Chapter 4 Educational Renovation in a Restructuring Society: Vietnam's Case Study



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Abstract In Vietnam's society where the economy is under restructuring into a market one, the renovation of education started in 1982 and the comprehensive educational renovation have created huge changes in the national educational system in 2001. The educational renovation has been led by the Vietnam Communist Party's (CPV) policy course, regulated by the country's legislation and has opened up education opportunities, reduced social inequality in education, and changing educational level structure. A number of studies have clarified factors of educational opportunities and their relationship to the human resource and economy, but these studies are relevant mainly to societies with developed and developing market economy. Therefore, based on the systematical theory approach and literature analysis method, this paper concentrates on clarifying the education renovation triangle comprising education policy, education opportunity, and educational level in a society restructuring into a market economy in Vietnam.

Keywords Education \cdot Opportunity \cdot The educational renovation \cdot Education opportunities \cdot Reduce social inequality in education \cdot Restructuring society \cdot Vietnam

1 Introduction

In 1986, Vietnam officially started its economic renovation from a centrally, commanded, administrative economy to a market-guided economy in a society of more than 61.1 million population, among them 19.3% living in urban areas and over 80.7% living in rural areas (GSO Vietnam, 2006, p. 117). In 1986, there were 96

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universities and colleges in the country with 19.2 thousand of teachers and 91.2 thousand of students. On average, there were 15 students among 10 thousand population. In general education including primary and secondary education, there were 13.7 thousand of schools, 426.2 thousands of teachers, and 12.5 millions of pupils making average of 2045 pupils among 10 thousand of population. The annual average GDP (at converted price) was USD 86. Agriculture shared the biggest portion 38.2% to GDP, while industry was of 28.9% and service sector was of 33%. The economic structure by the ownership consisted of mainly two sectors: the state sector, accounting for 46.6% GDP and the collective and individual sector accounting for 62.6%. At that time, there was not almost FDI in Vietnam's economy. Vietnam's economic renewal started with the change of thinking and renovation of economic management and social management. During the 1080s in rural areas, there were production management innovations with agricultural output contract system to farm households and peasants. It made the agricultural production increased and hence farmers' livelihood improved. In urban areas, there were also innovations and implementation of so-called plan 2 and plan 3 of collectives and individuals together with plan 1, the State management organs allocated down to production units. The economic and social thinking was renovated in the process where the people were actively seeking for measures and solutions to improve the living condition, increase productivity in all agriculture, industry, and service. The most obvious reflection open in the direction: the people are allowed to do what was not protected by the State and economic activities that assures the benefit to themselves, the collective, community, and the society are accepted and supported. New way of think and do in the socioeconomic life has been institutionalized in the 1986 CPV Congress documents. According to the CPV's renovation course in 1986, the mechanism of command, centrally and subsidized management was criticized and removed. At the same time, the law and mechanism of market economy was required to study and applied into the economic and social management in order to improve the people's life and progress to realize the target of rich people, strong nation, equal, democratic, and civilized society. The most obvious expression of the renovation of think and policy in the restructure of the economy from the structure of mainly two sectors of the state and collective to a multi-sector including domestic individual, private, and FDI sector. According to the General Statistical Office, in 1989, the FDI sector accounted for 2.1% of GDP (at current price), the state sector accounted for 33.4%, and the non-state sector accounted for 64.5% (GSO Vietnam, 2006, p. 117). The rate of the FDI sector increased very fast and reached almost 16% of the GDP in 2005. Among the non-state sector, the rate of the collective sector including agricultural cooperatives dropped rapidly to less than 1% and the rest made by the individual and private sector.

During twenty renovation years (1986–2005), the growth rate of GDP in Vietnam was of 6.8% annually, of which the state sector was of 6.4% and that of the non-state sector was 5.8% per year; the FDI sector grew at 22.7% annually in 1990–2005. In 2005, the population of Vietnam was more than 83 million people of them about 30% people live in urban areas, the rest of 70% live in rural areas. GDP per capita at converted price was of USD 638 (GSO Vietnam, 2006, p. 117). By 2018, GDP the per capita (at interbank average exchange rate) was estimated as much as USD 2590

(GSO Vietnam, 2019, p. 91, 185, 190). Table 4.1 presents many of the market-trend changes in Vietnam's socioeconomic context, poverty reduction, and improvement in the livelihood of the people. For example, GDP per capita increased from 86 USD in 1986 to 2590 USD in 2018, the general poverty rate by residence reduced from 58% to nearly 7% in the same period (GSO Vietnam, 2006, p. 117; GSO Vietnam, 2019, p. 91, 185, 190).

A question can be raised that in a society of economy restructuring to a market oriented with such changes as presented (see Table 4.1), how education renovation takes place? The answer relates to the relationship triangle of renovation in educational policy, opportunities of the citizen, and education level structure of the labor force in a restructuring society. The research of these three contents of the educational renovation may support available findings in the corelation of education and economy and, at the same time, add new knowledge to present researches that pay less attention on educational policy. The present researches emphasize the role of technical economic factors such as income, expenditure, but neglect social and cultural element including the right for learning and policy on educational reform. The basic conception of this paper can be summarized as follows: First, we can find expressions of educational renovation in educational reform policies and educational renovation is laid down in the CPV course and institutionalized in the State legislation on education. This is because in Vietnam, the CPV plays the leading role, the State manages, and the people own through their participation in the implementation of the provisions in the educational policies and law. Second, the educational renovation is most clearly reflected in the opening up education opportunities and reduction of inequality in education opportunities among social groups. Third, the educational renovation make changes in the educational level structure of the labor force and in turn, the highly educated labor force becomes the motivation of the economy to work by the market mechanism.

