



UNIVERSITI PUTRA MALAYSIA

***EFFECTS OF GOVERNMENT SPENDING ON ECONOMIC GROWTH,
POVERTY AND INSTITUTIONAL QUALITY IN ASIAN COUNTRIES***

LIEW CHUNG YEE

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**EFFECTS OF GOVERNMENT SPENDING ON ECONOMIC GROWTH,
POVERTY AND INSTITUTIONAL QUALITY IN ASIAN COUNTRIES**

By

LIEW CHUNG YEE

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

January 2017

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DEDICATION

To my loving wife, parents and sister



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Doctor of Philosophy

EFFECTS OF GOVERNMENT SPENDING ON ECONOMIC GROWTH, POVERTY AND INSTITUTIONAL QUALITY IN ASIAN COUNTRIES

By

LIEW CHUNG YEE

January 2017

Chairman : Associate Professor Law Siong Hook, PhD
Faculty : Economics and Management

Governments in developing and less developed Asian countries implemented large fiscal stimulus packages to cushion the shocks of global economic crisis. Nevertheless, the spending is unsustainable, the government spent more than receipts for many years. This study examined the effect of government spending on economic development in developing and less developed Asian countries from 1970 to 2013. Dynamic panel approach and Generalised Method of Moments (GMM) estimators were applied. This study first investigated the effect of government spending on economic growth in the existence of the spending threshold. The results suggest that current period government spending is significant and negative determinant of economic growth while one period lagged government spending is significant and positive determinant of economic growth. Threshold analysis suggests that Asian countries have been overspending and government spending is a significant and negative determinant of economic growth when government spending level is above the threshold value. For future growth, government spending should be results orientated and come with budget sustainability targeting. Next, this study investigated the effect of institutional quality on the effect of government spending on economic growth. The presence of institutional quality as a set of conditional variables is impact positively on the effect of government spending and economic growth nexus. The results suggest that higher institutional quality can offset the negative effect of government spending and generate growth-enhancing effect to economic growth. Finally, this study analysed the impact of government spending in eliminating poverty. The results in this study suggest that government spending does not reduce poverty but increases the cost to reduce poverty. Equality in distribution plays an important role because further analysis found that countries with more equality in income distribution leads to more equality in the distribution of government resources, and poverty reduction is more likely to meet the target. Besides, government spending in education and public health is also significant in reducing the poverty rate. Government spending is important to protect the vulnerable poor households before they benefit from the more long-term policies and strategies. However, the spending must not be anti-poor.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**KESAN PERBELANJAAN KERAJAAN TERHADAP PERTUMBUHAN
EKONOMI, KADAR KEMISKINAN DAN PERANAN KUALITI INSTITUSI
DI NEGARA-NEGARA ASIA**

Oleh

LIEW CHUNG YEE

Januari 2017

Pengerusi : Profesor Madya Law Siong Hook, PhD
Fakulti : Ekonomi dan Pengurusan

Kerajaan di negara-negara membangun dan kurang membangun di Asia melaksanakan pakej perbelanjaan fiskal merangsangan yang besar untuk menangani kejutan daripada krisis ekonomi dunia. Namun demikian, perbelanjaan kerajaan adalah tidak mapan dimana kerajaan telah membelanja melebihi penerimaan dalam banyak tahun beberapa kebelakangan ini. Kajian ini memeriksa kesan perbelanjaan kerajaan ke atas membangun ekonomi di negara-negara pembangunan dan kurang membangun di Asia dari tahun 1970 ke 2013. Dengan menggunakan pendekatan panel dinamik dan penganggar *Generalised Method of Moments* (GMM), kajian ini bermula dengan menyiasat kesan perbelanjaan kerajaan ke atas pertumbuhan ekonomi dengan kewujudan nilai ufuk. Keseluruhan hasil kajian mencadangkan bahawa peningkatan perbelanjaan kerajaan tempoh semasa merupakan penentu negatif yang signifikan kepada pertumbuhan ekonomi manakala perbelanjaan kerajaan lat satu tempoh merupakan penentu positif yang signifikan kepada pertumbuhan ekonomi. Analisis kesan nilai ufuk mencadangkan bahawa negara-negara Asia telah membelanja melebihi nilai ufuk dan perbelanjaan kerajaan merupakan penentu negatif yang signifikan kepada pertumbuhan ekonomi apabila perbelanjaan kerajaan melebihi nilai ufuk. Untuk pembangunan masa depan, perbelanjaan kerajaan perlu berasaskan penghasilan dan dengan bersasarkan kemampunan bajet. Seterusnya, kajian ini menyiasatkan kesan kualiti institusi terhadap kesan perbelanjaan kerajaan ke atas pertumbuhan ekonomi. Kewujudan kualiti institusi sebagai satu set pembolehubahan bersyarat berkesan positif terhadap kesan perbelanjaan kerajaan ke atas pertumbuhan ekonomi. Keputusan ini mencadangkan bahawa kualiti institusi yang lebih tinggi akan mengimbangi kesan negatif perbelanjaan kerajaan dan menyumbang kepada peningkatan tumbuhan terhadap pertumbuhan ekonomi. Akhir sekali, kajian ini menganalisis kesan perbelanjaan kerajaan dalam usaha menghapuskan kadar kemiskinan. Keputusan kajian ini mencadangkan bahawa perbelanjaan kerajaan tidak mengurangkan kadar kemiskinan manakala menambahkan kos penghapusan kadar kemiskinan. Kesaksamaan dalam pengagihan pendapatan memainkan peranan yang penting sebab kajian yang seterusnya mendapati bahawa negara-negara yang lebih

saksama dalam pengagihan pendapatan, berkecenderungan untuk mempunyai lebih pengagihan yang adil dalam sumber kerajaan, dan lebih cenderung untuk mencapai sasaran pengurangan kemiskinan. Selain itu, perbelanjaan kerajaan dalam pendidikan dan kesihatan awam juga signifikan untuk mengurangkan kadar kemiskinan. Perbelanjaan kerajaan adalah penting untuk melindungi kelemahan keluarga yang miskin sebelum mereka dapat bermanfaat daripada dasar dan strategi pembangunan jangka panjang. Namun demikian, perbelanjaan tersebut tak patut bersifat anti miskin.



