

# **AGE AT FIRST MARRIAGE IN VIETNAM: TRENDS AND DETERMINANTS**

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## **ABSTRACT**

Age at first marriage has not been the subject of systematic research in many changing societies. In Vietnam, the evidence is even scarcer. Our study used national representative sample of 16,381 ever-married women interviewed in 1997, 2002 and 2005 to describe trends and examine factors affecting age at first marriage in Vietnam. We found an increasing trend in age at first marriage. The increase was modest (mean age at first marriage rose just 0.4 year; from 20.6 in 1997 to 21.0 in 2005), but significant over time after controlling for other socioeconomic variables. Education, type of residence, wealth, age, region, and ethnicity were strongly related to age at first marriage. Our study also revealed that there was significant proportion of women who got married during adolescent especially among rural; minority; and less educated women.

## **BACKGROUND**

Study of marriage, typically age at first marriage, has been an important part of demographic and economic analysis. Age at first marriage has been considered a guide for public policy because of its impacts on fertility and thus, affects population growth. Marriage marks the period of potential childbearing and is one of the most important determinants of fertility. Historically, societies with later age at first marriage have experienced decreased fertility rates while in traditional populations in Asia and Africa where age at first marriage is younger, high levels of fertility has been observed. (Bongaarts, 1983; Coale, 1971; Week, 2007). Change in marriage pattern i.e. delayed marriage are believed to bring in the issues of dating, premarital sex, unwanted pregnancy, abortion, STDs and HIV/AIDS (Jones, 2007).

One attempt to explain for the changes in marriage patterns is Goode's modernization theory. Goode argued that global industrialization has brought the family systems in developing world toward the European norm. In the process of modernization, people with higher social status tend to get married late since they want to have more freedom. People who were born and live in big cities are more likely to marry later than those living in rural area or small town. Goode hypothesizes that this may be a result of greater diversity in life and little social control in big cities than in rural areas. (Goode, 1963).

A fair amount of literature has documented that age at first marriage has increased in most developed and developing countries among both men and women. However, the trends and rates of changing are different across countries and regions especially for countries in South and South East Asia. (Islam et al, 1996, 1998; Jones, 2003; Jones, 2007; Hirschman, 2007; Smith, 2002). Most studies in Asia and South East Asia have

shown evidence supporting Goode's theory of changing age at first marriage. People with higher education, live in urban area, have wage-earning work are more likely to delay marriage. Japan, Korean, Taiwan, Malaysia, Singapore, China and Thailand have showed dramatically increase age at first marriage. However, this is not necessary the case for some countries in South and South East Asian such as Indonesia, Vietnam, Bangladesh, India and Nepal. (Islam, 1996; Islam, 1998; Nguyen, 1997; Savitridina, 1997). Age at first marriage among these countries is just over 20 years old and marriage is almost universal with over 90% of all women would be ultimately married. Jones's study also showed that most Asian countries in the past two decades have observed increases in the proportion of men and women remain single especially in the urban area and among educated group (Jones, 2003; Jones, 2007).

By mid-2007, Vietnam has the population of 85,100,000 of which about one third are between the age of 10 to 24 years old, the largest cohort of youth in history. (General Statistical Office, 2008; Population Reference Bureau, 2008). Minimum age to get married in Vietnam is 18 for women and 20 for men. (Vietnam marriage and family law, 1992). Government strongly opposes to child marriage; and have programs to prevent child-marriage. Pre-marital sex and birth out of wedlock is stigmatized and looked down in Vietnam. (Khuat, 1998; MOH et al, 2005). Vietnamese society places high values on marriage when a child turns into adulthood. Marriage has been considered a filial duty and choosing not to marry meaning failure to fulfill that duty. (Nguyen, 1997; Khuat, 1998; Williams, 2005) Williams' qualitative study of marriage attitude in three countries showed that, in Vietnam, much more than in Thailand and Philippines, marriage was clearly seen as an integral part of life. People who don't get married in Vietnam are considered abnormal. Non-marriage is even considered a cause of degeneration of the society. (Williams, 2005).

