



Faculty of Economics and Business

**THE IMPACT OF EDUCATION ENROLMENT AND  
EXPENDITURE ON ECONOMICS GROWTH IN THAILAND**

Phua Jia Yong

Bachelor of Economics (Honours)  
(International Economics)  
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**KESAN PENDAFTARAN DAN PERBELANJAAN PENDIDIKAN TERHADAP  
PERTUMBUHAN EKONOMI DI THAILAND**

PHUA JIA YONG

Projek ini merupakan salah satu keperluan untuk  
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This project is submitted in partial fulfillment of  
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## **Pengesahan Pelajar**

Saya mengakui bahawa Projek Tahun Akhir bertajuk  
**“KESAN PENDAFTARAN DAN PERBELANJAAN PENDIDIKAN  
TERHADAP PERTUMBUHAN EKONOMI DI THAILAND”**

ini adalah hasil kerja saya sendiri kecuali  
nukilan, petikan, huraian dan ringkasan yang  
tiap-tiap satunya telah saya nyatakan sumbernya.

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Tarikh serahan

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Phua Jia Yong (39602)

## **Statement of Originality**

The work described in this Final Year Project, entitled  
**“The Impact of Education Enrolment and Expenditure  
on Economic Growth in Thailand”**  
is to the best of the author’s knowledge that of the author except  
where due reference is made.

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Date Submitted

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Phua Jia Yong (39602)

## **ABSTRACT**

### **THE IMPACT OF EDUCATION ENROLMENT AND EXPENDITURE ON ECONOMICS GROWTH IN THAILAND**

By

Phua Jia Yong

The purpose of this study is to examine the impact of education enrolment and expenditure on economics growth in Thailand. The data used in this study was yearly data of 40 years from 1974 to 2013. All data was obtained from the World Bank and United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. The findings of this study show that there is no long run relationship between education enrolment and expenditure as well as the economic growth in Thailand. However, enrolment in secondary and tertiary education affect the economic growth in Thailand in short run. Moreover, this study also found that education expenditure do not affect the economic growth in Thailand either in short or long run.

Keywords: Enrolment in primary, secondary and tertiary education, GDP per capita

## **ABSTRAK**

### **KESAN PENDAFTARAN DAN PERBELANJAAN PENDIDIKAN TERHADAP PERTUMBUHAN EKONOMI DI THAILAND**

Oleh

Phua Jia Yong

Kajian ini bertujuan untuk mengkaji kesan pendaftaran pendidikan dan perbelanjaan terhadap pertumbuhan ekonomi di Thailand. Kajian ini menggunakan data tahunan selama 40 tahun dari 1974 hingga 2013. Semua data diperolehi daripada World Bank dan United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. Hasil kajian ini menunjukkan bahawa tiada hubungan jangka panjang antara pendaftaran pendidikan dan perbelanjaan serta pertumbuhan ekonomi di Thailand. Pendaftaran dalam pendidikan menengah dan pengajian tinggi didapati memberi kesan kepada pertumbuhan ekonomi di Thailand dalam jangka pendek. Selain itu, kajian ini juga mendapati bahawa perbelanjaan pendidikan tidak mempunyai kesan terhadap pertumbuhan ekonomi di Thailand dalam jangka pendek dan panjang.

Kata kunci: Pendaftaran dalam sekolah rendah, menengah dan pengajian tinggi, KDNK per kapita

