Managerial Positions Attainment and Gender Earnings Differential in Thailand's Finance Sector

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Tanyamat SrungBoonmee[1]

Abstract

This paper uses data from the Thai Labor Force Survey (LFS) from 2012 – 2015 to study gender earnings differential among white collar workers in the Thai finance sector. The Blinder-Oaxaca (Blinder, 1973; Oaxaca, 1973) wage decomposition is employed in the investigation. The main results show a substantial unexplained earnings differential, but smaller than the explained difference. Family obligations do not seem to affect men and women differently. Further investigation reveals that the explained difference owes mostly to fewer females attaining management positions, as they tend to leave the profession at earlier ages than men. Insights from field interviews support the hypothesis that women are not as flexible in their work schedule as men are, while work in this sector often requires meeting clients at irregular hours. The inability or unwillingness of females to work those hours likely weakens their rapport with supervisors, which in turn hurt their chances of promotions.

Keywords: Gender equality, Wage inequality, Wage decomposition, Blinder-Oaxaca decomposition, Earnings

[1] **Affiliation:** Faculty of Economics, Khon Kaen University 123 Mitrapaab Road Tambon Nai Mueang, Mueang Khon Kaen THAILAND 40002 Tel. +6643009700 ext. 48145 Email. tanysr@kku.ac.th

การเข้าสู่ตำแหน่งบริหารและความแตกต่างของรายได้ระหว่างเพศชายและหญิงในภาคการเงินของประเทศไทย

ธัญมัชฌ สรุงบุญมี[1]

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บทคัดย่อ

งานวิจัยนี้เป็นการใช้ข้อมูลการสำรวจภาวะการทำงานของแรงงานไทยจากสำนักงานสถิติแห่งชาติ ไตรมาสที่ 3 ปี 2555 – 2558 เพื่อศึกษารายได้ที่ต่างกันระหว่างพนักงานชายและหญิงในภาคอุตสาหกรรมการเงินของประเทศไทย โดยวิธีการแยกส่วนความแตกต่างของรายได้เพศชายและเพศหญิงด้วยวิธีการของ Blinder (1973) และ Oaxaca (1973) ได้ถูกนำมาประยุกต์ใช้ ผลการศึกษาพบว่ารายได้ของเพศชายมีรายได้สูงกว่าเพศหญิงอย่างชัดเจน ปัจจัยส่วนใหญ่เกิดจากความแตกต่างที่อธิบายได้ (Explained difference) ในขณะที่ความแตกต่างที่ไม่สามารถอธิบายได้ (Unexplained difference) มีส่วนน้อย ความรับผิดชอบในครัวเรือนไม่ส่งผลที่ต่างกันในเพศชายและเพศหญิง นอกจากนั้นการกดค่าแรงในแต่ละกลุ่มอาชีพจมิได้ส่งผลมากนัก แต่อย่างไรก็ดีจากข้อมูลชี้ให้เห็นว่าเพศหญิงเข้าสู่ตำแหน่งผู้จัดการหรือหัวหน้างานได้น้อยกว่าเพศชาย เนื่องจากเพศหญิงมักจะออกจากสายงานนี้ในอายุที่น้อยกว่าเพศชาย ผลการสัมภาษณ์กลุ่มตัวอย่างของพนักงานในระดับต่างๆ ในภาคอุตสาหกรรมการเงิน เป็นไปตามสมมุติฐานที่ว่าเพศหญิงมีความยืดหยุ่นในด้านของการให้เวลากับการทำงานน้อยกว่าเพศชาย เนื่องจากรูปแบบงานมักจำเป็นต้องไปพบลูกค้าในเวลาที่ไม่แน่นอน ดังนั้นความไม่ยืดหยุ่นดังกล่าวจึงลดโอกาสของเพศหญิงในการสร้างความสัมพันธ์ที่ดีกับผู้บังคับบัญชา ซึ่งส่งผลในทางลบต่อโอกาสการเลื่อนขั้น

คำสำคัญ: ความเท่าเทียมระหว่างเพศ, ความไม่เท่าเทียมของค่าจ้าง, การแยกส่วนค่าจ้าง, การแยกส่วนค่าจ้างด้วยวิธี Blinder-Oaxaca, รายได้

[1] **หน่วยงานผู้แต่ง:** คณะเศรษฐศาสตร์ มหาวิทยาลัยขอนแก่น เลขที่ 123 ถ.มิตรภาพ ต.ในเมือง อ.เมือง จ.ขอนแก่น 40002 โทรศัพท์ 043-009-700 ต่อ 48145 อีเมล tanysr@kku.ac.th

Introduction

This paper investigates gender earnings differential among white collar workers in the finance sector of Thailand labor market. Men do not seem to have a clear advantage to perform better on the job, as the work rarely requires repeated physical exertion. In the U.S., physical abilties like static strength or dynamic strength are not relevant for a job like “financial examiner” or “loan officer” according to data compiled by O*NET (https://www.onetonline.org/find/descriptor/browse/Abilities/), and it seems to apply to finance jobs in Thailand. The empirical analysis utilizes Thailand Labor Force Survey (LFS) and applies the wage decomposition technique developed by Blinder (1973) and Oaxaca (1973) to separate the gender earnings difference into the “explained” and “unexplained” or “discriminatory” parts. The analysis finds significant gender difference in earnings, much of which is due to the difference in reaching managerial positions. The latter in turn reflects women’s earlier departure from the profession. The reason for this early departure remains unclear, and is an important topic for future work.

