



Patterns of Development in the Emerging Markets of China, South Korea, and Vietnam

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ABSTRACT

The purpose of this study is to examine the sources of stimulation that have influenced growth in some emerging markets in the past few decades. China, South Korea and Vietnam are selected because each of the three countries are currently in different phases of the development process. The research utilizes economic data and are analyzed by using descriptive statistical methods. The analyses are used to identify and measure political and social reforms that have either had positive or negative influences on the growth of the economies. A regression analysis was then conducted in order to observe the significance of each variable that was studied. The analysis revealed that increases in urban population, manufacturing value added and total exports had the most significant changes to the economy of each country; however, there are also noticeable spikes in each nation's GDP following major political reforms, particular those that emphasize trade liberalization and globalization

KEYWORDS: Emerging Markets, Economic Development, trade liberalization and globalization

JEL codes: O11, O53, C52

1. Introduction

Southeast Asia has experienced substantial economic development over the past couple decades and no country has exemplified the regional growth as much as China. The most populous nation in the world has grown from a small, agricultural economy, to one of the most proficient economic superpowers in the world. Despite their current surge in development, China took some time longer than other developed countries in the region. Countries such as South Korea and Japan have held their status as a developed nation long before China has. Identifying what changes in policy or culture spark economic growth is something that many developmental economists have sought after for centuries. This paper will review some contemporary and modern developmental theories that attempt to demonstrate the most effective changes necessary for economic development. It will analyze historic data from three nations (China, South Korea and Vietnam) that are all in different developmental stages and attempt to highlight the key changes that have led to rise in economic growth.

One popular model of economic development is the Lewis Two-Sector Model. Developed by Sir Arthur Lewis in the 1950s, his model to economic development focused on the imbalance of labor between the traditional agriculture sector and the modern industrial one. Lewis theorized that

addressing the imbalance of labor would be a key factor to improving the economic situation in a country. The natural migration from rural to urban areas would be likely to create markets and increase productivity of labor (Todaro, Smith 2015). Another contemporary model of economic theory is outlined in the Harrod-Domar growth model. Roy Harrod and Evsey Domar established similar theories around the early 1940s. Both economists believed that the key to economic growth is to increase the net savings of a nation and to decrease the capital ratio. Much like the Lewis Two-Sector Model, there is an assumption that labor is in surplus (Todaro, Smith 2015).

The Growth Diagnostics Framework is a contemporary developmental theory that was proposed by Ricardo Hausmann, Dani Rodrik and Andres Velasco. This specific theory uses a series of questions in an attempt to find the binding constraint of a country. The theory is in contrast to many contemporary theories in the idea that one theory is not the skeleton key to economic success. The Growth Diagnostics Framework relies on extensive research on an individual nation in order to unveil what factors are limiting the growth in that country (Todaro, Smith 2015).

The concepts and theories established by both contemporary and modern developmental economists are attempts to

identify the best course of action for developing nation in order to spur economic growth. While the ideas of these economist are important, the solution to development is never as simple as outlined. This paper will search for the largest contributing factor to growth in South Korea, China and Vietnam.

2. Literature Review

Previous literature has studied key factors in development, even focusing specifically on certain countries, but this study focuses primarily on the relationships of growth between the three countries (China, South Korea and Vietnam). One study, conducted by Ebitare L. M. Etale and Lyndon M. Etale, revealed a “significant bidirectional long run relationship between FDI Inflows per capita and GDP per capita” (2016). Their study focused on another country in the region, Malaysia, and the goal of the research was to make suggestions to policymakers in the region. They concluded by recommending that policymakers focus on greater export opportunities and investments. Another article written by, RuiMoura and Rosa Forte, found that FDI was important to the economic growth in the Philippines, but only if the country had an increase in human capital and infrastructure. The research also concluded by saying that a strong, stable government was important to growth, as foreign direct investment is likely to avoid corrupt or unstable political systems. The researchers continue by suggesting that the benefits of FDI are completely dependent on the characteristics of the host nation. Again, this study reiterated the importance of government policy to the effectiveness of FDI (Forte, Moura 2013).

