## Impact of War and Military Service on Income Inequality in Northern Vietnam

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War continues to be the dominant historical memory for most Vietnamese above age 40 today (Tai 1994). Between 1945 and 1975 Vietnam experienced nearly continuous wars with the Japanese, French, and Americans. After the reunification of North and South Vietnam in 1975, the country continued to be in military conflicts with Cambodia and China until 1979. Military service was almost a rite of passage for young men growing up during these periods. Over 70 percent of men in Vietnam's northern region of the Red River Delta were inducted into the military during the American war. War often reorders societies and reshapes the social stratification system (Erikson and Goldthorpe 2001; Modell and Haggarty 1991). Evidence from other societies indicates that war and military service usually have a long-term impact on the life course of war survivors, including their socioeconomic status and earnings (DeTray 1982; Martindale and Poston 1979; Sampson and Laub 1996; Teachman and Call 1996). While the series of wars over the span of three decades have left profound imprints on the early life course trajectories of men in Vietnam, there is surprisingly very little research that details the long-term consequence of military service. The purpose of this study is to examine the effects of war and military service on subsequent civilian earnings among men born between 1940 and 1975 in northern Vietnam.

Theoretical Perspectives: Review of the literature suggests that the effects of military service on income vary considerably depending on historical periods as well as pre-existing characteristics of veterans. For example, US-based studies document a positive relationship between military service during World War II and subsequent earnings, particularly among less advantaged veterans (DeTray 1982; Sampson and Laub 1996; Teachman and Tedrow 2004), while finding overall negative effects of military service on income among men serving during the Vietnam era (Card 1983; Hirsch and Mehay 2003; Teachman 2004). To ascertain the long-term impact of war and military service, I use the life course approach combined with the status attainment as well as human capital perspectives.

The life course perspective posits that military service disrupts the life course patterns of men; however, its effects differ by age at entry into the military (Elder 1987). It assumes that many social institutions are heavily age-graded and the military usually removes individuals from access to these institutions. At earlier ages, when life-course trajectories are less well-formed, the disruptive effects tend to be minimal. However, at older ages, investments in civilian relationships and careers are more substantial, thus making military service potentially more disruptive and harmful to the socioeconomic wellbeing of veterans after discharge (Pavalko and Elder 1990). Like the life course perspective, the status attainment perspective argues that military service represents a change in the life course and is a contingency that moderates the

Teerawichitchainan 1

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<sup>&</sup>lt;sup>1</sup> The standard Western reference to the war, which took place as a result of American intervention in Vietnam as the "Vietnam War," reflects an American-centered perception. In this study, I will refer to the war as the "American war" (1965-1975) to be consistent with Vietnamese scholarship and also to distinguish this war from the French war (1945-1954) and other wars in the modern history of Vietnam.

basic process of status attainment (Blau and Duncan 1967). It assumes that the social and psychological resources imparted by military service represent generalizeable resources useful throughout a career, particularly among veterans with less advantaged backgrounds (DeTray 1982; Xie 1992). This perspective implies a permanent effect of military service on subsequent earnings (Teachman 2004).

In addition, the human capital perspective (Becker 1993) explains the effects of military service on subsequent attainment emphasizing two countervailing aspects of time spent in the military. First, military service removes individuals from the labor market, thus reducing their experience relative to that of non-veterans. This is expected to negatively affect their wages (Angrist 1998). However, the disruptive effects tend to be transitory and dissipate after veterans return to the civilian labor market and accumulate necessary experience (Teachman 2004). Secondly, the human capital perspective also argues that the military can serve as a means of obtaining skills and experience that can substitute civilian labor market experience and may be used by employers as a screening device for mental and physical preparedness for work (DeTray 1982). Since these military skills, particularly those not related to combat duty, can transfer to the civilian labor market, military service may positively affect earnings for some veterans (Bryant and Wilhite 1990; Magnum and Ball 1989).

