

Gender Wage Gap in China from 1989-2009¹

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April 24th, 2011

Abstract

This paper investigates the changes in the gender wage gap from 1989-2009 in China during a time of substantial economic growth and increased privatization. The paper addresses three questions: first, has the wage gap between genders increased since 1989; second, can this wage gap be explained by differences in characteristics other than gender; third, is there a difference in the gender gap between state-owned versus private companies. Results show that the gender wage gap has increased dramatically in the last 20 years, from 20.4% in 1989 to 30% in 2009. When including controls for human capital, occupation, and geographic location, the overall gender gap increased from 10.7% in 1989 to 22.2% in 2009. Women also experience a higher wage gap in the private sector compared to the public for all surveyed years. Using the Blinder-Oaxaca decomposition, the percentage of wage gap not explained by wage determinants other than gender has increased from 80.2% in 1989 to 90.8% in 2009. This finding is largely due to increases in the proportion of men and women working in the private sector between 1989 and 2009. Additionally, men have a higher return on experience, occupation and enjoy a smaller penalization for being in rural areas.

1. Introduction

China's miraculous economic development for the past thirty years has transformed the country dramatically. Since 1978, real per capita income has quadrupled (Yao, 2002), with an average GDP growth rate of 10% per year, lifting millions of people out of poverty. Changes in its economic system from private to market-oriented production have facilitated this incredible growth. Along with these transitions was the encouragement of female labor participation which

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also facilitated the economic growth. Since the 70s, female labor participation has grown substantially, narrowing the gender gap in labor participation rate (Barret et. al, 2010). The most recent data from World Bank shows that female labor force participation rate is 67%, while men's are 80% (International Labor Organization, 2009). This growth is accompanied by an enormous increase in inequality, making China's income distribution one of the most unequal in the world (Khan and Riskin, 2001). Along with the increased inequality, rapid economic growth has not been gender neutral, which is consistent with evidence from other post-socialist countries (Aslanbeigui, Pressman and Summerfield, 2004). On the one hand, with the government's policies to restructure industries and transform state-owned enterprise into private, women have disproportionately experienced layoffs and downward mobility from these enterprises (International Labor Organization 2004). This downward mobility includes layoffs, cut in wages or downward positional changes. On the other hand, the structural changes in China create new opportunities for career development, advancement and wage increases.

In recent years, the Chinese government has been implementing policies to create the "Harmonious Society", such as implementing a social security system and developing various welfare programs to decrease inequality and social friction. Knowledge of the gender wage gap can greatly aid these discussions. To widen our understanding and knowledge of the gender discrimination and inequality in China, I explore the gender wage gap and the various factors that contribute to it, by looking at the changes in the wage gap from 1989-2009 and the effect of privatization on the wage gap using data from the Chinese Health and Nutrition Survey, a representative sample of the Chinese population from 1989 to 2009.

Results show that the gender wage gap has increased from 1989-2009, while differences in labor characteristics have narrowed between genders. This increased wage gap is largely due to higher returns men enjoy compared to women with similar characteristics.

The rest of the paper is structured as follows: in Section 2, I will present a brief summary of the previous literature. In section 3, I describe the data and methodology. In Section 4, I present the main results and I will provide further evidence of the determinants of the changes in the wage gap during the last 20 years. Section 6 concludes.

2. Previous literature

The characteristics of China's gender wage gap and employment differentials are quite unique, partly shaped by the country's unique cultural, political and economic circumstances. Although there have been various studies of the labor markets in China, relatively little attention have been paid to the gender wage gap. Clearly, there is much to explore and understand about the gender wage gap in China.

Most published research and articles in the field of gender wage differentials in China use data that are dated before 2002. With the rapid economic and social changes in China occurring every year, more recent research is desired. Additionally, many of the surveys used in existing works are limited to a small sample from few regions in China, either rural or urban. Given the geographic and ethnic diversity in China, surveys need to draw on large samples of respondents and cover wide range of provinces.

Overall, China's income inequality has increased at the lower end of the distribution. According to research done by Appleton, Song and Xia (2010), using quintile analysis, research has shown that that gender wage gap across the quintiles follows an "L-shape", with the highest

gender gaps for the bottom of the distribution and a small rise of wage gap again at the very top end. However, the rise in the pure gender gap appears much smaller at the higher end, while gender inequalities in pay have increased among lower paid workers. This correlates to the China's larger labor market characteristics. This characteristic may stem from the lack of labor reform in China and China's reliance on low-skill, export-oriented labor for economic growth.

Examining the lower-end of the income distribution shows us that males still have a higher wages than female. Research done by Song, Zhu, and Chen from surveying 1622 relatively low-income households in Changsha in 2007 shows that male respondents have higher levels of disposable income than females (2011). Men, on average, have an income premium of 8 percent. Such difference can only partially be explained by individual characteristics, such as education, age, and marital status; however, low-income men and women do have the same opportunities at employment in the research, suggesting that there may be social stereotyping and patriarchal culture in play when it comes to wages.

The growth of China's economy has led many to ask the question of whether the increasingly privatized economy has improved the status of women, narrowed the gender wage gap or provided women with more equality or upward mobility. On one hand, according to Becker's taste discrimination theory, in a free market, employers lose competitiveness by discriminating against a specific group. Therefore, a company will be better off by not discriminating, creating incentives for companies to not discriminate in hiring. This suggests that China's privatization and economic development might have decreased gender wage gap. In contrast to privately owned companies, because state-owned enterprises have special access to the market and face less competition, they is no disincentives to discriminate against women, since they will not be penalized by the market.

On the other hand, the belief of gender equality espoused by the official ideology, “Women is half the sky”, suggests that state-owned enterprise sector might have a narrower wage gap for women because of its stricter guidelines that promote rigid, equal wage structure. Before reform and opening-up, all urban Chinese workers were employed by state-owned or collective-owned enterprises; and all their income came from wages, which were solely decided by the planning system. For the determination of wages, working age was more important than productivity (education) (Gustafsson et al., 2001). The age differentials between men and women might be able to explain most of the wage gap. Therefore, before market reform, there may have been less discrimination and narrower pay gap and after the reform, state-owned enterprises, compared to private and foreign owned companies, may still be less discriminatory against women.

To sum up, there are two questions to be addressed. First of all, have women faced more discrimination and larger wage gap after the market reform? Secondly, is there a difference in the wage gap between existing state-owned enterprise verses privatized companies?

The phenomenon of women facing more discrimination and lesser pay than men during economic transition has also been observed in other countries, but is far from being a universal feature. Surveying the literature on East and Central European transitions, research concludes that the mixed results in different countries means that overall transition is neutral in its impact on the pure gender gap (Newell and Reilly, 2001). In the Chinese case, it appears that earlier in the reform period, pay scales were more equal between the genders and, during the move to the market, there has been more freedom to pay women less (Appleton et al, 2002).

Regarding occupational mobility, a study done by Cao and Hu shows that most men and women experienced downward occupational change, including layoffs, cut in pay and benefits,

or transitioning to jobs with lesser pay, but women were more negatively affected. They also found that married women were less likely to undertake career-oriented job changes but more likely to change jobs to meet family needs, which explains the partial cultural factor in play.

However, research on the differences in wage gap and discrimination among current state and non-state sector show mixed results. Dong and Bowles collected data on the wages among state-owned enterprises (SOEs), township and village enterprises (TVEs), joint ventures (JVs), and foreign-invested firms (FIFs) in China's light consumer goods industry in 1998. They found that gender wage discrimination persisted across all four firm types, indicating that wage discrimination against women is a common feature of wage-setting behavior in the light industrial goods (2002). Many others have found similar results. For example, Meng find that wage discrimination was more prevalent in the state-owned sector (1998), while Rozelle, Dong, Zhang, and Mason report that ownership type had no effect on the gender wage gap (2002).

3. Methodology

3.1 The data

For the purpose of my analysis, I used a longitudinal survey, Chinese Health and Nutrition survey, which incorporates a large number of people drawn from diverse regions. The China Health and Nutrition Survey (CHNS) provides many important economic data such as wages, income levels etc. The survey incorporates data from the following years, 1989, 1991, 1993, 1997, 2000, 2004, 2006 and 2009. For each survey year, the CHNS took place over a 3-day period using a multistage, random cluster process to draw a sample of about 4400 households with a total of 26,000 individuals in nine provinces. These individuals are followed

throughout the survey years, unless death or change of households occurs. To compensate for this loss, there are more households and individuals added to the survey each year.

However, not all of the samples have the required information for our regression analysis. After dropping unqualified samples, we've obtain at least 1800 samples for each survey year. There are more men than women in our sample, which reflects the larger labor market in China.

There are many advantages associated with this survey. First of all, the most recent data given out by the survey is 2009, which provides us with one of the most updated information compared to other researches. Secondly, the survey is also longitudinal, dating back to 1989, which provides us with a comprehensive view of the changes through market transition over time. Lastly, the entire analysis draws a sample of a total of 26,000 individuals from nine provinces that are geographically, economically and ethnically diverse.

3.2 Regression

In the main regressions that are the object of my analysis, I use the logarithm of hourly wages as a dependent variable and I consider standard Mincerian controls (education, experience) together with gender, occupation² and province³ dummies, dummies for rural location, and private⁴ job.