Table 4.1 Vietnam's selected socioeconomic indicators, year 1986–2018

Indicators	1986	1995	2005	2010	2015	2018
Population (mil. Persons)	61.1	72.0	83.1	86.9	91.7	94.7
Urban population (%)	19.3	20.7	26.9	30.5	33.9	35.7
Rural population (%)	80.7	79.3	73.1	69.5	66.1	64.3
GDP per capita (USD, in current exchange rate)	86	288	638	1273	2109	2590
The structure of GDP, in which	100	100	100	100	100	100
State (%)	39.7	40.2	38.4	29.3	28.7	27.7
Non-state (%)	60.3	53.5	45.7	43.0	43.2	42.1
Foreign direct investment (%)	-	6.3	15.9	15.2	18.6	20.3
The GDP growth rate compared with previous year (%)	2.8	9.5	8.4	6.4	6.7	7.1
General poverty rate by residence (%)	58.2*	37.4**	19.5	14.2	7.0	6.8***

Note: (*) data in 1993, (**) data in 1997, (***) multidimensional poverty

Source: GSO Vietnam (2006). *Vietnam – 20 Years of Renovation and Development.* Statistical Publishing House, Hanoi, Vietnam, 2006: 117; GSO Vietnam (2019). *Statistical Yearbook 2018*, Statistical Publishing House, Hanoi, Vietnam, 2019: 91, 185, 190

There are many experimental and theoretical researches on the socioeconomic elements of individuals, households, and communities affecting educational opportunities and the role of education for economic growth (Schultz, 1961, p. 1–17; Schultz, 1988; Becker, 1964; Psacharopoulos & Patrinos, 2004, p. 111–134; Sen, 1999; Acemoglu & Robinson, 2013; Zimmerman, 2001, pp. 87–98; Truong, Thai, & Bach, 1999, pp. 115–131; Vo et al., 2001, pp. 177–192; Handa, 2002, pp. 103–128; Iddrisu, 2014, pp. 145–156; Ravallion & Wodon, 2000, pp. C158-C175; Connelly & Zheng, 2003, pp. 379–388; Gharajedaghi, 2005, pp. 81–134, Le, 2015, pp. 235–248; Bui, Cao, Nguyen, Tran, & Haughton, 2001, pp. 91–108; Daren, 2017, pp. 177-192). Education is stemmed depending on macroeconomic elements including growth rates of GDP, national income, and the development of public infrastructure including road, electricity, and microeconomic elements such as income, expenditure levels of household, and the most directive the level of spending by individuals and households on education (Truong et al., 1999, pp. 115–131; Vo et al., 2001, pp. 177–192). However, though economic elements are very important but not the only reasons for educational renovation in a modern society including the restructuring one to market economy like in Vietnam (Truong et al., 1999, pp. 115–131; Gharajedaghi, 2005, pp. 81–134; Le, 2015, pp. 235–248). To clarify, the educational renovation triangle requires to study other noneconomic elements especially institution, policy, and legislation on education. According to the theory of Schultz and Becker, investments in education represent an investment in human capital a combination of educated capacities, trained skills capable to increase labor productivity, and thus increase income of working people and firms (Schultz, 1961, pp. 1-17; Schultz, 1988; Becker, 1964). Therefore, individuals, households, firms, and communities may consider, make choice, and prioritize their investments in education and training to improve the human capital. A study of Psacharopoulos and Patrinos found out that primary education created the largest income in lowincome countries with more than 21%, then secondary education with about 16%, and higher education and post upper-secondary education, more than 11% (Psacharopoulos & Patrinos, 2004, pp. 111–134). This may explain why in a restructuring society like in Vietnam many households spend much for their children's education as best as they can so that their children can go for university education. According to Amartya Sen, development as the right for freedom, that is why, to develop the society need to respect, protect, and create conditions for their people to realize the right to work, manage, and access to social services including freedom to access to educational and training (Sen, 1999). To Acemoglu and Robinson, an extractive policy prevents people from participation in a social process is a reason of poverty and slow development. An inclusive policy that may mobilize all people to get involved in the development process is a reason of property and wealthy of a nation (Acemoglu & Robinson, 2013). Therefore, we can consider an inclusive policy that respects the right to learn and creates conditions to widen and realize the right of the people to learn as a direct reason for changes and development of education in reality. This issue opens the requirement of seeking for the root of education renovation in reform, renovation in educational policies in Vietnam.

An important index of educational opportunity is the rate of children going for education of different levels at the right age calculated at percentage of the

population of the age X studying at X grade among the population of X grade age. A number of empirical studies found out factors influencing educational opportunities comprising family such as income level (Zimmerman, 2001, pp. 87–98; Truong et al., 1999, pp. 115-131; Vo et al., 2001, pp. 177-192), parental education (Truong et al., 1999, pp. 115–131; Vo et al., 2001, pp. 177–192; Handa, 2002, pp. 103–128; Iddrisu, 2014, pp. 145–1), individual elements of children such as age, sex, child labor (Truong et al., 1999, pp. 115-131; Iddrisu, 2014, pp. 145-156; Ravallion & Wodon, 2000, pp. C158-C175; Connelly & Zheng, 2003, pp. 379–388), and locality (Truong et al., 1999, pp. 115–131; Vo et al., 2001, pp. 177–192;; Connelly & Zheng, 2003, pp. 379–388). Based on regression analysis, for example logistic model (Truong et al., 1999, pp. 115-131; Vo et al., 2001, pp. 177-192), these studies pointed out the impact of the factors like age, sex, family income, and locality where children are living on their schooling opportunities. However, these studies might not do the assessment schooling opportunities in the relation to the whole national educational system where the lower learning grades provide the foundation and inputs for the upper education and learning grades that in turn are the outputs of the lower grades. There needs to apply a systematical theoretical approach to look at educational opportunities in the national educational system and between this system and educational institution, policies, and the labor market system (Gharajedaghi, 2005, pp. 81–134; Le, 2015, pp. 235–248). There possibly schooling opportunities for lower grades like lower-secondary, depend on the opportunity for going to upper-secondary schooling and in turn, the schooling opportunity for uppersecondary depends on the opportunity to go for university education. Because, according to the theory of investment in education by Shultz and Becker (Schultz, 1961, pp. 1–17; Schultz, 1988; Becker, 1964), making decision on schooling always considers expected benefits which are the opportunity to go for further higher education in the future. A lower-secondary student may drop out at any time if he or she finds that there will not be any opportunity to go for grade 10. This may often happen in rural areas where there is tough competition for admission in grade 10 in public schools. This situation may be similar to upper-secondary education: uppersecondary students may easily quit when they see no opportunity to be admitted in a university. While looking at educational opportunities, in the only national educational system from primary to tertiary, one can find out that the outputs of lower grades are inputs of higher grades. That is why, when conditions to enter higher grades are easy, then the schooling opportunities for higher grades will increase. Under the educational renovation in Vietnam, it will be possible that the renewing the method of university recruitment in the direction of increasing the quantity will provide more opportunities for secondary schooling. Some studies found out that education increases income through two levels of impact, at microlevel on health condition improvement, human capital and labor productivity and at macro level, on the level of participation in social labor force, improvement of technical, professional levels of labor force (Bui et al., 2001, pp. 91–108; Daren, 2017, pp. 177–192). In turn, the expectation of multidimensional benefits from education represents an element to increase investments in education and schooling opportunities. In the relation of education to the society, the opening up of university opportunities makes direct change in the structure of professional and technical levels to meet the