Employers often determine pay based on observed credentials in white collar occupations. Workers send a signal with their credentials, employers screen workers based on their credentials, and the market sorts workers into appropriate jobs (Spence, 1981). Therefore, much of the compensation is determined before actual work starts. In addition, the potential worker and the employer often bargain over wages, resulting in a significant level of subjectivity in pay. Thus, the fairness of compensation becomes a topic of discussion among stakeholders in most places of work.

It is widely accepted today that all workers should earn the same amount for similar work. Gender equity in pay has become a topic of interest as women continue to earn less than men despite their advancement in education and professional credentials (Nakavachara, 2010). Labor economists studying gender wage discrimination aim to find if discrimination exists and to design appropriate policy and legislation to address it. To identify wage discrimination, these scholars routinely employ versions of wage decomposition developed independently by Blinder (1973) and Oaxaca (1973) to quantify the part of gender earnings difference due to discrimination. This is given

by the earnings differential between two groups that is independent of differences in observable characteristics.

The finance sector is of particular interest in the Thai economy for a number of reasons. First, exploring the Thai Labor Force Survey (LFS), the dataset used for this study (National Statistical Office, 2015), it is found that the sector employs a large number of graduates of higher education. At the same time, this sector is among the most highly paid in the economy. In addition, low physical demands on the job lend itself to gender equality. Female employment in this sector is slightly disproportionate to the population. Given the importance of this sector as employer and advancement opportunity for women, it is useful to know if women continue to face obstacles to their professional development.

This paper contributes to our understanding of gender wage differentials in three important ways. First, by analyzing the finance sector in particular it is able to consider unique aspects of the industry and adjust the estimation models and results discussions accordingly. Second, the paper extends previous decomposition studies to include other family variables commonly believed to be mediators of wage differences, and controls for regional differences along with urban-rural differences in economic activities together. Finally, the empirical findings are complemented by perspectives of current workers and managers in the sector to provide insight into the mechanism that drives male-female differences in this sector.

Background and Literature Review

Women continue to earn less income than men with similar observable characteristics in many countries (Weichselbaumer & Winter-Ebmer, 2005). This gives rise to a literature on gender wage discrimination seeking to discover the existence of unfair disadvantages women face in the market, as well as developing appropriate policy solutions. A useful tool for studying wage inequality is wage decomposition developed independently by Blinder (1973) and Oaxaca (1973). The decomposition separates the earnings difference into the differences in observable characteristics (explained difference) and differences unobservable ones (unexplained). These correspond to differences in covariates and the coefficients in the wage regression

equation, respectively. The unexplained portion of the wage difference is often viewed as indication of wage discrimination.

In Thailand, women's earnings have been continuously improving relative to men during the past few decades. Whereas males earn more than 30% more than women in 1985, they earn only 5% more in 2005 (Nakavachara, 2010). The data used in this research (National Statistical Office, 2015) also confirms this trend. In 2015 men earned on average 15,700 THB, about 700 THB more than women. This closing gap has been largely attributable to superior education attainment of Thai women relative to men (Nakavachara, 2010). Liao and Paweenawat (2020) documents the evolution of male and female earnings in Thailand to discover some interesting pattern. They find that the share of women in the top 10% income bracket has been rising, while their share in the bottom 10% has been falling.

Yet researchers of the Thai labor market are well aware of the limitations of raw wage comparison to measure gender equality. While the share of women in the top 10% income bracket has been rising, Liao and Paweenawat (2020) observe that women's share at the top 1% has been stagnant or on a decline since 2007. They observe that women seem to run into a "glass ceiling" in advancing their earnings at top income levels. Using a different dataset from Thailand, Fang and Sakellariou (2011) find evidence of a "sticky floor" where the unexplained wage gap is largest at lower income quantiles. In fact, that study finds that the "sticky floor" phenomenon is stronger.

The Blinder-Oaxaca wage decomposition has been widely applied to studies of gender wage inequality in Thailand since Nakavachara (2010). Jithitikulchai (2018) carries out the Blinder-Oaxaca decomposition for male-female wage differentials and identifies the differential returns to jobs and industries as drivers of the total wage differential. Khorpetch and Kulkolkarn (2011, in Thai) use wage decomposition to study wage differentials across age groups in Thailand and find more discrimination in older age groups. Bui and Permpoonwiwat (2015) use wage decomposition to investigate male-female earnings difference separately by sectors in Thailand. The authors conclude that wage discrimination is falling, varies across sectors, and the pattern does not correspond to gender composition.

The decomposition results hinge on the variables included in the base regression models. While previous studies in the Thai context include marital status in regression models, effectively capturing differential effect of marriage across gender (Hersch & Stratton, 2000), they do not include children and spouse variables that directly capture the mechanism of this differential. Studies of marriage premium often cite household specialization as a key explanation for marriage premium among men (Hersch & Stratton, 2000) while others view that motherhood and household responsibilities should cause lower earnings among women (Gangl & Ziefle, 2009). Adding direct measures of household responsibilities can help refine decomposition results.

