# The Role of Education Reform in the Great Economic Development of Vietnam

Jiayang Chen<sup>1,a</sup>, Chenhe Zhang<sup>2,b,\*</sup>

<sup>1</sup>Shenzhen Senior High School, Shenzhen, Guangdong, 518000, China <sup>2</sup>School of Social Science, University of Western Ontario, London, N6A 3K7, Canada a. chenjy@cn-school.com, b. czhan923@uwo.ca \*corresponding author

*Abstract:* Vietnam established an effective education reform in order to improve the economic circumstance and help the country follow the globalization trend. This paper explains that education reform can boost the development of economy in a wide range which can be expressed by increasing labour quality and productivity, long-term economic prosperity, etc. Education also plays an important role in government spending which can lead to the increase in aggregate demand. This paper finds that the expenditure in education has a positive relationship to the economic growth of Vietnam. The paper draws on these findings to argue that the government of Vietnam are supposed to keep injecting funds into the Science, Technology, Engineering and Mathematics (STEM) education. Furthermore, the government has the duty to strengthen partnerships between educational institutions and industries and enhance access to education. These alternative policies can be beneficial to Vietnam in solving the economic problems, so this paper suggests Vietnam to keep investing in education, aiming to further stimulate economic development.

*Keywords:* education reform, human capital, economic development

# 1. Introduction

The Socialist Republic of Vietnam, a vibrant socialist nation nestled in Southeast Asia, proudly declared its independence on September 2nd, 1945, ushering in the era of the Democratic Republic of Vietnam. In 1986, Vietnam embarked on a pivotal chapter with the launch of Doi Moi (Renovation) – a sweeping reform and opening-up era that profoundly reshaped its economy, governance, and societal fabric. These reforms encompassed a broad spectrum, encompassing economic policy, agricultural practices, and, notably, education. Vietnam's education system has undergone significant changes since the Doi Moi reforms, with a particular focus on expanding access to education, improving educational quality, and aligning the education system more closely with the needs of a rapidly developing economy [1]. Over the subsequent decades, Vietnam has witnessed breathtaking economic progress, characterized by remarkable Gross Domestic Product (GDP) growth and a stable consumer price index, emerging as a beacon of rapid development within Asia's dynamic economic landscape.

Education reform stands as a cornerstone in Vietnam's comprehensive reform agenda. Recognizing the paramount importance of education in fueling national progress, the Vietnamese government has undertaken significant investments in this sector, fostering the expansion of educational infrastructure,

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enhancing accessibility, and upgrading the quality of teaching and learning. By placing education at the forefront, Vietnam has not only fortified its human capital but also catalyzed broader economic objectives, such as poverty alleviation, social mobility, and technological advancements. The emphasis on universal primary education and the gradual expansion of secondary and higher education have contributed to substantial improvements in the literacy rate and overall educational attainment among the Vietnamese population [1].

These education reforms have had a profound and direct influence on Vietnam's economic development. Consequently, Vietnam's education reforms have laid a solid foundation for its remarkable transformation from a low-income to a middle-income country, poised for even greater achievements in the years to come.

Taking the groundbreaking Doi Moi reforms into account, this article dives deep into how educational revamps have ignited Vietnam's stunning economic boom and bolstered its overall might. Using real-world numbers, detailed case studies, and rigorous policy assessments, this paper peels back the layers to show how expanding education access, boosting its quality, and aligning it with economic needs have all worked in harmony to propel growth. Discoveries of this paper highlight how education, as a game-changer, raises worker efficiency, spurs creativity, and reshapes industries for the better. Acknowledging the hurdles like unequal resources and skill gaps, this study offers practical solutions to keep the momentum going. These include smart investments that target on needs, more efficient ways to distribute resources, forging stronger ties between schools and industries, and harnessing technology to make education fairer and better. In essence, this analysis delivers tangible ideas to help Vietnam sustain its climb towards even greater prosperity, keeping its progress grounded and accessible to all.

## 2. Education and Economic Growth

# 2.1. Investment in Education

In economic theory, the relationship between education and economic development is multidimensional and complex. Education is often seen as an investment in human capital that boosts economic growth in several sectors such as individual productivity, innovation, technology uptake and diffusion. To illustrate, education improves the professional skills and problem-solving abilities of the workforce with increased productivity, help to build lower crime rates and public health awareness, reduce social inequality and promote inclusive economic growth, etc. Especially in Keynesian economics, the interventionist role of government in the economy is emphasized, and education, as part of government spending, can stimulate aggregate demand by improving the skills and knowledge level of the labor force, thereby boosting economic growth [2]. Keynesian economics holds that during a recession, due to business pessimism and certain features of the market economy, aggregate demand can fall further, leading to economic weakness [3]. Keynes advocated increased government spending and tax cuts to stimulate demand, thereby driving overall economic activity and reducing unemployment. Investment in education can be part of such government spending, indirectly increasing aggregate demand and output in the economy by improving the quality and productivity of the workforce.