requirement of the labor market. A society restructuring to a market induces stratification of labor market into types of labor market corresponding to technical levels. Global integration and industrialization and modernization of the country require the structure of the labor market to change accordingly in the direction of increasing the proportion of university, post-university, and college-educated laborers. In short, the empirical and theoretical researches from different corners have clarified every relation between the economy and education, household and education, social community and education, and between education and human capital development and between education and economic growth. However, few researches use systematically theoretical approach to look at the whole triangle of the relations among the renovation of educational policies and renovation of educational opportunities and educational level structure in a market-oriented restructuring society. Therefore, this paper lays down the study objective to clarify this triangle of educational renovation by basing on the analysis of policy data and statistics of population, household, and livelihood consensus in Vietnam.

2 Methodology

This researchuses a qualitative method, namely document analysis method (Browen, 2009, pp. 27-40), where documents have been collected, processed, and analyzed as social facts. The document analysis method have had different advantages such as efficiency, availability, cost-effectiveness, lack of obtrusiveness and reactivity, stability, exactness, and coverage (Browen, 2009, pp. 27–40; Yin, 1994). However, to use this method, one needs to be careful because this method may also have some disadvantages like insufficient details, low retrievability, and biased selectivity (Browen, 2009, pp. 27–40; Yin, 1994). To do a case study of Vietnam on educational renovation in a market-oriented restructuring society, the advantages of document analysis method is prioritized because the study issue requires to collect and process data from two sources. First, a qualitative data source consists of contents of educational institutional renovation of the government and CPV. These documents are (i) Resolutions of CPV's congresses and conferences on the socioeconomic renovation including those on educational renovation (every five years from 1982 to 2016) (Political report presented at the CPV Congress, 1982, 1986, 1991, 1996, 2001, 2006, 2011), (ii) Laws on education including the Law on Children Protection, Care and Education, 1991, The Law on Compulsory Primary Education, 1991, The LOEs in Law on Education, 1998, Law on Education, 2005, The Law on High Education, 2012, and The Law on Vocational Education and Training, 2014. These documents provide the qualitative facts on the right, responsibility, and duty to learning of Vietnamese citizens and the responsibilities of related parties such as the State, Government in the educational renovation in order to realize the objective of education in improving the people knowledge, educating human resources and talents for the country. According to institutionalism, renovating educational policy represents the reason of changes in education consisting of changes in education opportunities and changes in educational levels of the population. That is why a list of Keywords reflecting the renewal of the educational policy is used to analyze the content of these documents. These Keywords are "reform", "renovation", "compulsory education", "diversification", "public school", "semi-public," and "private" school.

Second, the quantitative source presented in the publications of the results of (i) The Population and housing consensus in Vietnam (every 10 years from 1979 to 2019); (ii) The Survey on the people livelihood in Vietnam (every 2 years from 1992 to 2016), and (iii) Surveys and researches relating to educational renovation. These documents provide the quantitative facts on rates of children going to school at the right age for deferent grades from primary to tertiary by sex, nation groups, locality, and the structure of educational levels of the population of age 15 and above. The quantitative facts are processed and analyzed, compared in percentage with the average rates to clarify differences if any, for example by gender, minority groups, locality relating to educational opportunities and levels (Haughton, 2001, pp. 23–24).

3 Results

3.1 Educational Policy Renovation, Opportunity of Going to School and Educational Level

3.1.1 Educational Policy Reform and Renovation

The following is a summary of basic contents of the education renovation process in Vietnam, starting from the educational reform in 1976 to the fundamental and comprehensive education renovation from 2011 until now.

- There are eight political reports presented at the CPV's conferences taking place from 1982 to 2016 (Political report presented at the CPV Congress, 1982, 1986, 1991, 1996, 2001, 2006, 2011, 2016). Among these eight documents, one report was made in 1982 before the start of the renovation (Political report presented at the CPV Congress, 1982) and the other seven were made during the socioeconomic renovation from 1986 to 2016 (Political report presented at the CPV Congress, 1986, 1991, 1996, 2001, 2006, 2011, 2016).
- Education was reformed during the 1976–1981 five-year Plan (Political report presented at the CPV Congress, 1982). The objective of the educational reform was educating new qualified working people to meet the requirements of the economic and cultural development of the country. Reforming education to realize the principle of learning linked to practice, education linked to production, school linked to society. The educational reform consists of reforming the pedagogical system, completing the system of the national education including public education, the system of tertiary and technical and vocational training schools. The reform was continued in 1981–1986. In 1986–2000, the reform was wrapped up, drawn experience, and adjusted and improved the quality of the reform. Educational reforms start with reforming teaching methods, reforming training

teachers, and education management staffs and reaches to the reforming of policies for teachers (Political report presented at the CPV Congress, 1986, 1991, 1996). In 2001–2005, after drawing experience, Vietnam concentrated in reforming the content and method of educating, reforming the system of schools, classes, and the system of education management in the direction of "standardization, modernization and socialization", "education for all", "the whole country becomes a learning society", giving more attention to profession orientation and categorizing secondary pupils (Political report presented at the CPV Congress, 2001). In 2006–2010, education was renovated in a comprehensive manner including organizational structure, management mechanism, educational contents, and methods. At the same time, the renovation was centered in renovating basic grades of the national educational system – preschool education and tertiary education in order to directly realize the objective of educating highly qualified human resources for the country (Political report presented at the CPV Congress, 2006). From 2011 until now, education has been fundamentally and comprehensively renovated including the renovation of the objectives of education from giving more importance to teaching knowledge to more attention given to qualification and ability development of learners; renovating from education contents, forms, methods to examination methods; renovating from organizational, management structure to educating teachers and radically renovating essential elements of the national educational system in the direction of open educational system, life learning, and building up a learning society (Political report presented at the CPV Congress, 2011, 2016).