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

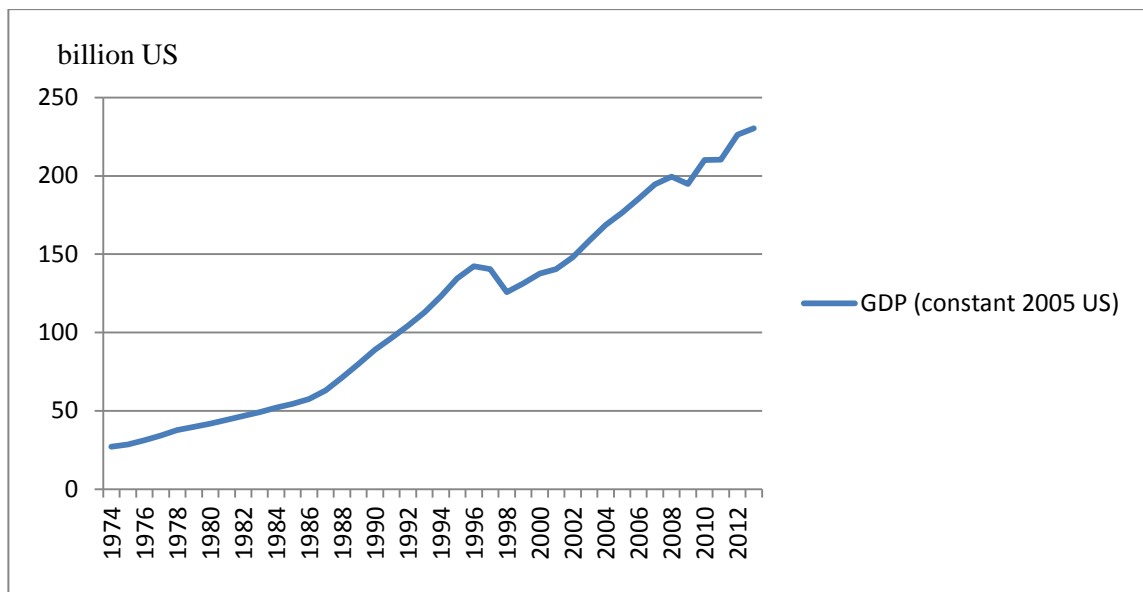
“Gross domestic production(GDP) is the market value of all final goods and services produced within a country in a given period of time”(Mankiw et al., 2013, p. 472). GDP measures the national income as well as the total output of a country. GDP is the key element to measure the economy growth of a country. People living in a country which has large GDP are able to enjoy better health care and education system as compare to a country with lower GDP.

One of the important factor that affect the economic growth of a country is education. Education is a form of investment in human capital which enhance better stock of human capital. This is because better education system produce more skilled and knowledgeable workers. Beside that, education enhance transfer of knowledge in technologies and management. The invention of new machineries which is more advance and faster in producing a product and a better production process which promote specialization of work reduce the production time as well as increase the productivity as a result of increasing knowledge in technologies and management. Therefore, this increase the productivity of the labour force in a country and thus increase the GDP of the country.

Since education is one of the important determinant of economic growth, research should be done to identify how education can affect the economic growth especially for the developing country such as Thailand. Therefore, the main purpose of this study is to examine the impact of education toward economic growth in Thailand.

### 1.1 Background of Study

*Figure 1.1: GDP of Thailand from 1974 to 2013*

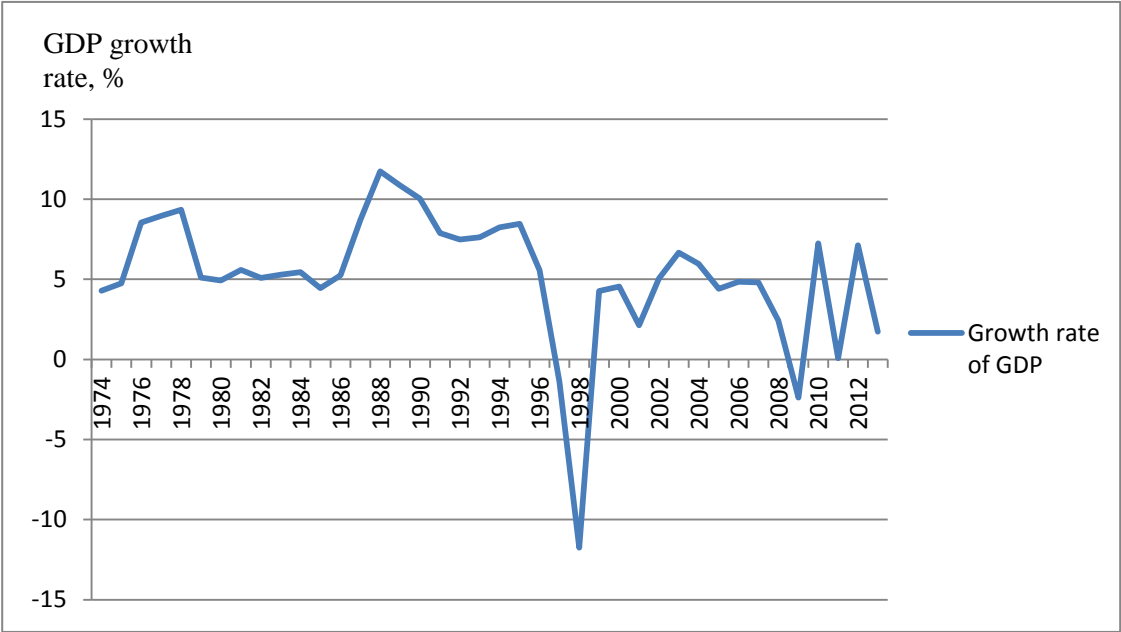


(Source: World Development Indicators, 2014)