Research Methodology

Empirical Approach

The empirical analysis uses cross section data over 4 years from 2012 - 2015 (see data description below) to identify sources of earnings difference between Thai men and women working in the financial sector. At the time of the research undertaking in 2016, the latest data available was for 2015. The analysis goes back to 2012 when a change occurred in the grouping of occupations and industries, since further investigation is necessary to make the groupings consistent going back to earlier years. The analysis starts with linear regression models pooling men and women, and estimating the effect of being female on earnings. The estimation equation takes the following form.

$$earnings_{it} = \beta_0 + \delta_1 female_{it} + \sum_{j=1}^{J} \beta_j x_{it} + \sum_{k=1}^{K} \gamma_k y_k + \sum_{t=1}^{4} \theta_t z_t + u_{it}$$

The subscript *i* denotes individual observations and *t* denotes survey year. In this model, individual earnings are determined by the individual's gender, represented by the *female* dummy, and other control variables. The list of control variables consists of individual- and household-levels ($\boldsymbol{x_{it}}$) and geographic-level ($\boldsymbol{y_k}$) variables as well as year indicators ($\boldsymbol{z_t}$). The geographic and year indicators are meant to filter out the effect of current local economic conditions on earnings, which is

beyond the scope of this study. Geographic variables included in the model are region indicators for each of the 4 regions outside of Bangkok, the capital city, and an indicator for non-municipal local administration to capture the rural status of the location, since the urban-rural wage gap has been documented for Thailand (Ariyaarpakamol, 2019). Year dummies are for the 3 later years, leaving the first year, 2012, as reference.

Individual level variables include age, education level, work experience and its quadratic, work-related variables such as occupation and total hours worked per week, and marital status. The latter has been shown in previous studies to be positively related to male earnings (see Korenman & Neumark, 1991, for example). Household variables include the number of children in the household, spouse's earnings, and spouse's hours of work. These are meant to capture the level of domestic responsibilities, and are expected to be negatively associated with earnings.

The LFS data identifies the field of study among more educated workers. While most of the workers report their field of study as business administration, a substantial proportion hold credentials in science and engineering, as well as a small number in other fields. Interestingly, workers reporting education in non-business fields tend to earn more, so the regression model controls for non-business education as well. In addition, the size of the business establishment might be associated with earnings. As wages may be affected by the size of the establishment (Gerlach & Schmidt, 1990; Oi & Idson, 1999), firm-size controls are thus added as another set of covariates.

From the regression model, the male-female earnings difference is given by the coefficient δ_1. This coefficient shows the female – male earnings difference that remains after controlling for all relevant variables. Each of the coefficients from β_j represent the effect of each control variable on earnings, while the vector γ_k gives the year effects. The analysis will start with the basic model with only controls for geographic and time indicators. This will give an estimate of the overall male-female earnings difference in the sector. We then successively add additional variables of interest and look at how the main coefficient of interest, δ_1, changes, identifying these variables as mediators of the relationship.

From the Blinder-Oaxaca decomposition, the "explained" portion of the earnings difference is caused by differences in observable characteristics, such as age, education, experience, etc., included in the regression model. The "unexplained" portion is the difference in the coefficients on these variables across two groups. These are interpreted as "unexplained" because the initial assumption is that workers should be valued equally based on their characteristics, so this difference means that something remains hidden to the researcher (Blinder, 1973; Oaxaca, 1973).

The decomposition starts by estimating regression models separately for males and females, obtaining coefficients. These coefficients, along with the means of the characteristics variables for each group, are combined to give the proportions of the explained and unexplained earnings difference as follows.

$$\bar{Y}^M - \bar{Y}^F = (\bar{X}^M - \bar{X}^F)'\hat{\beta}^M + \bar{X}^{F\prime}(\hat{\beta}^M - \hat{\beta}^F)$$

The derivation of this expression has been given abundantly (Blinder, 1973; Oaxaca, 1973; Jann, 2008), though it is worth summarizing here for the purpose of discussion. The overbars ($\bar{\cdot}$) indicate the mean for the relevant variables, Y's denote outcome variables, and X's denote the vector of explanatory variables, while the superscripts M and F denotes values for male and female regressions, respectively. The vectors $\hat{\beta}^M$ and $\hat{\beta}^F$ are regression coefficients estimated separately for men and women.

Thus, the left hand side of the equation shows the overall difference in mean earnings between males and females. The first term is the sum of the products of the male-female difference in each explanatory variable and its coefficient from the male regression. This gives the "explained" part of the earnings difference. The second additive term is the sum of the product of the mean of each explanatory variable and the difference in the estimated coefficient from the male and female samples. This gives the earnings difference due to coefficient difference, the "unexplained" portion (Jann, 2008). Alternatively, we can view the female coefficients as reference and adjust the expression accordingly.

The decomposition also allows researchers to consider each variable in turn. For example, Jithitikulchai (2018) find that the wage structure differentials (unexplained wage

difference) is attributable to differential returns to experience and industrial sector in 2002, and to various job characteristics—part/full time, public/private, firm size caregories—in 2013. The coefficient estimates from Khorpetch and Kulkolkarn (2011) show that in addition to experience and industry, returns to marriage is an important driver of male-female earnings differential.