- The learning right and duty of Vietnamese citizens is recognized and implemented through the compulsory policy of the State and officially has been started in 1981. In the 1981–2000 period, the compulsory policy was concentrated in compulsory primary education for children of 6–14 age in nationally and linked to the target of illiteracy fight and then moved to lower-secondary compulsory in regions of better conditions, especially where it strongly developed the commodity economy. In 2000, Vietnam completed compulsory primary education and in 2011, it completed the compulsory lower-secondary education in all cities and provinces.
- In 1986, before the start of the renovation and during the first years of it, and by the year 1990, there was only one type of public schools in Vietnam and they were owned, invested, and managed by the state. In 1991–2000, schools started to be diversified and as a result, there were other types of schools semi-state and people-set and private ones. Since 2001, education has been organized with three main types of schools: public, people-run and private ones, and foreign-invested schools.

The educational renovation linked to the learning right of Vietnamese citizens and duty of related parties to ensure this right be institutionalized in the Law on Education (LOE) of Vietnam. The task of making the law was stated in the Resolution of the CPV Congress VI in 1986. In 1991, Vietnam issued two laws: the Law on Children Protection, Care and Education in 1991 and The Law on

Compulsory Primary Education in 1991. According to the provision of these two laws, children under 16 age are Vietnamese citizens; The State guarantees their learning right, encourages them to study well, and creates conditions for their talent development; The State implements the policy on compulsory primary education from grade one to grade 5 for all Vietnamese children of 6 to 14 ages. A child of 6 age shall go to grade 1 from the right beginning of the school year and finish primary school before 15 age. The primary education shall take place in state-owned primary schools, classes, and other types of people-created. The pupils of stateowned school and class do not have to pay fees. So, since 1991, according to these laws, social equality and justice in primary educational opportunities of children of 6 to 15 ages have been recognized by the law and realized by the compulsory primary education policy. However, the provision of two types of state and non-state primary education whereby those children study in state schools do not pay fees may induce the danger of inequality between state and non-state primary education. Both of these laws have been replaced by the LOE promulgated in 1998 and became valid in June 1 of 1999. The LOE in 1998 was replaced by the LOE in 2005. It is noteworthy that many contents of educational renovation on the learning right and renovation of the national educational system stated in the CPV's course have been institutionalized in the provision of LOEs in 1998 and 2005, The Law on Higher Education (LOHE) in 2012, and the Law on Vocational Training in 2014, as specifically as follows.

- Education and training provide the number-one national policy: this conception is written in the foreword of the LOE in 1998 and institutionalized in provisions of the LOE in 2005, Article 9: Education development is the number-one national policy to improve the people's knowledge, educate human resource, and train talent (Law on education, 2005).
- Learning right and equality in learning opportunity of the citizen: Both LOE 1998 and LOE 2005 provide: "Learning is the right and duty of the citizen. All citizen regardless minority group, religion, sex, family root, social status, economic condition are equal in learning opportunity" (Law on Education, 1998, 2005).
- Education compulsory. The LOE 1998 provides that the State decides the plan
 and the level of public education but does not clearly provide what kind of educational levels. The LOE 2005 clearly provides that the primary and lowersecondary education is compulsory (Law on Education, 2005). However, the
 State has had the plan of implementing the primary education compulsory and
 then lower-secondary education where the condition allows.
- A modern national educational system (NES). Issuing the LOE 1998 allows
 Vietnam first time to complete the construction of a modern national educational
 system with fully educational grades and training levels. This has further been
 institutionalized in the LOE 2005, to which the NES consists of formal and informal education; The NES comprises the following grades and levels: the preschool education includes kindergarten and the preschool, general education
 comprises the primary and secondary (lower- and upper-secondary), professional

training comprises technical and vocational, and tertiary education is of college, university, master, and doctorate (Law on Education, 1998, 2005).

- Diversifying forms of educational organizations: quite different from before the Renewal when the education was organized in the only form of public schools, the LOE 1998 provides four forms including the public, semi-public, people-set, and private ones. The LOE 2005 provides three forms of education: public schools set up and invested by the State, the people-settings are created and invested by the local people's communities, and the private ones are set up and invested by social, socio-professional associations, economic organizations, or by individuals. Regarding tertiary education before the renewal in 1986, there were only public universities in Vietnam, but during the renewal process, there were some other forms of nonpublic universities. The LOHE 2012 provides three forms of universities (Law on High Education, 2012). They are (i) public universities are owned, invested in the construction of physical utilities; (ii) Private universities are owned, invested in the construction of physical utilities by social, socio-professional associations, private economic organizations by individuals, and (iii) Foreign investment universities are with 100% of foreign investments and the universities with joint stocks by foreign and domestic investors. As one of the grades of the NES, professional education is of four forms similar to those of the university education. The Law on Vocational Education and Training (LVET) provides that national education systems consist of (i) the public, (ii) private, (iii) foreign invested professional units which are with 100% of foreign investments, and (iv) the universities with joint stocks by foreign and domestic investors (Law on Vocational Education and Training, 2014).
- Educational streaming. The LOE 1998 does not mention about "streamline of students", but LOE in 2005 provides educational program creating condition for its streaming. The LVET in 2014 clearly provides that the State has had a policy on streaming students finishing secondary schools to continue vocation education and training relevant to every period of the socioeconomic development (Law on Vocational Education and Training, 2014).

3.1.2 Educational Opportunity: Gender Equality and Difference among Ethnic Groups

The results of the implementation the CPV's policy course, state's legislation on the educational renovation in order to open up more education opportunities and ensure the equality in learning opportunities for all Vietnamese citizen are reflected clearly in the statistic on the rate of schooling at the right age of grades of all general, college, and university. According to the institutional approach, the renovation in the CPV's educational policy in 1986, 1991, 1996 together with the Law on Compulsory Education (1991), The Law on Children Protection, Care and Education (1991), and The Law on Education (1998) provides convenient educational institution for opening more education opportunities. For example, the net primary school enrolment rate increases from 78% in 1993 to 95.5% in 2009. The net lower- secondary school

enrolment rate increases from 36% to about 83% and the net upper-secondary school enrolment rate increases from 11% to about 57%. The renovation in educational policy including the Law on University Education promotes the opening up of education opportunities for all social groups from 2009 to 2016.