² There are eleven different classifications of occupation.

1. Senior Professional (Doctor, Professor, Lawyer, Architect, Engineer)
2. Junior Professional (midwife, nurse, teacher, editor)
3. Administrator/manager/executive
4. Office staff (secretary, office helper)
5. Farmer, fisherman, hunter
6. Skilled worker (foreman, group leader, craftsman)
7. Non-skilled worker (ordinary laborer, logger)
8. Army officer, police officer
9. Ordinary soldier, policeman
10. Driver
11. Service worker

³ Codes for each province: 21 Liao Ning, 23 Heilongjiang, 32 Jiang Su, 37 Shan Dong, 41 Henan, 42 Hubei, 43 Hunan, 45 Guangxi, 52 Guizhou.

I first computed the general descriptive statistics on hourly wage, years of education, age adjusted experience, urban and rural, occupation types, number of workers in private and public company. Secondly, to analyze the determinants of wage gap, I computed seven different regressions with different specification and controls for each surveyed years. Thirdly, I used the Blinder-Oaxaca Decomposition to see what proportion of the wage gap is explained and unexplained. The main specification that I use for the Oaxaca decomposition includes the following regressors: education, experience, experience squared, rural dummies, private dummies, occupation, and province.

3.3 Blinder- Oaxaca Decomposition

The Blinder-Oaxaca decomposition (Blinder 1973; Oaxaca 1973) is a commonly adopted method to explain different outcomes in groups. The Oaxaca decomposition partitions the wage differential between two groups into the component that is “explained” by group differences in productivity characteristics such as education or work experience and a residual component that cannot be accounted for by such differences in wage determinants. This “unexplained” part is often used as a measure for discrimination, but it also subsumes the effects of group differences in unobserved predictors.

The conventional Blinder-Oaxaca decomposition is based on two linear regression models that are fitted separately for the groups A and B. X_A and X_B are mean vectors of the estimated coefficient vectors b_A and b_B for the two groups. C_A and C_B are the constants.

⁴ Public Companies: government department, state service/institute, state-owned enterprise, small collective enterprise, large collective enterprise.
Private Companies: Family contract farming, private/individual enterprise, three-capital enterprise (owned by foreigners, overseas Chinese and joint venture)

$$Y_A = C_A + X_A b_A$$

$$Y_B = C_B + X_B b_B$$

For these models, Blinder (1973) and Oaxaca (1973) propose the decomposition equations by subtracting Y_B and C_B then adding and subtracting $X_A b_B$ and $X_B b_A$. So,

$$Y_A - Y_B = (X_A - X_B) b_A + X_B (b_A - b_B) + (C_A - C_B)$$

where $Y_A - Y_B$ is the mean outcome difference. In both equations, the first term on the right-hand side displays the difference in the outcome variable between the two groups due to differences in observable characteristics. They are the part of the wage gap due to differences in average characteristics between A and B, whereas the second and third term shows the differential that is due to differences in coefficient and constant estimates. It is the unexplained part of the difference is Y_A and Y_B . It could be due to discrimination or unobserved variables that are not included in the regression.

5. Results

5.1 Descriptive Statistics

Table 1 shows the average hourly wage for both genders and its percentage difference. Both gender's average wages have increased since 1989 with the economics growth. Men are

Table 1 Hourly Wage			
	Male	Female	Gender Gap (%)
1989	0.69	0.59	14.5
observations	2038.0	1225.0	
1991	0.725	0.544	25.0
	1779	1196	
1993	1.18	0.89	24.6
	1463	982	
1997	3.21	2.48	22.7
	1432	937	
2000	4.71	4.11	12.7
	1316	795	
2004	7.13	5.8	18.7
	1006	709	
2006	8.94	6.15	31.2
	1102	737	
2009	14.45	11.98	17.1
	1268	846	

paid more than women on average and the percentage difference increases through the years, but it fluctuates substantially with increase from 1989-1997, major decrease in 2000 and a large increase in 2006.

This increasing gap in wage can potentially be explained using years of education, experience, rural or urban, occupation type, private or state, and regions.

Observing years of education, men on average have more years in education than women, but the difference is minor and narrows with women eventually surpassing men. In table 3, we can see the differences in average years of education over the surveyed years.

Table 2 Average Years of Education			
	Male	Female	Difference
1989	7.98	7.88	0.1
1991	8.85	8.7	0.15
1993	9.13	8.85	0.28
1997	9.27	9.21	0.06
2000	9.76	9.77	-0.01
2004	10.74	10.67	0.07
2006	10.75	10.75	0
2009	10.45	10.64	-0.19

Both men and women's education have increased steadily with women surpassing men in 2000 and 2009. However, average levels of education are still quite low for both genders. China institutes a policy of mandatory 9 years of education which explains the average education of around 9 to 10 years for both genders.

Although Table 2 shows the average education years for both genders, we need a more detail breakdown of the composition of education years for both genders. Table 3 shows the percentage of population for both genders that have less than 6 years of education. We can see from the difference that there are not that many differences between both genders. The difference

Table 3 Percentage of Population Under 6 years of education				
		Male	Female	Difference
	1989	33.46	31.27	2.19
	1991	24.96	23.24	1.72
	1993	22.62	21.08	1.54
	1997	20.74	19	1.74
	2000	17.71	15.22	2.49
	2004	10.34	10.3	0.04
	2006	11.43	11.4	0.03
	2009	10.8	13.24	-2.44

increases from 1989-2000 then decreases from 2000-2006 with another spiked increase in 2009.

Table 4 shows the percentage of population for both genders that has more than 13 years

	Male	Female	Difference
1989	5.4	3.1	2.3
1991	7.7	3.93	3.77
1993	8.89	5.3	3.59
1997	7.96	5.34	2.62
2000	11.7	9.4	2.3
2004	16.7	15.37	1.33
2006	18.51	21.71	-3.2
2009	15.69	18.79	-3.1

of education. Again we see a small percentage difference between both groups, the differences eventually decreases with women surpassing men.

Regarding experiences, men have an average of 29.7 years of experience, while women have an average of 26.3 years of experience. Table 5 shows average years of experience for both

	Male	Female	Difference
1989	29.17	26.13	3.04
1991	27.93	24.22	3.712
1993	28.68	24.95	3.73
1997	29.06	25.11	3.95
2000	29.26	25.85	3.41
2004	30.61	26.7	3.91
2006	31.52	27.851	3.669
2009	32.76	28.58	4.18

men and women. The difference has increased slightly over the surveyed years.

Whether one comes from rural or urban areas also greatly affects one's income and wage. Concerning the rural statistics, on average, there are more men in rural areas than women. On average, 54.8% of men are from rural areas while 48.8% of women are from rural areas.

Table 6 Percentage of Population in Rural				
	Male	Female	Difference	
1989	55.2	46.9	8.3	
1991	53.3	47.0	6.3	
1993	55.3	47.9	7.4	
1997	56.7	50.5	6.2	
2000	59.7	54.1	5.6	
2004	50.6	46.0	4.5	
2006	53.3	47.8	5.5	
2009	54.6	49.8	4.8	

In table 6, we see that, in each year, there are more samples of men that are from rural areas than women. However, this difference has decreased over the years, with fluctuations. If rural areas are paid less compared to urban, this should relatively increase the women's average wage compared to men's, unless men have a higher return working in rural areas than women.

Occupation type is also another factor that can greatly influence one's wages. In table 7 we have occupation data for 2009.

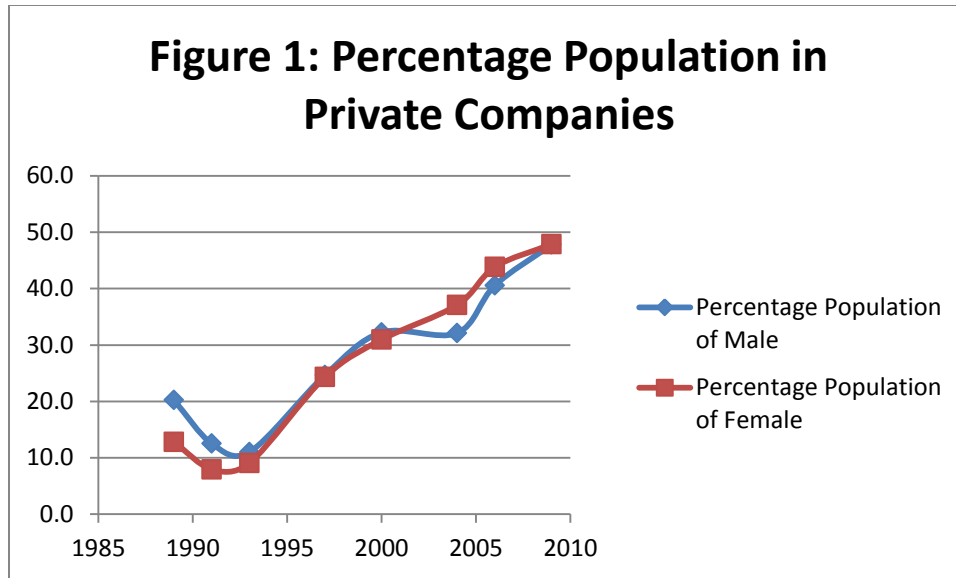
Table 7						
Occupation Type in 2009						
		Average	Average			
		Hourly	Hourly	Percentage of	Percentage of	Difference
Occup	Description	Wage Men	Wage Women	Men	Women	
1	Senior Professional (Doctor, Professor, Lawyer, Architect, Engineer)	19.2	16.5	12.2	7.9	4.3
2	Junior Professional (midwife, nurse, teacher, editor)	12.5	12.0	5.5	13.7	-8.2
3	administrator/manager/executive	24.8	13.7	12.1	6.1	6.0
4	office staff (secretary, office helper)	15.3	10.8	8.4	15.7	-7.4
5	farmer, fisherman, hunter	15.0	57.0	1.0	0.5	0.6
6	skilled worker (foreman, group leader, craftsman)	11.1	7.0	19.2	9.3	9.9
7	non-skilled worker (ordinary laborer, logger)	12.5	19.2	19.6	19.7	-0.1
8	army officer, police officer	18.9	12.0	0.7	0.1	0.6
9	ordinary soldier, policeman	7.3	n/a	0.6	0.0	0.6
10	Driver	22.6	4.6	7.5	0.1	7.4
11	service worker	6.5	5.8	13.1	26.7	-13.6