There seems to be no shortage of research conducted about the relationship between economic growth and FDI. Researchers Shiva S. Makki and Agapi Somwaru completed a comprehensive study of 66 developing country and concluded that an increase in FDI and trade lead not only to increased economic performance, but it also provides an avenue for more advanced technology to be implemented and tends to increase the domestic investment as well. However, the authors also alluded to the fact that in order for FDI to maximize effectiveness, the countries need to employ certain microeconomic policies. For example, in the countries they studied, the researchers concluded that those who benefited from FDI the most were those who limited inflation, lowered the tax burden and decreased government consumption (Makki and Agapi, 2004).

Another study by Kevin Honglin Zhang, adds to the importance of government promoted policies. He suggests that specifically policies that support education and trade freedom are keys to FDI being beneficial to the host economy (2001). In a study conducted by Sarwar and Kahn, they examine the effects of the uncertainty of the US Stock Market and how that affects the economy of emerging markets. Their study emphasizes how a major market, regardless of placement in geographically, can have a major

impact on the economic activity of emerging markets. However, the researchers discovered that the lag effect from a US stock crisis is actually much less than the lag effect that the studied emerging markets felt after the financial crisis subsided (2017). With that knowledge, it will be interesting to compare the effects that a booming Chinese economy has on the studied emerging markets to the effects caused by an economic crisis.

Another study conducted by in 2015 suggests that the development and growth of the financial sector is a major driver for economic growth as it is the source that matches borrowers and lenders more efficiently. In this study, the researchers affirm the idea that globalization both directly and indirectly cause a growth in the financial sector. They also examine how globalization tends to have a larger impact on the growth and development of a stock market than it does on the development of a financial sector. With those facts in mind, the researchers conclude by suggesting that East Asian countries should focus on the liberalization of trade and capital resources in order to assist in the development of their economies (Tan, Law, Azman-Saini, 2015). A study conducted by 2014, expands upon the findings in the previous research, by exploring the negative positive impacts of developing stock exchanges in South East Asia (SEA). The research examines whether or not SEA is “ready for such an ambitious economic initiative, particularly given the reported negative effects of lesser developed stock markets” (Niblock, Heng, Sloan, 2014). In the end, the researchers conclude that the development of a stock market in SEA has benefits that well outweigh the negative aspect and continue by suggesting that the development of the stock exchange with advance economic reform, assist in further economic liberalization and encourage an increase in both domestic and foreign investment.

3. Methodology and Data

Economic data has been gathered from multiple sources including the IMF, World Bank and the Federal Reserve. The data collected ranged as far back as 1960 for both China and South Korea, but the years were more limited for Vietnam as a lot of their economic data is only provided from 1985 on. The data collected varied from common measures of economic success (such as GDP growth, Foreign Direct Investment and unemployment rates) to more unfamiliar measures (such as urban migration, amount of capital investment and government spending). The data was then analyzed using ANOVA tables in order to find correlations between different economic factors and GDP growth. The economic factors that displayed a high level of correlation were then flagged for further research on what structural changes could be attributed to the change in growth.

Separate from the relationship between economic factors, the growth of each of the three countries were examined for

a correlation. This was an initial test to discover the volatility and scale at which each country’s economy has

developed.

Table 1. Comparison of GDP Growth % of China, South Korea and Vietnam.

SUMMARY						
<i>Groups</i>	<i>Count</i>	<i>Sum %</i>	<i>Average %</i>	<i>Variance</i>		
China's Growth	31	302.53	9.759032258	6.813642366		
Korea's Growth	31	185.22	5.97483871	14.29255914		
Vietnam's Growth	31	199.31	6.429354839	2.618372903		

ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	264.6723935	2	132.3361968	16.73406585	6.6213E-07	3.097698035
Within Groups	711.7372323	90	7.90819147			
Total	976.4096258	92				

Following the initial tests for correlation amongst variables, a number of regressions were also conducted in order to receive further information on the relationship between variables being examined. The variable that were chosen were selected based upon a ANOVA tables and other correlation analysis.

For the purpose of this study, the regression formula used is the following:

$$y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots + \beta_nx_n$$

In most cases, the y in the formula was annual GDP growth % and the x’s were filled in with other economic variables such as: net exports, urban population (as % of total), capital investment, government spending, labor force, ect.