Data and Summary Statistics

This study uses the Quarter 3 Thai Labor Force Survey (LFS) from 2012 – 2015 (National Statistical Office, 2015) to investigate the determinants of the male-female monthly earnings difference. The LFS is a quarterly survey that aims to be representative cross-sections of the Thai population during the time of each survey. The data contains individual-level information on employment status, earnings from all sources if employed, along with industry, occupation, and the number of hours worked for the employed population. It also provides information on human capital variables, which are the main determinants of earnings in the literature. In addition, individuals are identified by the household that they reside in, and their relationship to the household head is provided. This allows researchers to create some useful household-level variables. In this study, the household variables used are the number of own-children living in the household, spousal income, and spouse's hours worked.

The sample is restricted to men and women ages 25 – 60 years old in the financial sector, with the cutoff at 60 representing the legal retirement age for Thai workers. The study excludes those who are still in school and considers only white collar work, i.e. non-manual labor. In specifications that include the number of children, only workers who are either household head or the spouse remain in the sample, so as to not contaminate the effect of own-children with the presence of any children in the household. Finally, only wage workers are included in the analysis due to the availability of earnings information for employers and the self-employed. The sample size for finance industry workers is 5,350 for the 4 years of data, and restricting to the sample above brings the size to 1,706 males and 2,552 females.

Monthly earnings are the outcome of interest. The variable is log transformed for convenient interpretation as percentage difference. It also reduces variability in the

data leaving only what is meaningful. The analysis includes all sources of monthly earnings not provided by public assistance. These are monthly salary, overtime pay, bonus, and a category called "other money" which can come from a variety of sources. The base year for converting earnings to real terms is 2015, the most recent year in the current data. While some studies use hourly wages (e.g. Nakavachara, 2010), this paper uses monthly earnings to reflect overall economic well-being more than productivity. Weekly work hours are added as additional control variable to reflect differences in work hours, although in this sample there is little variation in work hours overall.

Explanatory variables include individual characteristics, work characteristics, and economic conditions. Individual characteristics include education level, years of potential experience (age – standard level-specific completion age), its quadratic, marital status, and the number of children. Education levels enter the model as indicator variables to parsimoniously capture both its incremental non-linear effect as well as the sheepskin effect on earnings (Hungerford & Solon, 1987) where most of the earnings difference occurs at level cutoffs. Specifications including the worker's field of study are also estimated, though the results are not very reliable as the bulk of all workers are found only in the field of social sciences and business.

Marital status and the number of children should pick up household responsibilities and their effect on earnings, which may be different for men and women. The data identifies 6 marital statuses. These are single (never married), married, divorced, widowed, separated, and uncertain. It is assumed here that marriage is associated with more household responsibilities, and could be a source of earnings differential between men and women. At the same time, divorce and widowhood may cause earnings to be different from workers who never married. The empirical model thus includes indicators for all marital statuses, except for "uncertain" as there are simply too few observations with this status. Alternative specifications also consider earnings and work hours of spouses, although these turn out not to affect earnings significantly.

Work characteristics variables include occupation group indicators and hours worked per week. This study considers only white collar workers, as they are the overwhelming majority in this sector. Including blue collar workers would likely contaminate the coefficient estimates. In all model specifications, controls for current

local economic conditions are included to filter out wage differentials due to these factors. These variables include region indicators and rural area indicators (non-municipality local administration) as previously discussed, along with survey year indicators.

Figure 1 shows the overall average log monthly earnings of males and females across 4 years of data from 2012 - 2015. The earnings used to calculate log earnings are real earnings expressed in 2015 prices. The table shows that while the earnings gap varies from year to year, males earn between 6% to 12% more than females throughout this period[3]. In addition, despite findings in earlier studies that the male-female wage gap is closing in Thailand (Khorpetch & Kulkolkarn, 2011; Nakavachara, 2010), data from the financial sector seems to suggest otherwise. The gender gap seems to widen in 2015, and it is of interest to learn why.

Figure 1 Log Real Monthly Earnings for Males and Females in the Finance Sector

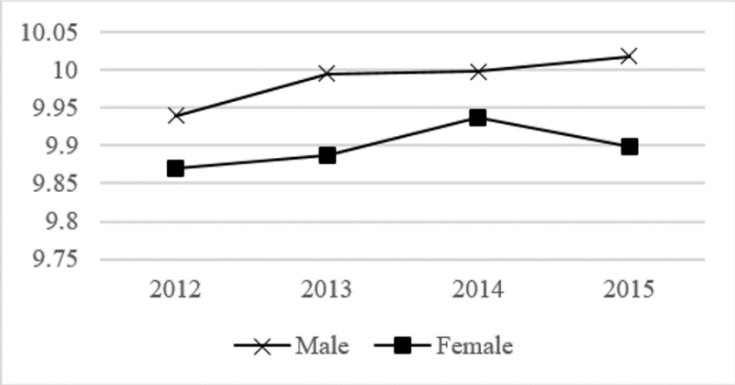

Table 1 provides the mean of each variable for each gender, pooling data for all years. In this sample males are somewhat older on average, and they also have more potential years of experience than females. A larger proportion of males are married, and they have more children. Total hours worked do not differ much across gender. A larger proportion of females hold bachelor's or advanced degrees, in total close to 84%, compared to males whose college or advanced degree holders make up only about 75% of the group. Yet, a larger proportion of males are in managerial