Although there are fluctuations throughout the years regarding hourly wage for each occupation and percentage of population in a specific occupation, the gender trend doesn't

change much. We can clearly see that men have the advantage of occupying higher paying jobs, more men are senior professionals, administrator, skilled workers while women occupy lesser paying occupations such as junior professionals (relative to senior professionals), office staff, non-skilled workers and service workers. This difference can greatly explain the average wage gap among genders. Jobs with a bigger portion of men than women also pay men higher. For instance, 12.2% of the population of men occupies senior professional positions compared to 7.9% of women. Meanwhile, women in senior professional positions on average get paid around 2 dollars less than men. On average, all occupation type pays men more than women except for occupation 7 and 5. However, in 2009, there are only 5 women in occupation 5 so there are high errors in this specific data.

Finally, the amount of men and women in private sectors can also affect the wage gap. In table 9, we see that the percentage of population entering private companies have increased for both males and females.

		Male	Female	Difference
	1989	20.2	12.8	7.4
	1991	12.5	7.9	4.6
	1993	11.0	9.1	1.9
	1997	24.7	24.3	0.3
	2000	32.2	30.9	1.3
	2004	32.1	37.1	-5.0
	2006	40.6	43.8	-3.3
	2009	47.8	47.9	-0.1



In figure 1, we see that the percentage of population entering the private sector has increased drastically for both genders. Initially there are a higher percentage of men in the private sector than women. However, this gap decreases drastically over time with percentage of women eventually surpassing men. If private companies have a higher gender wage gap controlling for other variables, then the overall gender wage gap will increase from 1989-2009 as more men and women enter the private sector.

Analyzing the descriptive statistics, we see a widening gap between women and men's average wages. This might be explained by men's occupation of higher paying positions, advantage in experience, and initial advantage in education. However, the characteristic differences between genders are quite minor and decrease by the year. Utilizing standard regressions and Oaxaca decomposition we can have a greater insight into the gender wage gap and the different returns to labor characteristics for both genders.

5.2 Regressions and Oaxaca Decomposition

Regression results for all years are listed in the appendix. We highlight the main message in this section. Coefficients on the female dummy are negative, high in magnitude, almost always significant at the 1% level, and large in magnitude, except for one specification in the first two years of the survey. Hereafter, I denote as “gender gap” the coefficient on the female dummy of a log hourly wage regression in my main specification, which includes education, experience and its square, and dummies for rural location, private companies, occupation and province.

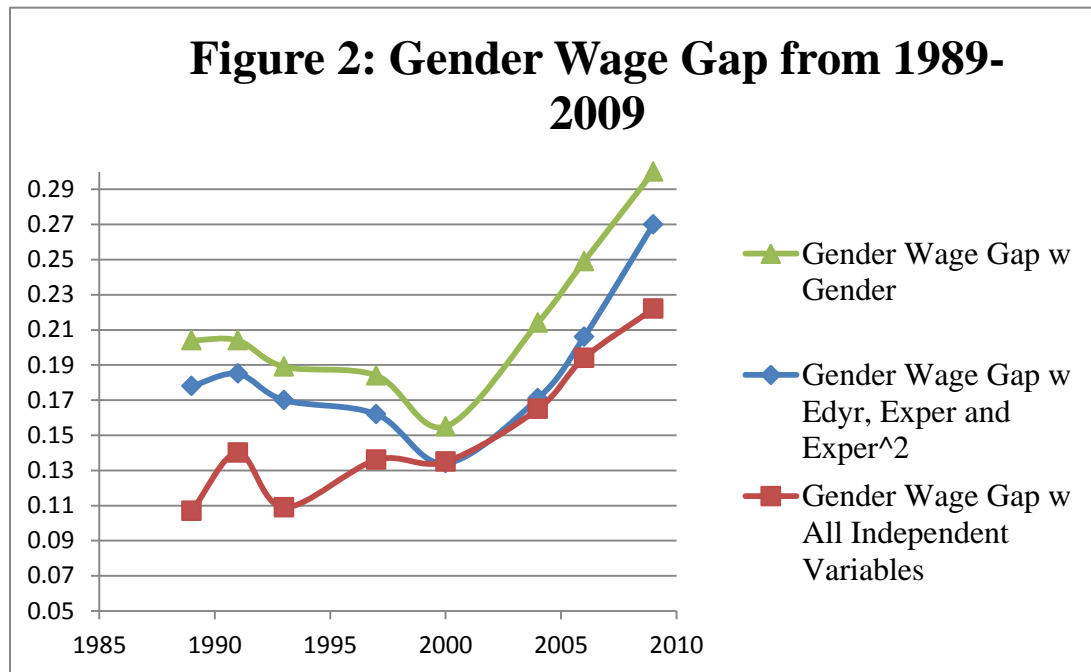


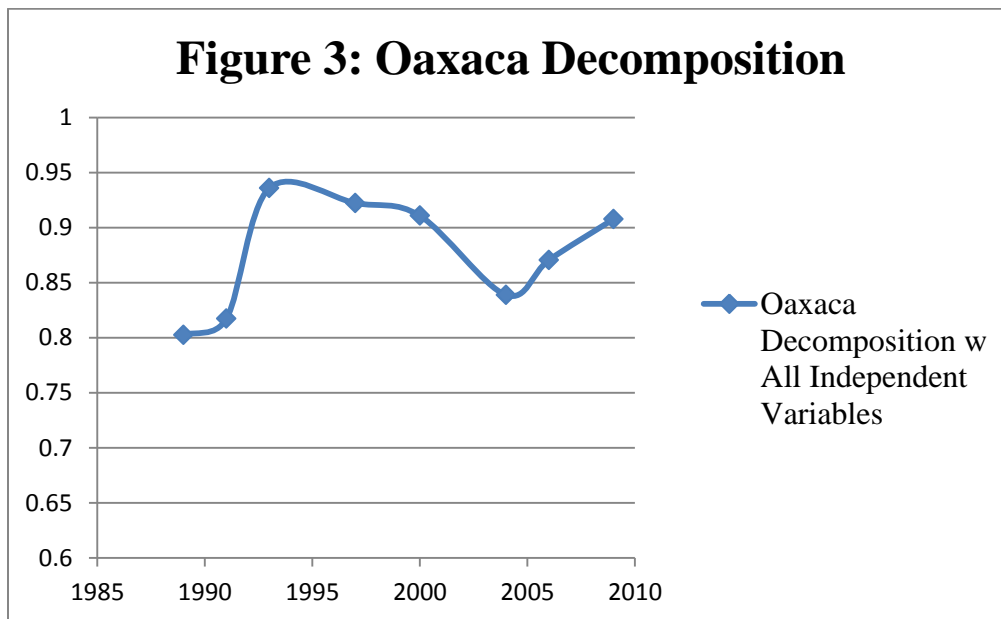
Figure 2 shows the trend of gender wage gap using the first and second regression types.

We can see a general upward trend for the wage gap using the three regressions. This trend is even more pronounced controlling for all variables.

Comparing the first and second regression, one controlling for only gender, the other controlling for gender, edyr, exper and exper², we see that the gender coefficient decreases. Since there isn't that many difference between female and male education over the years, this decrease is mainly because of changes in experience between genders.

Before 2000, the gap between the second and third regressions was larger, indicating that there were more variations between gender characteristics. The biggest gap was in 1989, where the first regression produced a gender coefficient of -0.178 and the second regression's gender coefficient is -0.107. Therefore, other wage determinants explained 7% of the wage gap. After 2000, these other wage determinants had lesser effect on closing the gap until 2009. Combined with the results in the descriptive statistics, we can see that the difference between gender characteristics narrowed. Therefore, other wage variables weren't able to shrink the gap.

