

Public Spending and Competitiveness in the 21st century: A Comparative Survey of Asian Countries

Danuvus Sagarik*

Abstract

This integrative study aims to answer the imperative question whether public expenditure has positive relationship with selected indicators on competitiveness in Asian countries in the 21st century. Numbers of literatures in the past have linked public spending to outcome of long-term economic growth and other dimensions of development. Public spending has been expanded in the last century and did, to certain extent, bring about better welfare to the people and several socioeconomic development indicators were improved. Nevertheless, there should be certain as well as modern development indicators affected by the efficacy of public spending, especially from the prevailing aspect that several countries are assessed in the 21st century. In this paper, Asian countries are classified into different groups according to their level of public spending and are examined on their competitiveness performances. The method used in this study is quantitative at the country level and it considers data mainly from the changes in the level of public spending and its relationship with the changes in the level of selected indicators on competitiveness. The results suggest that small governments that have relatively low level of public expenditure have shown better improvements on competitiveness scores in the past decade.

Keywords: Public Spending; Competitiveness, Asia, Public Policy

* Assistant Professor, Graduate School of Public Administration, National Institute of Development Administration (NIDA), Bangkok, Thailand. danuvus.nida@gmail.com
danuvus.sag@nida.ac.th

1. Introduction

This study aims to answer the imperative question whether public spending has positive relationship with selected indicators on competitiveness and e-government in Asian countries in the 21st century. The role of government in the economy has been evident as a result of market failure over the past several decades. Public spending is used to represent the size of government, which has been and is still a common tool for many governments to serve their goals in development, service provision, raising living standard, and many other objectives. review

Numbers of literatures in the past have linked public spending to outcome of long-term economic growth and other dimensions of development. Public spending has been expanded in the last century and did, to certain extent, bring about better welfare to the people and several socioeconomic development indicators were improved (Tanzi and Schuknecht, 2000). This serves as a guideline for government to assess and evaluate their spending performance and the desired development outcomes.

Nevertheless, there can and should be certain as well as modern development indicators affected by the efficacy of public spending, especially from the prevailing aspect that several countries are assessed in the 21st century. For over 30 years Professor Michael Porter has pioneered the use of economic analysis to investigate important issues relating to competitiveness at the firm, industry and national level. It is widely accepted that competitiveness, over the past decades, receive high attention from global audiences and global investors. Therefore, public spending should be incorporated to assess the relationship with countries' modern development performance, namely national competitiveness.

This study primarily aims to analyze benefits, based on principle of national competitiveness, accrued to the country as a consequence of public spending with a focus on Asian countries. Asia is chosen because most countries in this region are still developing and

competitiveness are considered as important steps for development in the 21st century. The result obtained can point out whether governments in Asia are still too big and whether their level of public spending are related the level of competitiveness ranking.

2. Theoretical Background and Related Literature

2.1 Government Spending and its Traditional Development Outcome Indicators

During 1930s, Keynesian economics emerged to support government intervention during the time of recession and unemployment. They contend that decisions from private sector sometimes lead to inefficient economic outcomes, thus required government intervention in order to stabilize the economy. This concept implies a great support for the increase in size of government in promoting socio-economic well-being.

Freidman supported a relatively free market rather than government's intervention (Friedman, 1962). This concept is more emphasized on the theme of human freedom, economic freedom and equity. The role of market is encouraged while the idea of big government is opposed especially in terms of growth of government (Friedman, 1980). The monetarist supports the control of money supply, rather than increase in government expenditure, as a key to achieve welfare and development.

According to Gwatney, Lawson and Holcombe (1998), government expenditures as a share of GDP, produces varying yet significant outcomes. They proclaimed that government is vital for growth enhancement as it can maintain essential institutions and invest in sectors that are deemed unattractive and costly for private sector such as infrastructure or national security. However, too big government can result in increases disincentive effects of higher taxes and borrowing, increase in diminishing returns as government grow in market sector, and even unproductive spending

In 1990, Barro (1990) suggests that public investment such as roads, ports, sanitation does compliments and raises productivity of private investment, and taxes can play a large role in determining growth. Supplementary to Barro's work, Easterly and Rebello (1993) utilized a cross-section data from 100 countries between 1970-1988 and panel data of 28 countries between 1870-198 and illustrate that infrastructure public spending such as public transportation, communication and education are positively correlated with growth of income per capita but aggregate public investment is negatively correlated with growth of income per capita.