Thailand, is a developing country in Asia with total area of approximately 513000 km<sup>2</sup>. Thailand is the 51<sup>st</sup> largest country in the world with its population around 66 million. Based on Figure 1.1, the GDP of Thailand had increasing in most of the year

from 1974 to 2013. The GDP of Thailand increased from 27.11 billion US dollar in year 1974 to 230.37 billion US dollar in year 2013. However, the GDP is easily affected by the economic crisis. In 1998, Thailand GDP had a sharp decreased from 140.45 billion US dollar to 125.69 billion US dollar due to the Asian financial crisis in year 1997. Global financial crisis happened in year 2008 also cause the GDP of Thailand decreased from 199.52 billion US dollar to 194.87 billion US dollar. The economic in Thailand grow rapidly during 1985 to 1996 because the rapid growth in industrial sectors. Thailand become a major exporter for some industrial products such as rubber, plastic, computer and accessories, auto part and accessories. The main sectors in Thailand are manufacturing, agriculture and tourism.

**Figure 1.2: GDP growth rate in Thailand year 1974 to 2013**



(Source: World Development Indicators, 2014)



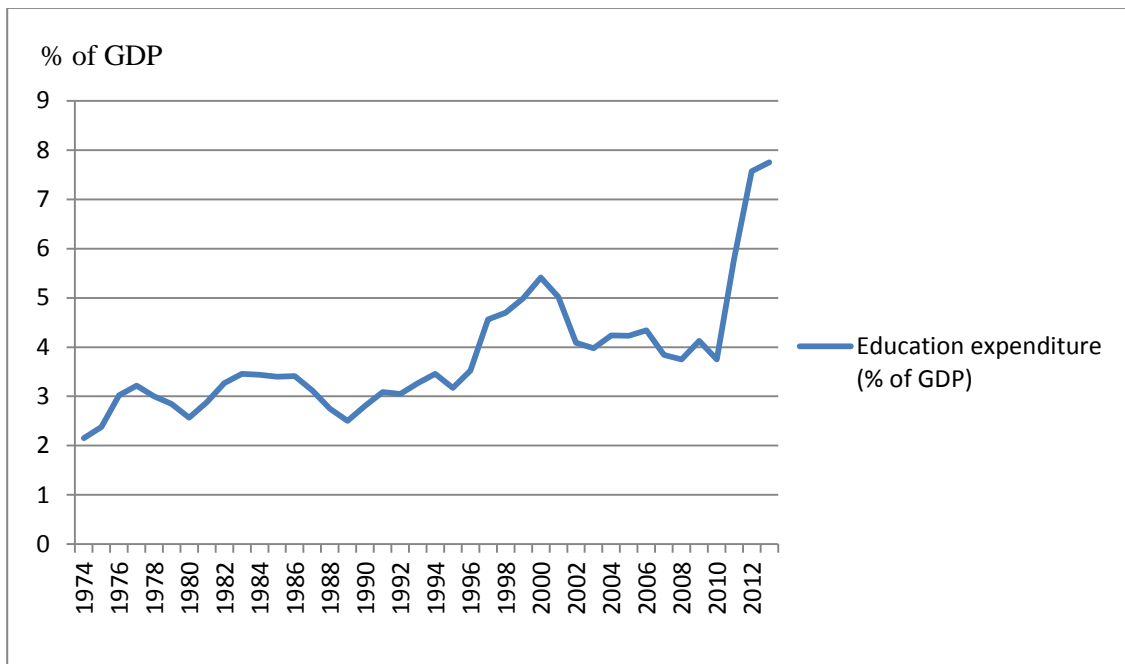
However, the growth rate of GDP in Thailand had been fluctuated since the year 1974 to 2013 based on Figure 1.2. Thailand's GDP growth rate had been remained in around 5% to 10% since 1974 to 2013. However, the economic growth of Thailand decreases sharply from 5.57% to -11.74% during 1996 to 1998 because of the Asian Financial Crisis. In 2009, Thailand has economic recession due to the global financial crisis which happened in 2008. Moreover, the growth rate of GDP in Thailand decreases from 7.24% to 0.08% in the year 2011 because Thailand suffered from a serious floods in year 2010 which lead to a sharp decrease in Thailand GDP. After that, the instability of politic in Thailand caused the GDP growth rate to decrease from 7.12% to 1.74% in 2013.