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I certify that a Thesis Examination Committee has met on 4 January 2017 to conduct the final examination of Liew Chung Yee on his thesis entitled "Effects of Government Spending on Economic Growth, Poverty and Institutional Quality in Asian Countries" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

Members of the Thesis Examination Committee were as follows:

Rusmawati binti Said, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Zaleha binti Mohd Noor, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Shivee Ranjanee a/p Kaliappan, PhD

Senior Lecturer
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Nirvikar Singh, PhD

Professor
University of California Santa Cruz
United States
(External Examiner)



NOR AINI AB. SHUKOR, PhD

Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 22 March 2017

This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Law Siong Hook, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Normaz Wana Ismail, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

Lee Chin, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

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Name and Matric No: Liew Chung Yee , GS24514

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Signature: _____
Name of Chairman
of Supervisory
Committee: Associate Professor Dr. Law Siong Hook

Signature: _____
Name of Member
of Supervisory
Committee: Associate Professor Dr. Normaz Wana Ismail

Signature: _____
Name of Member
of Supervisory
Committee: Associate Professor Dr. Lee Chin

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LIST OF ABBREVIATIONS

ADB	Asia Development Bank
ADO	Asia Development Outlook
AEs	Asian Economies
BOP	Balance of Payment
DPI	Database of Political Institutions
EU	European Union
FDI	Foreign Direct Investment
GMM	Generalised Method of Moments
GDP	Gross Domestic Product
GNP	Gross National Product
ICRG	International Country Risk Guide
IMF	International Monetary Fund
IV	Instrumental Variable
LS	Least Squares
LSDV	Least Squares Dummy Variable
MPG	Marginal Product of Government
MLG	Minimum Livelihood Guarantee
NIEs	Newly Industrialised Economies
OLS	Ordinary Least Squares
OECD	Organization
PRS	Political Risk Services
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific

UNESCO	United Nations Educational, Scientific and Cultural Organization
WDI	World Development Indicators
WGI	Worldwide Governance Indicators



CHAPTER 1

INTRODUCTION

1.1 Overview

There is widespread acceptance of the idea that the market economy has formed the foundation for economic prosperity and thus many countries have moved toward more economic freedom in recent years. This has included the liberalisation of various price controls, the reduction of trade barriers and ensuring stable monetary systems. However, government spending (usually measured as the share of total government spending within the gross domestic product (GDP)) has been rising over the past several decades; this has resulted in more resource allocation through government and increased intervention of government spending in the market (Gwartney, Holcombe, & Lawson, 1998).

Government spending is the allocation of public resources to different components of government; increased spending of one component may lower the allocation of the others, and this may, in turn, have different effect on the economic growth of a country. Barro and Grilli (1994) classified government spending into three main types. The first type is total government consumption spending on the acquisition of goods and services for current use or the collective needs of the community. The second type is total government investment spending on the acquisition of goods and services for future benefit, such as infrastructure investment. Total government investment expenditure usually forms the largest part of gross capital formation. The last type of government spending is transfer of payments such as social security payments or subsidies. Government consumption spending and government investment spending are major components in the gross domestic product. Government spending can affect economic growth directly through its effect on the factors of production (Baron, 1976); and indirectly through its effect on the marginal productivity of privately supplied factors of production (Barro & Sala-i-Martin, 1991).

How does the economy respond to rising government spending? Keynesian hypothesis (Keynes, 1936) indicates that public expenditure is an exogenous factor and can be used as a short-run growth-enhancing policy variable. Increasing government spending will, in turn, lift aggregate demand and increase consumption. This increment will, in turn, raise production. Keynesian economists argued that without government intervention, a severe recession or depression may never end. Barro (1989, 1990) and Barro and Sala-i-Martin (1992) incorporated public sector spending as a determinant of growth into the AK model of economic growth with the assumption that the government's public services are another possible factor that could eliminate the tendency for diminishing returns to private capital and determine the coefficient of the baseline technology, A , and thereby, generate the long-run growth

rate¹. From an empirical perspective, researchers and academicians remain divided as both positive and negative relationships have their respective proponents, however, the more common conclusion is negative as found by, Landau (1983), Barro (1989, 1990), Guseh (1997), Folster and Henrekson (2001) and others.

There is much dispute about whether governments should reduce or increase public spending. This study re-examines the empirical evidence on how the economy responds to government spending changes. In particular, this study applied the dynamic panel approach to estimate the effect of government spending, associated with the government spending threshold of economic growth. It is interesting to determine the threshold value of government spending and the impact of the threshold on the effect of government spending on economic growth. Besides, as government spending involves the use of public resources, the quality of institutions will be an important determinant of the effectiveness of the spending outcomes. Hence, this study analysed the impact of institutional quality on government spending in promoting growth. Furthermore, governments are expected to spend public resources to provide public goods for the welfare of the people, including the poor. An analysis on the impact of government spending on poverty reduction is also included in this study.

1.2 Background of the Study

Shocks and contagion from the sovereign debt crisis and financial turmoil in Europe and the USA have severely affected Asian countries. Economies have been slowed down sharply everywhere, including Asian countries at the end of 2008 (Akyuz, 2010). The economies of Asian developing countries are vulnerable to shocks and contagion because of the growing economic linkage between Asian countries and the West. Strong fiscal, balance of payment (BOP) and reserve positions helped Asian countries to contain the impact of the crisis by allowing considerable space for counter-cyclical fiscal responses. Table 1.1 shows that the impacts from previous recessionary episodes in the USA and the Eurozone on Asian Economies are increasing. Historically, both the USA and the Eurozone have been major export markets and sources of financial capital for Asian countries. However, declining exports, especially to the developed countries, have proven to be a setback to Asian countries, particularly in countries where the demand for exports has grown faster than the domestic aggregate demand. It is no surprise that the impacts suffered by the export-oriented newly industrialised economies (NIEs) of Asian countries have been higher. In some countries, the impact of export contraction on economic activity due to falling exports is not so much caused by the demand for exports, especially countries with a large domestic market, but by a tightening of the payments constraint and thereby narrowing the space for countries to implement counter-cyclical fiscal response (Akyuz, 2010).

¹ Barro and Sala-i-Martin (1992) suggested that all factors that can change the level of the baseline technology, A , in the AK model could affect the long-run per capita growth rate.

Table 1.1 : Impacts of US and Eurozone Recession

Changes in GDP growth				
	1991	1992/93	2001	2008/09
US	-2.1	1.5	-3.0	-2.7
Eurozone	-1.1	-1.7	-1.8	-3.6
East Asia	-1.2	-0.9	-2.8	-2.9
Japan	-2.2	-1.6	-2.7	-4.3
Emerging East Asia	1.6	0.4	-3.0	-2.3
ASEAN	-1.4	0.2	-2.3	-2.0
Newly industrialised economies	0.5	-0.8	-6.4	-3.2
People's Republic of China	5.4	2.4	-0.1	-2.5

Notes:

1. Recession years in the USA are 1991, 2001, 2008/09; Recession years in the Eurozone is 1992/93
2. ASEAN excludes Singapore; NIEs includes Hong Kong, South Korea, Taiwan and Singapore

(Source: ADB and CEIC)

Global economic growth has remained slow, averaging only 2.5% during the first half of 2013. Emerging and developing countries, especially commodity exporters, have slowed as growth in China has slowed (IMF, 2013). Furthermore, the high debt levels in major advanced economies remain unresolved and the economy in these countries is far from recovered after the crises. Asian countries responded to the shocks by implementing massive monetary and fiscal stimulus. The counter-cyclical fiscal responses of Asian countries are usually focused on increasing government spending, particularly in infrastructure investments.

