypotheses. Research design appears in Section 3. Section 4 presents and discusses our empirical results. We conclude in Section 5.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Market Segmentation: Notions of market segmentation come from the incomplete competition market theory by economic scholars in the 1930's. They assume that consumers are heterogeneous and possess different preferences in a market. Firms thus seek consumers with homogeneous preferences and group them into a smaller unit with which to market their products. Hence, concept of market segmentation originates from the demand side of market (Kotler, 2003). In the auditing literature, Ghosh and Lustgarten (2006) hypothesize and confirm that there are separate segments within the U.S. auditing industry in which different levels of rivalry and fee-setting practices prevail. In terms of market segment, Chen et al. (2008) investigate the continuing professional education of Taiwanese audit firms by categorizing audit firms into big-sized, medium-sized, and small-sized firms. Yang, Yang and Chen (2012) classify audit firms into big, large, medium, and small firms to examine the competition level and merger in Taiwanese auditing industry. DeFond et al. (2000) also document the existence of market segmentation in Hong Kong auditing industry.

Gender Salary Gap and Sex Discrimination: Several prior researches study the relationship between compensations, productivities and gender. Some report no evidence of gender compensation discrimination (Hægeland and Klette, 1999; Ilmakunnas and Maliranta, 2005) but some find gender pay gap (Hellerstein, Neumark and Troske, 1999; Kawaguchi, 2007; McDevitt, Irwin and Inwood, 2009). Marini (1989) classifies the sources of gender salary gap into either the demand and supply factors of labour market or merely sex discrimination. From the perspective of demand for labour, women tend to be disproportionately concentrated on the relatively lower pay jobs due to economy, industry, and workplace (Fields and Wolff, 1995). In contrast, some researches explain the salary gap in terms of supply-side factors of labour market. Women work fewer hours, complete fewer years of on-the-job training and have less work experience (Blau and Ferber, 1986). Further, women spend fewer years with the same employers and are more likely to work part-time and have more interrupted careers caused by child-rearing and family responsibilities (Tomaskovic-Devey and Skaggs, 1999).

Lower pay for women is presumably attributed to their relatively inferior productivities. Hence, differences in labourer productivity account for part of the gender salary gap (Green and Ferber, 2005). However, significant gender salary gap still persists after controlling for the above factors (Dreher and Cox, 1996; Graddy and Pistaferri, 2000; Stroh, Brett and Reilly, 1992; Wood, Corcoran and Courant, 1993). In other words, empirical results substantiate that women's lower salaries relate to their work, lower positions and lower human capital. Using the 1997 Social Change Survey of Taiwan, Chen (2002) finds gender salary differences. Chen and Kuan (2006) examine the relationship between gender wag discrimination and wage distribution. They show that gender wage discrimination changes with wage level, while low skilled female workers suffer the most. Based on the 1978-2003 Manpower Utilization Survey data in Taiwan, Hsu, Chen and Fang (2006) report that industrial structure change, resulting from economic growth, narrows the female-male wage differentials. In addition, the reduction in sex discrimination leads to smaller female-male wage differentials.

Gender Salary Gap in Accounting and Hypothesis Development

Some prior researches on gender salary gap in audit firms note significant differences in salaries between men and women. For example, Schaefer and Zimmer (1995) report a 52.75% gender salary gap but 29.5% of the gap is left unexplained. Olson and Frieze (1986) indicate that no salary differentials exist in the initial employment of 205 accountants. A few years later, they report significant salary gap favouring men even after controlling human capital-related variables. Although females are much senior than males, Hunton et al. (1996) indicate that average salaries of males are significantly higher than that of females at all hierarchical levels. However, some researchers find no significant pay differences. Whiting and Wright (2001) indicate that females are found to hold lower job status and are remunerated less than their male counterparts primarily due to fewer years of work experience and lower future career aspirations. They indicate no evidence of sex discrimination on salary. Cao and Buchanan (1987) investigate salary disparity among management accountants through a questionnaire survey and conclude nonexistence of serious sex discrimination on salaries.

In addition, Trapp et al. (1989) indicate that women perceive salary disparity against them but men perceive no such gender salary differentials. Stedham, Yamamura and Satoh (2006) support the existence of salary gap in Japan but both men and women are equally satisfied with their salaries. Pierce-Brown (1998) argue that salary differentials between male and female accountants can be explained by intermittent employment. He reports that about one third of the observed differentials arise from female career breaks and that the wage discrimination observed in the accountancy profession is more likely to be a sociological than an economic phenomenon. In sum, the community has a prevailing perception that women are less valuable in the workplace than men due to the supply-side factors in labour market, inappropriate sex discrimination and gender social role. Such a negative stereotype against women affects their compensations, resulting in gender salary gap. Few prior studies probe the gender salary differentials under market segmentation, especially in the auditing industry. Whether the gender salary gap favoring men still prevails in the three sub-samples, national, regional, and local firms? Because no prior studies or related literatures address this issue, this study does not predict the differences in salaries between male and female employees of audit firms and establishes the following non-directional hypotheses to acquire further evidences.

