Marital Status and Gender Earnings Gap among Thai Wage Workers

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Introduction

- Study of marital status effect (marriage "premium") among Thai males and Females.
- Contribution to knowledge about gender equality in Thai labor market.
- Why is gender equality important?
  - Fairness
  - Economic Efficiency—incentives, loss of productivity
- Results
  - Premium of about 6% for males, no premium for females
  - Married females have lower earnings potential than unmarried females (human capital, job types)

Outline

- Background, Research Question
- Related Studies
- Data—set, description, sample selection
- Marital status and earnings
- Regression analysis
- Results/Conclusion/Discussion/Future Work

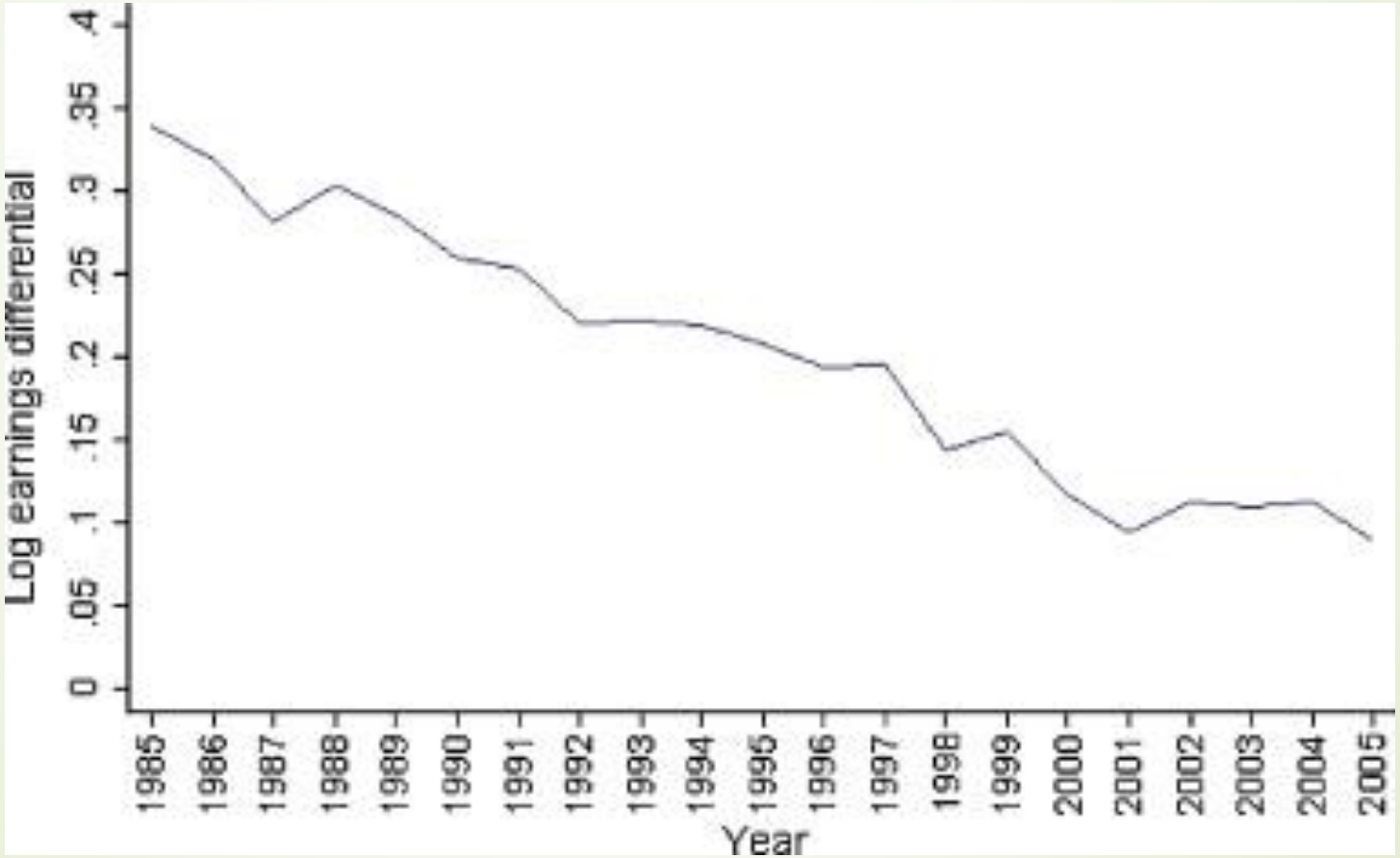
Background and Research Question

- Marriage and the Thai society
- Females and the labor market
- Research question: Does marital status affect males and females in the labor market differently?