Literature review also revealed that while studies of family planning, child mortality, abortion, and contraception have been numerous; marriage related issues have not been the subject of systematic research in Vietnam. Some national surveys have collected data regarding age at first marriage (Census, 1988; Demographic and Health Survey (DHS), 1997; DHS, 2002; and Vietnam Population and HIV/AIDS Indicator Survey (VPAI), 2005). However, the discussion of marriage has been only in passing. Studies of marriage conducted by international scholars with focus on Asia and South East Asian also lack multiple point-in-time data to strongly discuss the case of Vietnam. (Jones, 2003; Jones, 2007; Smith, 2002; Nguyen, 1993; Nguyen, 1997; Allman, 1991). Rough statistical figures showed that, in Vietnam, changing age at first marriage is less dramatic: age at first marriage in Vietnam is among the lowest compare to other countries in the region. (Wellings, 2006; Jones 2007; Smith, 2002). The only two studies that addressed the issues of marriage in Vietnam are studies by Nguyen L. (1993); and Nguyen M. et al (1997). These studies showed an increase in age at first marriage but lack the discussion of trends and might be hampered by the effect of lack of male due to the wartime and the effect of high death rate among male due to war. (Hirschman, 1995; Gookind, 1997; Nguyen, 1997; Phinney, 2005). Given the fast changes in Vietnam after Doimoi (reform) era; it is important and necessary to look at the issue of marriage more systematically and with recent surveyed data.

The objectives of our study are to: 1) describe trends in age at first marriage; 2) examine factors affecting age at first marriage; and 3) draw policy implications. Our studies used national representative sample of 16,381 ever married women interviewed in 1997, 2002 and 2005.

## **METHODOLOGY**

### Data:

Data are from the Vietnam Demographic and Health Survey conducted in 1997 and 2002 (Committee for Population, Family, and Children (Vietnam) & ORC Macro (USA), 1998, 2003); and from the Vietnam Population and HIV/AIDS Indicator Survey conducted in 2005 (General Statistical Office (Vietnam) and ORC Macro (USA), 2006). Since the data of 1997 and 2002 were collected only for Vietnamese ever married women, we decided to use only sub-sample of ever married women of the 2005 data for our study purpose. Data were collected using two stage cluster design. The sampling frames used for the above three surveys were the same and nationally representative of the Vietnamese population. Total sample for this analysis comprises of 16,381 ever married women aged 15-49 years old. Of which, 5664 were interviewed in 1997; 5665 were interviewed in 2002; and 5052 were interviewed in 2005.

### Variables:

Outcome is age at first marriage. For our sup-analysis looking at percentage of marriage that happened before the age of 18 (age eligible for marriage among women in Vietnam), we dichotomized age at first marriage at 18. Age at first marriage in continuous form was used for multivariate analysis.

Independents variables include current age; education; region; religion; ethnicity; wealth index and occupation. To look at how current age affects age at first marriage in a rough way, we divided age in to three categories: 15-29; 30-39; and 40-49 years old. Wealth index was constructed using household asset data including electricity, radio, TV, bicycle, motorbike and car. Each item was given a score and it was summed across items for each household. Individual wealth was ranked as poor; middle and rich based on the total score.

### Statistical analysis:

Three data sets of the 1997, 2002 and 2005 surveys were pooled based on dependent and independent variables using for this study purpose. Time variable representing survey year was added to help capture trends in age at first marriage through multivariate analysis. Results were reported for each survey year as well as for the pooled sample

Differences in mean age at first marriage across socioeconomic status were tabulated. The statistical significance of the relationship was reported. Multivariate analysis was

performed to assess effects of each variable while controlling for other variables. Since all individuals in the sample were ever married women and variable age at first marriage was normally distributed, instead of event history analysis, we used ordinary least square regression for our multivariate analysis purpose. Stata/SE Version 9.1 (StataCorp, 2007) was used to carry out our analysis.