3 Statistical significance testing is not provided here as these will be given with linear regression and Blinder-Oaxaca decomposition results.

positions, while a larger proportion of females are in clerical ones, the lowest earning group. Women seem to leave the profession at later ages while men stay around. One possibility is that females leave work in this sector when they form a family, and that work in this sector is not as conducive to marriage and family formation among women as it is for men.

Table 1 Summary Statistics for Males and Females in the Sample

Variables	Male	Female	M – F
Monthly earnings (THB, base = 2015)	31,369	26,158	5,211
Log monthly earnings (base = 2015)	10.13	9.97	0.16
Age	39.56	36.58	2.97
Experience (years)	17.58	14.13	3.44
Weekly work hours	42.77	42.02	0.75
% married	64.1%	52.2%	11.9%
Number of children 18 or younger*	0.66	0.61	0.06
% college graduate	60.6%	67.5%	-6.9%
% advanced degree holder	14.1%	15.3%	-1.2%
% in managerial positions	24.3%	16.2%	8.1%
% in clerical positions	20.2%	31.8%	-11.6%
Frequency (weighted)	579,601	872,183	0.66**
Observations	2,062	2,815	-

Note. * only HH heads or spouses considered; **male/female ratio

Results and Findings

Linear Regressions for Earnings

The analysis begins with linear regression models to learn about the effect of human capital and economic conditions on earnings of workers from both genders. The main coefficient of interest in regression analysis is the one on the "female" indicator variable in the earnings equation pooling male and female samples. The estimation starts from the most parsimonious model containing no individual control variables, then progressively adds more controls to examine how these contribute to male-female earnings differential.

Table 2 reports the linear regression results. Panel 1 shows that overall being female is associated with about 8.2% lower earnings than males with similar education and occupation. Higher education and experience correlate with higher

earnings. Regional variation affects earnings significantly, while year effects do not. Managerial occupations earn more than others. Adding marital status indicators in panel 2 reduces the magnitude of female disadvantage slightly to -0.08 log points. Adding the number of children and considering only household heads in panel 3, the female coefficient jumps in magnitude to -0.128 log points while the coefficient on the number of children (kids0_18) is insignificant.

While most of the workers hold degrees in business fields, about 23% hold non-business degrees in the sector. Panel 4 reports regression results adding a non-business field indicator, and shows that non-business degree holders earn about 11% more than business degree holders. Field of study information is available only for high school graduates and above, such that the education level dummies are from associate degree and above. Panel 5 shows that larger firms are associated with higher earnings as in some previous studies (see, for example, Oi & Idson, 1999), although the effect is significant at sizes above 100 employees. In these specifications, the female earnings penalty ranges from about 8.3 – 9.6% relative to males.

Table 2 Regression Results for Pooled Sample

Dependent Variable: Log Monthly Earnings	(1)	(2)	(3)	(4)	(5)
Female	-0.082***	-0.080***	-0.128***	-0.096**	-0.083**
	(0.021)	(0.021)	(0.030)	(0.038)	(0.036)
Married	-	0.011	0.033	0.028	0.009
		(0.024)	(0.042)	(0.052)	(0.050)
Divorced/separated	-	-0.031	0.013	0.042	-0.004
		(0.043)	(0.067)	(0.082)	(0.077)
Widow	-	-0.118	0.072	0.055	-0.005
		(0.104)	(0.135)	(0.175)	(0.163)
Kids0_18	-	-	-0.006	0.012	0.018
			(0.021)	(0.027)	(0.026)
Experience	0.020***	0.020***	0.020***	0.011	0.010
	(0.003)	(0.004)	(0.005)	(0.008)	(0.008)
Experience^2	0.000*	0.000*	0.000	0.000*	0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
log weekly hours	-0.030	-0.030	0.035	0.030	0.018
	(0.043)	(0.043)	(0.058)	(0.054)	(0.055)

Table 2 (Continued)