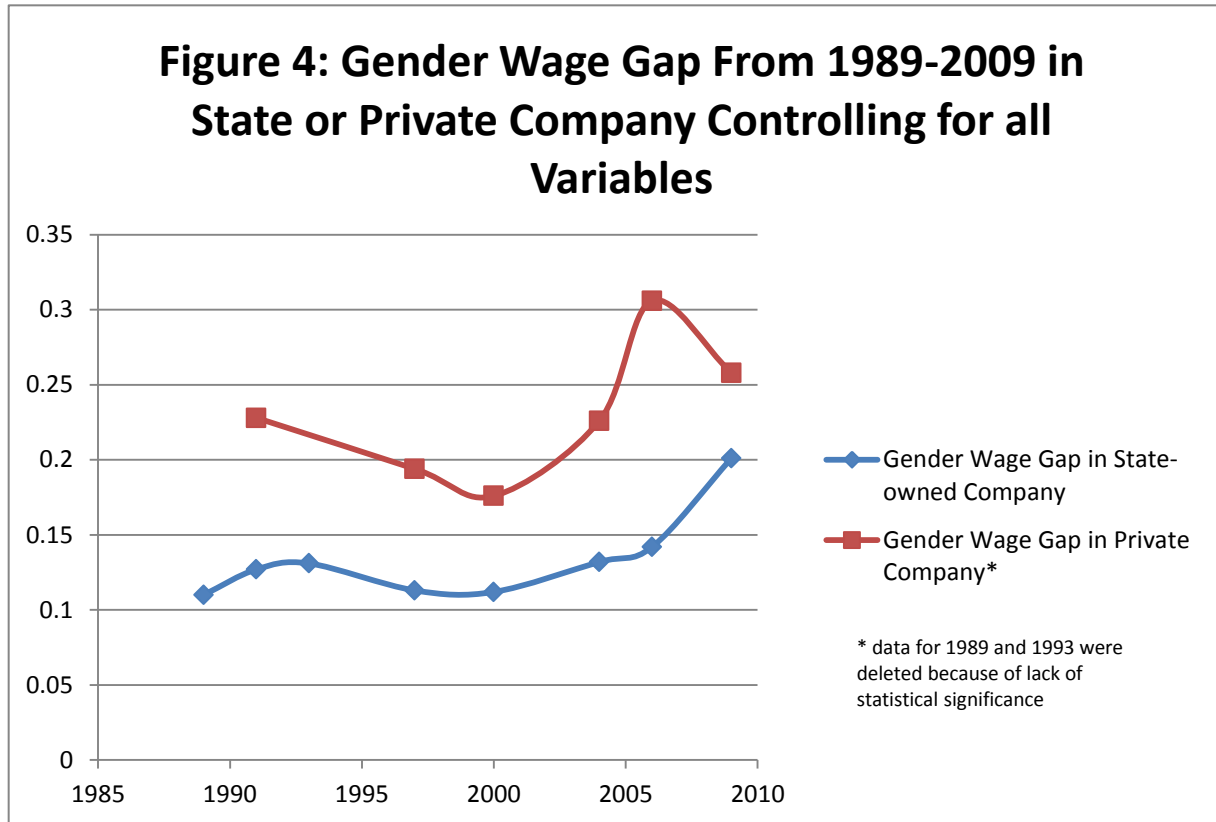
Blinder-Oaxaca Decompositions were used regressing natural log hourly wage on all



variables using separate data for genders to see how much of this wage gap is explained by differences in characteristics between male and female and how much is unexplained by wage determinants. This decomposition is performed for each surveyed year.

Detailed Oaxaca Decompositions can be seen in the appendix. Most of the results are statistically significant at 10% level, except for the results of 1993 and 2000. The percentage of wage gap not explained by wage determinants has increased from 80.2% in 1989 to 90.8% in 2009. However, there are large fluctuations throughout the years.

To further our understanding the gender wage gap, figure 4 shows the results for the third and fourth regression (state-owned=0, private companies=1). The gender wage gap in private



companies is larger than that in state-owned companies for all surveyed years. The gender wage gap in state-owned company has steadily increased, while in private companies the wage gap fluctuates with a general upward trend. This is consistent with the increase in the gender wage gap.

5.3 Discussion

While the gender wage gap has increased overtime, the unexplained portion of the gap has also increased, indicating that differences between gender characteristics have narrowed while other unexplained factors, variables and possible discrimination increased. This is consistent with our descriptive statistics, where differences in gender characteristics narrow. This

unexplained portion of the wage gap could be caused by the different returns females and males receive for the same labor characteristics.

First of all, in Chart 4, we see that private companies have a much larger gender wage gap than public companies. Since there are significant increase of men and women entering private companies from 1989 to 2009, with around 50% population in private companies for both genders in 2009, the increase in the unexplained portion of the gender wage gap can be partially caused by the different returns men and women receive by entering the private sector.

Secondly, from the descriptive statistics we learn that men on average have more experience than women for all surveyed years. Looking at regression 3 for all surveyed years, returns to experience are all positive and remains quite constant with a sharp decrease in 2009. Therefore, men's wage would be higher than women's with all other variables constant. This gap is explained by difference in characteristics. However, looking at regression 6 and 7, we observe that experience gives men a higher return for all surveyed years. While the returns to each additional year have stayed constant for men, the returns for women have decreased by the year. In other words, the difference between men's and women's return grows larger by the year. Since exper^2 are all 0 for all years, with more experience one receives more wages, but men receive a higher return compared to women. This difference in return is due to discrimination.

In general, rural had a negative effect on hourly wage. The effect fluctuates around -0.07 to -0.1. Before 2000, rural men and women's hourly wages were both smaller than those of urban area. However, after 2000, men in rural areas were no longer penalized for being in rural areas while the rural coefficient for women would increase by the year. Therefore, women were penalized more for being in rural area.

Women's percentage wage return to each occupation type is almost all smaller than men's throughout the surveyed years. We also saw this in our descriptive statistics. The difference in returns for gender grows by the year for statistically significant coefficients. This can be caused by discrimination or men may occupy a higher hierarchical position within the same occupation type compared to women.

Returns to education years become more and more important through the years. Returns to education are higher for women than men, which should decrease the wage gap. However, this effect is countered by returns to other variables, as analyzed above.

6. Conclusion

By utilizing Chinese Health and Nutrition Survey, a representative survey on China's population, this paper concludes that economic growth since 1989 has not been gender neutral. From 1989-2009, the gender wage gap in China has increased with economic growth and increased privatization. Not only does the gender wage gap increase but the unexplained portion of the wage gap also increases since 1989. The explained portion of wage gap has decreased, indicating that labor characteristics between genders have narrowed. Therefore, the higher wage gap can only be explained by other factors not included in the analysis or discrimination.

Privatization has increased the gender wage gap overtime. The gender wage gap in the private sector is larger than that in public sectors. With more women entering the private sector, the overall wage gap increases. By analyzing the data we find that men have a higher return for experience, working in private companies, occupation type and a smaller negative effect on being in rural areas.

Other factors not included in the research can also affect the wage gap. One major factor that may greatly affect the analysis is data on one's mobility and hierarchical position in an organization. For instance, although two people can belong to the same occupation type, if one was ranked higher in the work hierarchy, he/she may be paid more. This is not included in our analysis.

The classification of occupational types may also contribute error to the analysis. Different occupations in the same occupational type may be paid differently and shouldn't be classified in the same category. For instance, even though midwives and teachers are all classified into occupation 3, they may be paid quite differently.

Industry data is also unavailable in the CHNS and not included in the research. Industries may pay differently for workers with similar education, experience etc. Industries may also have wage gap for private and public companies. Private or public companies in certain industries may have bigger discrimination towards gender.

Additionally, data on marriage and children may also affect gender wages. For instance, a woman with children may be pay less hourly since they have less ambition for career advancement. Future research on gender wage gap in China could include these variables and classifications.