An inclusive study from a global perspective by Tanzi and Schuknecht (2000), with data from OECD countries during the second half of the 20th century, indicates that small governments did not produce less desirable socioeconomic indicators than big governments. Their findings also imply that governments can achieve the same social and economic objectives by intelligent policies with relatively low level of public spending. Their study also extended to the use of newly industrialized countries in the early 1990s and the results illustrate that these countries enjoyed similar level of development indicators with lower level of public spending.

During the last few decades there has progressed a resemblance between the work of Michael Porter and mainstream growth theories. Particularly, there has been significant recognition among economists of the importance of sound economic environment that can facilitate investment and innovation-friendly environment that can lead to sustainable growth especially from the work of Baumol (2002) and Helpman (2004).

2.2 Modern Concept of Development Outcome: Country's Competitiveness

Porter (1990) proposed a theory to explain national competitive advantage. The main question he attempts to answer is why some countries are more successful than others in

terms of development. Four categories of country attributes, which is called the National Diamond, providing the underlying conditions of the national competitive advantage of a nation are identified. These are factor conditions, demand conditions, related and support industries, and company strategy, structure and rivalry. Two other factors, namely government policy and chance (exogenous shocks), are also proposed as they can support and complement the system of national competitiveness.

From this view of Porter, competitiveness is the determinants of productivity and the rate of productivity growth. To allow the economy to be competitive as a whole, one must focus on the building of competitiveness on specific industries and industry segments. Landau (1992) explains the meaning of competitiveness, which should be the principal goal of our economic policy, as the ability to sustain, in a global economy, an acceptable growth in the real standard of living of the population with an acceptably fair distribution, while efficiently providing employment for substantially all who can and wish to work, and doing so without reducing the growth potential in the standard of living of future generations.

In a globalized world, the concept of the competitiveness has gained and has been gaining an unprecedented importance in the past decades. There is perhaps no pure competitiveness theory but different concepts can be useful to provide a framework for competitiveness. Broad concepts of national competitiveness can also provide insightful information for the analysis of this study. Hickman (1992) defines international competitiveness as the ability to sustain, in a global economy, an acceptable growth in the real standard of living of the population with an acceptably fair distribution, while efficiently providing employment for substantially all who can and wish to work and doing so without reducing the growth potential in the standards of living of future generations. The foci of this concept are on the determinants of productivity growth while explaining the competitiveness on an international scale.

Trabold (1995) introduced four concepts of national competitiveness including the ability to sell, the ability to earn, the ability to adjust, and the ability to attract. Competitiveness can also be defined as the ability of a country to produce goods and services that meet the test of the international markets and simultaneously to maintain and expand the real income and also rise the welfare level of its citizens (Haque, 1995). Nevertheless, the concept of national competitiveness should not be explained only by the ability of a country's productivity but also the ability in other aspects that allow a country to be able to highly compete with others.

Atkinson (2013) defines competitiveness as the ability of a region to export more in value added terms than it imports. This calculation includes accounting for terms of trade to reflect all government discounts, including an artificially low currency, suppressed wages in export sectors, artificially low taxes on traded sector firms and direct subsidies to exports. It also controls for both tariff and non-tariff barriers to imports. Under this definition, a nation may run a large trade surplus or seeming to be competitive, but if it does so by providing large discounts to its exporters or by restricting imports it would not be truly competitive, for such policies would reduce its terms of trade by requiring its residents to give up some of their income to foreign consumers and/or pay higher prices for foreign goods and services.