Related Studies

- Human Capital and wages—Mincer (1958)
- Gender wage gap
  - Earlier work—Becker (1957), Blinder (1973), Cain (1986, Handbook of Labor Econ), Ashenfelter & Hannan (1986) and recent applications of ideas and concepts to different settings
  - Cross-countries comparison—Meng (1996)
  - Thai data—Nakavachara (2010, Journal of Asian Econ.); Khorpetch & Kulkolkarn, K. (2011, Applied Econ. Journal); Bui & Permpoonpiwat (2015, Intl Journal of Bahav. Sci.)
    - All use the LFS, various years, latest is 2013 in Bui & Permpoonwiwat (2015)
    - Unexplained wage differentials remain, does not seem to reflect female concentration in various industries
- Unable to find work on marriage premium in Thailand so far.

Patterns and Trends in Thailand's Gender Wage Gap—Nakavachara (2010)

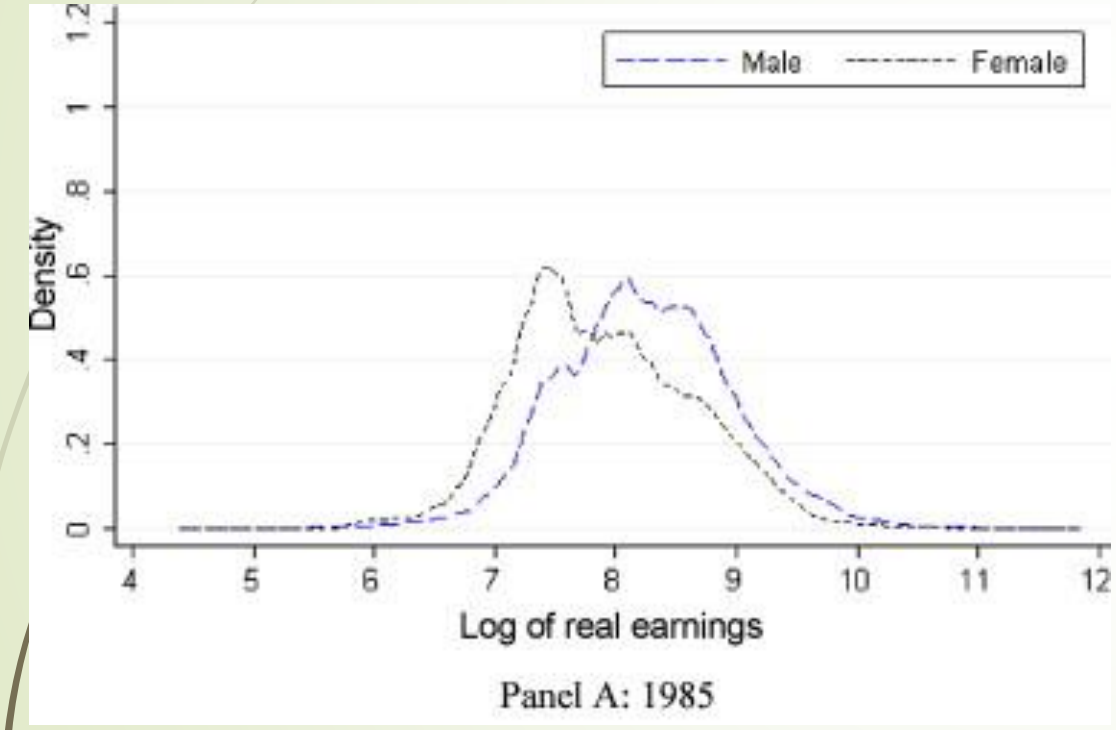


Where does Thailand stand?—Nakavachara (2010)

