East Asian Culture and Economic Miracle: The South Korean Experience

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Abstract: After the economic destruction of advanced nations including Japan during to the Second World War, the countries gradually recovered to register impressive growth rates until 1980s; included in this rank is some developing countries. Tremendous growth rates were seen in newly industrialised nations such as Hong Kong, Singapore, South Korea, and Taiwan since the 1980s. At present, the Chinese economy is fast expanding and is the fastest growing after Malaysia and Thailand. East Asian economies are among the three major economic powers in the global economy along with the EU and the NAFTA. They share cultural heritage and have worked hard to develop their nations and play an important role in the global economic system. Thus, it is relevant to analyse what are reasons behind East Asian countries' rapid economic development. Furthermore, it is also important to find out whether culture impact on national development in East Asia. This paper examines the cultural homogeneity in East Asia which is strongly influenced by Confucianist ideology and beliefs in general. It also discusses South Korean economic development strategies and role of culture in particular. Additionally, it analyses whether South Korean economy could develop further by creating technology innovation and strengthening regional economic integration.

*Keywords:*Economic Development, National Strategy, Culture, Confucianism, East Asia *JEL Classification:* Q1, Q5

Article Received: 26 March 2015; Article Accepted: 16 December 2015

1. Introduction

The East Asian economic miracle was proclaimed by the World Bank in a major report in 1993. Since then East Asia has been positioned as one of the major economic powers in the global economy along with the European Union (EU) and the North American Free Trade Agreement (NAFTA) region. During the 1990s, the East Asian economic miracle had been the subject of heated debate among scholars. Krugman (1994) described the miracle as perspiration instead of inspiration. It means that East Asian economic development was the result of demographics, high savings, rising investment,

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improving education, labour transfer of modern sector and other measurable inputs. He also added that economic growth in East Asian countries would weaken later in the absence of strong innovation-led productivity growth.

In fact, Japanese economic growth has slowed and matured since the 1990s. It is the most advanced economy in East Asia. The four newly industrialised nations (NIEs) such as Hong Kong, Singapore, South Korea, and Taiwan have experienced slowed economic growth since 2000s, while other developing Asian countries experienced an average growth rate of 7% annually from 1994 until 2003 to 9% between 2004 and 2011. The sharp GDP growth rates notched by Asia is a result of rapid expansion of the Chinese and Indian economies which continued until the global financial crisis in 2008.

During the Asian economic crisis of 1997-1998, many western scholars questioned if the East Asian economic miracle had ended. However, the crisis had not affected national economic growth permanently although financial excesses depressed growth for a while. During the Asian economic crisis, South Korea suffered as a result of the International Monetary Fund (IMF) bailout programme which resulted in internal reform processes such as deregulation and liberalisation. Since then, South Korean economy recovered rapidly showcasing its resilience. A decade later, the global financial crisis and the EU's sovereignty debt crisis battered the Western world though East Asian countries continued to show positive balance sheets.

East Asian economies overcame the global financial crisis and battled global recession successfully. As a result, economic growth rebounded strongly in 2010 whereby South Korea and China registered 6.3% and 10.3% growth rates respectively while US' and EU's growth rates were very marginal. Since then, East Asian economic growth has been on a slippery slope. Therefore, there are many debates if there are cyclical or structural factors affecting East Asia's economic growth (Magnus, 2013; Mahbubani, 2008).

Regardless of these debates on the trend of East Asian economic growth, the economic significance of East Asia is a fact. It is home to the world's busiest trade routes, manufacturing hubs, and some two billion people, about one third of the world's population. The World Bank projected the next billion consumers will come from Asia, particularly from East Asia. The growing middle class in Asia will ensure export of products, fashions, tastes, and designs from the West to the East. By 2015, the number of Asian middle class consumers will be equal to Europe and North America for the first time in 300 years. By 2021, there will be over two billion Asian middle class households and in China alone, the number of middle class consumers will account for over 670 million (an increase from 150 million in 2010). Additionally the spending of Asia's middle class is expected to rise in the next 20 years from about US\$5 trillion to over US\$32 trillion, which is about 42% of worldwide consumer spending (Kahras & Gertz, 2010; World Bank, 2010) (See table 1 and 2).

	20	09	20	20	20	30
North America	338	18%	333	10%	322	7%
Europe	664	36%	703	22%	680	14%
Central & South America	181	10%	251	8%	313	6%
Asia Pacific	525	28%	1,740	54%	3,228	66%
Sub Saharan Africa	32	2%	57	2%	107	2%
Middle East & North Africa	105	6%	165	5%	234	5%
World	1,845	100%	3,249	100%	4,884	100%

 Table 1: Size of middle class in different regions (in millions and global share)

Source: Wolfensohn Center for Development at Brookings, 2010.

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	20	09	202	20	20	30
North America	5,602	26%	5,863	17%	5,837	10%
Europe	8,138	38%	10,301	29%	11,337	20%
Central & South America	1,534	7%	2,315	7%	3,117	6%
Asia Pacific	4,952	23%	14,798	42%	32,596	59%
Sub Saharan Africa	256	1%	338	1%	827	1%
Middle East & North Africa	796	4%	1,321	4%	1,966	4%
World	21,278	100%	35,045	100%	55,680	100%

 Table 2: Total middle class consumption in different regions (2005 ppp billion dollars and global share)

Source: Wolfensohn Center for Development at Brookings, 2010.

