

Educational Outcomes of Children who Grew Up During the Transition to Market Economy in Vietnam

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Abstract

In the decade following the reunification of North and South Vietnam in 1976, Vietnam experienced a period of economic hardship which resulted in a series of economic reforms that introduced market economy in the late 1980's. An examination of the 1999 census of Vietnam revealed that educational outcomes of those who were children during the transition to market economy were negatively affected. This paper seeks to investigate the potential explanations for the drop in education level observed among cohorts born around 1978 observed in the 1999 Vietnam Census. While the paper focuses on Vietnam, it could have broader policy implications for other countries who are undergoing similar market reforms.

1 Background

After the end of a long-lasting war, North and South Vietnam were reunited in 1976. However, in the decade following reunification, Vietnam went through a period of economic hardship, struggling to produce enough food for a growing population. [4], [1] A decision was made in 1986 to make drastic economic reforms in the country and the *doi moi* (renovation) policies which introduced market economy in Vietnam were first implemented in 1988. [2]

Although Vietnam has placed strong emphasis on education and its literacy level was considered high for a developing country, the economic hardship of the mid-1980's appeared to have some effect on the educational system. There were concerns about the decline in the quality of the schools such as the deterioration of the physical infrastructure, reduced teacher motivation, and scarcity of textbooks due to funding difficulties. To ameliorate the problem, fees were introduced in 1989 for grades 4 and above. The fees for grade 4-5 were equivalent to 1 kilogram of rice per month, for lower secondary, 2 kilograms of rice per month, and for upper secondary, the fees were equivalent to 3 kilograms of rice. [3]

At about the same time, country's school enrollment began to decline. This decline in educational attainment can be observed in the 1999 Vietnam Census. The proportion completing primary school (defined as grades 1-5) is significantly lower for cohorts born around 1978, who would have been enrolled in primary school during the mid to late 1980's, than for cohorts born a few years before or after (see Figure 1). This paper seeks to investigate the potential explanations for this drop in educational level observed among cohorts born around 1978 in the 1999 Vietnam Census (Figure 1).

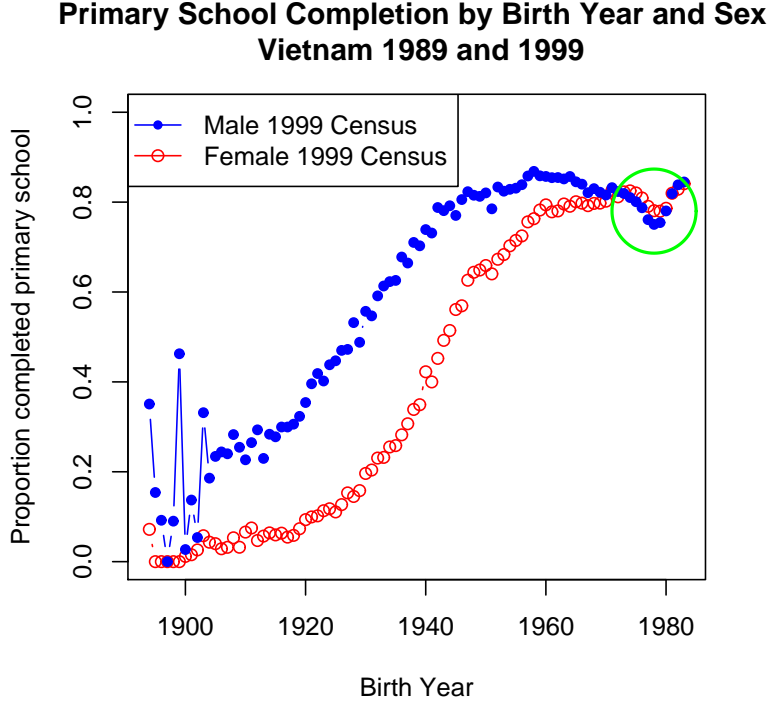


Figure 1: Proportion completing primary school by sex and birth cohort

2 Research question and hypotheses

What are some plausible factors that could explain the decrease in proportion completing primary education for cohorts born around 1978 as seen in the 1999 Census? Previous literature [3] has explored four hypotheses to explain the drop in school enrollment and educational attainment during the 1980's and early 1990's: 1) increased employment opportunities resulting from new economic policies resulted in increased opportunity cost of

staying in school; 2) quality of education has declined so much that parents have stopped sending children to school; 3) decreased job prospects of better-educated workers; and 4) introduction of school fees and charges for textbooks.