In the aftermath of the crisis, many countries have rolled out fiscal stimulus packages in the hope of spurring the economy due to events including the dot com bubble, subprime crisis, global financial crisis and the European sovereign debt crisis. After such crises, fiscal stimulus packages are rolled out because they can offer powerful results thanks to their multiplier effect. Government spending in Asian countries, especially in the Asian developing countries, as a share of GDP is still lower compared to advanced countries, although, the average has been growing (Figure 1.1). Compared to countries from Africa and South America, the average government spending of Asian countries is also much higher (Figure 1.2).

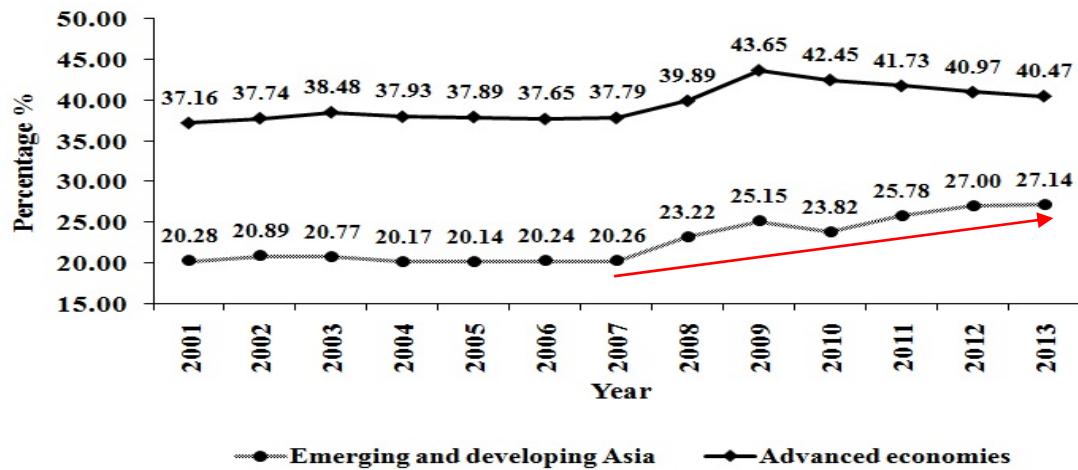


Figure 1.1 : Government spending in Asian developing countries and advanced countries

(Source: Author's plot based on data collected from World Economic Outlook database.)

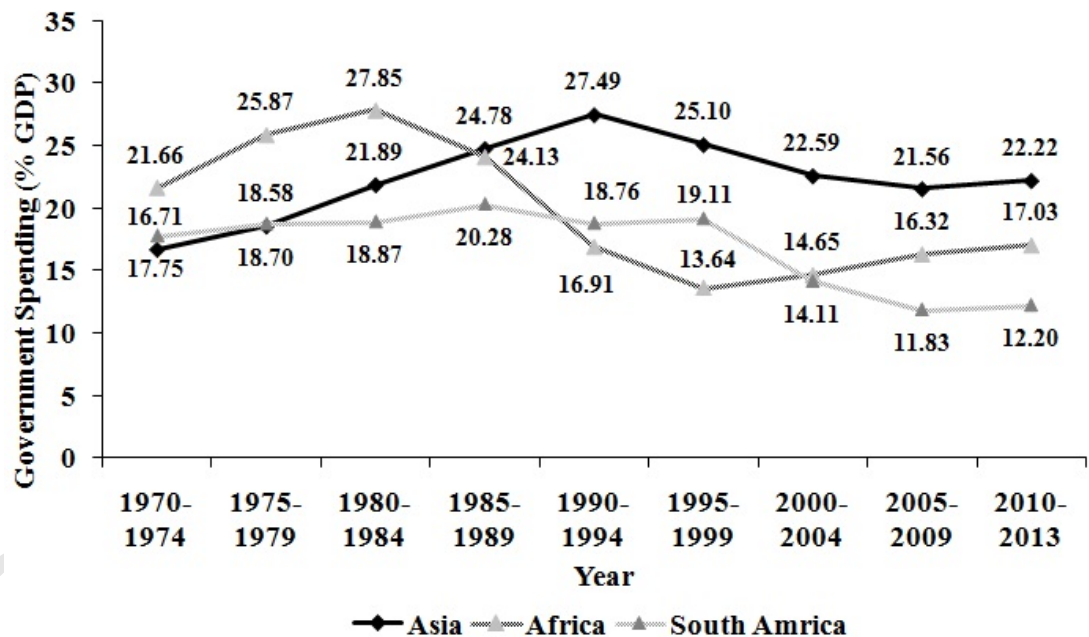


Figure 1.2 : Government spending in Asia, Africa and South America

(Source: Author's plot based on data collected from World Economic Outlook database.)

After the financial crisis in 2008 and since the sovereign debt crisis began, large scale fiscal stimulus packages through the injection of liquidity have been implemented. Asian Economies' governments have continued to increase spending over the years, even during the pre-crisis years, and the average rate of spending is also growing (Figure 1.1). In an interview, Rogoff (2011) suggested that policy makers continue to

place too much confidence in the Keynesian approach that the countries' economies can be jump-started with a big temporary stimulus².

Nevertheless, the spending is unsustainable; governments have been spending beyond their receipts for many years (Figure 1.3). The total level of debt³ in Asian developing countries (Figure 1.4) and government debt in many countries, with few exceptions, has also increased (Figure 1.5). The cost of the stimulus packages in 2008/09 means that Asian Economies will face an incremental fiscal deficit and the debt is also climbing in many countries from Asian Economies. With increasing debt levels in developing countries, creditors concerned about a country's solvency may demand higher interest rates and thus it will exacerbate its fiscal misery⁴.