## RESULTS

Table 1: Mean age at first marriage

<i>Variables</i>	<i>1997</i>		<i>2002</i>		<i>2005</i>	
	Mean (S.d.)	% (N)	Mean (S.d.)	% (N)	Mean (S.d.)	% (N)
Age						
15-29	19.3 (2.4)	29 (1674)	19.5 (2.6)	24 (1391)	19.6 (2.6)	24 (1232)
30-39	21.0 (3.5)	44 (2479)	20.7 (3.5)	42 (2397)	21.1 (3.6)	40 (2003)
40-49	21.4 (4.3)	27 (1507)	21.5 (4.2)	33 (1877)	21.8 (4.3)	36 (1817)
Residence						
Urban	22.1 (3.9)	23 (1316)	22.1 (3.9)	23 (1300)	22.4 (4.0)	32 (1600)
Rural	20.1 (3.3)	77 (4348)	20.2 (3.4)	77 (4365)	20.4 (3.5)	68 (3452)
Region						
North	20.6 (3.4)	40 (2235)	20.5 (3.4)	40 (2259)	21.0 (3.6)	51 (2589)
Central	20.5 (3.3)	26 (1495)	20.7 (3.4)	27 (1550)	20.9 (3.7)	21 (1037)
South	20.6 (3.9)	34 (1934)	20.8 (4.0)	33 (1856)	21.0 (4.0)	28 (1426)
Education						
No education	19.2 (3.9)	6 (305)	19.4 (4.0)	6 (355)	19.0 (3.8)	7 (370)
Primary	19.5 (3.3)	27 (1551)	19.9 (3.7)	27 (1536)	20.1 (3.8)	20 (1111)
Secondary	21.0 (3.5)	65 (3691)	20.9 (3.4)	63 (3555)	21.1 (3.5)	60 (3029)
Higher	24.1 (4.0)	2 (117)	24.0 (3.1)	4 (219)	23.6 (3.3)	11 (542)
Occupation						
Unemployed	21.1 (4.2)	8 (435)	21.0 (4.1)	7 (414)	21.4 (4.3)	7 (347)
Paid job	20.5 (3.5)	58 (3319)	20.7 (3.6)	56 (3175)	21.8 (3.7)	46 (2325)
Self employed	20.4 (3.5)	34 (1910)	20.5 (3.6)	33 (2040)	20.2 (3.5)	47 (2379)
Ethnicity						
Viet	20.8 (3.5)	87 (4932)	20.9 (3.6)	86 (4885)	21.3 (3.7)	84 (4220)
Other	19.2 (3.7)	13 (732)	19.3 (3.5)	14 (780)	19.7 (3.7)	16 (832)
Religion						
None/ Buddhist	20.6 (3.5)	92 (5212)	20.7 (3.6)	91 (5149)	21.0 (3.8)	93 (4720)
Christian	20.5 (3.7)	5 (291)	20.4 (3.9)	6 (322)	20.9 (3.9)	6 (286)
CaoDai/HoaHao	19.1 (3.2)	3 (161)	19.3 (3.3)	3 (192)	19.4 (2.8)	1 (46)
/Other						
Wealth						
Poor	19.7 (3.7)	18 (1011)	20.1 (3.8)	24 (1356)	19.7 (3.6)	18 (927)
Middle	20.4 (3.3)	44 (2491)	20.6 (3.4)	48 (2748)	20.6 (3.7)	34 (1695)
Rich	21.2 (3.7)	38 (2162)	21.3 (3.6)	28 (1561)	21.8 (3.7)	48 (2434)
<b>Mean</b>	<b>20.6 (3.6)</b>	<b>100 (5664)</b>	<b>20.7 (3.6)</b>	<b>100 (5665)</b>	<b>21.0 (3.8)</b>	<b>100 (5052)</b>

Table 1 gives the summary statistics of the samples and the variation of means age at first marriage across independent variables. The distributions of the samples of 1997 and 2002 were similar but slightly different from the sample of 2005. About 70% of the sample lived in rural area; majority of them (about 85%) were Viet ethnic; over 90% of the sample considered themselves none religious or Buddhist; and 6% to 7% of the sample had no-education.

Mean age at first marriage increased by 0.1 and 0.4 year from 1997 to 2002 and 2005, respectively. These changes are modest compared to other changes observed in Asia given the 5 years and 8 years difference between 1997-2002 surveys; and 1997-2005 surveys. (Studies in Asian found that the age at first marriage has increased about 1.5 years in past few decades).