All of these factors may be responsible for the drop in primary school completion that we see in the 1999 Census of Vietnam. However, I also propose that the reason that we observe this drop in education may be due to selective migration. Those with more education may have more resources to migrate abroad permanently, find temporary jobs overseas, or be students studying abroad. Military service may also play a role.

To see if migration would be a plausible reason for this phenomenon, a set of hypotheses were developed to test the idea that selective migration may be to blame for the drop in education level for these cohorts. If selective migration was the reason for the drop in education level for the cohort born around 1978:

1. And if migrants were predominantly male, then we would see that the drop in primary education would be seen only for males, and not for females.
2. And if migration was due to factors such as labor, education, and military service, then we would see that the mean age of the migrants to be fairly constant over time, and that in surveys conducted on other years, we would see a shift in the dip.
3. Then we should see an age pattern in the destination country of the migrants that would mirror the dip in population and a pattern of educational attainment that would be more highly educated than that of Vietnam.

I will show that there are conflicting evidence to support selective migration as the only reason why we might see this pattern.

3 Data and Methods

The data used for this analysis were the 1989 and 1999 Census of Vietnam available from IPUMS International. In addition, the 2000 Census data from the United States were used to examine the characteristics of the Vietnamese immigrants in the U.S. The methods will rely primarily on descriptive statistics.

4 Findings

4.1 Hypothesis 1: If selective migration was the reason for the drop in educational level and if migration was predominantly male, then we would see that the drop in primary education would be seen only for males, and not for females.

To test this hypothesis, I examined:

- the population by age and sex in one year age groups;
- survival ratio for males and females by one year age groups; and
- male and female primary education level by birth year.

Examining the population by birth year for males and females at the time of the 1989 and 1999 censuses seem to support the selective migration hypothesis. (See Figure 2 and 3). The male population shows a big drop in the population around the 1978 birth cohort while the female population stays fairly constant across cohorts. Looking at the intercensal cohort survival ratio between 1989 and 1999 confirms this notion. (See Figure 4) Further, Figure 5 shows an increase in proportion female for cohorts born around 1978 from the 1999 Census. This spike in proportion female for these cohorts is not seen in the 1989 Census. Furthermore, the 1989 Census shows a similar peak in proportion female about ten years earlier. These findings support the idea that selective migration may be the reason for the drop in proportion completing primary education.