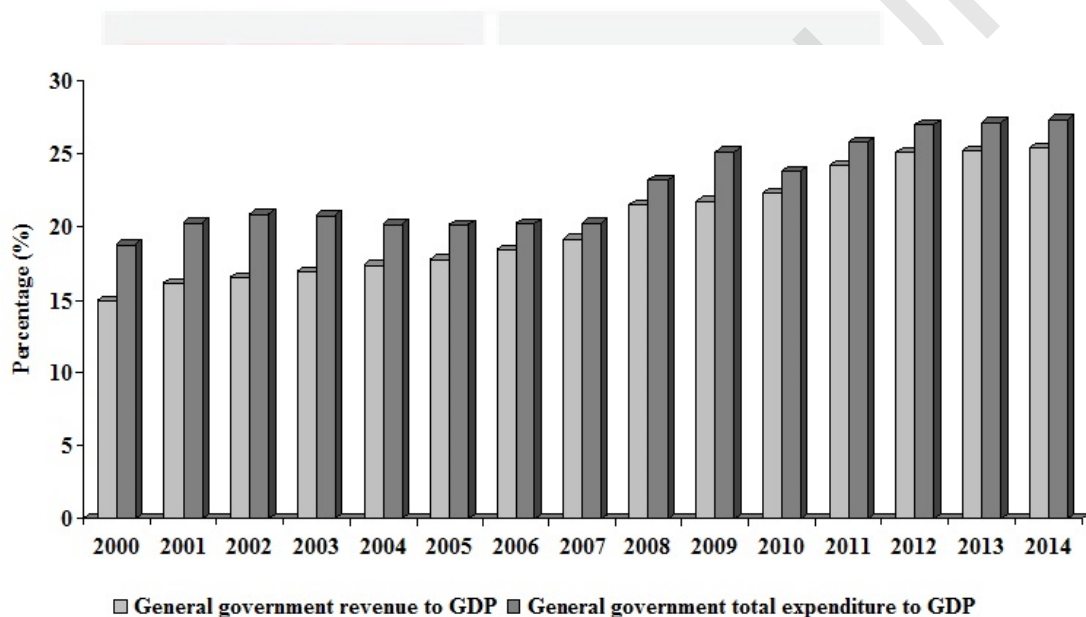


Figure 1.3 : General government revenue to GDP and general government total expenditure to GDP in Asian developing countries
(Source: Author's plot based on data collected from World Economic Outlook database.)

² McKinsey Quarterly (October 2011). *Understanding the Second Great Contraction: An interview with Kenneth Rogoff*.

³ Level of total debt is total debt to GDP (in %). Total debt included government debt, household debt, corporate bonds and bank lending to corporate.

⁴ The Economist (Sept 28, 2013). *Sovereign doubts*. (www.economist.com/news/schools-brief/21586802-fourth-our-series-articles-financial-crisis-looks-surge-public)

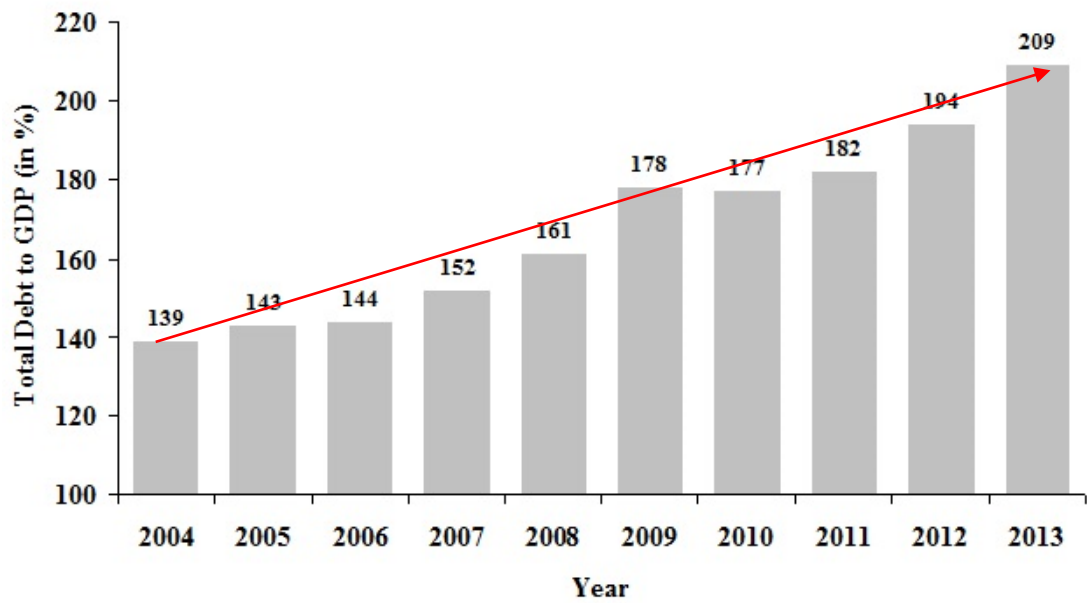


Figure 1.4 : Total debt to GDP (in %) in Asian developing countries

(Source: Author's plot based on data collected from the Asia Development Bank, International Monetary Fund.)

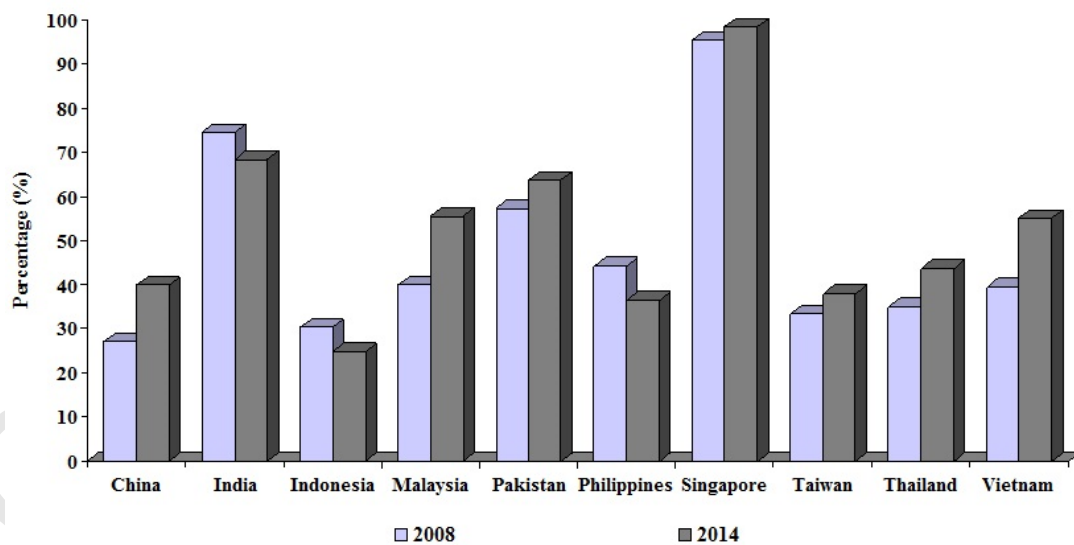


Figure 1.5 : Government debt to GDP (in %) in selected Asian developing countries

(Source: Author's plot based on data collected from World Economic Outlook database.)

Strong government commitment to play the role to open up domestic markets and in maintaining external economic relationships are crucial factors to Asian economic transformation. The open economic strategy, especially in East Asia once led to rapid economic growth in the region. However, the East Asian countries' successes in the implementation of economic policies are very different to the countries of the OECD. Asian countries installed "authoritarian developmentalism", an authoritarian state with economic capability (Ohno, 2008).