The concept national competitiveness basically examines the ability of a national economy to grow. It is measured by a set of factors, policies, and institutions that determine a country's level of productivity. Competitiveness, nevertheless, may not only be an issue of growth or productivity. There is an emerging consensus that economic growth once again needs to focus more on human well-being aspect. Competitiveness can be considered as an important contribution to the broader goal of human-centric economic progress by creating the resources needed for increased well-being, including better education, health, and security, and higher per capita income (The Global Competitiveness Report, 2017)

2.3 Measuring Country's Competitiveness

Despite the fact that there are different definitions and concepts regarding national competitiveness as discussed above, two well-known indices, such as Global Competitiveness Report reported by World Economic Forum (WEF) and The World Competitiveness Yearbook reported by Institute for Management Development (IMD), are substantially prominent. In fact, because of different definitions and approaches, indices and data sources used by these two reports as well as rankings of competitiveness of countries differ.

WEF publishes Global Competitiveness Report annually to indicate the competitiveness index from many indicators. This flagship report, presenting the results of the Global Competitiveness Index, offers impartial information that allows leaders from the public and private sectors to better understand the main drivers of growth. In other words, the Global Competitiveness Index measures the factors that drive long-term growth. This comprehensive report provides rankings of countries. Indicators and index presented in this report are highly regarded as the key factors contributing to country's competitiveness.

The Global Competitiveness Index (GCI) tracks the performance of close to 140 countries on 12 pillars of competitiveness. It assesses the factors and institutions identified by empirical and theoretical research as determining improvements in productivity, which in turn is the main determinant of long-term growth and an essential factor in economic growth and prosperity. In WEF's Global Competitiveness Report 2017-2018, variables are used for 137 countries and are grouped into 12 pillars. These 12 pillars are the sources of national competitiveness according to WEF's Global Competitiveness Report. These 12 pillars are Institutions, Infrastructure, Macroeconomic Environment, Health and Primary Education, Higher Education and Training, Goods Market Efficiency, Labour Market Efficiency,

Financial Market Development, Technological Readiness, Market Size, Business Sophistication, and Innovation.

3. Previous Studies

Even though several studies have attempted to research on competitiveness and its related factors and several studies have investigated factors affecting national competitiveness, there are few studies in the past that identified the effect of public expenditure or public spending on national competitiveness. This study reviews some of the studies that point out significant impact of how government spend on the change of competitiveness of a country.

Delgado, Ketels, Porter, and Stern (2012) define foundational competitiveness as the expected level of output per working-age individual and highlight three broad and interrelated drivers of foundational competitiveness, namely social infrastructure and political institutions, monetary and fiscal policy, and the microeconomic environment using multiple data sets covering more than 130 countries over the 2001-2008 period. The results suggest that microeconomic environment has a positive effect on output per potential worker even after controlling for historical legacies.

Makin and Ratnasiri (2012) studies how key macroeconomic variables determine competitiveness in Australia. This research econometrically examines its most significant determinants with reference to private consumption and investment and government spending in Australia. The results based on quarterly data from 1998 to 2013 suggest government expenditure on non-tradable goods and services was the most significant factor to worsen Australia's competitiveness in the short run over this interval. This study also provides an alternative perspective on the role of fiscal policy to those previously advanced in standard international macroeconomic models.

World Bank (2012) released a report on the case of public expenditure and competitiveness in Bulgaria. It intended to inform policy makers, the international community, and civil society about Bulgaria's recent economic performance and its options for reforming public spending to enhance competitiveness and growth. It analyzes Bulgaria's export performance to identify comparative advantages and outline policy options to enhance competitiveness in the medium term. Reforms should focus on improving the productivity of the public sector to enhance service delivery, improve the business environment, and upgrade infrastructure. Reforms are needed to strengthen Bulgaria's exports and competitiveness. Particularly, export-driven growth, however, is associated with lower tax revenues. Initiating the reforms needed to become more competitive relies on a more productive public administration.