Hypothesis 1: Gender salary differentials exist in national audit firms.

Hypothesis 2: Gender salary differentials exist in regional audit firms.

Hypothesis 3: Gender salary differentials exist in local audit firms.

Research Design

Data

Empirical data of this study are from the 2004-2009 Survey Report of Audit Firms in Taiwan, published by the Financia1 Supervisory Commission (FSC). Contents of the survey include detailed information about actual annual compensations for male and female partners, managers, auditor-in-charges, and audit staffs, respectively. This study divides total audit firms into three categories in terms of market segmentation: national, regional and local firms. Partnership firms that offer audit services to public companies are national firms and that do not provide such services are referred to as regional firms. Local firms are defined as the proprietorship firms. Final number of observations is 1,793, including 294 national firms, 621 regional firms and 878 local firms. To account for inflation, we deflate all monetary variables by the yearly Consumer Price Index (CPI).

Model Specification

Following Christensen, Jorgenson and Lau (1973), this study specifies the following translog revenue

function to estimate the productivities of male and female employees in each sub-sample.

$$lnREVENUE = \beta_0 + \beta_1 lnMALE + \beta_2 lnFEMALE + \frac{1}{2}\left[\beta_{11}(lnMALE)^2 + \beta_{22}(lnFEMALE)^2\right] + \beta_{12} lnMALE \times lnFEMALE + \varphi_1 lnCAPITAL + \varphi_2 lnEDUCATION + \varphi_3 lnEXPERIENCE + \varphi_4 lnTRAINING + \varphi_5 lnAGE + \varepsilon \quad (1)$$

where *lnREVENUE* denotes the revenues of audit firms, *MALE* and *FEMALE* is the number of male and female employees, and ε is the error term. In addition, other factors affecting the revenues of audit firms are incorporated into the function as control variables. Based on Hicks (1946), total amount of fixed assets, *CAPITAL*, is included. Human capital theory states that education level, work experience and training of employees are important determinants in generating revenues of a company. *EDUCATION* is an education level of employees and associates with revenues of audit firms positively (Bröcheler, Maijoor and van Witteloostuijn, 2004; Fasci and Valdez, 1998; Pennings, Lee and van Witteloostuijn, 1998). It is defined as the average number of years which employees take to have the academic degree. *EXPERIENCE* represents the work experience of employees, measured as number of ages of employees (Bröcheler et al., 2004; Fasci and Valdez, 1998; Pennings et al., 1998). *TRAINING* denotes professional training and is defined as mean training expenses per employees (Chen et al., 2008; Guerrero and Barraud-Didier, 2004; Ling and Jaw, 2006). *AGE* is the accumulated years since establishment of audit firms (Bröcheler et al., 2004; Fasci and Valdez, 1998). This study estimates the revenue equation (1) by ordinary least squares (OLS) method. With results obtained, this study calculates the marginal revenue product for male employees (MRP_M) and female employees (MRP_F) to measure the contributions of male and female employees to the revenues of audit firms. According to the envelope theorem, marginal rate of substitution between inputs is related to the ratio of their marginal revenue product. If input prices are determined in market exogenous to the firms and under the cost minimization requirement, the relationship between the marginal revenue product and input price should be as follows:

$$\frac{MRP_M}{MRP_F} = \frac{W_M}{W_F} \quad (2)$$

where W_M and W_F represent the compensations (salaries) of male and female employees, respectively. To justify higher compensations for male employees relative to the female employees, the MRP_M should be proportionately higher than the MRP_F. If the ratio of marginal revenue product is higher than the ratio of compensation level, male employees are under-compensated and the female employees over-compensated.