This paper focuses on the role of culture in shaping economic development in South Korea and other East Asian countries that has changed the structure of global economy. It analyses whether East Asian economic growth will continue or not. At the same time, it explores what are major factors that contribute to the rapid development of East Asian economies. In particular, it argues which aspect of culture based on Confucianism shared by East Asian countries that contributed to their rapid economic growth and economic miracle. This article will use South Korea as a case study to analyse how Confusion ethics have contributed to its rapid economic growth. It is important to understand the role of culture in the East Asian context generally and in South Korea in particularly by focusing on how Confucianism played a role in developing the national economy. This is because the rapid economic growth in South Korea cannot be explained only by conventional Keynesian and neo liberal economic theories.

Cultural variations are often used to explain the different economic achievement across countries. Different cultures infuse people with different values, which manifest themselves in varied ways of living. Some ways of life contribute to economic development more than others so that some countries with a culture that produces more pro-developmental forms of way of life can create higher economic growth than others. Some political scientists and cultural theorists argue that these forms of way of life are largely or entirely fixed because of cultural determination. Regardless of cultural supremacy explanation based on Europe's growth, the role of Confucianism in economic growth has witnessed renewed interest owing to the rapid economic development in the East Asian region since the 2000s. The popular argument is that different cultures make people behave differently which contribute to differences in economic development across societies. Accordingly, different cultures create different attitudes towards work, saving, education, cooperation, trust and authority among others that shape a nation's economic growth. However, it is not possible to explain clearly whether or not a particular culture is inherently good or bad for a nation to generate economic development (Chang, 2007; Fukuyama, 1995; Huntington, 2000; Landes, 1998).

2. Theoretical Debates on Economic Growth

Over last five decades, there have been many studies that dealt with the phenomenon and sustainability of economic growth. Many scholars have sought to identify the sources of national economic growth and attempted to provide a model which explains the large income differences across countries. In the 20th century, neoclassical, alternative and institutional model theories have gained prominence as they describe the interaction of the various macroeconomic forces to explain economic growth.

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Given the neoclassical economic theory, the original model consisted of capital and savings and stated economic growth originates through capital accumulation, which is the result of increased savings in the country. Capital refers to all physical capital such as land, natural resources, and minerals. It is the foundation for the neoclassical growth theory, which is known as the dynamic theory of growth today (Domar, 1946; Harrod, 1939). Later, Solow (1956) developed the neoclassical growth theory further and included labour and capital as factor inputs, and similar models were proposed by Swan (1956) and Meade (1961). This model was known as the exogenous growth model. Solow extended further the influence of technological progress on the production process. Solow's model introduced total factor productivity growth that showed constant returns to scale. It assumes that the national economy can achieve a balanced growth path if capital, output, consumption, and population grow at constant rate (Rispens, 2009; Solow, 1957).

Alternative models of economic growth were proposed by various researchers in the subsequent decades in order to improve the neoclassical growth theory further. Their main objective was to provide an overall detailed model, which was represented by the Ramsey growth model. The concept of the model was based on an optimal savings rate, which introduced endogenous savings by assuming that savings are variable over time (Ramsey, 1928). Mankiw, Romer and Weil (1992) recognised the importance of human capital and education in contributing to economic growth.

The neoclassical growth theory faced a barrage of criticism because exogenous models were unable to provide sufficient insight on the sources of economic growth. In fact, it is true that the exogenous models are not able to account for how technological progress originates and how it interacts in the models. In order to answer these questions, Romer (1986, 1990) and Lucas (1988) introduced the endogenous growth theory. It describes how technological change originates by introducing a model in which research and development (R & D) is the result of economic incentives and explains that sustainable economic growth is only possible with a growing population, which could provide more researchers, ideas, and research activities. As a result, technological progress takes place that enables further economic growth.

An institutional approach for explaining long term economic growth was also introduced which is based on social infrastructure. This approach recognises four fundamental determinants of economic growth, namely institutions, geography, culture, and luck. Institutions are man-made factors such as enforcement of property rights, equality of opportunity, and effectiveness of markets, while geography represents the role of nature such as natural endowments, climate, and disease burden. Culture contains religion, social capital, norms, preferences, and values of the population. Luck means multiple equilibriums such as right place at the right time.

Based on Glaeser, La Porta, Lopez de Silanes, and Schleifer (2004), institutions are not a source of economic growth but rather accumulation of human capital. However, their studies show developing nations often experience high economic growth during the dictatorial regimes that are effective in promoting economic policies. As a result, institutional improvement can take place over time, when poor countries develop. Overall, the institutional approach indicates that governments should focus more on strengthening economic and educational institutions (Rispens, 2009).

In this paper, three growth theories are adopted to explain how South Korean economy has developed rapidly since it embarked on industrialisation processes. In particular, the institutional approach can be used to examine South Korean economy having developed from the aid economy in the 1950s to the advanced economy in the 2000s.