Dependent Variable: Log Monthly Earnings	(1)	(2)	(3)	(4)	(5)
Education					
Junior High	0.346***	0.348***	0.288*	-	-
	(0.115)	(0.115)	(0.157)		
High School	0.568***	0.570***	0.582***	-	-
	(0.107)	(0.106)	(0.144)		
Associate Degree	0.618***	0.619***	0.717***	0.056	0.052
	(0.114)	(0.115)	(0.148)	(0.082)	(0.082)
College	1.038***	1.041***	1.086***	0.453***	0.423***
	(0.105)	(0.105)	(0.143)	(0.072)	(0.073)
Above College	1.418***	1.419***	1.453***	0.942***	0.910***
	(0.111)	(0.111)	(0.152)	(0.094)	(0.092)
Non-business (≥ high school)	-	-	-	0.111**	0.105**
				(0.043)	(0.043)
Occupations					
Professional	-0.256***	-0.255***	-0.323***	-0.3390***	-0.3484***
	(0.036)	(0.036)	(0.046)	(0.056)	(0.055)
Administrative/Technical	-0.397***	-0.395***	-0.398***	-0.381***	-0.405***
	(0.031)	(0.031)	(0.040)	(0.051)	(0.051)
Clerical	-0.436***	-0.435***	-0.430***	-0.425***	-0.413***
	(0.033)	(0.033)	(0.045)	(0.059)	(0.059)
Establishment Size (employees)					
5 - 9	-	-	-	-	0.037
					(0.137)
10 - 19	-	-	-	-	-0.024
					(0.124)
20 - 49	-	-	-	-	0.039
					(0.119)
50 - 99	-	-	-	-	0.049
					(0.126)
100 - 199	-	-	-	-	0.233*
					(0.136)
>200	-	-	-	-	0.208*
					(0.117)
Constant	9.240***	9.234***	9.060***	9.684***	9.667***
	(0.194)	(0.193)	(0.264)	(0.197)	(0.247)
Observations	3,836	3,836	1,954	1,179	1,179
Adjusted R-squared	0.517	0.517	0.514	0.492	0.509

Source: Calculations from Thai LFS data. All specifications include region, rural status, and year controls.

*,**, and *** denote significance at 10%, 5%, and 1%, respectively.

To assess the possibility of gender-biased household responsibilities (Gangl & Ziefle, 2009; Kühhirt & Ludwig, 2012; Liao & Paweenawat, 2020), the same models are estimated separately for the male and female samples. Results are given in table 3 below. Panel 1 repeats the previous results for comparison. The marriage coefficient is positive for men and negative for women, though insignificant. Widowhood is associated with higher earnings among men. Holding non-business degrees is associated with higher earnings only among men, while a large firm size increases earnings only for women. In panel 2 of the table, spousal income and spousal work are both insignificant, suggesting that the spouse's success at and dedication to work does not affect earnings, inconsistent with the household specialization hypothesis (Becker, 1981).

Table 3 Earnings Regression Results by Sex

Dependent Variable:	(1)		(2)	
Log Monthly Earnings	Female	Male	Female	Male
Married	-0.005	0.032	-0.512	-0.242
	(0.069)	(0.077)	(0.741)	(0.510)
Divorced/separated	0.053	-0.141	0.052	-0.141
	(0.096)	(0.108)	(0.099)	(0.108)
Widow	-0.026	0.321*	-0.028	0.359**
	(0.184)	(0.165)	(0.188)	(0.174)
Kids0_18	0.017	0.005	0.022	-0.01
	(0.040)	(0.037)	(0.042)	(0.039)
Experience	0.012	0.008	0.006	0.009
	(0.012)	(0.011)	(0.014)	(0.012)
Experience^2	0.000	0.000	0.001	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Log weekly hours	0.013	0.027	0.032	0.021
	(0.060)	(0.154)	(0.079)	(0.161)
Education				
Associate Degree	0.001	0.063	-0.029	0.064
	(0.118)	(0.118)	(0.123)	(0.125)
College	0.454***	0.401***	0.444***	0.421***
	(0.111)	(0.103)	(0.122)	(0.106)
Above College	0.873***	0.933***	0.858***	0.936***
	(0.131)	(0.136)	(0.142)	(0.138)
Non-business (≥ high school)	0.017	0.155**	0.021	0.164**
	(0.061)	(0.064)	(0.066)	(0.066)

Table 3 (Continued)

Dependent Variable:	(1)		(2)	
Log Monthly Earnings	Female	Male	Female	Male
Occupations				
Professional	-0.377***	-0.295***	-0.355***	-0.329***
	(0.092)	(0.066)	(0.104)	(0.072)
Administrative/Technical	-0.438***	-0.366***	-0.431***	-0.394***
	(0.076)	(0.068)	(0.085)	(0.073)
Clerical	-0.419***	-0.403***	-0.405***	-0.415***
	(0.086)	(0.084)	(0.101)	(0.091)
Log spouse income	-	-	0.023	0.004
			(0.032)	(0.011)
Log spouse weekly hours	-	-	0.065	0.063
			(0.157)	(0.127)
Establishment Size (Employees)				
5 - 9	-0.016	-0.113	-0.004	-0.18
(continued)	(0.141)	(0.240)	(0.153)	(0.250)
10 - 19	-0.033	-0.273	-0.038	-0.285
	(0.133)	(0.220)	(0.142)	(0.221)
20 - 49	0.034	-0.173	0.044	-0.172
	(0.108)	(0.225)	(0.121)	(0.228)
50 - 99	0.044	-0.151	0.048	-0.151
	(0.123)	(0.234)	(0.135)	(0.240)
100 - 199	0.162	0.057	0.159	0.058
	(0.133)	(0.258)	(0.143)	(0.261)
>200	0.191*	-0.024	0.192*	-0.025
	(0.108)	(0.224)	(0.112)	(0.227)
Constant	9.647***	9.794***	9.598***	9.819***
	(0.252)	(0.649)	(0.306)	(0.663)
Observations	669	517	601	476
Adjusted R-squared	0.459	0.503	0.458	0.503

Region, rural status, and year controls included. *,**, and *** denote significance at 10%, 5%, and 1%, respectively.