EMPIRICAL RESULTS AND DISCUSSIONS

Estimates of Revenue Function

Table 1 reports the parameter estimates of equation (1) for national, regional and local audit firms. As shown for national firms, the logarithmic number of the male professionals (*lnMALE*) and the logarithmic professional training (*lnTRAINING*) are significantly positive (t=4.37 and 6.36), while the logarithmic working experience of professionals (*lnEXPERIENCE*) is significantly negative (t=-2.72). The quadratic term of the number of the female professionals $(lnFEMALE)^2$ is significantly positive (t=4.34), while the interaction term of the number of the male professionals and the number of the female professionals (*lnMALE* × *lnFEMALE*) is significantly negative (t=-2.92). For the regional audit firms, the logarithmic number of the male professionals (*lnMALE*), the logarithmic number of the female professionals (*lnFEMALE*), the logarithmic total amount of fixed assets (*lnCAPITAL*) and the logarithmic professional training (*lnTRAINING*) are significantly positive (t=5.90, 5.61, 4.59 and 8.50), while the logarithmic working experience of professionals (*lnEXPERIENCE*) is significantly negative (t=-4.18). The quadratic

term of the number of the female professionals $(lnFEMALE)^2$ is significantly positive (t=2.54), while the interaction term of the number of the male professionals and the number of the female professionals ($lnMALE \times lnFEMALE$) is significantly negative (t=-3.43).

Finally, in the local audit firms, the logarithmic number of the male professionals (*lnMALE*), the logarithmic number of the female professionals (*lnFEMALE*), the logarithmic total amount of fixed assets (*lnCAPITAL*), the logarithmic professional training (*lnTRAINING*) and the logarithmic accumulated years of establishment of the audit firm (*lnAGE*) are significantly positive (t=3.35, 9.05, 5.09, 7.66 and 3.16). The interaction term of the number of the male professionals and the number of the female professionals ($lnMALE \times lnFEMALE$) is significantly negative (t=-3.65). The remaining quadratic terms, interaction terms and control variables are insignificant. Further, this study also obtain the results of rejecting the condition that all coefficients of the quadratic terms and interaction terms are zero. The test results show that chi-square statistic for national, regional and local audit firms are 36.03 ($p<0.00$), 16.30 ($p<0.00$) and 26.06 ($p<0.00$), respectively. That is, the translog function form is better than the Cobb-Douglas (log-linear) function form. The explanatory power of regression models in Table 1 (adjusted R^2) falls 0.95, 0.78 and 0.57 ($p<0.00$) for national, regional and local audit firms, implying that the models are well specified.

Table 1: Estimates of Parameters on the Revenue Function

Variables	National Firms		Regional Firms		Local Firms	
	Coefficient	T-Statistics	Coefficient	T-Statistics	Coefficient	T-Statistics
Intercept	5.77	5.05***	5.87	52.28***	5.20	47.05***
lnMALE	0.66	4.37***	0.68	5.90***	0.96	3.35***
lnFEMALE	-0.16	-0.79	0.62	5.61***	1.22	9.05***
$(lnMALE)^2$	0.20	1.33	0.24	1.03	-0.08	-0.13
$(lnFEMALE)^2$	0.89	4.34***	0.28	2.54***	-0.24	-1.29
lnMALE× lnFEMALE	-0.42	-2.92***	-0.41	-3.43***	-0.78	-3.65***
lnCAPITAL	0.00	0.00	0.04	4.59***	0.04	5.09***
lnEDUCATION	0.82	0.91	0.03	0.45	0.07	1.17
lnEXPERIENCE	-0.25	-2.72***	-0.18	-4.18***	0.01	0.27
lnTRAINING	0.06	6.36***	0.04	8.50***	0.03	7.66***
lnAGE	0.04	1.16	0.00	0.06	0.08	3.16***
Adjusted-R^2	0.95		0.78		0.57	
Test of Log-Linear Specification (βij=0, i=1,2，j=1,2)						
F-statistics	12.01		5.43		8.69	
Chi-square	36.03***		16.30***		26.06***	
Number of Observations	294		621		878	

*Table 1 represents the empirical results of translog revenue function for data pooled over 2004-2009. Empirical results for national firms, regional and local firms demonstrate that the interaction term of the number of the male professionals and the number of the female professionals are significantly negative. It explores the salary differentials between male and female employees in national, regional and local audit firms .This table also represents the chi-square statistic for national, regional and local audit firms. The test results show that the translog function form is better than the Cobb-Douglas function form. *, **, *** Denote two-tailed significance at the 10 %, 5 % and 1 % levels.*

Comparisons of Compensations and Productivities

Table 2 displays the average compensations and productivities of male and female employees. For the national audit firms, the average compensations of male employees (W_M) ($632,492) are significantly higher than that of female employees (W_F) ($531,201) (p = 0.0042). The differences in average compensations are $101,291 and the ratio of compensation level (W_M/W_F) equals 1.19. Next, the average productivities of male employees (MRP_M) are $1,230,406 and that of females (MRP_F) are $1,391,255. Although MRP_M is lower than MRP_F, the differences (-160,849) are insignificant (p = 0.3073). The ratio of productivities between male and female employees (MRP_M/MRP_F) is 0.88. When the ratios of productivities and compensation level are compared, the former (0.88) is less than the latter one (1.19). This indicates that male employees are over-compensated and female employees are under-compensated.