Table 4.2 indicates the rate of schooling at the right age of the Viet people and other five minority groups – Tay, Thai, Muong, Khmer, and Hmong (these five groups have had the biggest number of population among the 53 minority groups in Vietnam).

Table 4.2 presents the percentage as compared with national average as much as of 100, for easier and more precise comparison (Haughton, 2001, pp. 23–24). In 2009, the national rate of the right-age schooling was 95.5%; the rates of male and female were similar and equal to those of the nation (column 2, Table 4.2). This point proves that in 2009, Vietnam obtained the objectives of education compulsory and gender equality in the primary education. Three ethnic groups, Viet, Tay, and Thai, obtained the objective of compulsory primary education while the Khmer obtained only 90% of the nation rate. The Hmong got the lowest rate, 76% of the national average. Columns 3, 4, 5, and 6 of Table 4.2 show that in 2009, Vietnam got the gender equality in all primary, secondary, and tertiary education; however, as far as it goes to higher levels, the rates of right-age schooling of male and female and ethnic groups decrease strongly. Viet people has had the higher rate than the national average while the rates of other groups are lower than the national average and decreased for upper-secondary, tertiary levels. Especially, this rate for Hmong people was of only 41.3% of the national average for the general level and 11.6% for

Table 4.2 Net school enrolment rates by nation and percentage compared with national average by gender and selected ethnic groups, year 2009–2016

Criteria	2009			2016				
	Primary	Lower secondary	Upper secondary	College	University	Primary	Lower secondary	Upper secondary
Nation	95.5	82.6	56.7	6.7	9.6	97	90.4	68.6
National average	100	100	100	100	100	100	100	100
Gender								
Male	100	98.6	93.7	89.6	94.8	100.1	98.8	92.9
Female	99.9	101.6	106.9	110.5	105.2	100	101.3	107.3
Ethnic gr	oups							
Viet	101.1	105.0	109.0	114.9	115.6	100.5	103.1	109.6
Tay	102.1	106.1	97.9	44.8	33.3	101.1	102.4	101.2
Thai	97.1	88.7	52.7	23.9	11.5	100.8	98.9	66.8
Muong	100.2	100.8	73.0	19.4	17.7	98.1	104.5	95.5
Khmer	90.5	56.1	27.2	13.4	11.5	97.7	78.3	46.4
Hmong	76.0	41.3	11.6	3.0	2.1	93.9	70.0	36.4

Source: The Ministry of Planning and Investment – GSO Vietnam (2011). Vietnam Census on Population and Housing 2009 - Education in Vietnam: the analysis of basic indicators, Statistical Publishing House, Hanoi, Vietnam 2011: 36; GSO Vietnam (2018a, 2018b). Vietnam living standard survey 2016, Statistical Publishing House, Hanoi, Vietnam, 2018: 118

college and 2–3% for university. This means that the gag between Viet people and Hmong people widens by grade, from preschool to university. The rate of Viet people going to primary school was 2.5 times more than that of Hmong people, and 9 times to secondary, 38 to colleges, and 55 times to universities.

In 2016, the national rates of schooling at the right age of both male and female, all ethnic groups increased for all general grades including primary and secondary. Especially, in 2016, the rate of Hmong people going to general schools increased three times as compared with the rate in 2009 and equal to one of Viet people.

3.1.3 Educational Opportunity: Difference among the Urban, Rural, and Economic Geographical Regions

To clarify the renovation in educational opportunities and the difference in the locality, Table 4.3 presents the rate of schooling at the right age of educational grade in 1998 and 2019 of the whole country. The percentages are also divided by rural and urban areas and ecogeographical regions where by the national average is considered as much as 100.

- Column 2 in Table 4.3 shows that in 1998, there was insignificant differences in the rate of schooling at the right age between rural and urban areas. But, the highland (Tay Nguyen) has had the lowest rate of primary schooling at the right age as compared with the rest of five regions and equal to 90% of the national average.
- Column 3 indicates that the lower-secondary schooling rate in rural area was of 93% of the national average and the gap increased as compared with the urban area. The regions of the Highland and Mekong delta have had the lowest rates of lower-secondary schooling at the right age and were equal to 71–73% of the national average and a half of that of the Red River Delta.
- Column 4 shows the differences in upper secondary net enrollment rate between the urban and rural areas which was more than double (191% in the urban and 76% in the rural areas) and the regional inequality increased: The Highland has had the lowest rate (36.8%), equal to slightly more than one-third of the national average and a half of that of the Northern hill and mountain regions (76%). The inequality in university educational opportunity is very obvious. The rate of the urban area is as high as 4 times that in rural area and the rate of rural people going for the university education at the right age was as much as a half of the national average and equal to 5.4%. The Highland has had the lowest rate of people going to universities at the right age, 17% of the national average and one-tenth of the rate of the Red River Delta.
- In 2019, it was witnessed an increase in the education opportunities of all levels from the kindergarten to the university. Columns 6 and 7 indicate that Vietnam completed the compulsory primary education (98%) and lower-secondary education (over 89%). At the same time, the gap between rural and urban areas and among regions decreased and gradually moved closer to the equity.

	1998				2019				
National, urban, rural and Regions	Primary	Lower secondary	Upper secondary	Tertiary	Primary	Lower secondary	Upper secondary	Tertiary	
Nation	92.6	61.6	28.8	9.3	98.0	89.2	68.3	23.4	
National average	100	100	100	100	100	100	100	100	
Urban	103.6	133.0	190.6	229.0	100.3	102.7	111.9	186.3	
Rural	99.4	92.9	76.0	58.1	99.9	98.8	94.3	53.4	
Economic	geographi	c regions							
Northern	103.1	91.6	77.1	57.0	100.1	101.1	95.3	32.9	
Red River delta	103.5	135.6	158.0	174.2	100.8	106.4	122.5	159.8	
North central	99.68	101.8	108.0	96.8	100.4	103.6	108.1	83.3	
Highland	88.9	70.9	36.8	17.2	98.8	92.8	82.6	28.2	
South eastern	101.8	116.4	126.7	149.5	99.7	98.1	94.0	150.4	
Mekong delta	94.7	72.9	60.1	59.14	99.1	92.4	81.07	75.6	