The Vietnam Context: Up until the late 1980s, Vietnam was one of the most highly mobilized countries in the world (Beresford 1988). The universal draft law was implemented in North Vietnam in 1960. At least 60-70 percent of Vietnamese men who came of age during the 1960s and the mid-1980s were inducted into the military<sup>2</sup> (Figure 1). The law mandated that men between ages 18-25 were to be drafted; in 1967, the draft ages were expanded to 16-45 years old. The terms of service originally ranged from 2 to 4 years; however, during the American war, the duration of service was expanded indefinitely (Pike 1986). My exploratory analysis shows that more than half of men from the American war generation served well over 4 years (Table 1). The draft exemption was only applied to the physically disabled, sole remaining sons, young men who were the principal support for their families, selected Communist Party functionaries, the most talented college students, and technicians with special skills (Smith et al. 1967).

The socialist government of North Vietnam promised various incentives to encourage young men to serve in the military (Van Dyke 1972). Upon the completion of their service, young veterans were promised to receive educational benefits, preferences in getting civilian government jobs, memberships to the Labor Youth Group and the Communist Party, and increased rations for food and other goods. Evidence suggests that during the American war young Vietnamese men from advantaged status bore greater burden of war than those with less advantaged background (Merli 2000). During the time of war, military service was perhaps considered a desirable path to upward mobility for many young Vietnamese in northern Vietnam, thanks to the nationalist fervor and lack of other employment opportunities.

Since the late 1980s, not only has Vietnam become demobilized but the country has been undergoing an economic transition from a socialist to a market economy under the policies known as *doi moi* (renovation). These policies have led to high rates of economic growth during

<sup>&</sup>lt;sup>2</sup> These estimates have not yet accounted for high war casualties. According to Merli (2000), during the American war mortality rates for men ages 15-29 were ten times higher than the rates in the absence of war.

the 1990s and a remarkable decrease in the rate of poverty (Dollar 2004). However, over the same period, inequality has also risen (Glewwe and Nguyen Phong 2004). Researchers are particularly interested in documenting the determinants of income to understand mechanisms underlying rising inequality in post-transitional societies (Nee 1989, Xie and Hannum 1996). The market transition theory predicts that returns to human capital, particularly in the form of education, will increase, while returns to political capital (i.e., advantages possessed by those with political status) will decline (Nee 1989). A recent study by Taguchi (2003) finds evidence in Vietnam in support of the market transition perspective. Ten years after the *doi moi* reform, income in both wages and informal sectors have been increasingly determined by education, rather than cadre status and Communist Party membership. Unfortunately, although evidence suggests that there has been a significant impact of war on the early life course transition of Vietnamese men (Figures 2a and 2b), existing studies on income determinants generally ignore the potentially lasting effects of war and military service on subsequent earning profiles of veterans and non-veterans.

Data: This study is based on an analysis of the Vietnam Longitudinal Survey (VLS) carried out during 1995-1998 in the Red River Delta in the north of Vietnam. VLS is one of the first social surveys designed to document social changes in Vietnam, particularly changes related to families and economic activities, which have occurred since the market reform in the late 1980s. Since information on military and manpower are rarely published in Vietnam and are usually treated as top-secret intelligence (Ng 1974; Pike 1986), to my knowledge, the VLS is the only available dataset that contains detailed information on military service of Vietnamese men during the 20<sup>th</sup> century.

Measures and Analytical Approach: Analyzing the 1995-1996 VLS, I examine the effects of war and military service on subsequent income of Vietnamese men born between 1940 and 1975. The sample consists of three cohorts of men who grew up experiencing different levels of demand for military manpower and presence of war. This includes 1) men born 1940-1955 who are labeled as the American war cohort, 2) men born 1956-1966 or the reunification cohort, 3) men born 1967-1975 or the renovation cohort.<sup>3</sup> The sample is restricted to men reported being in the labor force<sup>4</sup> who reported their last year annual earnings in the 1996 VLS. Note that such a restriction may underestimate the disruptive effects of military service because the analysis excludes veterans who did not work due to physical disability caused by military service. Nonetheless, it appears that such bias is small. Most men from the American war cohort in the VLS sample remain economically active in 1996. Over 90 percent of men from this cohort were in the labor force and about 87 percent of them had their earnings reported. The final sample size is 1,419 (Figure 3).