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Appendix

Table 1: Regression Results for Year=1989

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private =0	Private =1	Female =0	Female =1
female	-0.2042	-0.178	-0.107	-0.11	-0.06		
	(8.69)**	(7.73)* *	(4.60)* *	(5.04)* *	-0.67		
edyr		0.005	0.011	0.016	-0.003	0.009	0.012
		-1.38	(2.48)*	(3.95)* *	-0.21	-1.61	-1.68
exper		0.034	0.033	0.028	0.047	0.036	0.031
		(10.52) **	(10.16) **	(8.84)* *	(4.30)* *	(8.61)* *	(5.57)* *
exper2		0	0	0	-0.001	0	0
		(8.52)* *	(7.87)* *	(5.68)* *	(4.49)* *	(6.68)* *	(4.42)* *
rural			-0.011	-0.04	0.195	0.008	-0.042
			-0.48	-1.93	(1.97)*	-0.27	-1.17
private			0.434			0.44	0.429
			(9.74)* *			(7.91)* *	(5.71)* *
_Ioccup_2			-0.097	-0.083	0.335	-0.117	-0.066
			-1.55	-1.52	-0.45	-1.43	-0.65
_Ioccup_3			-0.044	-0.038	0.556	-0.067	0.018
			-0.71	-0.69	-0.62	-0.89	-0.14
_Ioccup_4			-0.135	-0.125	0.519	-0.176	-0.088
			(2.15)*	(2.29)*	-0.57	(2.22)*	-0.84
_Ioccup_5			-0.119	-0.054	0.045	-0.145	-0.078
			-1.62	-0.57	-0.07	-1.59	-0.61
_Ioccup_6			-0.059	-0.043	0.343	-0.062	-0.064
			-1.01	-0.83	-0.52	-0.85	-0.64
_Ioccup_7			-0.138	-0.11	0.084	-0.121	-0.164
			(2.36)*	(2.12)*	-0.13	-1.64	-1.66
_Ioccup_8			0.079	0.105		0.075	
			-0.36	-0.55		-0.33	

_Ioccup_9			-0.071	-0.043	0.317	-0.112	0.067
			-0.6	-0.38	-0.43	-0.81	-0.29
_Ioccup_10			0.124	-0.002	0.533	0.119	
			-1.23	-0.02	-0.78	-1.09	
_Ioccup_11			-0.255	-0.173	-0.258	-0.293	-0.226
			(4.00)* *	(3.02)* *	-0.39	(3.34)* *	(2.25)* *
o._Iprovince_23			0	0	0	0	0
			(.)	(.)	(.)	(.)	(.)
_Iprovince_32			-0.077	-0.081	0.019	-0.079	-0.074
			-1.95	(2.26)*	-0.09	-1.52	-1.21
_Iprovince_37			0.107	0.146	-0.202	0.041	0.213
			(2.64)* *	(4.00)* *	-0.94	-0.79	(3.29)* *
_Iprovince_41			0.059	0.012	0.23	0.047	0.058
			-1.37	-0.29	-1.21	-0.85	-0.83
_Iprovince_42			-0.081	-0.066	-0.086	-0.078	-0.092
			-1.94	-1.75	-0.39	-1.41	-1.44
_Iprovince_43			0.144	0.151	0.193	0.114	0.178
			(3.32)* *	(3.77)* *	-0.95	(2.02)* *	(2.60)* *
_Iprovince_45			-0.038	-0.054	0.02	-0.049	-0.034
			-0.9	-1.31	-0.11	-0.87	-0.52
_Iprovince_52			-0.101	-0.075	-0.103	-0.103	-0.109
			(2.19)*	-1.71	-0.51	-1.74	-1.47
o._Ioccup_8					0		0
					(.)		(.)
o._Ioccup_10							0
							(.)
Constant	-3.175	-3.773	-3.825	-3.841	-3.781	-3.852	-3.883

	(220.38) **	(60.00) **	(36.50) **	(39.56) **	(5.00)* *	(29.48) **	(22.44) **
Observations	3263	3409	3263	2694	569	2038	1225
R-squared	0.0226	0.06	0.15	0.13	0.11	0.14	0.13
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Table 2: Regression Results for Year=1991

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private =0	Private =1	Female =0	Female =1
female	-0.219	-0.185	-0.14	-0.127	-0.228		
	(11.66) **	(9.87)* *	(7.67)* *	(7.37)* *	(2.21)*		
edyr		0.007	0.007	0.012	-0.033	-0.002	0.019
		(2.09)*	-1.92	(3.40)* *	-1.81	-0.35	(3.44)**
exper		0.027	0.023	0.024	0.02	0.027	0.02
		(9.35)* *	(8.44)* *	(8.98)* *	-1.39	(7.13)**	(4.58)**
exper2		0	0	0	0	0	0
		(6.16)* *	(5.01)* *	(4.71)* *	-1.46	(4.85)**	-1.92
rural			-0.076	-0.071	-0.131	-0.071	-0.08
			(4.26)* *	(4.29)* *	-1.15	(2.94)**	(3.11)**
private			0.449			0.445	0.468
			(11.51) **			(8.68)**	(7.83)**
_Ioccup_2			-0.039	-0.029	1.031	-0.099	0.065
			-0.79	-0.64	-1.31	-1.46	-0.89
_Ioccup_3			0.008	0.004	1.273	-0.079	0.181
			-0.16	-0.1	-1.61	-1.31	(2.22)*
_Ioccup_4			-0.06	-0.058	1.152	-0.161	0.081
			-1.21	-1.29	-1.32	(2.42)*	-1.07
_Ioccup_5			-0.062	-0.207	1.014	-0.092	-0.151
			-0.92	-1.36	-1.33	-1.06	-1.35
_Ioccup_6			-0.089	-0.076	0.973	-0.162	0.022
			-1.91	-1.78	-1.26	(2.65)**	-0.3
_Ioccup_7			-0.112	-0.107	1.097	-0.197	0.018
			(2.33)*	(2.42)*	-1.42	(3.10)**	-0.25

_Ioccup_8		0.022	0.02		-0.03	
		-0.13	-0.13		-0.17	
_Ioccup_9		-0.084	-0.07		-0.141	
		-0.53	-0.49		-0.83	
_Ioccup_10		0.14	0.064	1.443	0.071	
		-1.79	-0.81	-1.83	-0.8	
_Ioccup_11		-0.213	-0.193	0.763	-0.269	-0.114
		(4.14)* *	(4.08)* *	-1	(3.63)**	-1.54
o._Iprovince_23		0	0	0	0	0
		(.)	(.)	(.)	(.)	(.)
_Iprovince_32		-0.047	-0.036	-0.177	-0.017	-0.087
		-1.55	-1.26	-0.85	-0.39	(1.98)*
_Iprovince_37		-0.004	0.031	-0.497	0.009	-0.022
		-0.13	-1.05	(2.35)*	-0.2	-0.48
_Iprovince_41		0	0.022	-0.226	0.031	-0.067
		0	-0.66	-1.22	-0.66	-1.32
_Iprovince_42		0.039	0.041	0.028	0.074	-0.007
		-1.22	-1.37	-0.15	-1.67	-0.15
_Iprovince_43		0.052	0.071	-0.154	0.043	0.075
		-1.58	(2.21)*	-0.87	-0.94	-1.58
_Iprovince_45		-0.036	-0.015	-0.223	-0.063	0.004
		-1.05	-0.47	-1.29	-1.35	-0.08
_Iprovince_52		-0.17	-0.155	-0.342	-0.177	-0.171
		(4.61)* *	(4.49)* *	-1.62	(3.55)**	(3.18)**
o._Ioccup_8				0		0
				(.)		(.)
o._Ioccup_9				0		0
				(.)		(.)
o._Ioccup_10						0
						(.)
Constant	-3.525	-3.435	-3.534	-3.361	-3.336	-3.735
	(65.63)	(40.00)	(43.77)	(3.82)*	(29.20)*	(29.73)*

		**	**	**	*	*	*
Observations	2975	2975	2975	2657	318	1779	1196
R-squared	0.0437	0.1	0.21	0.19	0.11	0.18	0.17
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Table 3: Regression Results for Year=1993

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private=0	Private=1	Female=0	Female=1
female	-0.1889	-0.17	-0.109	-0.131	0.044		
	(7.3)**	(6.53)*	(4.28)**	(5.14)**	-0.4		
edyr		0.003	0.016	0.011	0.051	0.009	0.023
		-0.65	(3.26)**	(2.08)*	(2.55)*	-1.31	(3.08)*
exper		0.034	0.031	0.029	0.05	0.036	0.03
		(8.35)*	(7.97)**	(7.41)**	(3.11)**	(7.11)*	(4.76)*
exper2		0	0	0	-0.001	0	0
		(6.64)*	(5.78)**	(5.42)**	(2.52)*	(5.41)*	(3.52)*
rural			-0.118	-0.117	-0.104	-0.085	-0.167
			(4.77)**	(4.75)**	-0.85	(2.56)*	(4.49)*
private			0.61			0.533	0.739
			(13.45)*			(8.75)*	(10.88)**
_Ioccup_2			-0.038	-0.077	1.223	-0.117	0.026
			-0.57	-1.21	-1.91	-1.26	-0.27
_Ioccup_3			0.15	0.133	-0.193	0.129	0.107
			(2.47)*	(2.26)*	-0.43	-1.71	-0.94
_Ioccup_4			0.034	-0.007	0.192	-0.004	0.056
			-0.55	-0.12	-0.37	-0.05	-0.58
_Ioccup_5			-0.01	0.331	-0.01	0.023	-0.035
			-0.12	(2.47)*	-0.03	-0.2	-0.23
_Ioccup_6			0.126	0.073	0.297	0.08	0.17
			(2.13)*	-1.27	-0.81	-1.04	-1.83
_Ioccup_7			0.06	0.016	0.067	0.064	0.043