Thomas (2011) applies a comprehensive and established indicator used by The United Nations – The Human development index, to measure competitiveness at the national level. The main goal of this paper is to find whether higher expenditure on education, research and development leads to higher competitiveness. In evaluating the relationship, countries such as the United States, Japan and European Union countries were used. The panel data analysis was used to investigate the relationship and it was found that, expenditure on education and R & D positively leads to national competitiveness.

4. Methodology

4.1 Research approach and design

The research approach and methodology utilized by this study is uniquely designed to answer the questions regarding the collective effect of size of government as measured by public expenditure on several indicators of national competitiveness. With regard to the case

of Asian countries, this kind of study is relatively new and thus it is fascinating to find out the relationship between these variables in Asian countries.

In this paper, Asian countries are classified into different groups according to their level of public spending and are examined on their performances particularly on national competitiveness. The method used in this study is quantitative at the country level and it considers data mainly from the changes in the level of public spending and its relationship with the changes in the level of selected indicators on competitiveness including the 12 pillars of global competitive index, which are recorded in 2008 up until now. These figures are to be compared among Asian countries of different public spending level.

Secondary data are initially used to describe overall picture of public expenditure pattern, 12 pillars indicators of competitiveness among Asian countries. Public expenditure data are collected from the World Bank during the period of 2008-2016 and government effectiveness national competitiveness data are collected from the Global Competitiveness Report. Categorization is then used to classify countries by size of government measured by public expenditure as percentage of GDP. This method is used by Tanzi and Schuknecht (2000) but this study extends to consider the relationship of public expenditure with competitiveness rather than conventional economic development indicators. Comparisons between group and over time can be made whether small governments perform as well, better, or worse than their counterparts with relatively big governments. To estimate the impact on competitiveness, improvements or changes should be taken into account to evaluate the progress over time.

There could be certain limitation to the approach utilized in this study. It is assumed that there is no controversy about the change in the development indicators. This study also ignores an opportunity cost for public expenditure, for example in terms of private consumption or investment. The opportunity cost is ignored as this study registers only the

positive impact of public expenditure on socioeconomic development indicators not the cost such expenditure. The last limitation is the fact that it is impossible to take into account all the competitiveness indicators that government in Asian countries want to improve and there are various definitions of competitiveness. Essentially, this study will include fewer indicators than might have been desirable to include but all the key indicators are included.

4.2 Data collection and analysis

Data on public expenditure is used to represent the size of government. This reflects how government behaves in practice and can indicate how much governments spend. The more governments spend; it implies the bigger size of governments. To be more accurate as well as to reflect the real size of government, public expenditure in relative term compared with the size of a country's gross domestic product (GDP) is taken into account. Data on total public expenditure as percentage to GDP are utilized in this study and these data are collected from the World Bank.

The level of total public expenditure as percentage of GDP is used to classify the size of government in Asian into three categories; 0-25, 26-35, and more than 35, which are small, medium, and large governments respectively. This way of categorization of the size of government may be somewhat different from many studies in the past, especially in developed countries as the ability to collect income, the nature, and the historical context of Asian countries are different.

As for national competitiveness, the data are obtained from Global Competitiveness Report. This data differentiates countries by the score or level of competitiveness from 12 pillars. This study considers the higher the scores the higher level of competitiveness. Remarkably, differences between the context of countries and changes over time as well as cultural differences and therefore comparing a single indicator may not be helping in the

analysis but rather a careful and comprehensive look at the overall picture will yield a more policy-oriented analysis. Precisely, this based on indicators from global competitiveness report to illustrate the overall picture of competitiveness in Asia.

In order to analyze the effect on national competitiveness, improvements of the abovementioned indicators are considered. Precisely, this study will compare if there are improvements of the selected indicators from each competitive pillar. As a result, the greater the positive impact on these indicators, the greater the improvement in competitiveness from each aspect.

Building on this foundation, the findings from this study answer whether public spending spent by governments in Asia have any relationship with changes in countries' competitiveness and performance on e-government. This study certainly produces insightful and new piece of information not only to allow us to understand public spending in this region more thoroughly but also to serve as policy implications that can lead governments to be more efficient as well as to find the smarter choice for their societies.