<sup>&</sup>lt;sup>3</sup> Men in the VLS sample who were born 1940-1955 reached age 20 during 1960-1975 or during the armed conflicts between Vietnam and the United States. They are labeled as the "American war cohort". Meanwhile, the "reunification cohort" refers to individuals reaching age 20 between 1976 and 1986 – the period after Vietnam was reunified and still highly mobilized. The youngest cohort who entered early adulthood after the doi moi reform and demobilization period in 1986 is labeled the "renovation cohort". The measure of birth cohort is a post hoc proxy for exposure to the effects of 1) economic development; 2) the overall impact of the war; and 3) the level of military demand.

<sup>&</sup>lt;sup>4</sup> Persons in the labor force in 1996 are defined as those who reported they were working - either paid or unpaid, had a job but not working the week before the 1996 interview, and looking for work. This definition excludes anyone who reported "keeping house, going to school, unable to work, or retired."

This study follows the designs of other studies such as Xie and Hannum (1996), which utilize individual income as their dependent variable. In Vietnam, the process of income generation in the wage and business sectors operates quite differently (Gallup 2004). Therefore, these two populations are analyzed separately. Wage earnings are reported for respondents who said they worked for 1) a non-family member or a business; 2) a cooperative, or 3) the government, reflecting the governmental nature of the formal wage sector where the majority of workers are employed by the state. Meanwhile, business earnings are reported for respondents who said they worked for 1) themselves, 2) a family member in the household, 3) a relative not in the household, thus representing informal sector, dominated by family enterprises. Extreme right skewness of income distribution will be treated by log transformation.

In this study, I plan to document the effects of military service on civilian income as it may vary according to different historical periods as well as a variety of preexisting characteristics such as level of education, socioeconomic status, and Communist Party membership. In addition, variations in the effects of veteran status, age at entry into the military, and duration of the service will be considered. I also attempt to take into account the potential effect of unmeasured selectivity since men who enter the military are not a random subset of all men. Veterans may possess characteristics, particularly unmeasured characteristics, that may affect their earning potentials and which distinguish them from non-veterans. Veterans are closely screened for minimum standards of health and intellectual capacity that is difficult to measure in surveys. Selectivity might be particularly salient among the American war cohort since a substantial proportion of the Vietnamese male population served in the military. It is possible that non-veterans from the wartime cohort were disproportionately composed of individuals unfit for military service or civilian work assignment due to challenged mental capacity and physical limitation.

**Expected Findings:** The effects of military service are expected to vary by historical periods.

- The military service during the American war cohort is likely to have positive effects on the subsequent civilian income leading to differentials in wage as well as business income between veterans and non-veterans. Past studies argue that during wartime, families perhaps view military service as a locus for upward social mobility (Merli 2000). The positive effects may be explained not only by positive selectivity into the military, but also by various incentives, particularly educational benefits and access to the Communist Party membership, the socialist regime had promised for the veterans (the human capital perspective).
- Military service is likely to have negative effects on income attainment of veterans from the reunification and renovation cohorts. After the American war, military service became increasingly unpopular among young Vietnamese. For the reunification cohort, this might be because of the dwindling patriotic fervor as well as the inability of the socialist regime to pay off incentives to veterans as they had promised due to Vietnam's severe economic stagnation in the 1980s. For the renovation cohort, the negative effect of military service might be explained by competing economic opportunities outside the military institution after Vietnam's market reform. During the *doi moi* era, military service is possibly viewed as a hindrance to young men's labor market experience, thus negatively affecting their income (particularly wage income).

• Following the life course perspective, I expect to observe the effects of military service to vary by age at entry into the military as well as duration of service. The late entry and long-term service tends to be more disruptive to the long-term income attainment of veterans than the early entry and short-term service.

Results from the exploratory analysis are attached.