### **1.1.1 An Overview of Education System in Thailand**

In the past, the education in Thailand was only given to the males and provided by the Buddhist monks in the temple schools. Thailand's educational system is separated into four levels after 2001 which are pre-primary, six years of primary (Prathom) and secondary (Mattayom) as well as higher education. The schools in the rural areas are usually have less facilities and equipments for teaching as compared to those schools located in cities. The pre-primary school is optional for the children in Thailand. However, the primary and three years of secondary school is compulsory for every children in Thailand. The primary and secondary school of education is given free by the Thai government.

After finished the compulsory of nine years education, those who wish to proceed their studies have to take and pass the Ordinary National Educational Test (O-NET). Students who finish the secondary school must take the Advanced National Educational Test (A-NET) in order to graduate from secondary school. Students who graduating from the secondary school in Thailand are equivalent to the A-levels, the International Baccalaureate or the Standardized Achievement Test (SAT) in the US. Those who want to continue their studies in an university after completed the secondary school must pass the Central University Admission System (CUAS). This System is based on the scores obtained by the students in O-NET and A-NET together with the Grade Point Average of the last three year of secondary school.

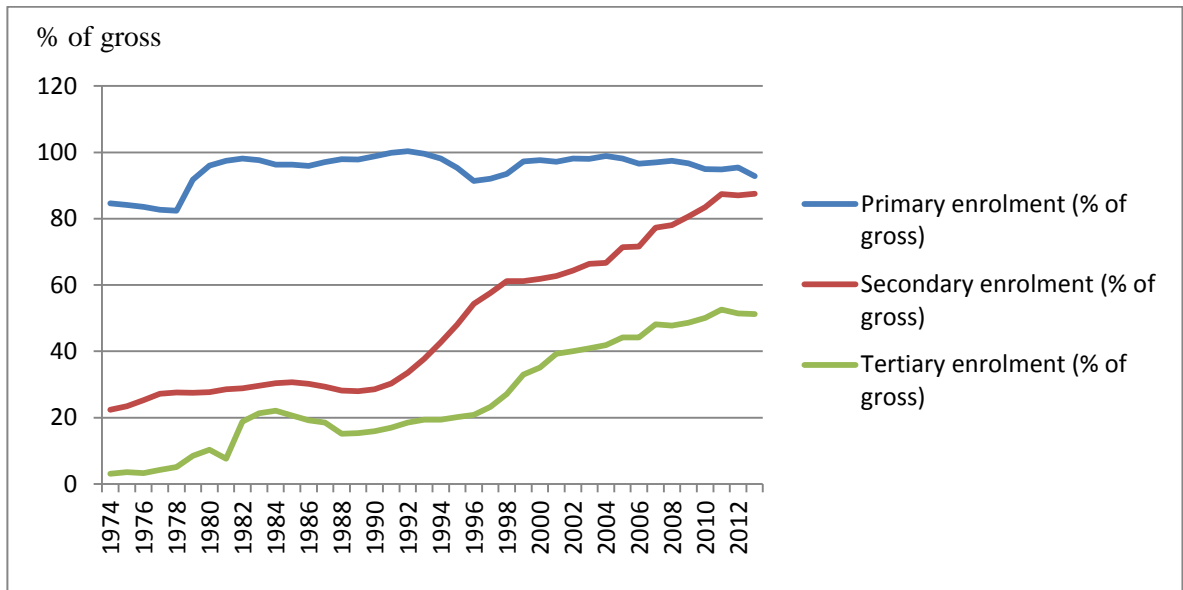
**Figure 1.3: Government expenditure on education from 1974 to 2012 (% of GDP)**



(Source: World Development Indicators, 2014)

Figure 1.3 shows the government expenditure on education since 1974 to 2012 measured in percentage of GDP in Thailand of the particular year. According to Figure 1.3, Thailand government had spend around 3 to 4% of the Thailand's GDP for educational expenditure in order to increase the quality of educational system in Thailand during 1974 to 1996. After year 1996, the government spend around 4 to 5% of the GDP on educational purposes after 1996. In year 2012, the government increases the education expenditure for almost 2% of the GDP up to 7.57% compared to 5.79% in year 2011.