3. Economic Growth in East Asian Countries and South Korean Economic Miracle

3.1 Pattern of Economic Growth in East Asian Countries

East Asia has been the fastest growing region in the world over the past four decades although several East Asian countries such as South Korea and Thailand experienced a severe economic depression during the Asian Financial Crisis (AFC) in 1997. When Japan began industrialising in the beginning the 20th century and began its nation building and reconstruction process post World War Two, the second tier nations such as Hong Kong, Singapore, South Korea, and Taiwan developed rapidly during the 1970s and 1980s and became known as the newly industrialised economies (NIEs). Since then, industrialisation processes continued in Philippine, Malaysia and Thailand as a third tier with China, Indonesia, Vietnam at the fourth tier. These nations generated high economic growth compared with other western advanced nations. In addition, they invested more capital, labour, and human capital than the advanced nations in order to create a high economic growth for a long period (Chang, 2007; Lau, 2001; Lin, 2010, 2011). (Table 3)

lable 5: a	verage annual rate	es of growth c	of real gdp, capital,	labour, and hi	uman capital in Eas	st Asian and G	-/ Countries
Country	Period	GDP	Capital Stock	Utilized Capital	Employment	Labour Hours	Human Capital
Hong Kong	1966~1995	7.4	8.8	8.6	2.6	2.4	4.8
S. Korea	1960~1995	8.5	12.3	12.3	3.1	3.3	6.2
Singapore	1964~1995	8.8	10.3	10.3	4.3	4.7	5.9
Taiwan	1953~1995	8.4	11.8	11.8	2.7	2.3	5.3
Indonesia	1970~1994	6.7	8.9	9.8	3.1	3.1	9.6
Malaysia	1970~1995	7.3	11.8	11.8	3.7	3.7	7.7
Philippines	1966~1995	4.0	5.8	5.9	3.2	3.2	10.8
Thailand	1966~1994	7.6	9.1	9.4	2.8	2.8	8.5
China	1965~1995	8.4	10.3	10.3	3.0	3.0	5.9
Japan	1957~1994	5.9	8.1	8.0	1.1	0.6	2.1
Canada	1957~1994	3.8	4.8	4.7	2.3	1.9	3.0
France	1957~1994	3.3	3.9	3.9	0.4	-0.2	2.0
W. Germany	1957~1994	3.2	3.3	3.1	0.1	-0.3	1.5
Italy	1959~1994	3.5	5.2	5.3	0.0	-0.3	1.8
U.K.	1957~1994	2.4	3.9	3.8	0.2	-0.1	1.2
NSA	1949~1994	3.1	3.0	3.3	1.7	1.3	2.1
Source: World	Bank Data Base, 1	$949 \sim 1995.$					

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Until 1990, East Asian economic growth had been input-driven with tangible capital accumulation as the most important source of economic growth. In fact, there was little technological progress in the East Asian NIEs during the same period while industrialised nations achieved significant technological progress. It is a clear difference between East Asian economic growth and Western economic growth particularly in the late 1980s. In the Japanese case, technological progress played an important role in the economic growth like advanced nations because Japan was already fully industrialised at that time, and it had a unique position compared with other East Asian NIEs.

Technological progress was the most important source of economic growth for advanced nations followed by tangible capital investment, R & D capital, labour, and human capital investment. In the western industrialised countries, technological progress vis a vis economic growth accounted for 56%, while it accounted for 58% in Japan from 1958 to 1990. As such, intangible capital contributed to strengthening economic growth compared with tangible capital and labour in the advanced nations because the former could generate high total factor productivity (TFP) growth.

However, there was little contribution of technological progress for economic growth in East Asian NIEs in the same period, while tangible capital and labour contributed to generating economic growth mostly. Technological progress is one of the factors in intangible capital consisting of human capital, R&D capital and technological progress. Although East Asian NIEs had contributed in generating positive output for economic growth in human capital and R & D capital, the technological progress did not contribute to generating any positive output for economic growth. This phenomenon is unique compared with the advanced nations including Japan. Therefore, several western economists, particularly Krugman, were sceptical about further economic developments in East Asian NIEs. He stated that NIEs could not grow continuously without technological progress although NIEs invested in human capital and R&D intensively. Technological progress is vital for economic growth as innovation plays an important role in creating value added that contributed to creating the advanced economy (Krugman, 1994; Lau, 2001). (Table 4)

	Tangible	Labour		Intang	ible Capital	
	Capital		Human Capital	R & D Capital	Technological Progress	Total
South Korea	62	18	5	15	0	20
Singapore	56	22	5	16	0	21
Taiwan	65	15	4	16	0	20
Japan	37	5	1	8	49	58
Non-Asian G-7	40	4	4	10	43	56

Table 4: Relative contributions of the source of economic growth in EastAsian Countries and Non Asian G-7 (As of 1958 - 1990, %)

Source: Lau, Lawrence, 2001.