Table 4.3 Net school enrolment rates by nation and percentage compared with national average by urban, rural, and economic geographic regions, year 1998–2016

Note: (*) data 2017

Source: GSO Vietnam (2000). Vietnam Living Standard Survey 1997–1998, Statistical Publishing House, Hanoi, Vietnam, 2000: 50, 52; GSO Vietnam (2018a, 2018b). Survey on population change and family planning on April 1, 2017: Basic results. Statistical Publishing House, Hanoi, Vietnam, 2018: 35; Steering Committee of Population and Housing Census (2019). Census on Population and Housing on April 1, 2019: Organization and preliminary results. Statistical Publishing House, Hanoi, Vietnam, 7. 2019: 55

- Column 8 shows that the rate of upper-secondary schooling at the right age was 68% in 2019 and doubled the rate in 1998. The educational opportunities have been rapidly opened in difficult regions such as doubled in the Highland, and about 30% in the Mekong Delta. But, the opportunities for the upper-secondary education were slowly increased in the Red River Delta and South-Eastern regions. Thus, the difference among regions clearly decreased in 2019 as compared with 1998.
- Column 9 presents facts in 2017 and indicates that the rate of people going for university education at the right age was 23.4%, 2.5 times to that in 1998, a slight increase as compared with the rate of the upper-secondary. However, the gap between the rural and urban areas though narrowed down but is was still large (3.5 times). Similarly, the gap among regions decreased but it was still large: the rate of people going to universities of the Red River Delta was as much as 5.5 times that of the Tay Nguyen (Highland).

3.1.4 Restructuring Education Levels: Gender and Urban – Rural Difference

The opening up of educational opportunities in all educational levels and for all social groups provides the element making changes in the educational level structure of the population in the sense of the output of the national educational system. However, changes in the educational level structure of the population also depend on other elements that need to be interpreted by other theoretical approaches such as the theory of labor market, the theory of labor mobility, and therefore it needs another research. The results of the study should be presented as follows to describe the changes in the levels of education of the population of 15 years and above in a restructuring society to a market economy.

To evaluate the results of education renovation and the gender and local disparities, Table 4.4 presents data on the structure of educational levels of the population over 15 years old. The percentages are compared with the national average considered as 100 by male and female, rural and urban areas in 2006 and 2016.

- Column 2 of Table 4.5 shows that in 2006, there was still 22% of the population of over 15 age "never go to school" or "no certificate" and therefore, resulting in very low human capital; about 53% of them have had compulsory education level and the population having college, university level, and over was 4.5%. So, one person has had university level one or two has had professional level and 19–20 people have no vocational and technical training among them five people have no certificate.
- Column 7 indicates that in 2016, the number of people "never go to school" or having "no certificate" and having "primary education", the rate of "secondary education" increases. The rate of people having "professional level" slightly decreased but being diversified. The rate of population having "university and over level" almost doubled as compared with 2006 and reached 10% in 2016. Thus, on average, one person has had the university and over level one or two has had professional level and nine people have not vocational and technical training. The gender equality gap clearly decreased among the group of university and over level due to the increase of female and the decrease of male.
- In 2016, Vietnam almost obtained the target of gender equality for the university level; however for the secondary level, the gender gap did not decrease but increased because the rate for males increased by 1.5 times while the rate of females increased a little bit.
- A comparison of the urban and rural areas shows that the rural area has had bigger number of the population "never go to school" and "no certificate", doubling the urban area and this disparity did not decrease after 10 years (2006–2016). This is caused by the increased rate of females and slowly decreased rate of male.
- For other levels of education, the difference between the urban and rural area decreased and the fastest for the university level: it was from five times in 2006 down three times in 2016.

	2006					2016				
			% compared with national average 100				% compared with national average 100			
Education		Gender		Area]	Gender	•	Area	
levels	Nation	Male	Female	Urban	Rural	Nation	Male	Female	Urban	Rural
Never go to school	8.1	58.0	138.3	59.3	114.8	5.4	64.8	131.5	46.3	125.9
No certificate	14.5	84.8	113.8	69.0	111.7	12.6	81.8	116.7	66.7	115.9
Primary	24.0	101.7	98.7	80.8	107.5	21.3	98.6	100.9	75.6	111.3
Lower secondary	28.7	105.6	94.8	80.5	107.7	28.2	103.9	96.1	79.1	109.9
Upper secondary	12.6	109.5	91.3	142.9	83.3	15.5	157.1	94.2	131.0	85.2
Primary vocational	3.3	142.4	60.6	172.7	69.7	1.9	157.9	52.6	147.4	84.2
Secondary apprentice	_	-		_	_	1.8	150	55.6	155.6	77.8
College vocational	_	_	-	_	_	0.5	160	40	120	80
Professional secondary	4.3	107.0	93.0	176.7	69.8	3.0	96.7	103.3	146.7	76.7
College, university	4.4	113.6	86.4	247.7	43.2	9.4	101.1	100	196.8	54.3
Post-graduate	0.10	200	100	400	_	0.46	123.9	78.3	276.1	15.2
Other	_	_	_	_	-	0.02	150	100	200	50

Table 4.4 Education levels by the nation's population 15 years old and above and percentage compared with national average by gender and areas, 2006–2016

Source: GSO Vietnam (2018a, 2018b). Vietnam living standard survey 2016, Statistical Publishing House, Hanoi, Vietnam, 2018; 118

3.1.5 Restructuring Education Levels: Difference between the Richest and the Poorest Quintile

Table 4.5 presents data on the educational levels of population over 15 age and percent to the national average stemmed 100 of the richest quintile and poorest quintile in terms of annual per capita income in 2006 and 2016.