			-1.02	-0.27	-0.19	-0.83	-0.48
_Ioccup_8			1.17	1.123		1.176	
			(3.97)**	(4.02)**		(3.83)*	
_Ioccup_9			-0.218	-0.281		-0.266	0.038
			-1.33	-1.8		-1.48	-0.07
_Ioccup_10			0.529	0.425	0.656	0.517	
			(5.84)**	(4.40)**	-1.71	(5.03)*	
_Ioccup_11			-0.036	-0.053	-0.128	-0.112	0
			-0.57	-0.83	-0.37	-1.2	0
o._Iprovince_23			0	0	0	0	0
			(.)	(.)	(.)	(.)	(.)
_Iprovince_32			0.082	0.069	-0.014	0.084	0.097
			-1.93	-1.66	-0.06	-1.47	-1.55
_Iprovince_37			0.195	0.201	-0.233	0.118	0.305
			(4.17)**	(4.44)**	-0.62	-1.88	(4.40)*
_Iprovince_41			-0.038	-0.012	-0.532	-0.028	-0.048
			-0.76	-0.23	-1.93	-0.41	-0.65
_Iprovince_42			-0.027	-0.031	-0.123	-0.038	0.003
			-0.6	-0.73	-0.41	-0.63	-0.04
_Iprovince_43			0.161	0.123	0.385	0.207	0.065
			(3.43)**	(2.69)**	-1.49	(3.33)*	-0.91
_Iprovince_45			0.015	0.063	-0.305	-0.047	0.097
			-0.32	-1.32	-1.38	-0.75	-1.4
_Iprovince_52			-0.085	-0.018	-0.437	-0.118	-0.03
			-1.71	-0.36	-1.89	-1.79	-0.39
o._Ioccup_8					0		0
					(.)		(.)
o._Ioccup_10							0

							(.)
Constant	-2.639	-3.202	-3.453	-3.325	-3.24	-3.446	-3.611
	(160.93) **	(42.78) **	(30.01)* *	(29.05)* *	(5.76) **	(22.77) **	(21.00) **
Observations	2445	2484	2445	2195	250	1463	982
R-squared	0.0213	0.06	0.17	0.12	0.28	0.17	0.17
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Table 4: Regression Results for Year=1997

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private=0	Private=1	Female=0	Female=1
female	-0.184	-0.162	-0.136	-0.113	-0.194		
	(7.14)* *	(6.32)* *	(5.22)* *	(3.92)* *	(3.28)* *		
edyr		0.017	0.015	0.017	0.012	0.013	0.019
		(3.68)* *	(2.81)* *	(2.83)* *	-1.07	-1.86	(2.34)*
exper		0.027	0.029	0.025	0.028	0.033	0.024
		(6.64)* *	(6.95)* *	(4.82)* *	(3.53)* *	(5.73)**	(3.73)* *
exper2		0	0	0	0	0	0
		(5.51)* *	(5.81)* *	(3.43)* *	(3.63)* *	(5.07)**	(2.65)* *
rural			-0.097	-0.1	-0.066	-0.092	-0.096
			(3.81)* *	(3.61)* *	-1.05	(2.70)**	(2.47)*
private			0.255			0.273	0.219
			(7.40)**			(5.83)**	(4.31)* *
_Ioccup_2			-0.038	-0.049	-0.136	-0.054	-0.037
			-0.58	-0.77	-0.25	-0.61	-0.37
_Ioccup_3			-0.129	-0.123	-0.672	-0.151	-0.073
			(2.13)*	(2.07)*	-1.4	(2.04)*	-0.66
_Ioccup_4			-0.071	-0.063	-0.576	-0.087	-0.07
			-1.15	-1.03	-1.13	-1.03	-0.72
_Ioccup_5			-0.286	-0.06	-0.732	-0.27	-0.361
			(3.69)* *	-0.34	-1.55	(2.76)**	(2.74)* *
_Ioccup_6			-0.061	-0.064	-0.458	-0.067	-0.06
			-1	-1.06	-0.97	-0.88	-0.58

_Ioccup_7			-0.258	-0.249	-0.727	-0.28	-0.238
			(4.24)* *	(4.10)* *	-1.54	(3.57)**	(2.41)*
_Ioccup_8			-0.137	0.109	-0.818	-0.143	
			-0.47	-0.28	-1.26	-0.47	
_Ioccup_9			0.059	-0.074	1.444	0.154	-0.55
			-0.35	-0.44	-1.81	-0.8	-1.38
_Ioccup_10			0.302	0.142	-0.032	0.29	0.237
			(3.46)* *	-1.32	-0.07	(2.90)**	-0.71
_Ioccup_11			-0.231	-0.231	-0.666	-0.19	-0.261
			(3.47)* *	(3.24)* *	-1.41	(2.05)*	(2.57)*
_Iprovince_23			-0.102	-0.15		-0.071	-0.133
			-1.79	(2.34)*		-0.95	-1.62
_Iprovince_32			0.238	0.217	0.142	0.252	0.247
			(4.67)* *	(3.69)* *	-1.1	(3.74)**	(3.48)* *
_Iprovince_37			0.079	0.066	-0.035	0.115	0.051
			-1.43	-1.08	-0.22	-1.59	-0.66
_Iprovince_41			-0.019	-0.006	-0.229	-0.018	
			-0.33	-0.09	-1.55	-0.24	
_Iprovince_42			0.09	0.071	-0.003	0.094	0.117
			-1.67	-1.15	-0.02	-1.31	-1.55
_Iprovince_43			0.276	0.295	0.089	0.263	0.335
			(5.10)* *	(4.59)* *	-0.7	(3.72)**	(4.32)* *
_Iprovince_45			0.088	0.117	-0.107	0.15	0.03
			-1.62	-1.76	-0.86	(2.06)*	-0.39
o._Iprovince_52			0	0		0	
			(.)	(.)		(.)	
o._Iprovince_23					0		
					(.)		

_Iprovince_52					-0.154		0.037
					-1.14		-0.41
o._Ioccup_8							0
							(.)
o._Iprovince_41							0
							(.)
Constant	-1.84251	-2.171	-2.17	-2.159	-1.258	-2.21	-2.285
	(7.14)* *	(28.28) **	(18.56) **	(16.48) **	(2.36)*	(14.32)* *	(12.87) **
Observations	2369	2454	2369	1788	581	1432	937
R-squared	0.0211	0.04	0.14	0.13	0.19	0.12	0.13
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Table 5: Regression Results for Year=2000

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private= 0	Private= 1	Female =0	Female= 1
female	-0.155	-0.134	-0.135	-0.112	-0.176		
	(4.95)* *	(4.42)* *	(4.29)* *	(3.22)**	(2.69)**		
edyr		0.05	0.032	0.033	0.035	0.032	0.033
		(9.83)* *	(5.06)* *	(4.60)**	(2.67)**	(3.95)**	(3.12)**
exper		0.023	0.017	0.027	0.003	0.021	0.006
		(4.50)* *	(3.12)* *	(4.25)**	-0.27	(2.97)**	-0.68
exper2		0	0	0	0	0	0
		(3.09)* *	(2.12)*	(3.13)**	-0.11	(2.34)*	-0.13
rural			-0.069	-0.082	-0.023	-0.079	-0.055
			(2.14)*	(2.43)*	-0.29	-1.88	-1.06
private			0.106			0.139	0.055
			(2.62)**			(2.63)**	-0.86
_Ioccup_2			0.017	0.061	-0.533	0.033	-0.011
			-0.24	-0.89	-1.56	-0.33	-0.1
_Ioccup_3			-0.11	-0.111	0.061	-0.082	-0.175
			-1.6	-1.67	-0.22	-0.98	-1.39
_Ioccup_4			-0.151	-0.146	-0.012	-0.141	-0.168
			(2.13)*	(2.14)*	-0.04	-1.49	-1.52
_Ioccup_5			-0.427	-0.321	-0.424	-0.375	-0.565
			(5.13)* *	-1.81	-1.95	(3.64)**	(3.92)**
_Ioccup_6			-0.293	-0.277	-0.332	-0.307	-0.233
			(4.21)* *	(4.02)**	-1.45	(3.53)**	(1.98)*
_Ioccup_7			-0.311	-0.287	-0.362	-0.308	-0.307
			(4.47)*	(4.03)**	-1.65	(3.45)**	(2.71)**

			*				
_Ioccup_8			-0.156	-0.022	-0.883	-0.067	-0.278
			-0.68	-0.1	-1.1	-0.23	-0.73
_Ioccup_9			-0.439	-0.385		-0.411	
			(2.19)*	(2.09)*		(1.96)*	
_Ioccup_10			-0.032	-0.243	0.172	-0.035	
			-0.31	-1.96	-0.69	-0.31	
_Ioccup_11			-0.425	-0.435	-0.421	-0.419	-0.429
			(5.67)*	(5.27)**	-1.91	(4.16)**	(3.69)**
			*				
_Iprovince_23			-0.032	0.026	-0.157	-0.086	0.062
			-0.49	-0.38	-1.02	-1.02	-0.61
_Iprovince_32			0.302	0.38	0.166	0.324	0.272
			(5.00)*	(5.73)**	-1.28	(4.21)**	(2.75)**
			*				
_Iprovince_37			0.186	0.288	-0.093	0.164	0.234
			(2.97)*	(4.26)**	-0.65	(2.05)*	(2.28)*
			*				
_Iprovince_41			0.2	0.199	0.183	0.131	0.343
			(2.84)*	(2.58)*	-1.22	-1.45	(3.00)**
			*				
_Iprovince_42			0.133	0.172	0.054	0.114	0.165
			(2.10)*	(2.45)*	-0.41	-1.42	-1.59
_Iprovince_43			0.317	0.452	-0.106	0.334	0.295
			(4.43)*	(6.04)**	-0.62	(3.64)**	(2.57)*
			*				
_Iprovince_45			0.203	0.187	0.154	0.165	0.259
			(3.07)*	(2.37)*	-1.24	-1.92	(2.49)*
			*				
_Iprovince_52			0.17	0.149	0.124	0.15	0.217
			(2.43)*	-1.86	-0.91	-1.7	-1.86
o._Ioccup_9					0		0
					(.)		(.)
o._Ioccup_10							0