In the early stage of economic development in East Asian countries, economic growth was mainly capital-driven instead of technology-driven. It was attributed to efficient and rapid accumulation of tangible capital. However, it was not adequate for East Asian NIEs to grow continuously so that they started to invest in intangible capital. Despite human capital and R&D investment, technological progress was slow compared with advanced nations. Among East Asian NIEs, South Korea was keen to invest in R&D activity in order to create technological innovation, particularly since the 1980s. However, the outcome of R&D investment was poor because it imported mature technologies with limited innovation capabilities. The imported capital goods and technologies had been fully priced in the international market until the mid of the 1990s. It was acquisition and royalty costs which fully reflected the possible efficiency gains and amortisation of R & D, and other developmental costs. Such innovation rents did not generate any net increase in value added and the normal returns created by the factor inputs (Lau, 2001). (Figure 1)

East Asian economies grew rapidly in the throughout the 1990s except during the AFC in 1997 and 1998; South Korea and Thailand were particularly affected. However, their physical resource mobilisation were limited, and the constraint except Japan imposed by the exploitation of existing technologies took place in the 1990s. As a result, their growth prospects depended on technological innovation and robust institutional arrangements more than ever. It means that rapid growth in total factor productivity (TFP) was vital, and growth was not merely dependent on inputs of labour and capital (Rashid, 2000; Stiglitz, 2001).



Figure 1: Percentage of total R & D expenditure in GDP (1963-1993)



Despite the importance of TFP to boost economic growth, there was no remarkable TFP growth in East Asian countries until 2000. It began in 2001 and accelerated across the region by improving educational levels, rising electricity consumption, the growth of air transport, telecommunications and internet uses as well as the shift to higher value added exports. These changes contributed to fast TFP growth in East Asian countries. In addition, this growth has resulted in high efficiency as a result of technological achievement as well as high savings and the absence of balance sheet problems and financial instability. Some increase in TFP growth in the 2000s may reflect the impact of globalisation and the recovery from the AFC. Despite such a fast TFP growth, the rate of growth in TFP appeared to have slowed down since 2011 in large measure due to structural reasons. (Magnus, 2013) (Figure 2)



Figure 2: The components of economic growth in East Asian Countries (%)
Total Factor Productivity Capital Labor

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As a result, East Asian countries grew continuously since 2001 despite the scepticism of some Western economists. Besides, their economic growth in this period was much higher than in the advance nations. Chinese economic growth also contributed to economic development of surrounding countries with efforts towards regional integration in the likes of western economic blocks such as EU and NAFTA. It indicates that East Asian economies are able to grow continuously by strengthening regional economic integration. Among the East Asian countries, NIEs generated a relatively high economic growth from 2001 to 2012 although economic growth in Hong Kong and Singapore fluctuated heavily during the global financial crisis. Compared with these two nations, South Korean economy generated a positive economic growth even during the global financial crisis. Other East Asian developing economies grew continuously except during the period of global financial crisis. The Chinese economic growth in this period was extraordinary registering a stable growth even during the global financial crisis. The Chinese economic growth in 2009 contributed to 50% of world economic growth, and China became the second largest economy in the world in 2010 while growth of advanced economies, including Japan, were stagnant. (Table 5)

			Count	ries (A	<u>AS OI 2</u>	- 100	2012,	<u>%)</u>				
	' 01	' 02	' 03	' 04	' 05	' 06	' 07	' 08	' 09	'10	'11	'12
South Korea	4.5	7.4	2.9	4.9	3.9	5.2	5.5	2.8	0.7	6.5	3.2	2.3
Singapore	-1.0	4.2	4.4	9.5	7.5	8.9	9.1	1.8	-0.6	15.2	6.2	3.4
Hong												
Kong	0.6	1.7	3.1	8.7	7.4	7.0	6.5	2.1	-2.5	6.8	4.8	1.7
Malaysia	0.5	5.4	5.8	6.8	5.3	5.6	6.3	4.8	-1.5	7.4	5.2	5.6
Thailand	2.2	5.3	7.1	6.3	4.6	5.1	5.0	2.5	-2.3	7.8	0.1	6.5
China	8.3	9.1	10.0	10.1	11.4	12.7	14.2	9.6	9.2	10.6	9.5	7.8
Indonesia	3.6	4.5	4.8	5.0	5.7	5.5	6.3	6.0	4.6	6.2	6.2	6.0
Japan	0.4	0.3	1.7	2.4	1.3	1.7	2.2	-1.0	-5.5	4.7	-0.5	1.8
Germany	1.7	0.0	-0.7	1.2	0.7	3.7	3.3	1.1	-5.6	4.1	3.6	0.4
UK	2.7	2.5	4.3	2.5	2.8	3.0	2.6	-0.3	-4.3	1.9	1.6	0.7
USA	1.0	1.8	2.8	3.8	3.3	2.7	1.8	-0.3	-2.8	2.5	1.6	2.3

 Table 5: economic growth trend in East Asian Countries and Major Western Countries (As of 2001 - 2012, %)

Source: World Bank Development Indicators, 2015.