- Column 4 of Table 4.5 shows that out of people of the richest quintile, there are still people "never go to school". The rate of this group is about 31% as compared with the national average and the rate of people having college and university levels was as much as three times to the national average.
- Column 5 indicates that the rate of "never go to school" in the poor group was 222% to the national average. The rate of people having college and university levels was 4.5% to the national average.
- In 2006, the disparity between the poor and richest quintiles was most clear when
 the poorest quintile has had the rate of "never go to school" as much as seven
 times higher than that of the richest quintile. The richest quintile has had the rate

Table 4.5 Education levels by the nation's population 15 years old and above and percentage compared with national average by the richest and poorest quintiles, 2006–2016

	2006				2016				
		National average as 100		% compared with national average 100		National	% compared with national average 100		
Education levels	Nation (%)		Richest quintile	Poorest quintile	Nation (in %)	average as 100	Richest quintile	Poorest quintile	
Never go to school	8.1	100	30.9	222.2	5.4	100	20.4	313.0	
No certificate	14.5	100	55.9	137.9	12.6	100	46.0	164.3	
Primary	24.0	100	70.8	112.9	21.3	100	65.3	123.0	
Lower secondary	28.7	100	81.2	93.0	28.2	100	83.7	93.3	
Upper secondary	12.6	100	150.8	51.6	15.5	100	129.7	50.3	
Primary vocational	3.3	100	190.9	21.2	1.9	100	136.8	21.1	
Secondary apprentice	_	_	_	_	1.8	100	161.1	16.7	
College vocational	-	-	_	-	0.5	100	140.0	20.0	
Professional secondary	4.3	100	214.0	16.3	3.0	100	170.0	23.3	
College, university	4.4	100	320.5	4.5	9.4	100	241.5	6.4	
Post- graduate	0.10	100	500	_	0.46	100	343.5	_	
Other	_	_	-	_	0.02	100	300.0	-	

Source: GSO Vietnam (2018a, 2018b). Vietnam living standard survey 2016, Statistical Publishing House, Hanoi, Vietnam, 2018: 118

of "upper secondary" as much as three times as compared with the poorest quintile. The richest–poorest quintile inequality was of the highest rate for the "college and university level", 71 times.

- After ten years, in 2016, the disparity between the richest and poorest quintiles witnessed a change in different directions and levels. The rate of people "never go to school" decreased but the rate of the poorest people "never go to school" increased, resulting in strongly increasing the inequality between these two groups. The rate of the poorest people "never go to school" was as much as 15 times to the richest quintile and this gap doubled after ten years.
- The rate of the richest people having "upper secondary education" was 2.5 times higher than that of the poorest quintile and this gap decreased as compared with 2006.

• The inequality between the richest and poorest quintiles in terms of college and university level decreased almost a half from 71 times in 2006 down to 38 times in 2016.

3.1.6 Restructuring Education Levels: Differences among Economic and Geographical Regions

Table 4.6 presents the structure of educational levels of the population over 15 age and the percentage of economic geographical regions as compared with the national average considered as 100.

• Row 2 of this table shows that the Highland has had the highest rate of people "never go to school", 168% to the national average and the Red River Delta has had the lowest rate, about a half of the national average. The region of Mekong delta has had the highest rate of "no certificate", 188% to the national average and it is three times higher than the lowest region, i.e. the Red River delta.

Table 4.6 Education levels by the nation's population 15 years old and above and percentage compared with national average by economic geographic regions, year 2008

		National		Red				
Education		average as		River	North		South	Mekong
levels	Nation	100	Northern	delta	Central	Highland	Eastern	delta
Never go to school	7.5	100	161.3	48.0	93.3	168.0	70.7	133.0
No certificate	13.5	100	80.7	49.6	89.6	92.6	94.8	188.0
Primary	23.1	100	91.8	60.2	97.0	113.4	112.1	142.0
Lower secondary	27.9	100	105.0	135.1	110.4	93.6	79.9	60.9
Upper secondary	14.1	100	87.2	122.7	112.1	83.0	119.9	57.4
Primary vocational	3.2	100	103.1	159.4	75.0	84.4	100.0	53.1
Secondary apprentice	1.8	100	127.8	183.3	77.8	77.8	83.3	33.3
College vocational	0.3	100	100.0	133.3	66.7	66.7	133.3	66.7
Professional secondary	3.3	_	130.3	130.3	103.0	97.0	90.9	51.5
College, university	5.1	_	72.6	145.1	84.3	62.8	164.7	47.1
Post-graduate	0.1	_	60.0	280.0	70.0	60.0	190.0	30.0
Other								

Source: GSO Vietnam (2018a, 2018b). Vietnam living standard survey 2016, Statistical Publishing

House, Hanoi, Vietnam, 2018: 118

• However, the Mekong delta has 57% of the people having "upper secondary", equal to a half of the national average and a half of that of the Red River Delta which has had 123% of people having "upper secondary" to the national average.

• The South-Eastern region and the Red River delta have had the rates of population of "college and university" as high as 145–165% and 1.5 times higher than the national average and three times higher than that of the Mekong delta which is of the lowest rate, 47% to the national average.

Table 4.7 indicates that in 2016, the rate of the population "never go to school" in the Highland was of over 183% as compared with the national average making 6 times higher than the rate of the Red River delta with 31% to the national average. This disparity did not decrease but increased 3.5 times in 2008.

The Mekong delta region has had the rate of people having "upper secondary" as much as 56% to the national average and making only a half of the rate in the Red River delta. The gap between the rich region – the South Eastern and the Red River delta and Mekong delta decreased by 2.6 times as compared with the three-time gap in 2016.

Table 4.7 Education levels by the nation's population 15 years old and above and percentage compared with national average by economic geographic regions, year 2016

1		0 3	0	0 1	,	2		
Education levels	National	National average	Northern	Red River delta	North Central	Highland	South Eastern	Mekong delta
Never go to school	5.4	100	211.1	31.5	88.9	183.3	57.4	124.1
No certificate	12.6	100	91.3	44.4	92.9	89.7	95.21	194.4
Primary	21.3	100	93	56.8	97.7	116	109.4	148.8
Lower secondary	28.2	100	105	125.9	109.6	98.6	81.2	67.7
Upper secondary	15.5	100	85.2	127.7	107.1	87.1	116.8	56.1
Primary vocational	1.9	100	79	142.1	84.2	73.7	136.8	68.4
Secondary apprentice	1.8	100	105.6	188.9	83.3	50	88.9	38.9
College vocational	0.5	100	80	180	80	60	80	40
Professional secondary	3	100	116.7	123.3	110	86.7	80	63.3
College university	9.4	100	74.5	142.6	87.2	79.8	140.4	54.3
Post-graduate	0.46	100	43.5	243.5	54.5	41.3	102.2	30.4
Other	0.02	100	50	300	50	50	100	50

