

Health Insurance Reform Impact on Children's Educational Attainment: Evidence from Vietnam

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Abstract

Research has shown that parental health shocks and child health status each exert measurable effects on child educational attainment, particularly in low-middle income countries. In 2005, the Vietnamese government enacted a new health insurance policy increasing the proportion of population covered by health insurance from 22% of total population to approximately 43%. Using a quasi-experimental setup and a difference-in-differences (DID) approach, this paper examines the effects of health insurance reforms on children's educational outcomes. Because households in the state sector were almost unaffected before and after the reform, children in that group served as a natural control group, whereas children growing up in non-state employed households formed a treatment group. Educational outcomes were measured for three levels of general education: primary, secondary and high school. Results showed that the NHI reform improved educational outcomes for children in high school, both in terms of enrollment and school completion likelihood. Furthermore, it was shown that children from minority groups, females, those in rural areas, and those from poorer families were less likely to derive the same educational outcomes when compared to their counterparts. These findings are the first of their kind using the VHLSS survey data and would be of value to policy makers in countries that plan to adopt a similar health policy.

JEL Classification: I13, I18, I24

Key words: national health insurance, public policy, difference-in-differences, educational attainment

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Extended Abstract

Vietnam is a global success story among the low-middle income countries when considering economic growth, human capital development, education and healthcare. Vietnam opened to international trade in 1986, but the benefits were not fully realized until the 1990's when growth accelerated sharply. World Bank (2018) data shows a positive GDP growth rate since 1990, with only three minor upsets to a stable trend, 1990, 1999 and 2008. In the 2000s, Vietnam maintained an average annual growth rate of about 8%, one of the highest in the world. In terms of education, Vietnam has also made great improvements, such as the period 2001-2012, where the rate of enrollment increased rapidly. Pre-primary level enrollment (under 5 years) increased from 72% to 98%, primary increased from 94% to 97%, secondary increased from 70% to 85%, and high school grew from 33% to 50% (UNESCO, 2015).

Nationalized Health Insurance (NHI) is a monumental policy decision for governments to undertake, and it is now a pillar of the social protection policy of the Vietnamese central government. The goal of NHI was to increase the proportion of population covered, and produce universal cover for all citizens. Between 1992 and 2010, the NHI scheme experienced three major reforms (1998, 2005 and 2009), the biggest one being the second one in 2005 (July 1, 2005: 63/2005/ND-CP). The new NHI policy in 2005 required that people in the non-state sector, including workers in non-state enterprises of more than one employee, economic cooperatives, war veterans and people in poor households, participate in the NHI scheme. Employees that worked in the state sector were covered by NHI before 2005. After the implementation of the 2005 NHI policy, the percentage of population covered doubled, from around 22% in 2004, to around 43% in 2006. For this reason, it is expected that NHI reform data, pre-post 2005, may yield a useful natural experiment to examine NHI effects.

This paper is one of the first studies to use household level data from Vietnam to evaluate the effects of the 2005 NHI reform on children's educational outcomes. Indicators will be school enrollment and school completion data across three levels of education: primary, secondary and high school. Differences between households in the state sector (control group) and non-state sector (treatment group) will be used to perform the tests. This paper contributes to the growing literature on the topic of NHI policy and educational outcomes. It provides a valuable insight into the spillover impact that NHI has on children's educational attainment.

Using the quasi-experimental difference in differences approach and later the PSM-DID method, the impact of NHI reform on children's educational outcome was measured. Two groups, a control and treatment group were defined and tested across three levels of education (primary, secondary and high school). The results showed that while there was no direct evidence connecting NHI implementation and children's educational outcomes for the two youngest groups (primary and secondary), there was strong evidence of a positive effect on high school students, in both enrollment rates and grade completion.

This paper's findings are compatible with the conclusions reached by Mendolia et al. (2019) where children aged 15-18 were the most vulnerable age group when considering negative effects of parental health shocks. Furthermore, this result is consistent with the conclusions of Cohodes et al. (2016) where expanding NHI coverage for low-income children increased the rate of high school and college completion. The labor market in Vietnam prohibits employment of individuals under 15, meaning that they are not subject to health or economic shocks. Because of the regulations it is very challenging for under 15s to find paid employment, and so they are more likely to be in education.

This paper also uncovered the fact that children from minority ethnicity groups, those living in rural areas, poor families and female children were less likely to obtain the educational benefits from NHI implementation compared to their counterpart groups. These results are similar to of previous literature on the topic by Phuong (2006); Mont and Nguyen (2013); Dang and Rogers (2015); Giang and Cuong (2017).

NHI does not just play an important role in healthcare provision, this study shows the effect it has on educational attainment for the young, through its reduction of healthcare burden (health shocks) and financial burden (loss of income, or loss of income provider). Not only this, but it also brings benefits to the size and quality of the labor pool, improving productivity. These reduced health and financial risks lead to improvements in parental finances, which also impact educational outcomes. This study on Vietnam found consistent evidence that the NHI expansion reduced household financial burdens due to health shocks, and increased both labor supply and productivity. Our findings are the first of their kind using the VHLSS survey data and would be of value to policy makers in countries that plan to adopt a similar health policy in developing countries.