3.2 South Korean Economic Miracle

In the last five decades, South Korea achieved tremendous economic growth and transformed itself from one of the poorest countries in the world to attaining an advanced nation status. In 1962, GDP per capita was only USD82 increasing up to USD33,200 based on purchasing power parity (PPP) in 2013. With a rapid economic growth in the 1960s and 1970s, the GDP per capita reached to USD3,000 in 1980, which was categorised as a middle income nation according to the World Bank and International Monetary Fund (IMF) ranking. Since then, South Korea grew registered a steady growth and its GDP grew to USD30, 000 in 2010. Now it has grown into a global economic player with a solid industrial base. Along with rapid economic growth, South Korea was proud to showcase its democracy and pluralism. As a result, it is no exaggeration that South Korean economic and political development is unique as it achieved both economic and political success with democratic transition in the post-war era (IMF, 2011; Sakong & Koh, 2010). (Figure 3)

The transformation of the South Korean economy can be attributed to industrialisation and globalisation. First of all, the industrialisation process had been extraordinarily dynamic. The share of industrial sector such as manufacturing, construction and public utilities in total value added had more than doubled from 17% in the 1960s to 38% in the 1980s. The service sector has also increased its share from 41% in the 1960s to 63% in the 2000s. In contrast, the primary sector had declined from 42% to 3% in the same period.



Figure 3: South Korean Gross Domestic Product based on PPP per Capita GDP (1980 – 2010, USD)

1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 Source: IMF, 2011.

Rapid industrialisation accelerated globalisation of South Korean economy. The total trade volume had increased from around 10% in the 1960s to 90% in 2010. At the same time, cross border capital flows also increased

rapidly in this period. The integration of South Korean economy into the global economy is closely related to the AFC in 1997. Owing to the crisis, South Korea was forced to implement structural reforms across the economy based on deregulation and market liberalisation to promote trade liberalisation (Park, 2014; Todaro & Smith, 2012).

Industrialisation and globalisation of South Korean economy are closely inter-related and influenced by each other. International trade offered a vast global market for South Korean producers. It also enabled them to import intermediate goods and advanced technologies which were vital for export products. During the 1960s and 1970s, the international division of labour generated the growth of labour intensive industries in which South Korea had a comparative advantage. These industries absorbed surplus labour forces from rural areas and contributed to increasing income per capita and saving rates. In the 1980s, capital accumulation progressed, and comparative advantage shifted from labour intensive to capital intensive industries. As a result, income per capita continued to grow rapidly as productivity increased based on human capital and R&D investment (Sakong & Koh, 2010).

In the process of industrialisation and globalisation, the policy stance of the government has changed several times in different periods. In the 1960s, a systematic effort to economic development was initiated. The government promoted actively exports in all business sectors with policy incentives such as tax holidays, subsidies etc. In the 1970s, the government focused on heavy and chemical industries (HCIs), and its intervention in the market became more selective and discriminatory. Additionally, the government strengthened its control of the financial market to allocate resources in favour of the HCIs. However, such a government led HCIs policy generated many problems, including a serious misallocation of resources, chronic high inflation and income inequality.

As a result, the government emphasised price stability over economic growth in the 1980s. It also encouraged private initiatives and started the market liberalisation process. At the same time, more attention was given to social policies which contributed to increase in public spending on health, welfare, and education. After the AFC in 1997, the government pursued liberalisation particularly in capital markets. It also tried to modernise prudential regulation and competition policy. With the integration of the South Korea's economy into the global economy, concerns about growth potential was raised in the 2000s. There was an economic slowdown with decelerating growth of working age population in the 1990s. At the same time, income distribution started to deteriorate in the 1990s due to the expansion of knowledge based economy and globalisation that resulted in low skilled workers being disadvantage. As a result, the government concentrated on bilateral and regional free trade agreements (FTAs) in the 2000s to boost economic growth (Park, 2014; Sakong & Koh, 2010). (See also Table 6, Fig. 4)

It is the South Korean economic growth strategies that contributed to its economic miracle. Cultural factors play a role in the implementation of these strategies and will be discussed in the following section. During rapid economic growth period, the government was efficient in implementing economic and industrial policies in order to meet the policy targets, while private companies expanded their business activities to target domestic and international markets and invested huge amounts of capitals in production, R & D, and education for skilled workers. It is a so-called corporatism between government and industry in order to develop the nation as fast as possible that is common in East Asian countries particularly those which subscribe to Confucian ethics (Amsden, 2003).

Table 0. P	initial out	put giown	i by secto	$\frac{1}{1}$	2007, 70)	
	1953 -1960	1961 -1970	1971 -1980	1981 -1990	1991 -2000	2001 -2009
Agriculture, forestry and fishing	2.3	4.4	1.6	3.5	1.9	1.8
Mining & manufacturing	12.1	15.7	14.1	11.4	8.2	5.3
Mining			4.7	-0.2	-1.3	-0.3
Manufacturing	12.7	16.8	15.8	12.2	8.4	5.4
Light industries			12.7	7.0	1.1	-0.6
Heavy & chemical industries	-	-	17.2	14.4	9.8	6.6
Public utilities & construction	9.3	19.2	10.3	10.3	2.7	3.3
Public utilities	-	-	15.8	17.6	10.3	5.8
Construction	-	-	10.1	9.7	1.4	2.6
Services	3.8	8.6	6.8	8.4	6.1	3.6
GDP	3.8	8.4	9.0	9.7	6.5	3.9

Table 6: Annual output growth by sector (1953 - 2009, %)

Source: Bank of Korea, 2012.