5. Results and Discussion

5.1 Level of public spending and size of Asian countries

Having obtained data on public expenditure as percentage of GDP together with the level of national competitiveness, an initial reflection on features of countries can be sketched. As stated earlier, this study places importance on the impact of government on national competitiveness, considering different level of public spending.

Table 1 below demonstrates a level of public spending that classifies countries into three different types of expenditure based on the level of public expenditure as percentage of GDP. This table illustrates variations in the level of public expenditure across Asian countries, which can later be categorized into large, medium, and small size of government.

Table 1 Size of Government and Public Expenditure Composition, 2008 and 2017 (Percent of GDP)

Countries	Government Total		Expenditure on		Military Expenditure	
	Expenditure (% GDP)		Education (% GDP)		(% GDP)	
	2008	2017	2008	2017	2008	2017
Northeast Asia						
South Korea	14.64	15.21	16.30	-	8.90	-
Japan	34.23	36.66	9.98	9.23	5.95	5.50
China	22.39	31.32	-	-	16.08	11.78
Mongolia	26.10	40.71	14.51	12.75	4.66	3.33
Southeast Asia						
Thailand	19.23	22.25	18.16	19.14	8.98	7.51
Laos	15.42	22.00	13.96	12.19	2.77	1.12
Cambodia	15.38	22.67	13.96	9.09	9.32	14.22
Myanmar	12.18	22.42	5.39	-	35.17	23.97
Vietnam	27.07	28.53	18.05	18.51	11.54	10.09
Philippines	18.65	19.48	14.44	13.21	9.20	9.10
Indonesia	19.39	16.82	13.67	20.63	3.43	5.89
Malaysia	27.30	25.07	14.03	20.64	9.76	8.25
Singapore	17.89	18.74	19.94	19.95	26.54	21.61
Brunei Darussalam	27.10	39.09	5.29	9.98	-	-
South Asia						
India	28.69	27.90	11.19	14.05	15.11	14.86
Pakistan	21.84	19.92	14.09	12.60	19.28	-
Bangladesh	13.82	13.74	17.81	18.11	11.92	15.30

Countries	Government Total		Expenditure on		Military Expenditure	
	Expenditure (% GDP)		Education (% GDP)		(% GDP)	
	2008	2017	2008	2017	2008	2017
Nepal	15.35	22.01	22.11	16.99	10.00	9.24
Sri Lanka	19.73	19.71	8.27	17.72	19.32	14.41
Bhutan	37.80	31.59	15.64	25.52	-	-
Maldives	35.42	38.28	12.62	11.09	-	-
Southwest Asia						
Afghanistan	20.92	25.92	17.06	12.50	4.62	2.69
Iran	22.01	19.55	20.57	19.03	14.72	-
Iraq	57.25	43.51	-	-	-	14.08
Israel	41.46	40.13	13.36	14.32	16.73	15.52
Jordan	34.52	28.96	-	13.45	18.04	13.78
Kuwait	40.40	54.41	-	-	-	-
Lebanon	34.20	26.91	5.87	8.57	13.14	19.58
Qatar	23.01	41.52	15.05	12.74	14.09	8.01
Oman	29.33	51.50	10.94	11.95	42.43	42.93
Saudi Arabia	26.68	38.59	19.25	-	-	-
Syria	22.93	-	20.04	-	23.10	-
Turkey	34.58	33.43	12.83	13.13	7.50	5.23
Bahrain	23.65	35.44	10.55	7.59	17.26	17.73
United Arab Emirates	21.95	32.38	-	-	-	-
Yemen	41.25	30.80	12.48	-	-	-
Cyprus	38.23	39.14	17.59	15.53	2.64	4.78