Women in urban areas on average got married 2 years later than women in rural areas. Women with no or primary education were among the youngest to get married compared to people who had secondary and higher education. The differences in age at first marriage comparing no-education with those who had more than secondary education were: 4.9 years (1997); and 4.6 years (2002 and 2005). Poor people tend to get married earlier than people in middle and rich class. Comparing people in the poor category with those in rich category, the difference in age at first marriage were: 1.5 years (1997); 1.2 years (2002); and 2.1 years (2005). People who belong to minority religious group (Cao Dai and Hoa Hao and other) were about 1.5 years married earlier than people in non-religious/Buddhist groups. Viet ethnic group got married 1.6 years later than those of minority groups. However, age at first marriage did not vary between regions and among different job categories.

Table 2: Multivariate analysis of age at first marriage on socioeconomic factors

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	$\beta$ (SE)	p-value	$\beta$ (SE)	p-value	$\beta$ (SE)	p-value
Current age						
15-29 (ref)						
30-39	1.32 (.06)	.001	1.32 (.06)	.001	1.6 (.10)	.001
40-49	2.001 (.07)	.001	2.001 (.07)	.001	2.1 (.13)	.001
Residence						
Urban (ref)						
Rural	-1.30 (.11)	.001	-1.29 (.11)	.001	-.13 (.11)	.001
Region						
North (ref)						
Central	.16 (.12)	.10	.16 (.10)	.10	.16 (.09)	.10
South	.31 (.10)	.001	.31 (.09)	.001	.31 (.09)	.001
Education						
None (ref)						
Primary	.21 (.18)	.25	.21 (.18)	.27	.20 (.18)	.26
Secondary	1.27 (.18)	.001	1.28 (.18)	.001	1.3 (.18)	.001
Higher	3.50 (.23)	.001	3.50 (.22)	.001	3.50 (.23)	.001
Occupation						
Unemployed (ref)						
Paid job	-.30 (.13)	.02	-.30 (.13)	.03	-.30 (.13)	.02
Self employed	-.43 (.14)	.001	-.44 (.13)	.001	-.44 (.13)	.001
Ethnicity						
Viet (ref)						
Other	-.65 (.13)	.001	-.70 (.14)	.001	-.66 (.14)	.001
Religion						
None/Buddhist						
Christian	-.12 (.16)	.47	-.12 (.16)	.47	-.12 (.16)	.47
CaoDai/HoaHao/	-.84 (.18)	.001	-.83 (.18)	.001	-.83 (.18)	.001
Other						
Wealth						
Poor (ref)						
Middle	-.28 (.08)	.001	-.28 (.08)	.001	-.27 (.84)	.001
Rich	-.42 (.11)	.001	-.44 (.11)	.001	-.43 (.11)	.001
Time						
1997 (t1) (ref)	--					
2002 (t2)	--		-.05 (.09)	.55	-.27 (.09)	.001
2005 (t3)	--		.06 (.10)	.56	-.20 (.12)	.06
Interaction						
Age (30-39)*t2	--		--		-.57 (.14)	.001
Age (30-39)*t3	--		--		-.33 (.14)	.02
Age (40-49)*t2	--		--		-.27 (.17)	.12
Age (40-49)*t3	--		--		-.03 (.20)	.88
R-square	14.6%		14.7%		14.8%	

Three multivariate models were and reported in table 3. This analysis used the pooled sample of 16,831 ever married women. The basic difference between the 3 models is that model 3 includes time trend variable and the interaction between time and age while model 2 includes only time variable and model 1 does not includes those two.

Overall, all independent variables are found to be significantly associated with the outcome except variable religion. Types of residence and education were the two strongest predictors for age at first marriage. Women who lived in rural area got marriage 1.3 years earlier than those who lived in urban area; and those how had higher than secondary education got married 3.5 years later than those had no-education. Women who lived in the South are more likely to get married earlier than those who live in the North. Women who had job are more likely to get married later than those who were unemployed.

Time trend variable in model 2 was not significantly associated with age at first marriage. However, time trend became significant in model 3 when interaction between time and current age was placed into the model. This means age at first marriage was significantly increased over time.