Figure 4: Trend of trade in South Korean economy (1953 – 2009, % of GDP)

4. Role of Culture in South Korean Economic Growth

4.1 Background

In terms of culture, East Asian countries presuppose that reality and all its facets are guided by a divine presence. Therefore, human relations are regarded as subject to the same principles as natural phenomena and inherently ethical in nature. Such a perspective may hinder the possibility from creating an objective and impersonal relations based on economic rationality that are fundamental to modern industrial society. Confucianism forms the East Asian cultural backbone and assumes that some courses of action are preferable to others because they are good in and of themselves regardless of their potential for value maximisation. In the Confucian perspective, ethics are not a means, but the final goal which the whole society is keen to achieve. It is no doubt that Weber's anti-Confucian thesis regained significance during the AFC in 1997. Several western scholars concluded that Asian values based on Confucian moral were the root cause of the crisis (Pye, 2000; Seong, 2003).

Research and scholarly interest into the relationship between Confucianism and economic development continued until the East Asian economies experienced rapid industrialisation and high economic growth post AFC. Certain values promoted in Confucian ideology such as hierarchy, perseverance, thrift, and collectivism is responsible for the impressive economic growth in East Asian countries since the 1960s. It can explain the recent rapid economic growth witnessed in China. Certain Confucian values are regarded as detrimental to economic performance, but positive Confucian ethics are valued because collective societies have long term orientations and emphasise the acquisition of skills and knowledge through education (Chang, 2007; Hofstede, 1991; Huntington, 2000).

East Asian culture in a social and political institutional context provides a holistic explanation of economic performance. At the same time, Confucianism explicates the differences between various models of economic organisation rather than identify a common single model that can be discerned in the East Asian context. It means that Confucianism is present in all East Asian countries, but it has influenced these nations differently. The most significant dissimilarities of Japan's keiretsu, South Korea's chaebol, and the family oriented business organisation in China nations exist that makes difficult to identify a single model of organisational structure in East Asian countries characterised by Confucian ideology (Chang, 2007; Wilkinson, 1996).

In South Korea, most intellectuals have regard Confucianism as having cultural superiority and whereby the leadership has employed the notion of Confucian capitalism for political purposes. Instead of assuming an objective assessment of the interplay between traditional Confucian values and economic performance, they have taken the economic success of East Asian countries as a de facto proof for the superiority of Confucian ideology. As a result, they justify morally objectionable practices such as authoritarianism, corruption and nepotism, and human right violation under the Confucian capitalist system. In fact, traditional Confucianism discouraged people from taking up professions such as business and engineering that play important roles in economic development. Additionally, it also discouraged creativity and entrepreneurship owing to a rigid social hierarchy that prevents certain segments of society (Chung, 2007; Seong, 2003).

4.2 Confucian Capitalism and Economic Growth

In contrast to many other developing countries, South Korea developed economically first and later emerged as a democracy after having reached a respectable level of economic development. Under the authoritarian rule from 1961 to 1993, South Korea had maintained "developmental dictatorship" where political leaders repressed their citizens and guided the national economy in order to generate high economic growth. This system was very effective to mobilise limited resources for the economic development despite strong political conflicts between the ruling and opposition parties. Authoritarian rule was very common under the Confucian society, and people accepted the political system namely military dictatorship, because the authoritarian government could achieve a high economic growth although political freedom is restricted and human right issues are non-existent. The authoritarian government made most of pivotal investment decisions, and the companies involved operated with an extraordinary degree of market control and protected from foreign competition that enabled a rapid industrialisation process in South Korea (Amsden, 2003; Lee, 2006).

South Korea is one the most ethnically homogenous society in the world with an impressive social cohesion. There is strong social cooperation between different actors. It means that social trust and social capital are higher than any other developing countries when South Korea began to develop. Although there were always political conflicts and protests against the government during the reform process and catch up development period from the 1960s to 1980s, the South Korean people participated in the economic development process. During the period, people identified with their nation and companies understood economic development as an individual and social goal. Such a strong social cohesion was strengthened by Confucian ethics which stress the importance of a harmonious and well-ordered society (Domjahn, 2013).

Furthermore, the Confucian ethic and values contributed to creating good governance in the government. Although South Korea was under military dictatorship for nearly three decades, the level of corruption in the public sector was very low compared with other authoritarian governments. The political leaders and the high ranking civil service officers were aware of developing the nation as social elites and tried to prevent from the corruption measures resulting in good and efficient governance. During the authoritarian governments and democratic governments, anti-corruption measures have been carried out continuously. In particular, the Board of Audit and Inspection was established in the Korean Constitution in 1948. However, its power to audit and inspect the government organisations was strengthened by the authoritarian government in 1963 in order to tackle corruption in the public sector (The Academy of Korean Studies, 2015).