Watanabe (1995) defines the leadership in authoritarian developmentalism states as powerful and economically literate. They made state development as an ultimate national goal, their political ideology and obsession. The leaders of the authoritarian developmentalism states usually have an elite technocrat group to support them in designing and executing policies. Their political legitimacy is derived from their success in development. Suehiro (2000) constructed a diagram (Figure 1.6), which suggested that although not all Asian countries are authoritarian developmentalism, all successful economies except Hong Kong, have adopted authoritarian developmentalism and that this regime typically lasts for at least 20-30 years. A large number of Asian countries have adopted authoritarian developmentalism, whilst it has not been adopted in other regions, can be explained by regional contagion (Ohno, 2008).

Strong economic growth in these countries will continue to support an authoritarian developmentalism regime and reject western style democracy. Even high growth countries that have adopted democracy such as Taiwan and South Korea have also experienced one party dictatorships or military governments during the period when their economies started to boom. Competition among neighbouring countries is always high, and thus, governments have become sensitive to policy shifts in neighbouring countries. Consciously or unconsciously, they monitor and copy the policies of neighbouring countries; especially those which give the country a head start and make others feel left behind (Ohno, 2008).

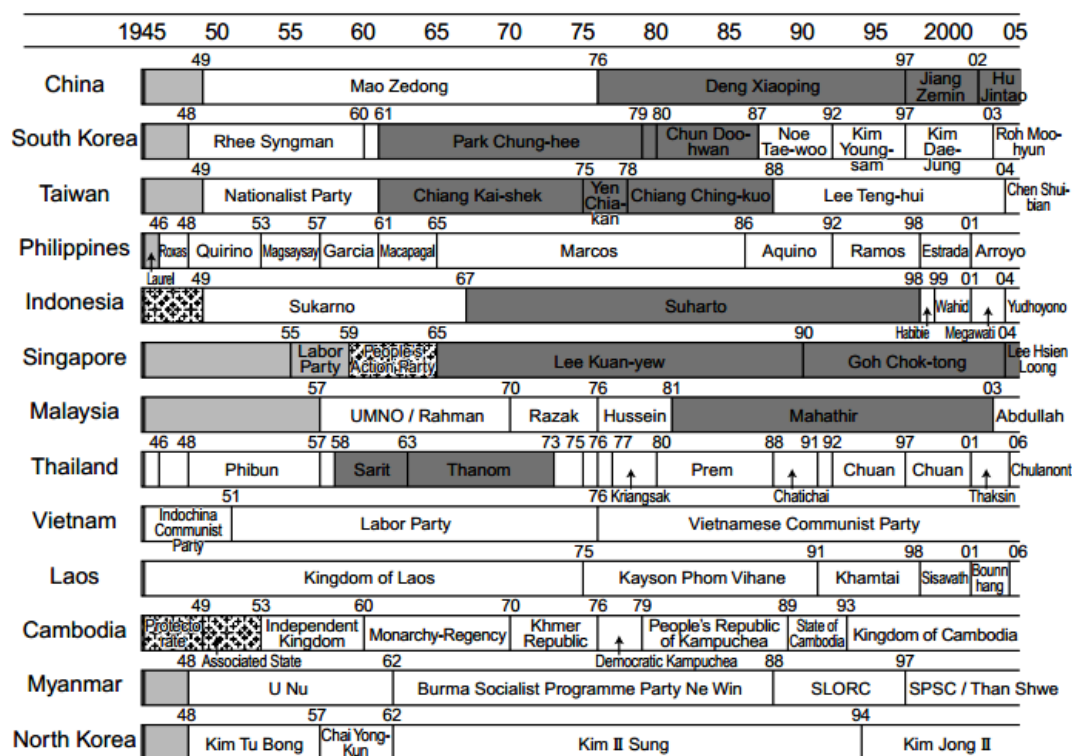


Figure 1.6 : Authoritarian Developmentalism in Asian countries

(Source: Suehiro (2000), Ohno (2008))

Asian countries' score in institutional quality indexes are generally lower compared to developed countries from the OECD. Table 1.2 displays the institutional quality scores constructed using the International Country Risk Guide (ICRG) indicators following Knack and Keefer (1995) and Demetriades and Law (2006)⁵.

Corruption remains a significant issue in Asia. Based on the Corruption Perceptions Index released by Transparency International, corruption in the public sector in Asian countries is still common (Figure 1.7). The darkness of the colour indicates the level of corruption in the public sector. Darker means the level of corruption is higher.

⁵ The overall institution quality indicator is obtained through the summation of the five ICRG indicators - (i) Repudiation of Contracts; (ii) Expropriation Risk; (iii) Rule of Law; (iv) Corruption in Government; (v) Bureaucratic Quality. The first two indicators are scaled from 0 to 12 whereas the last three indicators are scales from 0 to 4. Higher values imply better institutional quality and vice versa. To make them comparable, all scales are converted to 0 to 10 following Demetriades and Law (2006). Details of indicators are discussed in Chapter 3.

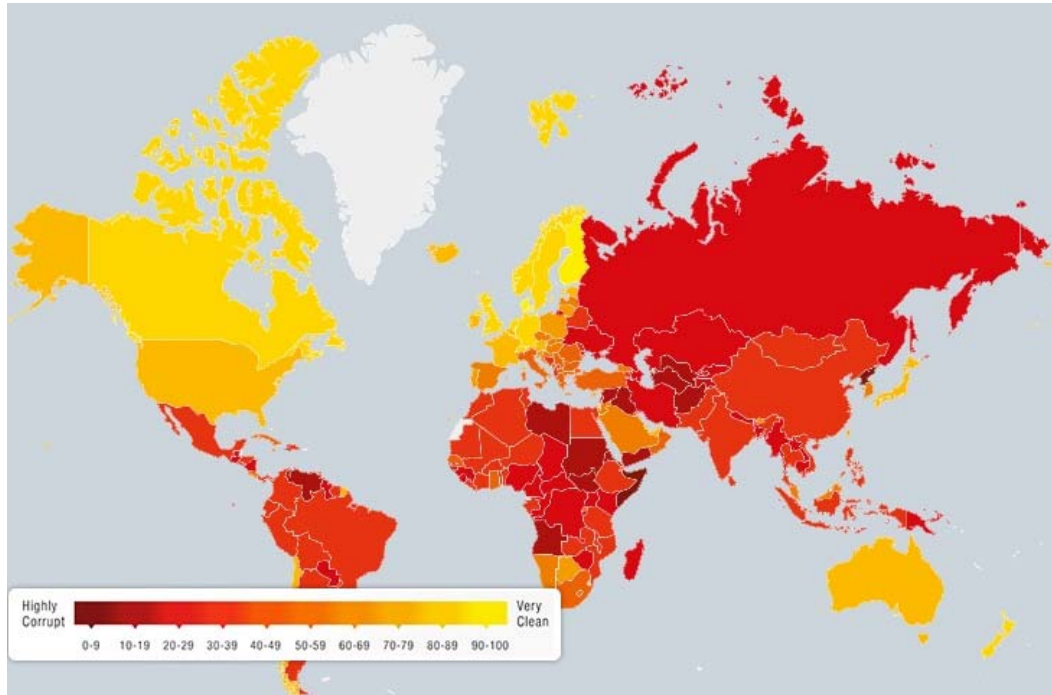


Figure 1.7 : Corruption Perceptions Index 2015

(Source: Corruption Perceptions Index 2015, Transparency International)

The score of corruption in government for Asian countries in Table 1.2 provides some simple supporting evidence to the corruption issue in Asia.