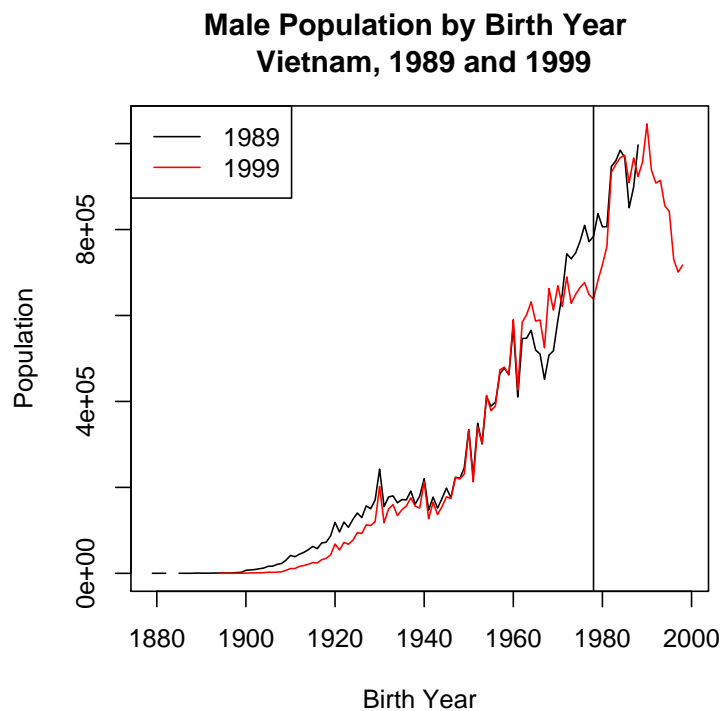


Figure 2: Male population by birth year

**Female Population by Birth Year
Vietnam, 1989 and 1999**

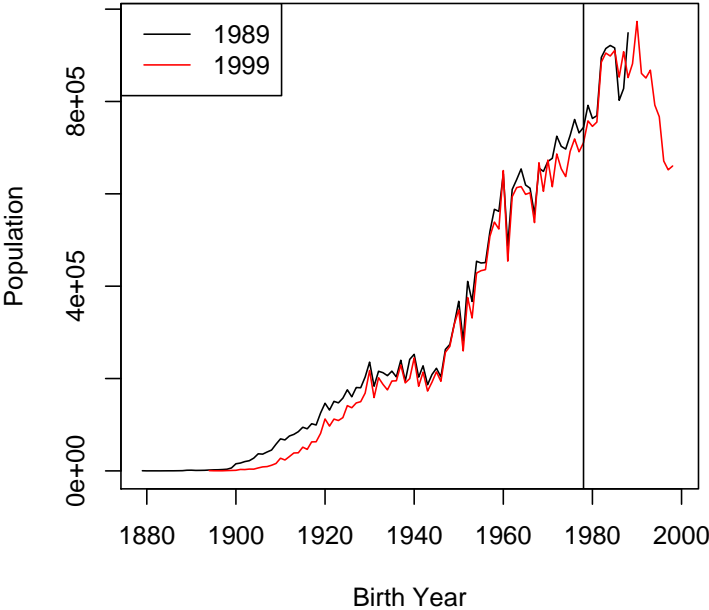


Figure 3: Female population by birth year

**10-Year Cohort Survival Rate by Sex, 1989–1999,
Vietnam**

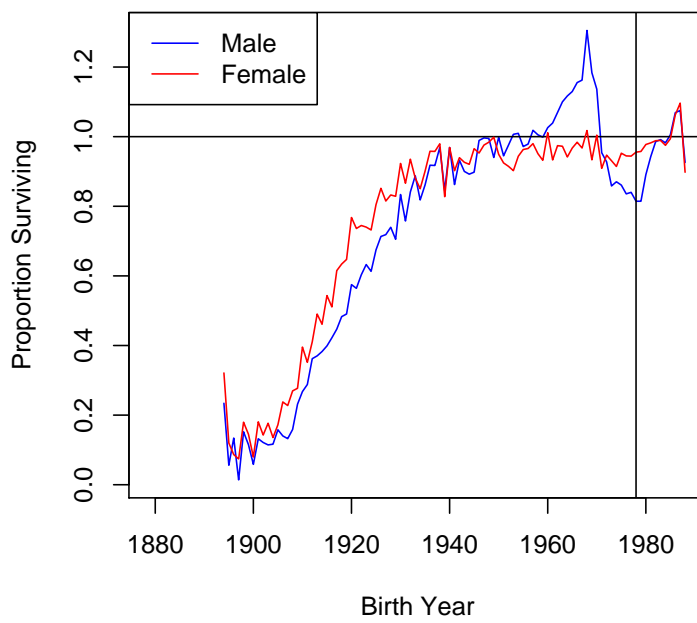


Figure 4: Survival ratios

**Proportion Female by Birth Year,
Vietnam, 1989 and 1999**

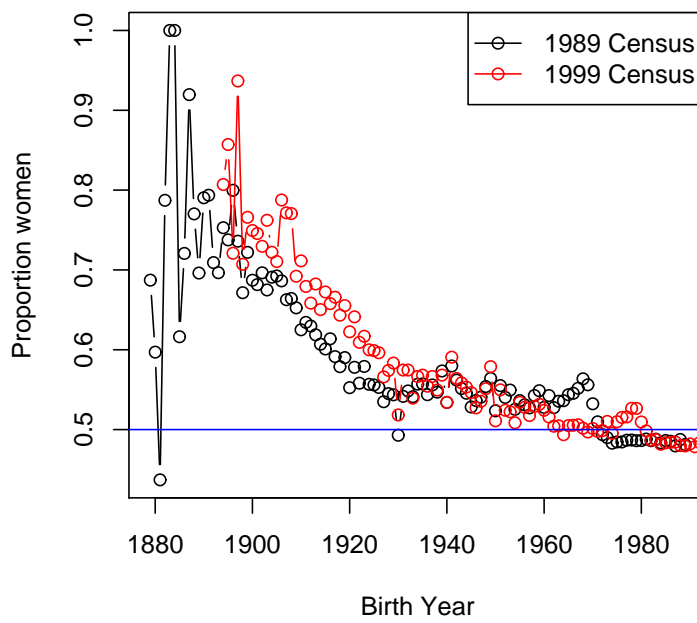


Figure 5: Proportion female by birth year

However, as was seen in Figure 1, cohorts of both sexes show a drop in educational attainment around the birth year 1978 (Figure 1). If emigrants were primarily male, as suggested by the previous figures, the similarity in educational levels between the sexes contradicts the notion that this drop is due to selective migration only.