Confucianism prioritises education and is considered one of the most important values. South Korea's population is the most highly educated in the world. Its results in the worldwide PISA and TIMS studies are ranked at top levels. In 2012, South Korea invested over 7% of its GDP in education in 2012. Private investment in education accounted for 2.8% of GDP in the same year which was the highest among all OECD countries. A high demand for education is one of the features of Confucianism that still exists in all societies shaped by Confucian ethics. Particularly in South Korea, there is a high demand for education among the East Asian countries. As a result, South Korea is regarded as Asia's most "Confucian" country. The demand for education in South Korea is higher than other Confucian countries as well as most non-Confucian countries which facilitated human capital accumulation. In this respect, Confucianism has a very similar function to Protestantism, which promotes education as an ethic. The high investment in education is one of the major reasons why South Korea experiences high economic growths and a rapid industrialisation process. A well educated work force is a general property of rapid industrialisation that distinguishes from earlier industrial change. It is premised on the learning of production processes and procedures that are characteristic of more developed economy (Amsden, 2003; Becker & Wosesmann, 2009; Kern & Kollner, 2005). (Fig. 5)

Figure 5: Enrolment rates and the number of enrolled students in Higher Education (1965 – 2010)



Confucian ethic stresses hard work and discipline known as Asian value; it is similar to the Protestant ethic. The catch up development from the 1960s to 1970s was only possible because South Korean worked very hard with relatively low wages including overtime works. The commitment of South Korean employees was also very high based on hard work, discipline, thrift, and loyalty described as Asian values. These elements contributed to a rapid economic growth based on high saving rate and high investment in developing human capital. Even today, the work load in South Korea is one of the highest among OECD member nations, and students and pupils study long hours for their A-levels (Amsden, 2003; Brinkmann, 2011; Hahm, 2001; Weber, 1920;). (Table 7)

South Korea has the comparative advantage that its informal institutions are more compatible with Western formal institutions such as capitalism, rule of law, and democracy than those in other non-Confucian countries. Confucianism is regarded as a pragmatic, flexible, secular and adoptive thought system although it lacks emphasis on god or life after death. As a consequence, conservative religious force such as Buddhism did not block economic and political reforms during high economic growth periods (Domjahn, 2013).

195319611971198119912001 -1960 -1970 -1980 -1990 -2000 -2010 Gross savings (A)11.115.523.333.035.831.3Private savings 8.6 9.919.026.827.121.4Households $ -$ 11.514.115.25.5Corporations $ -$ 9.812.711.915.9Government savings2.55.64.36.28.710.0Gross investment (B)11.518.829.232.134.629.4Net lending from the rest of the world (A-B) Current transfers from the rest of the7.15.41.01.10.3-0.3world (C) $ -$						-	
Gross savings (A)11.115.523.333.035.831.3Private savings 8.6 9.9 19.0 26.8 27.1 21.4 Households 11.5 14.1 15.2 5.5 Corporations 9.8 12.7 11.9 15.9 Government savings 2.5 5.6 4.3 6.2 8.7 10.0 Gross investment (B) 11.5 18.8 29.2 32.1 34.6 29.4 Net lending from the rest of the Current transfers from the rest of the 7.1 5.4 1.0 1.1 0.3 -0.3 world (C) 1.0 1.1 0.3 -0.3 -0.3		1953 -1960	1961 -1970	1971 -1980	1981 -1990	1991 -2000	2001 -2010
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Gross savings (A)	11.1	15.5	23.3	33.0	35.8	31.3
Households - - 11.5 14.1 15.2 5.5 Corporations - - 9.8 12.7 11.9 15.9 Government savings 2.5 5.6 4.3 6.2 8.7 10.0 Gross investment (B) 11.5 18.8 29.2 32.1 34.6 29.4 Net lending from the rest of the current transfers -0.4 -3.4 -5.8 0.9 1.2 1.9 World (A-B) Current transfers 7.1 5.4 1.0 1.1 0.3 -0.3 world (C) - - 5.4 1.0 1.1 0.3 -0.3	Private savings	8.6	9.9	19.0	26.8	27.1	21.4
Corporations - 9.8 12.7 11.9 15.9 Government savings 2.5 5.6 4.3 6.2 8.7 10.0 Gross investment (B) 11.5 18.8 29.2 32.1 34.6 29.4 Net lending from the rest of the current transfers from the rest of the -0.4 -3.4 -5.8 0.9 1.2 1.9 world (A-B) Current transfers from the rest of the 7.1 5.4 1.0 1.1 0.3 -0.3	Households	-	-	11.5	14.1	15.2	5.5
Government savings 2.5 5.6 4.3 6.2 8.7 10.0 Gross investment (B) 11.5 18.8 29.2 32.1 34.6 29.4 Net lending from the rest of the rest of the -0.4 -3.4 -5.8 0.9 1.2 1.9 World (A-B) Current transfers from the rest of the 7.1 5.4 1.0 1.1 0.3 -0.3 world (C)	Corporations	-	-	9.8	12.7	11.9	15.9
Gross investment (B)11.518.829.232.134.629.4Net lending from the rest of the world (A-B) Current transfers from the rest of the (C)-0.4-3.4-5.80.91.21.90.91.21.91.01.10.3-0.3	Government savings	2.5	5.6	4.3	6.2	8.7	10.0
Net lending from the rest of the world (A-B) Current transfers from the rest of the (C)-0.4 -3.4 -5.8-5.8 0.90.9 1.21.9 1.9World (A-B) Current transfers from the rest of the (C)7.15.41.01.10.3-0.3	Gross investment (B)	11.5	18.8	29.2	32.1	34.6	29.4
Current transfersfrom the rest of the7.15.41.01.10.3-0.3world (C)	Net lending from the rest of the world (A-B)	-0.4	-3.4	-5.8	0.9	1.2	1.9
	Current transfers from the rest of the world (C)	7.1	5.4	1.0	1.1	0.3	-0.3
(A-C) 4.0 10.1 22.3 31.9 35.5 31.6	(A – C)	4.0	10.1	22.3	31.9	35.5	31.6

Table 7: Savings and investment in South Korea (1953 – 2010, % of GNI)

Source: Bank of Korea, 2012.