Countries	Government Total Expenditure (% GDP)		Expenditure on Education (% GDP)		Military Expenditure (% GDP)	
	2008	2017	2008	2017	2008	2017
	Central Asia					
Tajikistan	27.18	39.38	12.80	16.44	-	-
Kazakhstan	27.07	22.05	13.64	13.86	6.16	5.10
Uzbekistan	32.99	32.08	-	-	-	-
Turkmenistan	10.87	17.20	20.79	-	-	-
Kyrgyzstan	17.52	17.23	-	-	-	-
Georgia	25.88	17.85	8.93	12.66	29.25	8.52
Armenia	22.24	27.00	14.26	10.19	16.06	15.90
Azerbaijan	32.95	38.70	7.82	7.63	17.78	22.62

Source:

* Expenditure on Education (% of Total Government Expenditure)

** Military Expenditure (% of Central Government Expenditure)

Considering the size of government classified by the level of public expenditure as percentage of GDP in both year, 2008 and 2017, it is quite evident that expenditure level range between 16 to 57 percentage of GDP among Asian countries. This indicates that there are different size of government as measured by public expenditure ranging from small to large. Big governments tend to also spend a lot on education and military.

Particularly, countries in Southeast Asia seem to have relatively lower spending than in other regions similar to countries Northeast Asia except Japan due its macroeconomic policy. Several countries in Southwest Asia seem to have quite large level of spending whereas countries in Central Asia.

From the data presented above, it is obvious that there are variations in level of public spending across the Asia region has shown considerable level of variations and there are also changes in level of public spending from 2008 to 2017 quite obvious in almost every country. From this aspect, it is interesting to look whether different level have any relationship with changes in the level of national competitiveness.

5.2 Discussion on national competitiveness

Competitiveness is nowadays considered as one of the main indicators of country's success in development economically. Table 2 clearly illustrates data on competitiveness from 12 different pillars in all country groups. The results are very interesting indeed as there are changes in level of competitiveness quite differently among different groups of country. This is expectedly due to the performance of spending and efficiency of spending among different countries. This pattern of change, in terms of competitiveness, it not beyond expectation and should be considered to address carefully in the 21st century as the global economic landscape and technological change have been dramatic. All Asian countries were affected by the fourth industrial revolution, which may affect the level of competitiveness and the use and utilization of public expenditure should be a major concerned if a country wants to achieve desirable outcome.

Table 2 Size of Government and Public Expenditure Composition, about 2008 and 2017 (Percent of GDP)

Global Competitiveness Index (GCI)	Large Government (% GDP)		Medium Government (% GDP)		Small Government (% GDP)	
	2008	2017	2008	2017	2008	2017
	Pillar 1: Institutions	4.96	4.13	4.30	4.36	4.15

Global Competitiveness Index (GCI)	Large Government (% GDP)		Medium Government (% GDP)		Small Government (% GDP)	
	2008	2017	2008	2017	2008	2017
	Pillar 2: Infrastructure	4.43	4.05	3.85	4.37	3.80
Pillar 3: Macroeconomic Environment	5.72	4.50	5.02	4.46	4.98	5.15
Pillar 4: Health and Primary Education	6.00	5.65	5.42	5.89	5.34	5.78
Pillar 5: Higher Education and Training	4.51	4.09	4.04	4.56	3.87	4.34
Pillar 6: Goods Market Efficiency	4.67	4.30	4.35	4.52	4.40	4.56
Pillar 7: Labour Market Efficiency	4.69	4.15	4.50	4.25	4.44	4.22
Pillar 8: Financial Market Development	5.05	3.75	4.27	3.97	3.19	4.12
Pillar 9: Technological Readiness	4.31	4.24	3.47	4.38	3.41	4.11
Pillar 10: Market Size	3.70	3.33	4.00	4.42	4.02	4.39
Pillar 11: Business Sophistication	4.69	4.03	4.20	4.21	4.19	4.18
Pillar 12: Innovation	3.95	3.57	3.54	3.70	3.35	3.61

Small Government = South Korea, China, Thailand, Laos, Cambodia, Myanmar, Philippines, (GDP = 0-25 %) Indonesia, Singapore, Pakistan, Bangladesh, Nepal, Sri Lanka, Afghanistan, Iran, Qatar, Syria, Bahrain, United Arab Emirates, Turkmenistan, Kyrgyzstan, Georgia and Armenia