Table 3: Proportion of women who married before the age 18

Variables	1997		2002		2005	
	%	$\chi^2$ (p-value)	%	$\chi^2$ (p-value)	%	$\chi^2$ (p-value)
Current age		55 (.001)		59 (.001)		57 (.001)
15-29	22.1		22.1		20.6	
30-39	14.5		14.6		13.6	
40-49	13.3		12.6		11.0	
Residence		67 (.001)		49 (.001)		72 (.001)
Urban	9.0		9.5		8.2	
Rural	18.6		17.6		17.2	
Region		57 (.001)		17 (.001)		9 (.01)
North	12.4		14.5		13.1	
Central	16.4		14.1		14.7	
South	21.1		15.8		16.6	
Education		315 (.001)		268 (.001)		313 (.001)
No education	33.4		31.8		34.9	
Primary	27.7		25.2		23.3	
Secondary	10.7		11.0		11.1	
Higher	1.7		.9		.2	
Occupation		2.8 (.25)		3.1 (.21)		106 (.001)
Did not work	17.0		17.4		15.0	
Paid job	16.0		15.9		9.0	
Self-employed	18.2		16.7		19.5	
Ethnicity		187 (.001)		169 (.001)		156 (.001)
Viet	13.8		13.3		11.6	

Other	33.9		31.5		28.3
Religion		23 (.001)		57 (.001)	16 (.001)
None/Buddhist	15.8		14.8		14.0
Christian	21.7		19.9		17.8
CaoDai/HoaHao	28.0		34.4		32.6
/Other					
Wealth		132 (.001)		59 (.001)	179 (.001)
Poor	27.5		22.1		27.0
Middle	16.3		14.8		15.3
Rich	11.3		12.0		8.9
<b>Mean</b>	<b>16.4</b>		<b>15.8</b>		<b>14.4</b>

We conducted a supplement analysis to look at proportion of marriage during adolescent and results were reported in table 2. The table showed that there was significant proportion of women who got married before the age 18 and all independent variables were significantly associated with early marriage except for occupation in 1997 and 2002. This proportion decreased in 2002 and 2005 (from 16.4% to 15.8% and 14.4% respectively). Women who lived in rural; lived in the South; had lower education level; of minority ethnicities; of Cao Dai/ Hoa Hao religions; were poorer were more likely to get marriage during adolescent. This pattern remained consistent in the survey year 2002 and 2005.

## DISCUSSION

This paper focuses on describing trends and examining factors affecting age at first marriage among Vietnamese ever-married women aged 15-49 years old. As the marriage trends which have been studied in many other Asian countries, Vietnam was in the same situation of increasing age at first marriage. Though mean age at first marriage rose just 0.4 year (from 20.6 to 21.0), the increase in age at first marriage was significant over time after control for all other SES variables. Education, place of residence, wealth, current age, region and ethnicity are found to be significantly related to age at first marriage.

Our study also revealed that there was significant proportion of women who got married during adolescence and before the legal age (18 years old) especially among women in rural area; women of ethic minority; and less educated women. While early marriage is believed to cause negative consequences such as having more children, increase child and maternal mortality especially while Vietnam still needs to control fertility rate, effort to increase age at first marriage may be needed. Government policies can help women to have more access to education, improve socioeconomic and thus help young women to make their own decision regarding when to get married. This also suggests that study on the consequences of early marriage should be conducted.

Our study has some limitations. First, the reporting of age at first marriage might be inaccurate. This recall bias might be more severe in rural area where literacy is low and marriage certificate may not be ready available. However, the study also collected

information on duration of marriage in an effort to minimize the effect of error reporting on age at first marriage. Second, our study includes only ever-married women. This may bias downward age at first marriage because women in the older group who had not married were not included. Third, the study includes only women so there might be still much unknown about trends and determinants of marriage among men.