**Figure 1.4: Gross enrolment ratio in primary, secondary and tertiary education**



(Source: World Development Indicators, 2014)

On the other hand, Figure 1.4 shows the percentage of gross enrolment in primary, secondary and tertiary education. The gross enrolment of students in primary education

is very high as the six years of primary education is compulsory for every children based on the education system in Thailand since 1974. However, the gross percentage of enrolment in secondary and tertiary education much more lower with only 17.96% and 2.86% of gross enrolment in secondary and tertiary education in 1974 respectively. The gross percentage of enrolment in both secondary and tertiary education were increased since 1974 to 2013. Gross percentage of enrolment in secondary education had increased from 17.96% in 1974 to 87.50% in 2013 while enrolment in tertiary had increased from 2.86% in 1974 to 51.23% in 2013.

## **1.2 Problem Statements**

Although the GDP of Thailand had been increasing in most of the years during 1974 to 2013, Thailand's GDP is easily affected by the economic crisis. The GDP of Thailand decreased sharply in year 1998 due to the Asian financial crisis in year 1997 which lead to a negative growth rate of the Thailand GDP. Asian financial crisis had caused economic recession in Thailand and take around ten years for Thailand to deal with the recession. In 2008, global financial crisis also cause a sharp decreased in Thailand's GDP from 199.52 billion US dollar to 194.87 billion US dollar. Thus, this research aim to examine whether education can promote economic growth in Thailand so that Thailand's GDP will be less affected by economic crisis and able to recover from the economic recession within a short period of time.

Education is the most important factor for human capital development as education produce better stock of human capital. According to Mankiw et al. (2013), education is a form of investment in human capital in order to increase the quality of human capital in a country and investment in education and physical capital are equally important to achieve economic growth in the long run. Many children usually do not enrol or drop out of school in many less developed countries in order to work for money to support the family because they are too poor. This will affect the economic growth of the country in short run and long run as they would become more productive if they are able to receive education.

The impact of education on economic growth can be direct or indirect. The direct effect of education on economic growth is through increase the number of skilled labors which are more productive. On the other hand, education will indirectly affect the economic growth by enhance tranfer of knowledges and technologies which lead to the intervention of new machineries to increase the efficiency of the production process. The intervention of new machineries which are more advance and efficient reduce the time needed to produce goods and services thus increases the productivity of a country.

Therefore, the impact of education enrolment and expenditure on short run and long run economic growth should be study especially for developing countries such as Thailand. There are several research questions related with this study which are:

1. Does education enrolment and expenditure affect Thailand's economic growth in short run.

2. Does education enrolment and expenditure affect Thailand's economic growth in long run.

### **1.3 Objectives of Study**

#### **1.3.1 General Objective**

The general objective of this study is to examine the impact of education enrolment and expenditure on economic growth in Thailand.

#### **1.3.2 Specific Objectives**

The specific objectives include:

1. To study whether enrolment in primary education and Gross Domestic Product (GDP) in Thailand are related in the short run and long run.
2. To examine whether enrolment in secondary education and Gross Domestic Product (GDP) in Thailand are related in the short run and long run.
3. To identify whether enrolment in tertiary education and Gross Domestic Product (GDP) in Thailand are related in the short run and long run.
4. To investigate whether public expenditure on education and Gross Domestic Product (GDP) in Thailand are related in the short run and long run.

#### **1.4 Significance of Study**

The main purpose of this study is to examine the impact of education enrolment and expenditure on economic growth in Thailand during 1974-2013. This study is important to identify whether the education enrolment and expenditure is promoting Thailand's economic growth.

Moreover, this study will also be beneficial for Thailand government which provided most of the education in the country through Ministry of Education. Thai government are able to gain the information of whether the education enrolment and expenditure is promoting Thailand's economic growth through this study.

Therefore, the Ministry of Education will has more information to revise the current education system to enhance the education enrolment in Thailand. The Ministry of Education in Thailand can use the information obtained from this research to set the education policies in Thailand. Beside that, this research is also useful for the government to allocate the spending on educational purposes in Thailand to increase the quality of the education system. The education expenditure must be spend wisely to increase the facilities and equipments for teaching especially for the schools located in rural areas so that children in rural areas also have the opportunities to enjoy a better quality of education and increased the enrolment rate in rural areas.

## **1.5 Organization of Study**

The study focus on the impact of education enrolment and expenditure on economic growth in Thailand between 1974 to 2013.

There are overall five chapter in this study which are organized as follow: The chapter two is the reviews of the prior studies that had been conducted by other researches which are related to this study. The description of data and methodology use in the study will be explained in chapter 3. After that, chapter 4 will discussed about the empirical findings of this study and lastly, the summary of the findings and policy recommendations will be provided in chapter 5