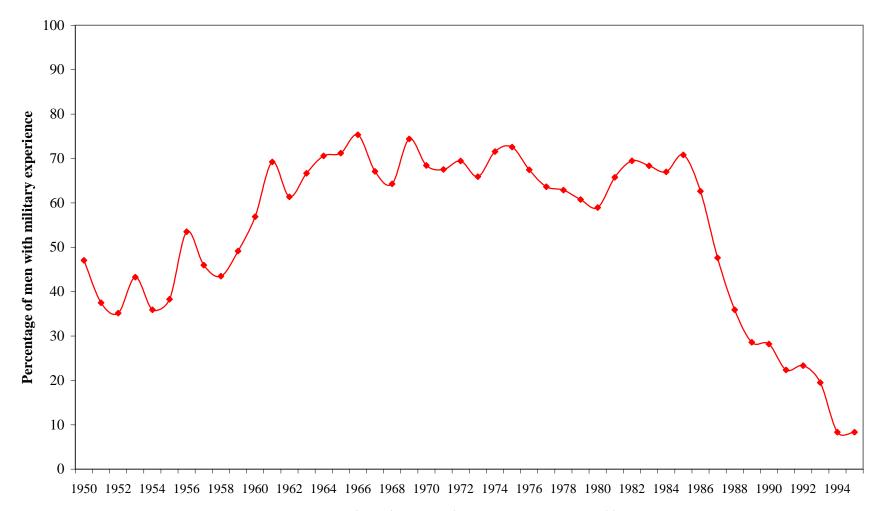
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Figure 1. Percentage (3-Year Moving Average) Ever Served in the Military in Each Birth Cohort: Men Born 1930-1975 in the Red River Delta, Vietnam (N=1,851)



Year in which each birth cohort reached age 20

Table 1. Cohort Trends in Timing of Induction and Duration of Military Service by Birth Cohort, the Red River Delta Men Born 1930-1975 (N=1,851).

	Year in which each birth cohort of men reached age 20:			
	< 1960	1960-1975	1976-1986	1987-1995
	Pre-mobilization generation	American war generation	Reunification generation	Renovation generation
	N=199	N=600	N=688	N=364
% Age at induction				
Total	100%	100%	100%	100%
Never served	57	32	34	73
Inducted, ages 19 or younger	9	35	40	22
Inducted, ages 20-24	13	27	25	6
Inducted, ages 25 and older	22	6	1	0
% Duration of service				
Total	100%	100%	100%	100%
Never served	57	32	34	73
Served 3 years or less	18	15	33	25
Served 4-6 years	11	21	24	2
Served 7 years or more	15	33	9	0

Source: Vietnam Longitudinal Survey, 1995.

Figure 2a. Median ages (3-year moving average) at school completion, first marriage, and first birth for single-year birth cohorts of Vietnamese males, born 1930-1975, veterans

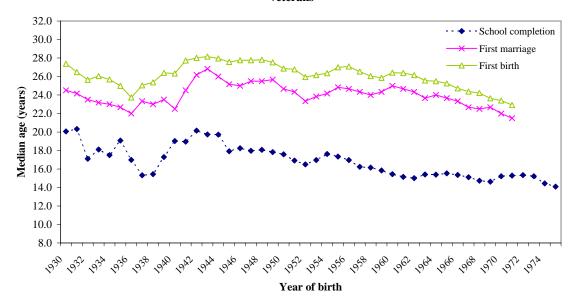


Figure 2b. Median ages (3-year moving average) at school completion, first marriage, and first birth for single-year birth cohorts of Vietnamese males, born 1930-1975, non-veterans

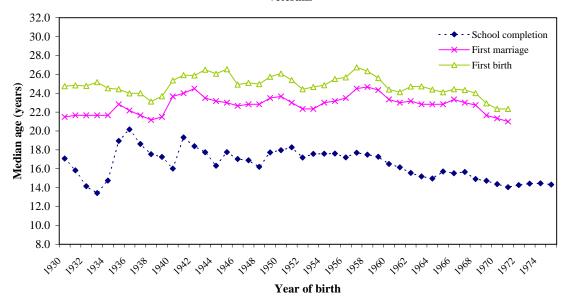


Figure 3. Number of Observations by Cohorts and by Experience in the Military Service (Total N=1419).