That is, male employees are paid more than equally-productive female employees in the national audit firms.

Table 2: Estimation of Compensations and Productivities

Variables	National Firms	Regional Firms	Local Firms
Panel A Compensations and Productivities (Standard Error in Parentheses)			
W_M	632,492	486,213	430,216
	(359,234)	(219,468)	(248,165)
W_F	531,201	438,669	405,691
	(486,529)	(153,016)	(160,488)
MRP_M	1,230,406	1,323,902	1,289,123
	(2,530,176)	(1,232,022)	(975,482)
MRP_F	1,391,255	930,321	1,043,466
	(940,490)	(405,026)	(833,960)
W_M-W_F	101,291	47,544	24,525
W_M / W_F	1.19	1.11	1.06
MRP_M-MRP_F	-160,849	393,581	245,656
MRP_M / MRP_F	0.88	1.42	1.24
Panel B Test of Equality of Gender Compensations and Productivities			
Significance Level of t-Test			
W_M=W_F	0.0042***	0.0001***	0.0140***
MRP_M=MRP_F	0.3073	0.0001***	0.0001***
Number of Observations	294	621	878

*Table 2 shows the average compensations and productivities of male and female employees. W_M is the compensations of male employees and W_F is the compensations of female employees. MRP_M denotes productivities of male employees and MRP_F is the productivities of female employees. *, **, *** Denote two-tailed significance at the 10 %, 5 % and 1 % levels.*

In the regional audit firms, the average compensations of male employees (W_M) are $486,213, which is significantly higher than that of female employees (W_F), $438,669 (p = 0.0001). The differences in average compensations are $47,544 and the ratios of compensation level (W_M/W_F) equal 1.11. Next, the average productivities of male employees (MRP_M) are $1,323,902 and that of female employees (MRP_F) are $930,321. MRP_M is significantly higher than MRP_F (p = 0.0001). The ratios of productivities between male and female employees (MRP_M/MRP_F) are 1.42. Because the ratios of productivities (1.42) are greater than the compensation level (1.11), male employees are under-compensated and female employees are over-compensated. That is, male employees are paid less than equally-productive female employees in the regional audit firms. Local audit firms have similar results to regional firms. Average compensations of male employees (W_M) are $430,216 and that of female employees (W_F) are $405,691. The differences in average compensations ($24,525) are significant (p = 0.0140). The ratios of compensation level (W_M/W_F) equal 1.06. Next, the average productivities of male employees (MRP_M) are $1,289,123 and that of female employees (MRP_F) are $1,043,466. MRP_M is significantly higher than MRP_F (p = 0.0001). The ratios of productivities between male and female employees (MRP_M/MRP_F) are 1.24. As the ratios of productivities are greater than that of compensations, male employees are under-compensated and female employees are over-compensated. That is, male employees are paid less than their equally-productive counterparts in the local audit firms.

Discussions

Consistent with prior studies, this study confirms that gender salary gap exists in the auditing industry and compensations of male employees are higher than that of female employees. Further, our empirical results indicate that male employees are over-compensated in the national firms but female employees are over-compensated in both regional and local audit firms. This study documents that different situations of gender salary gaps exist in market segments of an industry, an extension of prior studies and a new finding. In this study, national firms refer to audit firms rendering services to public companies. They account for 8.73% of the number of observations, but earn 71.80% of the total revenues. National firms

dominate the auditing industry and are the first choice of employers by graduates of accounting department in Taiwanese universities. Practically, Taiwanese audit firms recruit new employees by a series of on-and-off-campus events and have priority in selecting the most suitable students they desire. Most of the employees are from outstanding universities or graduate schools or from other universities with distinguished academic achievement. They are highly homogeneous in professional expertise and intellectual capabilities and are paid equally in the initial employment. However, subsequent promotion depends on their contributions to the audit firms. Accordingly, this study addresses our findings in terms of the positions held by and work experience of employees in the auditing industry.