Medium Government = Japan, Mongolia, Vietnam, Malaysia, Brunei Darussalam, India, Maldives, (GDP = 26-35 %) Jordan, Lebanon, Oman, Saudi Arabia, Turkey, Tajikistan, Kazakhstan, Uzbekistan and Azerbaijan

Large Government = Bhutan, Iraq, Israel, Kuwait, Yemen and Cyprus (GDP = 36-100 %)

Remarkably, small governments, as measured from public expenditure, seem to have performed very satisfactory in improving the level of competitiveness compared to the medium and large government. Almost every pillar of competitiveness, except labour market efficiency, of small governments have shown higher scores in 2017 compared to 2008. Interestingly, scores on infrastructure, health and primary education, and higher education are the most improved, from 3.80 to 4.28, 5.34 to 5.78, and 3.87 to 4.34 respectively, compared to other pillars that increase in the lesser extent indicating that governments that do not spend much can also gain competitiveness both in general and very much on certain aspects. This information can lead to suggestion that government may consider lowering level of spending while finding ways to still improve level of competitiveness, which will benefit the fiscal health of a country. This could imply that strong and competitiveness economy does not need to depend heavily on government

As for the medium size governments, this country group has also shown quite good performance, although not as good as small governments. Almost all pillars have illustrated higher scores except macroeconomic environment, financial market, and labour market efficiency. This group also has the highest scores on health and primary education. The strength of a country could come from many factors that can build a strong shield against uncertainty and serve as good foundation for the competitiveness.

The large government group have shown decreases in all 12 pillars of competitiveness. It is obvious that countries in Asia that has large public expenditure level did not show improvement in level of competitiveness and rather a clear sign of lower scores on all pillars of competitiveness especially institutions, financial market development, and business sophistication. This indicates that governments that spend relatively less can still have reached certain success in the terms of scores of competitiveness whereas countries that spend more tend to face a difficult situation in lesser scores on competitiveness.

Small and medium size governments have clearly enjoyed increases in competitiveness in the last 10 years. Comparing countries with effective government, those with small governments perform in the similar fashion with big-government countries. In particular, it can be concluded that governments that spend less can still yield similar improvement in the level of income per capita compared to the bigger spenders.

There is no area or pillars where large government achieved improvements compared other groups and it is noteworthy how context and background of socioeconomic development of countries in this group differ from others. Obviously, table 2 shows that both medium and small effective governments experienced better performance in terms of competitiveness outcomes than the large governments.

Particularly in 2017, it is obvious that large spending governments have obtained even lower scores compared to other groups even though back in 2008 the large governments did a lot better. This could be because countries with large governments, namely Bhutan, Iraq, Israel, Kuwait, Yemen and Cyprus, are less developed economically and socially compared to countries with small and medium size governments. Besides, countries that spend less may have better institutions compared to the large spending countries. This is particularly obvious also that the large spending group have a lot lower scores on institution pillar of competitiveness.

6. Concluding Remarks

This study aimed to designate the important question whether different level of public expenditure across Asian countries produce different level of national competitiveness during 2008 to 2017. As reviewed critically, the link between public expenditure and economic development have been evident in certain theories and researches but the link with competitiveness is still rare.

Methodology used in this study is quite unique as it constructs a method that classifies Asian countries into three different groups based on their level of public expenditure. Asian countries are classified into three different groups including large, medium, and small governments. These groups are analysed according to their relationship with the changes or improvements in scores of competitiveness pillars from the global competitiveness report using the data from 2008-2017.

In the period between 2008 and 2017, selected data on public expenditure as percentage of GDP and scores on competitiveness from global competitive report have been reviewed. Countries with different size of public expenditures are compared. The results suggest that small and medium size government in Asia have achieved better improvements in the scores of competitive compared to the bigger ones. The performances in areas such as institutions, health and primary education, higher education, and market related indicators have been more outstanding in countries with smaller governments. In other words, small governments perform better than the bigger in terms of improvements.