4.2 Hypothesis 2: If selective migration was the reason for the drop in educational level, and if migration was due to factors such as labor, education, and military service, then we would see that the mean age of the migrants to be fairly constant over time, and that in surveys conducted on other years, we would see a shift in the birth year in which the drop in education occurs.

To test this hypothesis, I looked at Demographic and Health Surveys (DHS) surveys that were conducted in 1997 and 2002.

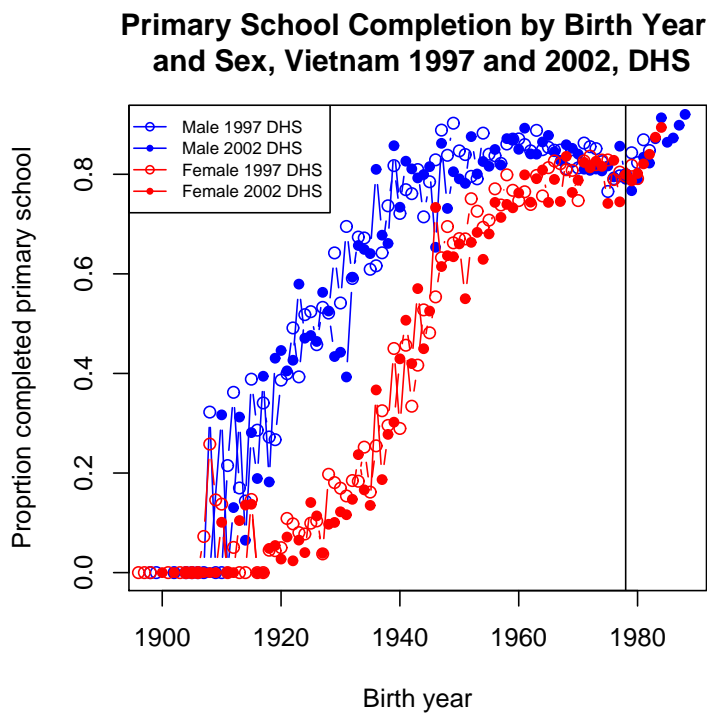


Figure 6: Proportion completing primary school by birth cohort and sex, DHS, 1997 and 2002

DHS results showed that the cohort 1978's drop in primary school completion remained

in the surveys completed in 1997 and 2002. The DHS data also showed that there were no differences by sex in the drop in education for cohorts born around this time.

4.3 Hypothesis 3: If selective migration was the reason for the drop in educational level, then we should see an age pattern in the destination country of the migrants that would mirror the drop in population and a pattern of educational attainment that would be more highly educated than that of Vietnam.

First, the sex and age distribution of the Vietnam-born population in the U.S. was examined to see whether the mean age of this population was centered around the birth year of 1978 and whether it was disproportionately male. The U.S. hosts 64 percent of the refugees from Vietnam who left the country after 1975. The results showed that there is a peak in the the Vietnam-born population centering around the cohort born in 1975. The number of Vietnam-born population after 1975 sharply drops. Furthermore, there are no big differences between males and females in the 1978 cohort. The result does not support selective migration as a way to explain the reduced educational attainment in Vietnam since we would have expected a peak in the 1978 male Vietnam-born population in the U.S. where there is a trough in the Vietnamese population. However, it also does not rule out selective migration as a factor since U.S. may not be the most common destination country for temporary migrants, students, and military personnel.

Second, the educational attainment of Vietnam-born residents who immigrated to the United States as adults was examined to see whether the educational attainment of the U.S. Vietnamese were higher than their counterparts in Vietnam. Since we are interested in their educational attainment in Vietnam, only those who migrated to the U.S. as adults were included. The results showed that the proportion completing 5th grade or higher among the Vietnam born population in the U.S. was higher than that seen in Vietnam. Hence, this supports the idea of selective migration.