Table 3 displays the position distribution of male and female employees in national, regional, and local firms. In practice, employees of audit firms include managers, auditor-in-charges, and audit staffs. As shown in Panel A, national firms are composed of 30% male and 70% female employees. Male and female employees account for 38% and 62% of managers. The ratio of male auditor-in-charges is 30% and that of female employees is 70%. Among the audit staffs, 26% are male employees and 74% are females. Both managers and auditor-in-charges are the upper-level employees and are defined as supervisors, while audit staffs are the entry-level employees and are referred to as assistants. Panel B shows that 49% of male employees hold the upper-level positions and receive higher compensations. In contrast, only 39% of female employees are in the upper-level positions. Employees in the upper-level positions are paid much more than those in the lower level ones. Hence, salaries of male employees are higher than that of female employees. Given the insignificant differences in productivities between male and female employees shown in Table 2, male employees are over-compensated in the national firms. Namely, more male employees in the upper level positions account for the results that male employees are over compensated in the national audit firms. This study argues that sex discrimination favouring men exists in the national firm subsample.

Next, Panel A shows that 83% and 77% employees of regional and local firms are females, representing more female employees are hired compared to national firms. Dataset of this study indicates that work experience of employees (EXPERIENCE) in the regional firms (11.81) and local firms (14.09) is higher than that of in the national firms (9.22). This further indicates that females spend longer years with the same employers. Regional and local firms are smaller in size and hire fewer employees compared to national firms. Most practices are offered to small and medium-sized enterprises and are relatively simpler, such as tax matters and accounting and bookkeeping services. Rendering of these practices needs employees with the attributes of gentle, tender (yielding), affectionate and compassionate. Female employees possess these attributes (Williams and Best, 1982). Although the productivities of male employees are higher than that of female ones, female employees are over-compensated due to their personal attributes. As a result, sex discrimination favouring women exists in the regional and local firms.

Table 3: Position Distribution of Male and Female Employees

	National Firms					**Regional Firms**					**Local Firms**				
	Males		**Females**		**Total No.**	**Males**		**Females**		**Total No.**	**Males**		**Females**		**Total No.**
	No.	**(%)**	**No.**	**(%)**		**No.**	**(%)**	**No.**	**(%)**		**No.**	**(%)**	**No.**	**(%)**	
Panel A															
Managers	733	(38)	1,172	(62)	1,905	82	(34)	163	(66)	245	58	(44)	74	(56)	132
Auditor-in-charges	516	(30)	1,194	(70)	1,710	44	(14)	283	(86)	327	33	(19)	142	(81)	175
Audit staffs	1,320	(26)	3,763	(74)	5,083	186	(14)	1,094	(86)	1,280	150	(20)	611	(80)	761
Total	2,569	(30)	6,129	(70)	8,698	312	(17)	1,540	(83)	1,852	241	(23)	827	(77)	1,068
Panel B															
Supervisors	1,249	(49)	2,366	(39)	3,615	126	(40)	446	(29)	572	91	(38)	216	(26)	307
Assistants	1,320	(51)	3,763	(61)	5,083	186	(60)	1,094	(71)	1,280	150	(62)	611	(74)	761
Total	2,569	(100)	6,129	(100)	8,698	312	(100)	1,540	(100)	1,852	241	(100)	827	(100)	1,068

Table 3 shows the position distribution of male and female employees in national, regional, and local firms. No. is equal to number of employees

CONCLUSIONS AND SUGGESTIONS

This study explores the salary differentials between male and female employees in Taiwanese audit firms, including national, regional and local audit firms. Empirical data are from the 2004-2009 Survey Report of Audit Firms in Taiwan, published by the Financial Supervisory Commission (FSC). Following Christensen et al. (1973), we conduct translog revenue functions of audit firms to acquire gender's marginal revenue productivity, to compare gender compensation premium for national, regional and local audit firms. Empirical results indicate that gender salary gap exists in the auditing industry and compensations of male employees are higher than that of female employees, agreeing with prior researches. Furthermore, male employees are over-compensated in the national firms but female employees are over-compensated in both regional and local audit firms. Given the productivities of employees, this study attributes our results to sex discrimination in the three sub-samples. In contrast with prior researches, this study possesses two unique features.

First, prior studies examine the gender salary differentials for an industry or economy. Instead, this study investigates this issue in terms of market segments. Audit firms in the same business area have similar production technology level and are more homogeneous than the entire firms of the industry. Consequently, the association between gender compensations and productivities is more stable and determinate, especially in the auditing industry. Second, most prior studies investigate the gender salary gap in audit firms through questionnaire survey but we test it using an official data base. Empirical results obtained reflect real practice better. This study focuses on the effects of gender on productivities (marginal revenue product). Limitation of the study is the absence of individual gender employee-level data, which includes the level of education, number of years in the current firm, years of previous experience and marital status for male and female professionals. Because final effects of productivities appear in the form of financial performance, future studies may extend to examine the impacts of gender on accounting net income or profit ratios.

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