In addition, according to human capital theory, education is not merely a consumable expenditure of the government, but an investment that can improve the economic efficiency of individuals, thereby enhancing the overall productivity and economic competitiveness of the country [2]. Education expands individuals' ability to participate in economic activities and increases their potential for innovation and absorption of new technologies, which is critical to sustaining long-term economic growth.

From the Vietnam's perspective, it paid a high attention in education which can be illustrated by the government expenditure on education from 2008 to 2014. As can be seen in Figure 1, education expenditure plays an important role in the government spending, which is approximately 4% out of total government expenditure.

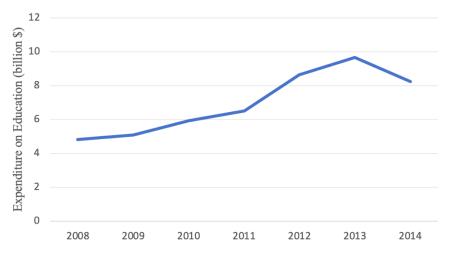


Figure 1: Government expenditure on education in Vietnam between 2008 and 2014 (Data Source: World Bank).

Vietnam's education system has progressed from struggling with the long, brutalizing post-war conflicts to a world-leading one in the international academic contests and assessments. In its first attempt to participate in the Program for International Student Assessment (PISA) in 2012, Vietnamese youths topped those from the Organisation for Economic Co-operation and Development (OECD) countries, ranking 17th in mathematics, 8th in science, and 19th in reading out of 65 participating nations [4]. In the 2015 PISA three years later, the average score of Vietnam was 32 points above the OECD average. Overall, Vietnam represents an impressive success story for the effects of efficient investment in education, given its top performance in the PISA and international academic competitions [4].

The increased government expenditure on education has bolstered aggregate demand, fueling economic growth. Moreover, education is instrumental in elevating labor quality and productivity, which are vital for sustaining long-term economic prosperity. Vietnam's rapid economic growth over the past two decades has been closely linked to improvements in human capital, which were driven by increased investments in education and training. The country's progress in education has been instrumental in preparing its workforce for the demands of a modern market economy. A highly educated workforce is better positioned to navigate technological disruptions, engage in creative endeavors, and contribute to higher-value industries.

### 2.2. Economic Impact

In 1980s, Vietnam began to build the Doi Moi to deal with the economic problem, an ambitious series of economic and educational reforms aimed at navigating a seamless transition from a rigidly centralized economy to a vibrant socialist-oriented market system. Vietnam's education reform has had a profound and transformative effect on both its unemployment rate and GDP per capita growth, exemplifying its remarkable success in harmonizing the nation's educational system with the ever-evolving demands of the economy. Over the past two decades, the Vietnamese government has embarked on a strategic journey of reforms, aimed at enhancing the quality and accessibility of education while nurturing a highly skilled and competent workforce [5]. These endeavors, fueled by

the imperatives of globalization and industrialization, have facilitated Vietnam's transition from an agrarian-based economy to a vibrant one reliant on services and manufacturing sectors.

A cornerstone achievement of these reforms lies in the notable decline in unemployment, particularly among the youthful population and fresh graduates. By enhancing the relevance of educational curricula and vocational training programs, Vietnam has effectively addressed the issue of skill gaps in the labor market. Strengthening technical and vocational education and training (TVET) has equipped students with hands-on industry-ready skills, thereby contributing to a substantial reduction in youth unemployment [6]. In 2023, Vietnam boasted a commendably low unemployment rate of approximately 2.3%, underscoring the efficacy of its education system in preparing students for the rigors of the job market. With a growing cohort of students equipped with skills tailored to sectors like technology, manufacturing, and services, businesses have found it easier to source qualified talent, further mitigating structural unemployment.

Concurrently, Vietnam's GDP per capita has witnessed remarkable growth, partially attributed to these far-reaching reforms. By nurturing a skilled workforce, the country has augmented its labor productivity, which has, in turn, fueled economic expansion. The surge in the number of workers with advanced education and technical proficiency has attracted a flurry of foreign direct investment, particularly in high-tech industries. This influx of capital and expertise has propelled Vietnam's economic growth and significantly bolstered its GDP per capita. Between 2000 and 2023, the country's GDP per capita soared from approximately 400 to over 4,000 dollars, marking a 10-fold increase. This remarkable growth is intricately linked to the enhancement of human capital facilitated by education reform, since an educated workforce tends to exhibit heightened productivity and innovation.

In essence, Vietnam's education reform has played a pivotal role in reducing unemployment and augmenting GDP per capita. By aligning educational offerings with labor market demands and bolstering workforce competencies, these reforms have fostered both individual prosperity and national economic advancement.