							(.)
Constant	-1.28	-2.177	-1.83	-2.053	-1.464	-1.877	-1.867
	(66.67) **	(24.48) **	(12.43) **	(12.67)* *	(4.23)**	(9.88)**	(8.08)**
Observations	2111	2221	2111	1441	670	1316	795
R-squared	0.0115	0.07	0.12	0.14	0.1	0.11	0.11
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Table 6: Regression Results for Year=2004

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private =0	Private =1	Female =0	Female =1
female	-0.214	-0.171	-0.165	-0.132	-0.226		
	(6.09)* *	(5.14)* *	(4.83)* *	(3.63)* *	(3.13)* *		
edyr		0.08	0.049	0.049	0.044	0.034	0.064
		(13.43) **	(6.67)* *	(6.18)* *	(2.96)* *	(3.60)**	(5.57)**
exper		0.027	0.025	0.017	0.032	0.036	0.012
		(4.45)* *	(3.99)* *	(2.18)*	(2.98)* *	(4.21)**	-1.2
exper2		0	0	0	0	0	0
		(2.92)* *	(3.02)* *	-1.37	(2.47)*	(3.76)**	-0.31
rural			-0.054	-0.085	-0.006	-0.047	-0.073
			-1.63	(2.36)*	-0.08	-1.07	-1.41
private			0.015			0.046	-0.036
			-0.38			-0.89	-0.57
_Ioccup_2			-0.096	-0.103	0.349	-0.075	-0.128
			-1.41	-1.66	-1.03	-0.76	-1.3
_Ioccup_3			-0.164	-0.243	0.845	-0.08	-0.316
			(2.49)*	(4.06)* *	(2.69)* *	-1	(2.68)**
_Ioccup_4			-0.146	-0.196	0.671	-0.16	-0.116
			(2.20)*	(3.18)* *	(2.20)*	-1.79	-1.15
_Ioccup_5			-0.249	-0.643	0.821	-0.402	-0.001
			-1.06	(2.25)*	-1.72	-1.34	0
_Ioccup_6			-0.331	-0.369	0.386	-0.32	-0.377
			(4.81)* *	(5.34)* *	-1.34	(3.75)**	(3.17)**

_Ioccup_7			-0.44	-0.38	0.191	-0.422	-0.438
			(6.49)* *	(5.61)* *	-0.67	(4.86)**	(4.02)**
_Ioccup_8			-0.047	-0.058		-0.033	0.542
			-0.19	-0.27		-0.12	-0.84
_Ioccup_9			-0.116	-0.142		-0.131	0.47
			-0.62	-0.87		-0.66	-0.73
_Ioccup_10			-0.052	-0.22	0.831	-0.068	0.398
			-0.53	(2.08)*	(2.62)* *	-0.62	-0.87
_Ioccup_11			-0.5	-0.672	0.281	-0.493	-0.493
			(6.87)* *	(7.88)* *	-0.98	(4.79)**	(4.58)**
_Iprovince_23			0.122	0.141	-0.006	0.018	0.275
			-1.89	(2.18)*	-0.04	-0.21	(2.75)**
_Iprovince_32			0.377	0.372	0.396	0.378	0.404
			(6.43)* *	(5.43)* *	(3.64)* *	(4.96)**	(4.35)**
_Iprovince_37			-0.054	-0.048	-0.155	0.015	-0.154
			-0.82	-0.71	-1.01	-0.18	-1.45
_Iprovince_41			-0.103	-0.134	-0.077	-0.111	-0.068
			-1.5	-1.87	-0.5	-1.19	-0.67
_Iprovince_42			-0.122	-0.064	-0.244	-0.086	-0.152
			-1.77	-0.85	-1.74	-0.97	-1.37
_Iprovince_43			0.146	0.11	0.274	0.085	0.259
			(2.10)*	-1.55	-1.61	-0.97	(2.24)*
_Iprovince_45			0.047	0.131	-0.025	-0.001	0.129
			-0.7	-1.56	-0.21	-0.01	-1.26
_Iprovince_52			0.038	0.03	-0.009	0.092	-0.002
			-0.54	-0.41	-0.05	-1.01	-0.01
o._Ioccup_8					0		
					(.)		
Constant	-0.915	-2.302	-1.679	-1.547	-2.407	-1.679	-1.858
	(40.49) **	(19.93) **	(9.98)* *	(8.32)* *	(5.99)* *	(7.60)**	(7.21)**

o._Ioccup_9					0		
					(.)		
Observations	1715	1784	1715	1129	586	1006	709
R-squared	0.0212	0.12	0.22	0.24	0.2	0.17	0.29
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Table 7: Regression Results for Year=2006

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private= 0	Private =1	Female= 0	Female =1
female	-0.249	-0.206	-0.194	-0.142	-0.306		
	(7.18)* *	(6.34)* *	(5.79)* *	(3.52)**	(5.36)* *		
edyr		0.082	0.05	0.07	0.024	0.052	0.045
		(14.90) **	(7.22)* *	(8.09)**	(2.06)*	(5.53)**	(4.25)**
exper		0.031	0.028	0.027	0.028	0.034	0.021
		(5.33)* *	(4.81)* *	(3.30)**	(3.31)* *	(4.08)**	(2.71)**
exper2		0	0	0	0	0	0
		(3.49)* *	(3.77)* *	(2.31)*	(2.89)* *	(3.43)**	-1.9
rural			-0.007	-0.048	0.061	-0.025	0.049
			-0.21	-1.21	-1.06	-0.57	-0.98
private			-0.023			0.022	-0.113
			-0.6			-0.43	-1.95
_Ioccup_2			-0.062	-0.078	-0.011	0.031	-0.209
			-0.9	-1.18	-0.04	-0.3	(2.13)*
_Ioccup_3			-0.045	-0.083	0.255	-0.004	-0.062
			-0.65	-1.23	-1.14	-0.04	-0.5
_Ioccup_4			-0.185	-0.216	0.106	-0.196	-0.234
			(2.85)* *	(3.41)**	-0.51	(2.20)*	(2.40)*
_Ioccup_5			0.539	-0.367	0.936	0.569	
			-1.62	-0.62	(2.04)*	-1.62	
_Ioccup_6			-0.3	-0.275	-0.188	-0.207	-0.511
			(4.28)* *	(3.48)**	-1.01	(2.33)*	(4.41)**
_Ioccup_7			-0.3	-0.243	-0.219	-0.243	-0.427
			(4.31)*	(3.09)**	-1.18	(2.71)**	(3.81)**

			*				
_Ioccup_8			0.073	0.025		0.101	0.275
			-0.29	-0.11		-0.35	-0.45
_Ioccup_9			-0.34	-0.273		-0.255	
			-1.58	-1.39		-1.12	
_Ioccup_10			-0.231	-0.265	-0.098	-0.19	-0.14
			(2.44)*	(2.15)*	-0.47	-1.78	-0.23
_Ioccup_11			-0.55	-0.541	-0.394	-0.441	-0.688
			(7.75)* *	(6.16)**	(2.14)*	(4.47)**	(6.46)**
_Iprovince_23			0.081	0.136	-0.164	0.087	0.056
			-1.33	-1.93	-1.35	-1.07	-0.61
_Iprovince_32			0.325	0.268	0.344	0.309	0.361
			(5.81)* *	(3.55)**	(4.04)* *	(4.10)**	(4.34)**
_Iprovince_37			-0.101	-0.029	-0.215	-0.096	-0.139
			-1.63	-0.39	(1.98)*	-1.16	-1.51
_Iprovince_41			0.034	0.07	-0.041	0.087	-0.068
			-0.49	-0.87	-0.32	-0.96	-0.64
_Iprovince_42			-0.006	-0.022	0.034	0.045	-0.058
			-0.09	-0.27	-0.32	-0.51	-0.59
_Iprovince_43			0.213	0.182	0.338	0.148	0.371
			(3.20)* *	(2.32)*	(2.80)* *	-1.72	(3.54)**
_Iprovince_45			-0.046	0.101	-0.172	-0.121	0.033
			-0.66	-1.06	-1.6	-1.25	-0.32
_Iprovince_52			0.044	0.001	0.09	0.004	0.105
			-0.67	-0.02	-0.78	-0.04	-1.06
Constant	-0.71	-2.198	-1.576	-1.831	-1.427	-1.725	-1.519
	(32.36) **	(19.84) **	(9.92)* *	(9.36)**	(4.96)* *	(8.20)**	(6.32)**
Observations	1839	1891	1839	1069	770	1102	737
R-squared	0.0273	0.15	0.23	0.24	0.19	0.17	0.3
Absolute value of t-statistics in parentheses							

* significant at 5%; ** significant at 1%			
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Table 8: Regression Results for Year=2009