The main contribution of the integrative results indicates that progress in competitiveness in Asian countries that could come from increases in public expenditure are quite unlikely. Furthermore, countries that spend less but may have other strength can perform better in the improvements of competitiveness.

The analysis can perhaps imply that governments with more sophisticated public policies and public administration are likely to be the ones that can achieve competitiveness goals with fewer resources. Notably, this favourable depiction of small governments does not necessarily mean that governments should play no role or a very limited role in the society.

This study suggests that the level of public expenditure may not be a major actor in helping countries to get rid of all competitiveness difficulties. Rather, the expenditure that really deliver the outcomes and the right targets of public expenditure, particularly

performance of competitiveness indicators should receive more attention from both policymakers and public administrators. The use of new technology to monitor and evaluate desirable outcomes that match with public expenditure and performance of government is recommended to Asian countries, especially the ones that still have large size of public expenditure, as a tool to help achieve future goal of competitiveness.

References

- Atkinson, R. (2013). *Competitiveness, Innovation and Productivity: Clearing Up the Confusion*. Washington, D.C.: The Information Technology and Innovation Foundation.
- Barro, R. J. (1990). Government Spending in a Simple Model of Endogeneous Growth. *Journal of Political Economy* 98(S5): 103-125.
- Baumol, J. W. (2002). *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*. Princeton: Princeton University Press.
- Delgado, M., Ketels, C., Porter, M. E., & Stern, S. (2012). *The Determinants of National Competitiveness*, NBER Working Paper No. 18249. Cambridge, MA: NBER.
- Easterly, W., & Rebelo, S. (1993). Fiscal Policy and Economic Growth: an Empirical Investigation. *Journal of Monetary Economics*, 417–58.
- Friedman, M. (1962). *Capitalism and Freedom*. Chicago, IL: University of Chicago Press.
- Friedman, M., & Friedman, R. (1980). *Free to Choose: A Personal*
- Gwatney, J., Lawson, R., & Holcombe, R. (1998). *The Size and Functions of Government and Economic Growth*. Joint Economic Committee.
- Haque, I. ul. (1995). *Technology and Competitiveness*. In I. ul Haque (ed.) *Trade, Technology and International Competitiveness*. Washington D.C.: World Bank.

- Helpman, E. (2004). *The Mystery of Economic Growth*. Cambridge, Mass: Belknap-Harvard University Press.
- Hickman, K. A. (1992). Do Outside Directors Monitor Managers Evidence from Tender Offer Bids. *Journal of Financial Economics*, 32, 195-222.
- Landau, R. (1992). Technology, Capital Formation and U.S. Competitiveness. In B.G. Hickman, ed., *International Productivity and Competitiveness*. New York: Oxford University Press.
- Makin, A. J., & Ratnasiri, S. (2015). Competitiveness and Government Expenditure: The Australian Example. *Economic Modelling*, 49, 154–161.
- Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.
- Statement. New York, NY: Harcourt Brace Jovanovich.
- Tanzi, V., & Schuknecht, L. (2000). *Public Spending in the 20th Century: A Global Perspective*. Cambridge, Cambridge University Press.
- Thomas, K. J. (2011). Global Business Chain and Twin Advantage: Strategic Opportunities for Developing Countries. *Competitiveness Review: An International Business Journal*, Vol. 21 Issue: 4, 352-368. <https://doi.org/10.1108/10595421111152156>
- Trabold, H. (1995). Die internationale Wettbewerbsfähigkeit einer Volkswirtschaft. Deutsches Institute für Wirtschaftsforschung. Vierteljahrshefte zur Wirtschaftsforschun. Berlin: Dunker & Humblot, 169-183.
- World Bank. (2012). *Bulgaria-Public Expenditures for Growth and Competitiveness* (English). Public Expenditure Review (PER). Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/276861468020095614/Bulgaria-Public-expenditures-for-growth-and-competitiveness>

World Economic Forum. (2017). The Global Competitiveness Report 2017–2018. Geneva, September 26, 2017. <https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018>