The scores are considered low as compared to developed countries (OECD countries). Whilst corruption is not getting worse, there has been little improvement either. The quality of bureaucracy has also not improved significantly. The levels of corruption and low bureaucracy quality in Asian countries are believed to have lowered the confidence of citizens in the ability of the institutions to implement the law and regulations. This is reflected in the deteriorating score in the rule of law index. Corruption in the public sector can be reflected by; low public sector efficiency, misuse of power, inappropriate and wasteful spending and the mismanagement of public resources which has been witnessed in Asian countries. Without strong institutions, government intervention in the markets will breed rent-seeking activities involving various special interest groups. The cost of corruption to the people is huge. Issues including human trafficking, poor education, poverty, inequality and child labour are among the results of corruption. A few specific groups of people were profited from the loss of economic welfare, whilst, the majority of the population were suffered, with many of them living in grinding poverty.

Table 1.2 : International Country Risk Guide

Corruption in Government										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Asia	2.16	2.76	3.16	3.33	3.44	3.74	4.08	4.13	3.74	3.47
Asia Developing	2.07	2.66	3.07	3.24	3.34	3.65	3.98	4.04	3.64	3.36
OECD	5.89	5.93	6.36	6.66	6.21	6.15	6.22	6.25	6.50	6.53
Bureaucracy Quality										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Asia	3.79	3.79	3.79	3.80	3.80	3.80	3.82	3.82	3.83	3.83
Asia Developing	3.70	3.70	3.71	3.71	3.71	3.71	3.73	3.73	3.73	3.73
OECD	5.92	5.92	5.87	5.85	5.85	5.85	5.85	5.85	5.85	5.85
Rule of Law										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Asia	6.28	6.19	6.25	6.36	6.40	6.41	6.39	6.39	6.15	5.85
Asia Developing	6.13	6.04	6.10	6.20	6.24	6.24	6.23	6.22	5.98	5.68
OECD	8.19	7.81	7.91	7.97	7.97	7.83	7.97	7.95	7.94	7.92
Repudiation of Contracts										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Asia	5.96	6.08	6.39	6.46	6.61	6.42	6.38	6.36	6.20	6.12
Asia Developing	5.78	5.90	6.21	6.28	6.43	6.23	6.19	6.17	6.01	5.93
OECD	9.18	9.22	9.24	9.28	9.35	9.34	9.22	9.03	9.02	8.82
Expropriation Risk										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Asia	7.74	7.82	7.72	7.56	7.42	7.22	6.69	7.28	7.17	5.82
Asia Developing	7.59	7.68	7.58	7.41	7.29	7.09	6.53	7.13	7.02	5.68
OECD	7.80	7.56	6.96	6.60	6.31	5.73	6.08	6.76	6.12	5.49

Notes:

1. Asian countries exclude Japan and Korea, which are included with the OECD countries.
2. Mean are computed from ICRG of Political Risk Services (PRS) and weighted by population based on Penn World Table.

Many Asians are living in poverty despite the region growing steadily for the last two decades. Average real incomes per capita in developing economies have doubled and China has experienced a seven-fold increase in per capita income since the early 1990s (UNESCAP, 2015). While many applauded the achievement of economic development and the reduction of the numbers of people living below the global poverty line of US\$1.25 a day since 1981, Asia and the Pacific region still have more than 700 million people living below US\$1.25 per day. This is about two-thirds of the world's poor and some 933 million people or a further 40% of the region's population are earning less than US\$ per day (Figure 1.8). The gains in the region over the past two decades may not be as bright as they seem. The Asian Development Bank (ADB) found that, although the number of people living in extreme poverty has fallen by more than 50% since 1980 (UNESCAP, 2015); the rising living costs in the region, especially food prices and the increasing vulnerability of poor families to cope with calamities, crises, and other shocks have increased the challenge to improve the living

conditions of billions of people in Asia, especially many that have been living below the poverty line, earning either below US\$2 a day or below US\$1.25 a day as defined by the World Bank.

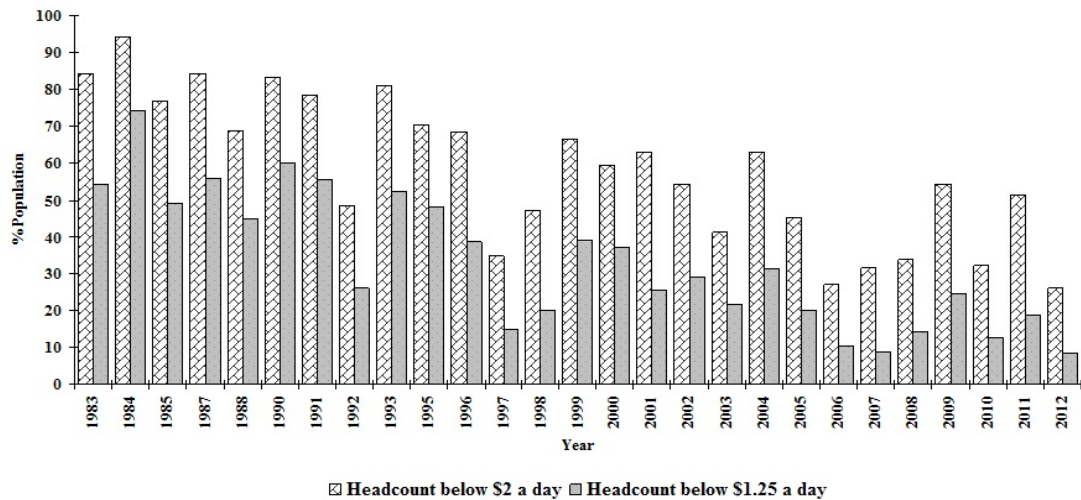


Figure 1.8 : Poverty headcount in Asia 1983 - 2012

(Source: Author's plot from WDI data)

For the poor, economic growth cannot always be converted into significantly higher household income or consumption and their real per capita income or consumption also could not keep pace with the rise of the population. Strong economic growth in Asian countries might have lifted millions of people from poverty; however, the growth is accompanied by increases in income inequality. A common and popular measurement of inequality that used in many studies is the Gini coefficient. Figure 1.9 presents the Gini coefficient for selected Asian countries between the 1990s and 2000s.