	1	2	3	4	5	6	7
	logwage	logwage	logwage	logwage	logwage	logwage	logwage
				Private= 0	Private= 1	Female= 0	Female= 1
female	-0.3	-0.27	-0.222	-0.201	-0.258		
	(8.67)* *	(8.34)**	(6.69)* *	(4.98)**	(4.88)**		
edyr		0.086	0.045	0.065	0.021	0.043	0.045
		(15.86)* *	(6.64)* *	(7.38)**	(2.01)*	(4.81)**	(4.13)**
exper		0.014	0.016	0.022	0.009	0.021	0.008
		(2.69)**	(3.03)* *	(3.08)**	-1.13	(3.07)**	-1.01
exper2		0	0	0	0	0	0
		-0.84	(2.03)*	(1.99)*	-0.88	(2.36)*	-0.31
rural			-0.065	-0.157	0.048	-0.001	-0.163
			(2.05)*	(4.12)**	-0.92	-0.03	(3.29)**
private			-0.015			-0.024	-0.006
			-0.38			-0.48	-0.1
_Ioccup_2			-0.056	-0.056	0.232	-0.056	-0.181
			-0.79	-0.85	-1	-0.55	-1.67
_Ioccup_3			-0.107	-0.203	0.739	-0.058	-0.251
			-1.55	(3.14)**	(3.33)**	-0.71	-1.92
_Ioccup_4			-0.166	-0.166	0.175	-0.083	-0.353
			(2.46)*	(2.54)*	-0.85	-0.91	(3.26)**
_Ioccup_5			0.172		0.394	0.072	0.498
			-0.95		-1.52	-0.34	-1.39
_Ioccup_6			-0.369	-0.222	-0.154	-0.287	-0.616
			(5.32)* *	(2.87)**	-0.84	(3.49)**	(4.66)**
_Ioccup_7			-0.435	-0.368	-0.177	-0.313	-0.711
			(6.28)* *	(4.54)**	-0.97	(3.67)**	(5.85)**

_Ioccup_8			0.242	0.215	0.469	0.314	0.242
			-1.08	-1.06	-0.6	-1.32	-0.35
_Ioccup_9			-0.762	-0.697		-0.669	
			(2.85)* *	(2.97)**		(2.46)*	
_Ioccup_10			-0.008	-0.191	0.356	0.057	-0.548
			-0.09	-1.46	-1.79	-0.56	-0.79
_Ioccup_11			-0.678	-0.664	-0.371	-0.65	-0.832
			(9.72)* *	(7.83)**	(2.03)*	(7.09)**	(7.26)**
_Iprovince_23			0.206	0.148	0.155	0.204	0.175
			(3.29)* *	(2.09)*	-1.36	(2.50)*	-1.77
_Iprovince_32			0.373	0.225	0.449	0.403	0.342
			(6.56)* *	(2.93)**	(5.30)**	(5.43)**	(3.88)**
_Iprovince_37			-0.007	-0.095	0.112	0.066	-0.094
			-0.11	-1.38	-1.01	-0.83	-0.97
_Iprovince_41			0.056	-0.02	0.079	0.153	-0.131
			-0.82	-0.24	-0.72	-1.77	-1.17
_Iprovince_42			0.28	0.176	0.361	0.325	0.212
			(4.30)* *	(2.15)*	(3.59)**	(3.90)**	(2.05)*
_Iprovince_43			0.354	0.254	0.438	0.333	0.403
			(5.30)* *	(3.41)**	(3.56)**	(3.95)**	(3.69)**
_Iprovince_45			0.052	0.01	0.064	0.025	0.13
			-0.83	-0.12	-0.69	-0.3	-1.34
_Iprovince_52			0.276	0.188	0.335	0.269	0.282
			(3.92)* *	(2.29)*	(2.87)**	(2.96)**	(2.55)*
o._Ioccup_5				0			
				(.)			
o._Ioccup_9					0		0
					(.)		(.)

Constant	-0.298	-1.576	-0.954	-1.215	-0.979	-1.127	-0.828
	(13.6)* *	(14.48)* *	(6.07)* *	(6.12)**	(3.64)**	(5.67)**	(3.30)**
Observations	2114	2217	2114	1103	1011	1268	846
R-squared	0.0344	0.14	0.25	0.32	0.19	0.2	0.3
Absolute value of t-statistics in parentheses							
* significant at 5%; ** significant at 1%							

Oaxaca Decomposition

Year=1989

Blinder-Oaxaca decomposition

Number of obs = 3263

1: gender = 0

2: gender = 1

| Robust

logwage | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-----+-----

Differential |

Prediction_1 | -3.175185 .0146977 -216.03 0.000 -3.203992 -3.146378

Prediction_2 | -3.379477 .0179367 -188.41 0.000 -3.414632 -3.344322

Difference | .2042921 .0231894 8.81 0.000 .1588418 .2497425

-----+-----

Decomposit~n |

Explained | .0403629 .0070812 5.70 0.000 .0264839 .0542418

Unexplained | .1639293 .0231434 7.08 0.000 .118569 .2092895

Year=1991

Blinder-Oaxaca decomposition

Number of obs = 2975

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
Differential						
Prediction_1	-2.996558	.0125996	-237.83	0.000	-3.021253	-2.971863
Prediction_2	-3.215584	.0131838	-243.91	0.000	-3.241424	-3.189745
Difference	.2190261	.0182363	12.01	0.000	.1832837	.2547685
-----+-----						
Decomposit~n						
Explained	.040009	.0065693	6.09	0.000	.0271333	.0528846
Unexplained	.1790172	.0183424	9.76	0.000	.1430666	.2149677

Year=1993

Blinder-Oaxaca decomposition

Number of obs = 2450

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
Differential						
Prediction_1	-2.637666	.0170159	-155.01	0.000	-2.671016	-2.604315
Prediction_2	-2.829062	.0188865	-149.79	0.000	-2.866078	-2.792045
Difference	.1913958	.0254213	7.53	0.000	.141571	.2412206
-----+-----						
Decomposit~n						
Explained	.0122536	.008024	1.53	0.127	-.0034732	.0279804
Unexplained	.1791422	.0258695	6.92	0.000	.1284389	.2298456

.

Year=1997

Blinder-Oaxaca decomposition

Number of obs = 2369

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
Differential						
Prediction_1	-1.588924	.016788	-94.65	0.000	-1.621828	-1.55602
Prediction_2	-1.773175	.0189303	-93.67	0.000	-1.810278	-1.736072
Difference	.184251	.025302	7.28	0.000	.1346599	.2338421
-----+-----						
Decomposit~n						
Explained	.0143122	.0073636	1.94	0.052	-.0001201	.0287444
Unexplained	.1699388	.0257889	6.59	0.000	.1193936	.2204841

Year=2000

Blinder-Oaxaca decomposition

Number of obs = 2161

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
<hr/>						
Differential						
Prediction_1	-1.285346	.0196596	-65.38	0.000	-1.323878	-1.246814
Prediction_2	-1.440049	.0237112	-60.73	0.000	-1.486522	-1.393576
Difference	.1547027	.0308013	5.02	0.000	.0943332	.2150721
<hr/>						
Decomposit~n						
Explained	.0137882	.0103527	1.33	0.183	-.0065027	.034079
Unexplained	.1409145	.0301629	4.67	0.000	.0817962	.2000328
<hr/>						

Year=2004

Blinder-Oaxaca decomposition

Number of obs = 1715

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
Differential						
Prediction_1	-.9148358	.0221717	-41.26	0.000	-.9582915	-.8713801
Prediction_2	-1.128817	.0275943	-40.91	0.000	-1.182901	-1.074733
Difference	.2139811	.0353981	6.04	0.000	.144602	.2833602
-----+-----						
Decomposit~n						
Explained	.0344683	.0145433	2.37	0.018	.005964	.0629726
Unexplained	.1795128	.0335558	5.35	0.000	.1137447	.245281

.

Year=2006

Blinder-Oaxaca decomposition

Number of obs = 1839

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
Differential						
Prediction_1	-.7098731	.0223682	-31.74	0.000	-.7537139	-.6660322
Prediction_2	-.9587107	.0259996	-36.87	0.000	-1.009669	-.9077524
Difference	.2488376	.0342974	7.26	0.000	.1816159	.3160593
-----+-----						
Decomposit~n						
Explained	.0322016	.0155298	2.07	0.038	.0017638	.0626394
Unexplained	.216636	.0318388	6.80	0.000	.1542332	.2790388

Year=2009

Blinder-Oaxaca decomposition

Number of obs = 2114

1: gender = 0

2: gender = 1

	Robust					
logwage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----+-----						
Differential						
Prediction_1	-.2980046	.0215092	-13.85	0.000	-.3401618	-.2558474
Prediction_2	-.5984259	.0275458	-21.72	0.000	-.6524145	-.5444372
Difference	.3004213	.0349487	8.60	0.000	.2319231	.3689195
-----+-----						
Decomposit~n						
Explained	.0277077	.0157788	1.76	0.079	-.0032182	.0586336
Unexplained	.2727136	.0332538	8.20	0.000	.2075374	.3378897