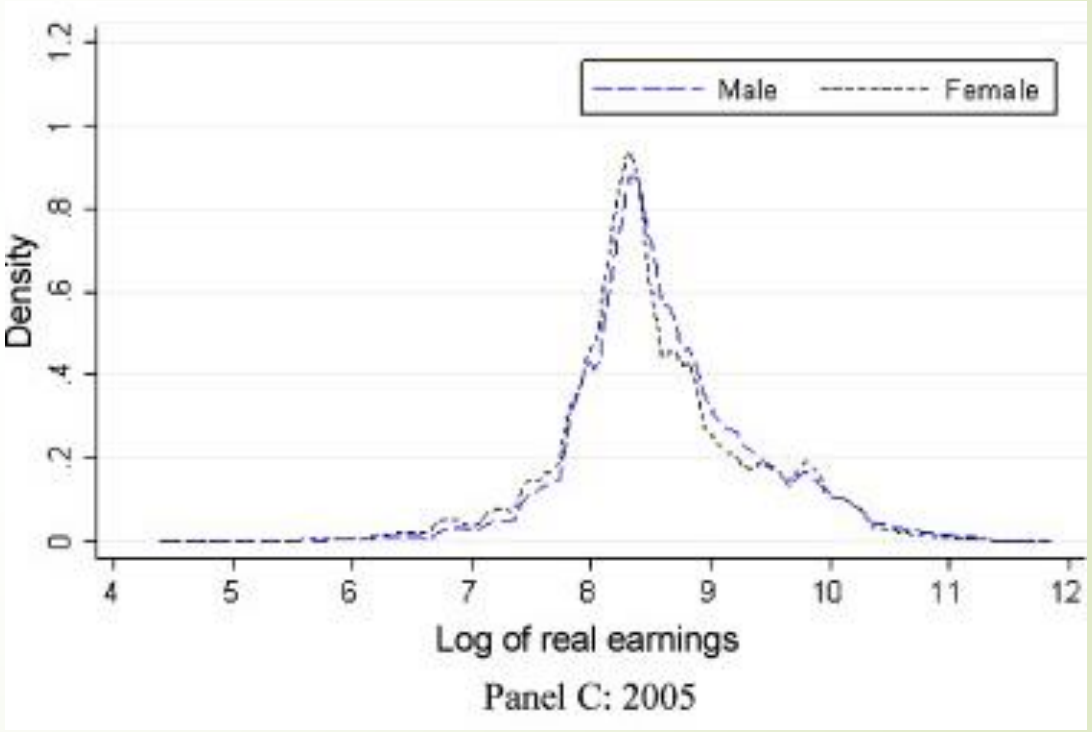
- World Bank Data most recent observation reported (from 1991 – 2003)

Country	Female/Male Earnings Ratio
Sweden	0.81
USA	0.62
Thailand	0.59
Japan	0.44
Saudi Arabia	0.15

Evolution of Wage Gap—Nakavachara (2010) density plots



Panel A: 1985



Panel C: 2005

Evolution of Wage Gap

- The male-female wage gap has been closing gradually.
- Using 2015 Q3 Thai LFS data (data for this study), the male earnings advantage was about 3%.

Data—set, description, sample selection, final sample

- Thai Labor Force Survey Q3 2015 (available from Thailand National Statistical Office)
  - Socioeconomic variables including marital status and work variables, among others
- Age 25 – 60
- Not in school
- Either never married or currently married (no divorcees or widows)
- Reported working the week before the survey
- Resulting sample size = 38,938
- Only wage workers are included in the final sample without deliberate exclusion (public, public enterprise, private)
- All calculations are weighted using "weight" variable unless noted.

Wage or Earnings?