## REFERENCES

- Allman J., Vu N., Nguyen Th., Pham S., Vu M. 1991. Fertility and family planning in Vietnam. *Studies in family planning*, Vol.22, No.5, pp.308-317.
- Bongaarts, J. 1983. The proximate determinants of natural fertility. *Population Development Review* 2, 105.
- Coal A. 1971. Age pattern of marriage. *Population studies*, 25(2): 193-214.
- Committee for Population, Family, and Children (Vietnam) & ORC Macro (USA). 1998. *Vietnam Demographic and Health Survey 1998*. Hanoi, Vietnam.
- Committee for Population, Family, and Children (Vietnam) & ORC Macro (USA). 2003. *Vietnam Demographic and Health Survey 2002*. Hanoi, Vietnam.
- General Statistical Office; National Institute Hygiene and Epidemiology (Vietnam) and ORC Macro (USA). 2006. *The 2005 Vietnam Population and AIDS Indicator Survey*. Hanoi, Vietnam.
- Goode, W. 1963. *World revolution and family patterns*. New York Free Press.
- Goodkind, Daniel. 1997. The Vietnamese Double Squeeze. *International Migration Review*, Vol.31, No. 1. pp. 108-127.
- Gubhaju B. 2002. Adolescent reproductive health in Asia. *Asia Pacific Population Journal*, Dec 2002.
- Hajnal J. 1953. Age at marriage and proportion of marrying. *Population index*. Vol. 19, No.2, Apr 1953.
- Hirschman C. and Edwards J. 2007. Social Change in South East Asia. *The Blackwell Encyclopedia of Sociology*. Vol.9: 4374-4380.
- Hirschman C., Samuel, P., Vu L. (1995). Vietnamese causalities during the American war: a new estimate. *Population and development review* 21(4); 738-812.
- Hirschman C. 1985. Premarital socioeconomic roles and the timing of family formation: a comparative study of 5 Asian societies. *Demography*. Vol.22, No.1. Feb 1985.

- Hirschman C. and Rindfuss R. 1982. The sequence of timing of family formation event in Asia. *American Sociological Review*, Vol.47, PP.660-680.
- Islam M. and Mahmud M. 1996. Marriage patterns and some issues related to adolescent marriage in Bangladesh. *Asia Pacific Population Journal* Vol. 11, No3, Sep 1996.
- Islam M. and Ahmed A. 1998. Age at first marriage and its determinants in Bangladesh. *Asia Pacific Population Journal* Vol. 13, No2, June 1998.
- Jones G. 2007. Delayed marriage and very low fertility in Pacific Asia. *Population and development review* 33(3): 453-478, Sep 1997.
- Jones G. 2003. The “Flight from marriage” in South East and East Asia. *Asian MetaCentre for Population and Sustainable Development Analysis*. Issue 11, June 2003.
- Khuat H. 1998. Study on sexuality in Vietnam: the know and unknown issues. South East Asia regional working paper. The Population Council.
- Ministry of Health of Vietnam; WHO; UNICEF; General Statistical Office. 2005. Survey Assessment of Vietnamese Youth (SAVY report)
- Nguyen, M. 1997. Age at first marriage in Vietnam: patterns and determinants. *Asia Pacific Population Journal* Vol. 12, No2, June 1997.
- Nguyen, L., Nguyen, Th., Swenson I., and Pham., S. 1993. Selected determinants of fertility in Vietnam: age at first marriage, marriage to first birth interval and age at first birth. *J Biosocial Science* (1993) 25, 303-310.
- Phinney H. 2005. Asking for a child: the refashioning of reproductive space in post war Northern Vietnam. *The Asia Pacific Journal of Anthropology*, Vol.6, No.3, Dec 2005, pp.215-230.
- Savitridina R. 1997. Determinants and consequences of early marriage in Java, Indonesia. *Asia Pacific Population Journal* Vol. 12, No2, June 1997.
- Smith P. 2002. Asian marriage patterns in transition. *Journal of family history*, 5:1, p58, Spring 1980.
- Week, J. 2007. *Population: an introduction to concepts and issues*. 10th edition. Thomson Wasswoth publishing house.
- Wellings K., Collumbien M., Slaymaker E., Singh S., Hodges Z., Patel D., and Bajos N.2006. Sexual behavior in context: a global perspective. *The Lancet sexual and reproductive health series*, Otc 2006.

Williams L. and Guest M. 2005. Attitudes toward marriage among the urban middle class in Vietnam and Thailand. *Journal of comparative family studies*; Spring 2005; 36, 2. p.163.

Website of General Statistical Office of Vietnam accessed on Sep 15, 2008:

[http://www.gso.gov.vn/default\\_en.aspx?tabid=467&idmid=3&ItemID=6173](http://www.gso.gov.vn/default_en.aspx?tabid=467&idmid=3&ItemID=6173)

Website of Population Reference Bureau accessed on Sep 15, 2008:

[http://www.prb.org/pdf07/07WPDS\\_Eng.pdf](http://www.prb.org/pdf07/07WPDS_Eng.pdf)