Wage Decomposition

This section applies the Blinder-Oaxaca decomposition. The decomposition also provides insight into which variable or group of variables are important determinants of earnings difference. Table 4 provides decomposition results, which employ two-fold decomposition using earnings coefficients for males as reference. The overall earnings difference is about 0.29 log points in favor of males, or about 30%. The explained earnings difference accounts for 0.20 log points in the difference, and the remaining 0.09 log points come from coefficient differences. Standard

interpretation of this result is that 1/3 of the earnings difference is attributed to some type of discrimination, while 2/3 of it is due to endowment differences.

Table 4 Earnings Decomposition for Male and Female Workers in the Finance Sector

	Male	Female	Difference
Log Monthly Earnings	10.407	10.114	0.293***
	(0.039)	(0.035)	(0.052)
Difference due to			
Endowment	0.199***		
Coefficient	0.093**		
Total	0.293***		

*, **, and *** denote significance at 10%, 5%, and 1%, respectively.

Table 5 shows detailed decomposition results grouping sets of dummy variables where appropriate. Occupation is a significant part of explained earnings differentials, with managerial occupations earning more than others. It appears that women can substantially close the gender earnings gap by more of them becoming managers.

Table 5 Detailed Earnings Decomposition

Dependent Variable: Log Monthly Earnings	Difference due to Endowment	Difference due to Coefficient
Married	-0.024	0.188
	(0.051)	(0.627)
Divorced/Separated	0.001	-0.007
	(0.002)	(0.006)
widow	-0.003	0.003
	(0.002)	(0.003)
Kids0_18	-0.001	-0.018
	(0.006)	(0.031)
Education (levels, non-business dummies)	0.018	0.033
	(0.021)	(0.154)
Experience, experience^2	0.106***	0.006
	(0.024)	(0.139)
Log weekly hours	0.001	-0.040
	(0.008)	(0.667)
Occupation (dummies)	0.069***	0.014
	(0.023)	(0.086)
Region (dummies)	-0.009	0.018
	(0.008)	(0.042)

Table 5 (Continued)

Dependent Variable: Log Monthly Earnings	Difference due to Endowment	Coefficient
Rural	0.001	-0.015
	(0.003)	(0.022)
Year (dummies)	-0.004	0.035
	(0.005)	(0.064)
Log spouse income	0.003	-0.130
	(0.006)	(0.238)
Log spouse work hours	0.023	-0.008
	(0.047)	(0.579)
Establishment size (dummies)	0.018*	-0.207
	(0.010)	(0.243)
Intercept	-	0.220
		(0.730)
Total	0.199***	0.093**
	(0.044)	(0.044)

*, **, and *** denote significance at 10%, 5%, and 1%, respectively.

Managerial Status Decomposition

After having identified occupation status as the main driver of male-female earnings differential, this section further investigates the factors related to attaining managerial positions in the financial sector. The outcome variable of interest is managerial occupation status binary variable. Linear Probability Models (LPM) are estimated for this outcome variable separately for males and females then Blinder-Oaxaca decomposition is applied. The estimation model removes the quadratic term of the labor market experience variable for parsimony, as there is no theoretical basis for a diminishing effect of experience on managerial level attainment.

Table 6 shows Linear Probability Model (LPM) regression estimation for the management level binary indicator (manager) on human capital, family, and economic condition covariates for males and females. Results show that marriage does not affect the likelihood of males or females becoming managers, though the coefficient is positive for males but negative for females. More years of experience seems to increase the likelihood of being manager for both sexes, with the impact slightly stronger among males. Going down the table we see that having children is significantly associated with a higher probability of being a manager among men, but does not seem to affect women.

Table 6 Management-Level LPM Regression Results

Dependent Variable: Manager	Female	Male
Married	-0.156	0.22
	(0.415)	(0.338)
Divorced/separated	-0.083	-0.117
	(0.078)	(0.133)
Widow	0.018	-0.2
	(0.218)	(0.223)
Kids0_18	0.017	0.102***
	(0.031)	(0.034)
Experience	0.011***	0.015***
	(0.003)	(0.003)
Log weekly hours	0.086**	-0.278*
	(0.043)	(0.149)
Education		
Associate Degree	0.004	0.089
	(0.067)	(0.108)
College	0.191***	0.328***
	(0.048)	(0.091)
Above College	0.621***	0.687***
	(0.079)	(0.105)
Non-business (≥ high school)	-0.008	-0.02
	(0.043)	(0.059)
Log spouse income	-0.008	-0.011
	(0.010)	(0.008)
Log spouse weekly hours	0.062	-0.039
	(0.100)	(0.081)
Establishment Size Controls	Yes	Yes
Constant	-0.657***	1.010*
	(0.179)	(0.594)
Observations	609	500
Adjusted R-squared	0.208	0.229

Source: Calculations from Thai LFS data. All specifications include region, rural status, and year controls.
*,**, and *** denote significance at 10%, 5%, and 1%, respectively.