5 Conclusion

The results showed that selective migration may be a significant factor in the drop in primary education. However, migration is likely not the only factor that can explain this decline and contradictory evidence was found to support the selective migration hypotheses. If not selective migration, then what? We may be able to see whether the census data may be consistent with some of the other hypotheses that have been explored by other authors. [3]

Figure 1 showed that there is a decline in proportion completing primary education for both males and females centered around the birth cohort of 1978. This means that they were about ten years old when market reforms were first implemented in 1988. While information on child labor was not available from the census data, analysis done on the

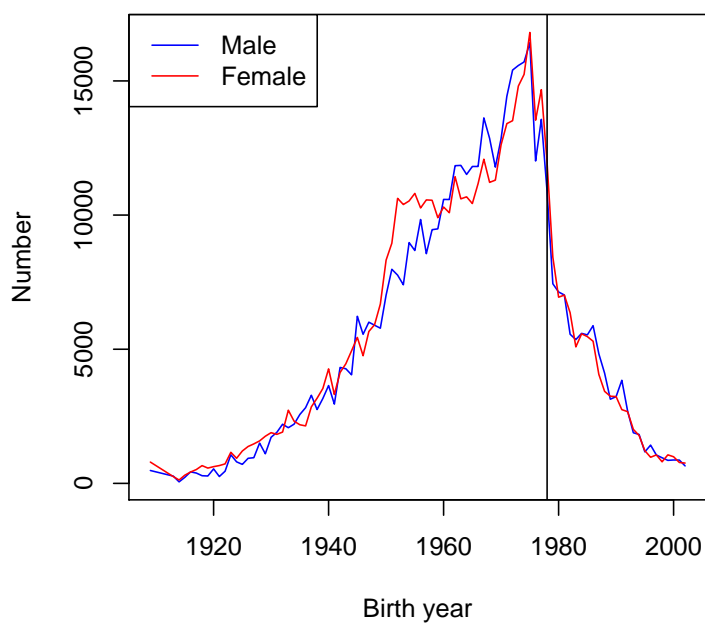


Figure 7: Age and sex distribution of the Vietnam-born population in the U.S., 2000

**Proportion completing ≥ 5 th grade, Vietnam-born,
immigrated at age 18+, U.S., 2000**

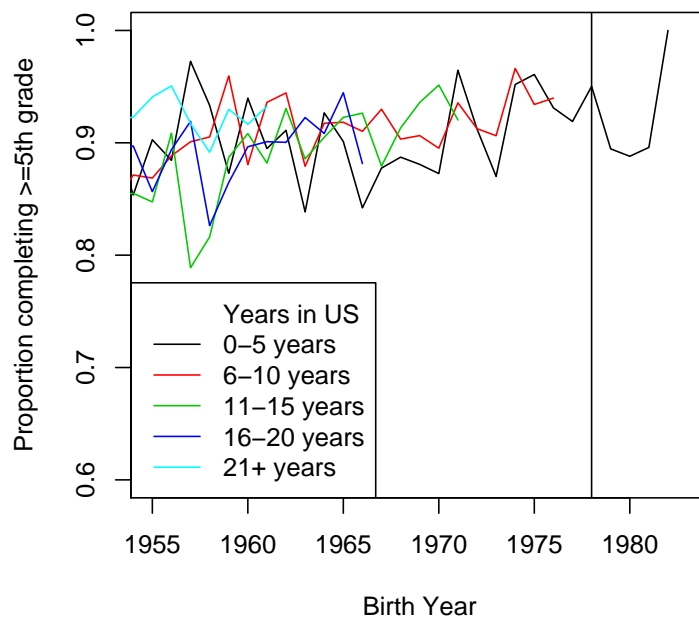


Figure 8: Proportion completing primary school by birth cohort, adult immigrants only

1992-1993 Vietnam Living Standards Survey show that labor force participation of 6-11 year olds increased starting around 1986 and peaked around 1991. [3]. If increase in child labor were to explain the drop in primary education, then the drop should be centered around cohorts born between 1980-1985. However, as can be seen in Figure 1, by birth year of 1985, the cohorts have recovered from the drop. Therefore, the child labor argument may not explain the drop in educational level.

The census data do not have any indicators that would allow me to evaluate the quality of education or the job prospects of better-educated workers. However, the census may shed some light on whether introduction of school fees may have been associated with the decline in primary school completion. The fees were instituted in 1989. If the majority of the students started primary school at age 6, then they would have finished primary school by 1989, just before the fees were introduced. Therefore, while the fees may have had some effect on the cohorts born between 1979 to 1983, it does not seem likely that this would be the reason for decrease in primary education completion.

This study explored various factors that may explain the drop in education levels in cohorts born around 1978. While selective migration is the likely reason why we see the pattern in 1999, questions still remain as to what other mechanisms may underlie the decline in primary education for cohorts born around 1978.

References

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