Source: GSO Vietnam (2018a, 2018b). Vietnam living standard survey 2016, Statistical Publishing House, Hanoi, Vietnam, 2018: 118

4 Conclusions and Discussion

This case study of Vietnam is based on the systematical theoretical approach and empirical and theoretical researches on the changes in education in a developed and developing society. It helps to clarify the relation triangle of educational policy, educational opportunity, and educational level in a society restructuring to a marketoriented economy. During the restructuring process from a centrally, subsidized management mechanism to a market-oriented mechanism, there were positive changes in the society with improved living conditions and rapidly reduced poverty. The educational renovation was started with the educational mechanism, policies expressed in the documents of the CPV's on the educational reform before the year 2000 and fundamental and comprehensive renovation of the education since 2001. A number of conceptions about educational renovation such as the learning right and education compulsory together with renewals in the national educational system have been institutionalized in the legislation on the education. This provides the legal foundation for the state organizations to implement policies on compulsory primary, lower-, and upper-secondary education in localities and the conditions allow to development of the economy. This is also the legal foundation allowing households to make more investment in education. The results of the research indicates that educational opportunities measured by the rate of schooling at the right age have been strongly opened for all people regardless their sex, ethnic group, locality, and living standard. Vietnam completed compulsory primary and lowersecondary education and thus achieved gender equality in these two grades. Especially, Vietnam has obtained gender equality in upper-secondary education with the rate of schooling at the right age of girls higher than that of boys and also higher than the national average.

The speed of education opportunity increase may be uneven especially for upper-secondary and university education. The disparity among ethnic groups, urban and rural areas, and economic regions though decreased along with the restructuring process to a market mechanism is large, especially for tertiary education. The university opportunities of the ethnic minority people and people living in the Highland and the Northern hill and mountain regions increased but are still limited as compared with the national average and economically developed regions such as the Red River delta and the South-Eastern region. Within the national education system, the output of general education provides the opportunities for going to colleges and universities. The implementation of the Law on University Education in the direction of respecting the learning right and the need for the development of high-quality human resources might be the factor for opening more opportunities for university education of the people.

The results of research show that the changes in education might induce rapid increase in the proportion of high educational levels and decrease of lower levels including the rate of the people "never go to school" and "no certificate" in the structure of educational levels of the population. The rates of college and university level have doubled in 2006–2016, but the rate of the professional education increased

very slowly, though it is diversified from primary vocational to professional secondary levels.

However, in restructuring society educational renovation in all three educational sides - policy, opportunity, and level - always faces with it new issues. One issue going through the whole process of the educational reform and fundamental, comprehensive educational renovation now is how to balance the quality and quantity of education, i.e., what to ensure the opening more education opportunities and, at the same time, improve its quality. For this issue, the policy of educational reform seemingly chose the solution of compulsory education and strengthening occupation-oriented education linked to the renovation of examination, test, performance evaluation methods including the method of upper-secondary final examination. From the systematical theory, the relation between the quantity and quality of education is a kind of dynamic balance between the demand for learning and the freedom to learning of the people, on the one side, and the requirement of development of a market economy. This may require the educational renovation policy to shift the center to renovating educational management staffs and teacher training and renovating research and development work of educational science.

The issue of dynamic balance between the quantity and quality of education directly affects the link to the opening up of educational opportunities, namely how to equally distribute opportunities that are opened up in the society. There may be two most distinguish concepts, first, there need to be more input opportunities of education and narrowing down output in the sense that enrolment by the demand and graduation by the results of study. This concept clearly reflects a center of the educational policy renovation that is renovation of examination method, evaluation of learning results, and renovating forms of graduation examination. However, in the national educational system, the output of this grade is the input of another grade; therefore, giving more importance to the examination, evaluation quality has caused a social problem as it has been in a tradition of an Asian society - "learn to take exam" and the pressure of examination always induces other problems of "additional teaching and learning" and the "success disease". The second concept emphasizes the need to implement at the same time the solutions of renovation of university education and renovation of professional education linked to the renovation of occupation-oriented education, categorizing professional education after lower-secondary school. However, the categorization of professional education may not achieve the expected results when the majority of lower-secondary graduates would continue to go for upper-secondary education. The importance is the postlower-secondary categorization seems not to be the tendency of the development of education under the impact of globalization and the fourth industrial revolution demands for post-upper-secondary educational level.

Together with the issue of opening educational opportunities is the issue of social inequality in schooling opportunity which is often hidden by another issue causing dispute, issue of "redundant teachers and shortage of workers". Educational renovation in the direction of opening up schooling opportunities for all people has been seen as the reason of creating too many university graduates: redundant teachers means there are too many people having university education level and over and

shortage of workers means the shortage of people having professional training. The structure of professional level changes in the direction of increasing the rate of population having university and over education but not at the price of decreasing the rate of people having professional education but reducing the rate of people "never go to school", "no certificate", and of low qualification. It is noteworthy that even when the rate of people having university and over, i.e., teachers doubled in the past decade it is still very low, very "insufficient" to the requirements of the industrialization, modernization of the country, and world integration. Vietnam had achieved the social equality in primary schooling, thanks to the compulsory education and gender equality has been improved in primary and secondary and tertiary levels. However, in upper-secondary level and especially tertiary level, the social inequality in educational opportunities have been decreasing along with renovation educational process but it is still high among ethnic groups, regions, and especially between the rich and poor groups. This again requires the education renovation policy to be integrated with economic renovation policies in difficult economic geographic regions and ethnic minority areas.

In short, this research contributes to clarify a triangle of educational renovation typical for Vietnamese society that is restructuring into a market economy, including the fundamental, comprehensive educational policy with the centers of opening more educational opportunities for citizens and shifting the structure of educational level. The case study of Vietnam may suggest ideas for the development of new conceptions of equality in education opportunities and its relation to educational policy and levels in in a restructuring society.

This research describes the renovation in the educational policy where these elements are seen as institutional elements creating convenient conditions for opening up educational opportunities and reducing social inequality in educational opportunities of all social groups. In turn, the educational opportunity opening provides an element making changes in the educational level structure of the population and being seen as the output of the national educational system. However, conclusions of the research of the educational renovation triangle has just been tested by the research using literature analysis method and, therefore, it needs to be tested by quantitative research with modern statistical models.

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