More highly educated individuals are more likely to be manager for both sexes, although the effect seems slightly higher among men. Holding a college degree increases the probability of being a manager by about 33 percentage points among men, while increasing the probability by only about 19 percentage points among women. Advanced degree holders are about 62 and 68 percentage points more likely

to be managers among women and men, respectively. Interestingly, working more hours is positively related to being a manager among women but the relationship is negative among men. Finally, men in larger establishments are significantly less likely to be managers, while establishment size does not matter for female attainment of manager position.

Is the differential management level attainment across gender due more to observable or unobservable characteristics? Table 7 shows the Blinder-Oaxaca decomposition results for managerial position status. Overall, about 37% of white collar males are in managerial position, compared to about 21% of white collar females. The overall difference in the probability of attaining managerial positions is thus about 16 percentage points. This difference consists of about 7.2 percentage points in explained difference, and 8.9 percentage points in unexplained difference due to differential "returns" to characteristics in determining managerial position attainment, suggesting that there are hidden barriers to women's career advancement.

Table 7 Management-Level Attainment Decomposition

	Male	Female	Difference
Management Level Binary	0.368	0.206	0.162***
	(0.028)	(0.022)	(0.036)
Difference due to			
Endowment	0.073***		
Coefficient	0.089**		
Total	0.162***		

*, **, and *** denote significance at 10%, 5%, and 1%, respectively.

Table 8 reports detailed decomposition results, grouping variables where appropriate. Years of experience is an important determinant of managerial position status. For both sexes, age is positively associated with attaining managerial status. Higher education attainment increases of managerial position attainment, but not enough to place more women in managerial positions than men. A previous study has identified a glass-ceiling type obstacle faced by women in all sectors, looking at the gender wage gap at high income (Liao & Paweenawat, 2020). The "sticky-floor" type of earnings disadvantage is not observed here as in a previous study (Fang & Sakellariou, 2011), probably due to sample selection of white collar workers.

Coefficient differences are not positively significant for any of the included variables except the number of children, which is borderline significant at the 10% level. Most of the significant difference comes from the intercept, which includes the effects from unobserved variables. The significant difference in the coefficient on children suggests that different family responsibilities are part of the explanation. Coefficients for firm size and work hours are also significant, although these are negative and does not support the view of discrimination against women.

Table 8 Detailed Management-Level Attainment Decomposition

	Difference due to	
	Endowment	**Coefficient**
Married	0.020	0.264
	(0.032)	(0.375)
Divorced/Separated	0.002	-0.002
	(0.002)	(0.003)
widow	0.001	-0.001
	(0.002)	(0.006)
Kids0_18	0.015	0.045*
	(0.008)	(0.025)
Education (levels, non-business)	0.007	0.117
	(0.015)	(0.101)
Experience	0.064***	0.057
	(0.016)	(0.063)
Log weekly hours	-0.016	-1.351**
	(0.013)	(0.576)
Region (dummies)	0.001	-0.059
	(0.006)	(0.037)
Rural	0.000	-0.005
	(0.001)	(0.018)
Year (dummies)	0.000	-0.008
	(0.004)	(0.061)
Log spouse income	-0.005	-0.023
	(0.006)	(0.091)
Log spouse work hours	-0.013	-0.293
	(0.027)	(0.371)
Establishment size (dummies)	-0.002	-0.318**
	(0.007)	(0.135)
Intercept	-	1.667***
		(0.620)
Total	0.073**	0.089**
	(0.029)	(0.038)

*, **, and *** denote significance at 10%, 5%, and 1%, respectively.

Discussion and Recommendation

This study finds that women earn less than men with similar characteristics in the finance sector. Detailed Oaxaca-Blinder earnings decomposition show that experience and occupation status are the main drivers of the earnings difference. Women are younger in this sector, and they reach managerial positions less often. Decomposition of the managerial status reveals that age is also an important factor in this dimension. Age difference makes up most of the explained gender difference in reaching managerial positions. Women tend to be younger than men in this sector, and their younger age seems to hurt their advancement prospects.

In the finance sector, women dominate among younger workers, with a male-female ratio of 0.45 for ages 25 – 30. The sex ratio increases with age in favor of men, with men dominating from late 40's. In the Thai culture where age represents social status, it is an unsurprisingly an important predictor of leadership positions. When more men are employed in older ages than women, it also means they have a better chance of advancement. However, as table 9 shows, this gap in manager-ship already exists in earlier ages. It seems that barriers exist other than age that limit women reaching management positions. Cultural perception might also play a part in reducing women's chances of reaching management positions (Yukongdi, 2005).

Limitations and Suggestions for Future Research

Some limitations in the current study can be addressed to improve our understanding. First, research can investigate the nature and the causes of female disadvantage in reaching managerial positions. Since the main observable factor driving this difference is age, researchers might look at why females tend to leave the profession earlier than males. One possible candidate is family obligations, and it is worth verifying it with data as well as field interviews. Second, interviewees mention the higher flexibility among males as a possible driver of male-female difference in advancement and pay. It might be useful to explore ways to level the paying field by instituting changes at work to formally address emergencies. This may not only help women gain earnings parity, but might also improve work efficiency as well as help all workers with family related obligations such as taking care of the young and the elderly.

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