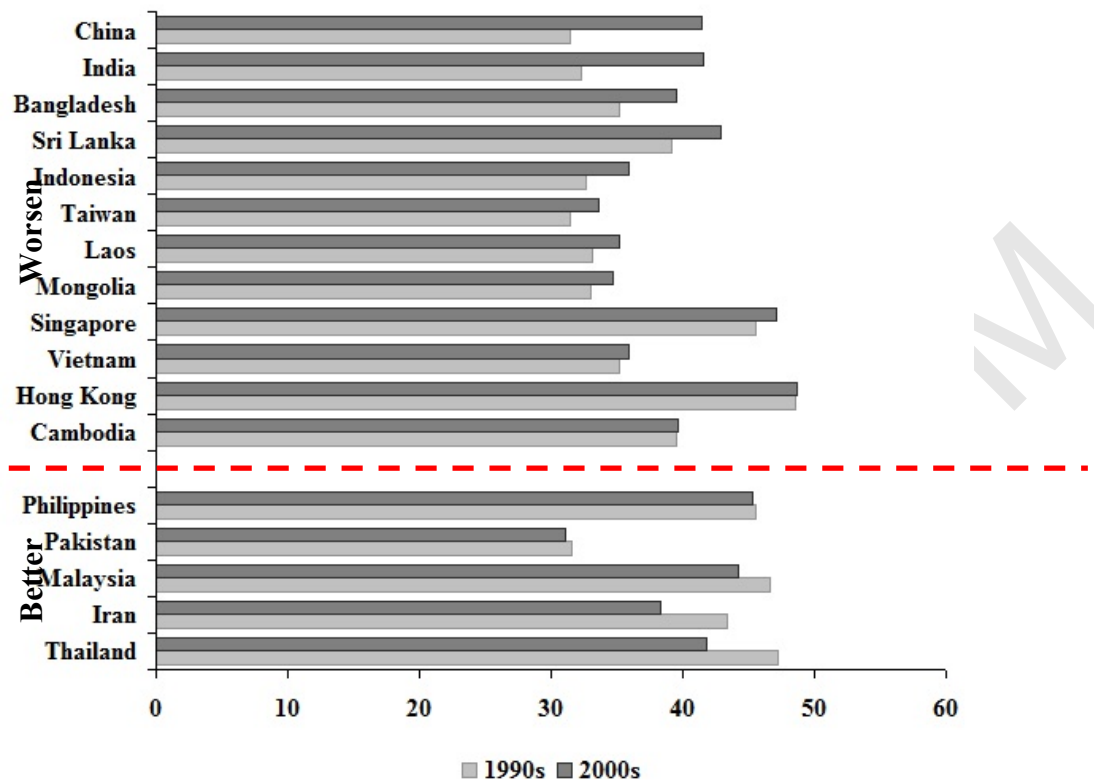


Figure 1.9 : Gini coefficient in selected Asian countries

(Source: Author's plot from UNU-WIDER data)

Rising levels of income inequality in many Asian countries is another potential problem in the region. Although a few countries have lowered income inequality, many have worse levels of inequality. Countries with large populations including China, India and Indonesia have experienced increased income inequality. For example, the Gini coefficient for China rose sharply over the last two decades despite fast growth. The regional concentration of rapid industrialisation and urbanisation, as well as foreign direct investment inflows, led to wider income inequalities between coastal and inland regions, and between the cities and rural areas in China (Cheng, 2006; Zheng & Chen, 2007).

Among the major ASEAN countries, income inequality in Indonesia and Singapore is worsening; Malaysia and Thailand have recorded falling income inequality due to government policy efforts that have made progress in building a sizeable middle class in these countries (Jain-Chandra, Kinda, Kochhar, Piao, & Schauer, 2016). Figure 1.10 shows the middle class in selected Asian countries. It is noted that Indonesia has struggled to raise its population to higher income levels as compared to their neighbouring countries. The large gap in the middle class in both urban and rural China and Indonesia are an evidence of greater income inequality in both countries.

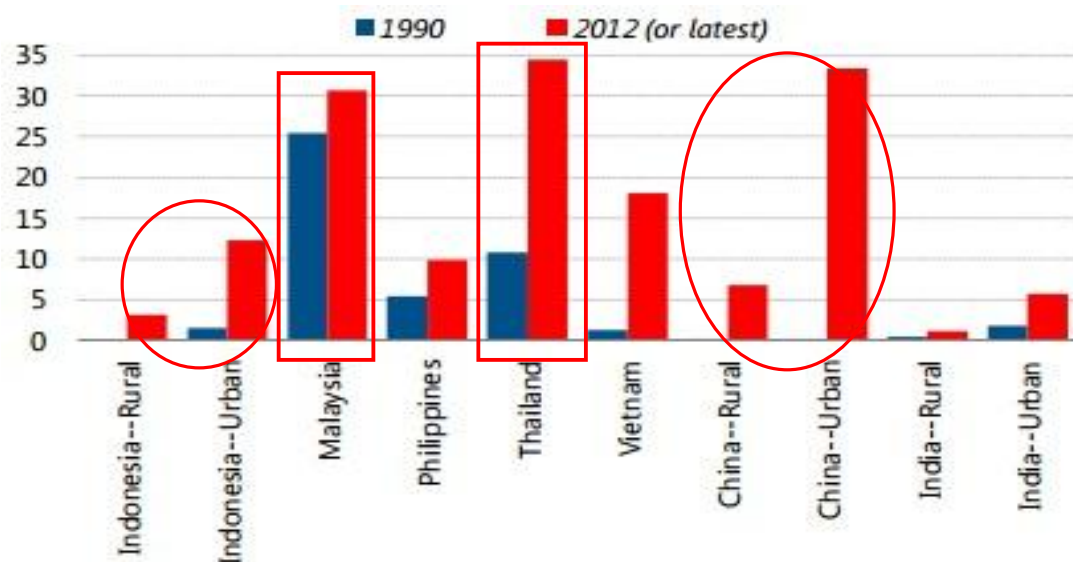


Figure 1.10 : Middle class in selected Asian countries
(US\$ 10 – US\$20 a day in 2011 PPP; in percent of total population)
 (Source: Jain-Chandra *et. al.* (2016), World Bank, PovcalNet database)

Asia has been unable to achieve growth with equity. While the record of poverty reduction is impressive, a much lower level of poverty could be achieved if income inequality had not risen (Jain-Chandra *et. al.*, 2016). Public investment in infrastructure and utilities like electricity and clean water, as well as social spending including transfer of payments, primary healthcare and basic education, have been important to the poorest families, but income inequality, inequality of opportunity and social exclusion leave the poor marginalised (United Nations, 2016).