Building upon this foundation, subsequent reforms in the 1990s and 2000s strategically aligned education with the dynamic demands of a rapidly expanding economy. By broadening access to education, particularly in rural hinterlands, Vietnam witnessed a remarkable decline in poverty levels, as literacy and numeracy rates soared. Vietnam's Doi Moi reforms, which included significant educational restructuring, contributed to a reduction in the poverty rate from nearly 60% in 1993 to 13.5% in 2014 according to the World Bank. This empowerment of individuals unlocked doors to better job prospects, lifting entire communities out of poverty's grip and fostering a more prosperous society [7]. Consequently, Vietnam has emerged as a prominent hub for technology and manufacturing, attracting a deluge of Foreign Direct Investment (FDI), further fueling its economic ascendancy.

Vietnam's education system, reformed to meet global standards, has significantly enhanced the country's international reputation, positioning it as a competitive economy in Southeast Asia [8]. These educational advancements have not only bolstered Vietnam's domestic growth narrative but also elevated its international standing. The country now stands tall as an emerging economic powerhouse in Southeast Asia, boasting a competitive edge across diverse sectors, notably electronics and information technology. Moreover, these reforms have facilitated increased participation in global academic and professional forums, fostering deeper integration into the global economic landscape. In essence, Vietnam's educational reforms constitute a cornerstone in its remarkable journey, contributing significantly to poverty alleviation, technological advancement, and the enhancement of the nation's global prestige.

### 2.3. Policy Recommendation

To amplify the economic repercussions of Vietnam's education reforms, a deliberate adoption of strategic approaches and recommendations is paramount. Drawing inspiration from proven success stories in other nations can serve as a beacon, guiding Vietnam towards continual improvement in its educational landscape which can lead to its economic prosperity.

Firstly, Vietnam ought to sustain its investment in Science, Technology, Engineering and Mathematics (STEM) education, while placing a heightened emphasis on innovation and entrepreneurship. South Korea's exemplary integration of innovation into its educational framework "has been a key driver of its technological leadership," offering a blueprint for Vietnam to emulate [9]. Encouraging students to not merely assimilate existing technologies but also to forge new ones would ignite a creative spark, propelling Vietnam towards technological forefronts.

Secondly, expanding vocational training programs in Vietnam, with a keen eye on labor market demands, is a prudent move. Germany's dual education system, praised by the World Bank for its efficiency in nurturing a skilled workforce tailored to economic needs, serves as a paradigm. Adopting a similar model could bridge the skills gap and optimize employment prospects for graduates, fostering a robust economy.

Furthermore, strengthening partnerships between educational institutions and industries is a vital recommendation. Singapore's close collaboration between universities and the private sector, hailed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) for its pivotal role in innovation and economic growth, underscores the importance of such synergies. Vietnam can emulate this model to ensure that its education system remains agile and responsive to the ever-evolving economic landscape [10].

Lastly, enhancing access to education, particularly in rural and underserved regions, must remain a cornerstone of Vietnam's educational agenda. Finland's education system, renowned for its equity and inclusiveness, presents a shining example. Guaranteeing that every child, regardless of socioeconomic status, has access to quality education is instrumental in alleviating poverty and fostering sustainable economic expansion [11].

By embracing these strategies and embracing successful international models, Vietnam can solidify its educational foundation, deepen its fight against poverty, and solidify its position as a formidable competitor in the global economic arena.

### 3. Conclusion

The comprehensive analysis in this paper emphasizes the significant impact of Vietnam's education reforms on its economic circumstances. The strategic overhaul of the education system, especially the focus on STEM education and vocational training, has not only enhanced the quality of nation's human capital but also catalyzed a dramatic economic growth. A clear correlation among educational spending, enhancement GDP per capita, reduction in unemployment rate and a remarkable decline in poverty levels is revealed in this study.

The findings of this paper support Vietnam's educational development, which brings diverse and wide-ranging benefits, especially the STEM system as a key factor in innovation and economic progress. The success of Vietnam's education reforms can be further reinforced by learning international models, such as South Korea's emphasis on innovation, Germany's dual education system, and Singapore's industry-education partnerships. These strategies have played an instrumental role in stimulating educational outcomes with the demand of the labour market, fostering a considerable number of skilled workforce and attracting foreign direct investment.

In conclusion, Vietnam's transformation from an agrarian economy which suffered a lot from economic crisis and depreciation of Vietnamese dong to a technological and manufacturing powerhouse is the outcome to the power of education reform in Doi Moi which has led to the economic prosperity. The government's intensely support for education, especially in STEM fields, and its strategic partnerships with industries had occupied a leading position in this transformation. Moving forward, it is recommended that Vietnam continues to prioritize educational access and quality, especially in rural and under-developed areas, to chase this booming economic era and to maintain its competitive advantages in the global market.

By adhering to these policy recommendations and continuing to learn from suitable and superior policies, Vietnam is poised to further its economic development, reduce poverty, and enhance its position as a leading economy in Southeast Asia and beyond. The future of Vietnam's economic prosperity lies in the continued evolution and excellence of its education system, which will undoubtedly play a crucial role in shaping the nation's future development in the decades to come.

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All the authors contributed equally and their names were listed in alphabetical order.

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