These comparative advantages based on the pragmatic, flexible and adoptive thought enabled South Korea to become innovative by investing in R&D and emphasise education, which has received the biggest allcocation in the world. South Korea has invested in R & D to the tune of nearly 4%percent of its GDP that is one of the highest levels in the OECD member nations. As a result, South Korea became the most innovative country in the world in 2014 indicating a high possibility of South Korea's further economic growth in the future based on Krugman's judgment. The reason why South Korea could generate further economic growth is that the innovation capability can upgrade industrial structure and create value added products that are crucial to becoming an advanced economy in the global economic system. Along with other western developed nations and Japan, South Korea has succeeded in transforming itself as one of the most innovative nations in the world. It is the result not only of the government policy, but also of strong will of companies' investment and education in private households that are closely related with the cultural background of Confucianism (www.bloomberg.com). (Table 8)

Table	8: Most innov	ative cou	untries in th	ie World (as of 2	(014)				
Rank	Country	Total Score	R & D Intensity	Manufacturing capability	Productivity	High tech density	Tertiary efficiency	Researcher concentration	Patent actinvitee
-	South Korea	92.10	3	2	33	3	3	9	2
7	Sweden	90.80	4	22	L	5	13	8	26
3	NSA	90.69	10	24	10	1	37	12	5
4	Japan	90.41	5	9	14	8	30	6	3
5	Germany	88.23	6	С	20	9	25	17	9
9	Denmark	86.97	9	56	9	17	27	С	14
Г	Singapore	86.07	17	14	15	14	24	4	34
8	Switzerland	86.02	8	16	3	6	35	22	29
6	Finland	85.86	2	21	12	32	5	2	15
10	Taiwan	83.52	7	NA	30	2	2	5	1
Source	: www.bloombe	srg.com/1	rank						

5. Conclusion

Many traditional economists have argued there is no miracle in economic development and that the latter can only be achieved through as labour force, capital investment, technological innovation and competitive market regulation. Together, they play a significant role in boosting economic growth. It is a truism economic development in many countries are influenced by these factors. At the same time, however, economists are still not able to answer why these factors are stronger in certain countries and what influences them.

East Asian economies demonstrated tremendous economic growth since the Second World War. Certainly, Western nations have also experienced such economic development after the Industrial Revolution which lasted for two centuries. The speed of economic growth in East Asian countries was faster than in Western countries. Even Japan started its industrialisation process at the end of the 19th century, a century later than the Western countries. Within the East Asian countries, a clear difference exists. Japan already became an industrialised nation before the Second World War while other East Asian countries were considered developing countries until the late 1950s. The industrialisation processes in four East Asian newly industrialised nations such as Hong Kong, Singapore, South Korea, and Taiwan began in the late 1950s.

Among these, South Korea started its industrialisation process in the beginning of 1960s due to the civil war (1950 - 1953) and military codetta in 1961. Compared with other NIEs, South Korean economy was in the worse shape because the country was totally destroyed by the civil war in addition to political turmoil and instability due to ideological conflicts between the conservative and progressive parties. The end of the era of the military regime (1961 – 1987) witnessed rapid economic growth. The government launched a Five Year Economic Development Plan from 1962 to 1991 focused on the export driven policy which boosted economic growth. During the period, the average economic growth was 9.1%. The economy grew continuously even after democratidation, and South Korea became the member of OECD in 1995 and a mature economy with a high income per capita in the 2000s. The income per capita based on PPP grew from USD82 in 1962 to USD33,200 in 2013. Additionally, South Korea became the 7th largest trading nation with over USD1 trillion in trade volume since 2011.

Nations have their own cultures and histories that give them a unique character. South Korea as one of the East Asian countries is deeply influenced by Confucianism which stresses hard work, discipline, loyalty and social harmony among others. It also emphasises thrift and education. These elements are considered Asian values that contribute to a rapid economic growth. A strong government based on hierarchy could mobilise limited resources efficiently for economic growth focused on an export oriented strategy. A committed labour force is crucial in having a competitive edge in the global markets. Good and sound educational system provides skilled workers and reliable engineers. The Confucian ethics that emphasises thrift provides high saving rates in private household and companies enabling high investment in technology innovation. In short, the role of culture in South Korean economic growth and creating economic miracle has been significant. At the same time, it also questions whether or not Confucianism can contribute to the further economic development in South Korea. It is possible because South Korean innovative competitiveness has improved continuously and ranked among the top in 2014 to generate high value added products and economic advancement. Overall, South Korean economic development based on Confucianism can be a model for other developing nations in the region; for western scholars to argue that it hinders further economic development is flawed. As a result, it is important to understand that Confucianism is still valid for a nation to facilitate economic development not only in South Korea, but also in East Asia.

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