1.3 Problem Statements

Historically, the counter-cyclical fiscal policy in Asian countries is argued to have effectively stabilised the economies and promoted recovery in the event of external shocks and economic crises, through maintaining the confidence of consumers and investors, and its impact on aggregate demand. Fiscal stimulus packages are now widely considered as a “medicine” to ailing economies or a “booster” to a weakened economy due to the reduced economic growth in developing countries caused by severe downturns in developed countries economies. Increasing government spending in developing economies is a leading economic consideration since public works are politically easier to control than current spending and tax cuts (Aykuz, 2006). Governments’ preference to implement fiscal stimulus packages to cushion any global downturn is understandable. Governments in developing countries have been increasingly spending more (as a share of GDP) over the years (IMF, 2013). However, unsustainable spending, due to governments spending more than their revenue for many years has led to increasingly massive fiscal deficits in many Asian countries. Public debt is also growing. Against this background, the identified risks of government spending policies will increasingly be exposed and their effect on economic growth remain inconclusive. No one can draw a definitive significant

correlation between government spending and economic growth in developing countries. In Asia, developing countries with successful economic development include both countries with a low government spending to GDP ratio and also some countries with a relatively high ratio (Lindauer & Velenchik, 1992). In summary, the relationship between government spending and economic growth is not obvious, and many studies based on developed countries have predicted the idea of a diminishing return to economic growth and a negative impact on the long-run economic growth.

There is a lack of evidence relating to the impact of the quality of public institutions on the effect of government spending on economic growth and no detailed empirical investigation has been conducted (Rajkumar & Swaroop, 2008). More attention should be devoted to carefully formulate this relationship and examine if the difference in institutional quality between countries can significantly explain the difference of the economies' response towards changes in government spending. The nature of government and its influence on government spending to impact economic growth has become an important issue. Governments of Asian countries have a strong presence in the market and economic activities. This comes with the risk of distorting the market's function to efficiently allocate resource and the possible breeding of rent-seeking behaviour. Countries with low-quality institutional frameworks are usually lagging in their efforts to reform the public sector, curb corruption, and are constantly concerned about the overall legitimacy of government decision making, especially regarding budgeting. Appropriate legal and other institutions can create participation and opportunities for the public to exert their demand for greater government transparency and accountability, responsiveness to public issues as well as better delivery of public services. These include both direct and indirect institutions' instruments such as regulations on budgeting and freedom of information (Russell-Einhorn, 2007). The effectiveness of government spending policy remains an interesting subject pending to be verified and justified. Weak institutional quality has contributed to the ineffectiveness of government spending and institutional inefficiencies in government spending. In these cases, government spending is found to have an unfavourable link to economic growth. Even if public resources were precisely allocated to the right goods and services this may not lead to desirable outcomes if the institutions involved are malfunctioning (World Bank, 2013). Solving this basic idea by linking government spending to different institutional quality indexes may provide some clues for researchers to understand the influences of institutions in Asian countries on the effectiveness of government spending.

From a wider perspective, economic development is not only growth. In determining the role of government spending on the economy, a complete analysis needs to include other components, such as poverty. The outcomes of government spending are often measured as the increase in GDP per dollar spent by the government which in turn, is expected to increase the potential income of all individuals in the economy. Moreover, government social spending and the provision of transfer of payments and education are viewed by many as important tools to enhance the chances for the poor to escape from poverty. Higher levels of education allow individuals to earn on average an higher income than those who have less education (Schultz, 1999; World Bank, 2006; Cremin & Nakabugo, 2012) and have a wider and more profitable range of earning options (Cremin & Nakabugo, 2012), the unemployment rates among university

graduates are considerably lower compared to those that have less education (World Bank, 2006; Cremin & Nakabugo, 2012), and educating children from the poor will increase their opportunity of escaping from poverty (Cremin & Nakabugo, 2012). Unfortunately, rising inequality is an issue in Asia and is a barrier to opportunities and a risk to accelerated and sustained growth (Zhuang, Kanbur, & Rhee, 2014). Inequality has limited access of the unskilled and lower-income groups to financial services, healthcare, education and the opportunity for training to enhance their knowledge and skill. Furthermore, higher inequality has also translated to the unfair distribution of public resources to the poor and led to limited benefits transfer from social safety programs to the poor (Kenworthy, 1999). Policy-makers and scholars were discussing the importance of education, while at the same time, inequality had caused the educational opportunities to be limited to only those who could afford, and thus, making high-quality knowledge and skills exclusive (UNESCO, 2015) and being more “urbanised”. More substantive research needs to be conducted for more insight into the link between government spending and poverty reduction, as well as factors affecting the effectiveness of government spending on poverty reduction.

1.4 Research Questions

The analysis is conducted to answer the question of how to link government spending and economic development in Asian middle-income and low-income countries. More specifically, this study aims to answer the following research questions:

1. Does government spending have any significant effect on economic growth?
2. Does a government spending threshold exist? How does the threshold influence the effectiveness of government spending on economic growth?
3. Does the level of institutional quality impact the effectiveness of government spending on economic growth?
4. What is the effect of government spending on poverty reduction?

1.5 Objective of Study

The general objective of this study is to examine the role of government spending in economic development. Specifically, this study intends:

1. To investigate the impact of government spending on economic growth and the existence of a threshold effect on government spending.
2. To examine the impact of institutional quality on the effectiveness of government spending in promoting economic growth.
3. To investigate the impact of government spending on poverty reduction.

1.6 Significance of the Study

This study aims to contribute by filling the gaps in the empirical literature as well as to present an additional theoretical discussion on the vast existing literature on government spending, poverty reduction and economic growth. It has provided several ways in which academicians and researchers can dramatically improve the empirical

analysis in the study of government spending, poverty reduction and economic growth.

Many studies have debated the relationship between government spending and poverty reduction; however, there is insufficient empirical work on the role of income inequality in income distribution on the impact of government spending on poverty reduction. This study includes the interaction between the proxy of equality in income distribution and government spending to examine the effect of government spending on poverty reduction when in the presence of the level of equality in income distribution. This approach allows this study to imply the impact of government spending on the outcome of poverty reduction depending on the level of equality in income distribution; this is complementary to the empirical analysis in existing available literature.

Conditional hypothesis is common in political science literature. Many studies have been conducted on government spending, institutional quality and economic growth. However, studies are mainly focused on the direct impact of spending and other fiscal variables on economic growth. This study proposed to determine the effect of government spending on economic growth when a set of conditional variables, the institutional quality variables, are presented in the equation. In other words, compared to the direct impact implication from existing literature, this study estimated and discussed the indirect impact of institutional quality on economic growth, when channelled through government spending.

1.7 Organisation of the Study

Chapter 2 is the literature review. In this chapter, past studies, including both theoretical and empirical studies are reviewed; the reviews of past studies covered all three objectives in this study. In Chapter 3, the empirical methodologies and data are discussed. The discussion starts with the fundamental empirical frameworks to answer the objectives of this study. Then, discussion of panel dynamic modelling and the Generalised Method of Moments (GMM) estimators used to estimate the results. Chapter 4 starts with the presentation of descriptive statistics and correlation. Next, presentation of the regression results for each objective, the conducted econometrical analysis and a discussion on the findings for each objective to fulfil the intention of this study. Finally, Chapter 5 is the summary and conclusion. This chapter summarises the study and makes summary remarks on the findings, and discussed the policy implications.

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