- Similar pattern for both, will focus on total earnings
- Earnings include salary (approx.), bonus, overtime (ot), and other sources of income (oth_money)

Marriage and Earnings—Basic Pattern

Marital Status	Sex	
	Male	Female
Never Married	15,981	18,591
Married	15,989	14,156

Marriage and Earnings—Basic Pattern

Marital Status	Sex	
	Male	Female
Never Married	9.44	9.66
Married	9.44	9.32

Empirical Analysis—Pooled sample

- Estimate Marriage Effects on monthly earnings for Thai male and female workers
- $\ln(earn) = \beta_0 + \delta_1 married + \delta_2 female + \delta_3 married\_female + \cdots$

- Model 1—no other controls
- Model 2—Model 1 + Economic environment controls
  - region, municipality status
- Model 3—Model 2 + Human capital
  - edu, exp, exp^2
- Model 4—Model 3 + work variables
  - Hours, occupation, industry

Empirical Analysis—Full sample

	(1)
married	0.00244
	(0.16)
female	0.225***
	(11.69)
married_fe~e	-0.341***
	(-15.49)
N	38938
R-sq	0.024
adj. R-sq	0.024

Empirical Analysis—Full sample

	(1)	(2)
married	0.00244	0.0713***
	(0.16)	(5.27)
female	0.225***	0.178***
	(11.69)	(10.40)
married_fe~e	-0.341***	-0.303***
	(-15.49)	(-15.31)
N	38938	38938
R-sq	0.024	0.140
adj. R-sq	0.024	0.139

Empirical Analysis—Full sample

	(1)	(2)	(3)
married	0.00244	0.0713***	0.0871***
	(0.16)	(5.27)	(7.69)
female	0.225***	0.178***	-0.0856***
	(11.69)	(10.40)	(-6.52)
married_fe~e	-0.341***	-0.303***	-0.0913***
	(-15.49)	(-15.31)	(-6.12)
N	38938	38938	37127
R-sq	0.024	0.140	0.580
adj. R-sq	0.024	0.139	0.580

Empirical Analysis—Full sample

	(1)	(2)	(3)	(4)
married	0.00244	0.0713***	0.0871***	0.0686***
	(0.16)	(5.27)	(7.69)	(6.73)
female	0.225***	0.178***	-0.0856***	-0.101***
	(11.69)	(10.40)	(-6.52)	(-8.00)
married_fe~e	-0.341***	-0.303***	-0.0913***	-0.0600***
	(-15.49)	(-15.31)	(-6.12)	(-4.23)
N	38938	38938	37127	37065
R-sq	0.024	0.140	0.580	0.652
adj. R-sq	0.024	0.139	0.580	0.652

Empirical Analysis—Full sample

- Compared to unmarried males
  - Male marriage premium about 7%
  - Female penalty about 10%
  - Female marriage premium about 1% (subtract 6% from 7%), not significant
  - Married females tend to concentrate in low education and low-pay jobs
    - Smaller marriage "penalty" for females after controlling for human capital and job characteristics

Empirical Analysis—separate male-female equations

- $ln(earn) = \beta_0 + \delta_1 married + controls$

- Model 1 = male, Model 2 = female

Empirical Analysis—separate male-female equations

	(1)	(2)
married	0.0642***	0.00805
	(5.91)	(0.69)
N	20353	16712
R-sq	0.635	0.683
adj. R-sq	0.635	0.682

Do children affect marriage premium?

	(1)	(2)
married	0.0614***	0.0129
	(5.50)	(1.08)
kids0_18	0.00657	-0.0146*
	(1.22)	(-2.30)
N	20353	16712
R-sq	0.635	0.683
adj. R-sq	0.635	0.683

Further investigation—employment (probit)

	(1)	(2)
married	0.741***	-0.333***
	(20.67)	(-10.36)
N	50052	52767
pseudo R-sq	0.067	0.035

Further Investigation—employment

- Translate to 10.5% points **higher** employment rate for males, 8.4% points **lower** employment for females.
  - *job characteristics omitted in regressions.

Conclusion and Discussion

- Female wages have increased relative to male in recent years…
- …, but disadvantages remain.
  - Females continue to earn significantly less than observably similar males.
  - There's no observed marriage "penalty" for females relative to other females, but married females concentrate in low-pay jobs and low-education
  - Evidence of effect of marriage on employment
- There seems to be a family/career tradeoff among women, but that decision is probably made before actually getting married.
  - Shows up in employment
- Khorpetch, C., & Kulkolkarn, K. (2011) find a marriage "penalty" among women, though their sample includes much younger workers.

Remaining Issues, future work

- Selection models (into employment)
- Endogenous marital status
  - Selection into marriage
  - Instrumental variable
- Non-wage population, informal sector

Thank you for listening!

- Comments, questions, and suggestions welcome.

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