4. Brief History of China’s Economic Growth

China’s growth is nothing short of incredible. Since 1960, China’s GDP growth has averaged nearly 8.3% and now makes up over 13% of the world’s GDP. The most highly populated country in the world had a very sporadic economy between 1961 to 1982 where they experienced economic highs and lows in which GDP growth varied from -5.6% to 19.4%. It was in 1982 that China saw a consecutive seven years of economic prosperity where they averaged an annual growth of 11.5%. This is in no way a coincidence that this trend began the same year that a new constitution was signed. Prior to the signing of the constitution, private enterprise and foreign investment were generally dismissed. In fact, in 1978, nearly three-fourths of industrial production was produced by centrally controlled, state-owned enterprises (SOEs), according to centrally planned output

targets” (Morrison, 2017). With the new constitution allowing for more economic liberty, China was first exposed to foreign direct investment.

The economy faltered between 1989 and 1992 following the Tiananmen Square Protests, but flourished again after reforms in 1992 that reduced subsidies to failing state-owned enterprises and stressed the importance of foreign investment. The reforms led to four straight years of GDP growth over 10%. The economy continued to stay strong growing 8.5% annually between 1996 and 2001. Once again in 2003, China saw growth over 10% following their decision to join the World Trade Organization (WTO) in 2001. The growth exceeded 10% through the year 2007 and China even managed to grow at upwards of 9% following the global recession that sparked at the end of 2007. Since 2010, China’s growth has slowed slightly growing at 7.8% over recent years.

Overall, China’s incredible growth can be attributed to several key factors. The first of which is their increased emphasis on trade liberalization and allowance of foreign investment. The country also put a larger priority in capital investments and by 2010, China lead the world in gross value added manufacturing. Just four years later, China’s gross value added basis was 39.6% higher than the second highest manufacturer, the United States (Morrison, 2017). Part of their success in manufacturing had to do with the labor costs in China. Their high population and general ability to offer low wages, gave China a distinct competitive advantage over other countries. However, the wages in China have been growing rapidly and that can attribute to the slowing growth of China’s economy.

Table 2. Descriptive Statistics of Key Economic Factors of China.

<i>Foreign Direct Investment % of GDP</i>		<i>Government spending, % of GDP</i>		<i>Exports, % of GDP</i>	
Mean	1.7929630	Mean	13.72593	Mean	14.09782
Standard Error	0.267628	Standard Error	0.17577	Standard Error	1.35381
Median	0.91	Median	13.775	Median	11.7
Standard Deviation	1.966654	Standard Deviation	1.291642	Standard Deviation	10.04012
Sample Variance	3.867727	Sample Variance	1.668338	Sample Variance	100.80398
Range	6.21	Range	4.92	Range	33.13
Minimum	0	Minimum	10.95	Minimum	2.52
Maximum	6.21	Maximum	15.87	Maximum	35.65
Sum	96.82	Sum	741.2	Sum	775.38
Count	54	Count	54	Count	55

5. Brief History of South Korea’s Economic Growth

South Korea’s development is a true rags-to-riches story that saw its economy take off in the early 1960s. Though the economic growth is historically less than China’s, the small country similar in size to Indiana is currently 11th largest economy in the world and has averaged a GDP growth of 7.3% since 1961. The growth can be attributed to the restructuring of the Korean economy following the the Korean War. Directly following the war, Korea relied on import substitutions as they tried to recover from the war efforts; however, in 1961 a military coup led by General Park Chung-hee. Park sought to change the South Korean economy from an agrarian led system to a modern industrial one. This change in ideology was the catalyst to changing the Korean economic structure. South Korea experienced their first annual growth over 10% in 1966, following the beginning of the Korean DMZ Conflict. The following eight years, Korea managed to grow an average of 11.2%. This time period between 1962 and 1980 was vital in the development in South Korea’s economy. One key element to this growth was that the government chose to participate

in the economy both directly and indirectly. They did so by using public enterprises to cope with market failures revolving around a lack of entrepreneur activity, but staying out of activities involving commercially competitive firms in the private sector. According to previous research, the most important takeaway from Korea’s economic success in this time period is their focus on human capital investment (Kim, 1995). This is in large part due to South Korea focusing on industry that requires skilled laborers.

The economic growth of South Korea remained fairly consistent up until 1980, where their growth dropped to -1.89% following the assassination of Park. The next period of substantial growth began in 1987, when South Korea signed a new constitution allowing for democratically appointed officials, thus ending their history of military regimes having authority. The following three years once again saw growth rates at about 12%. However, since 1989 until now, the South Korean economy has plateaued some averaging 5.24% over those 25 years and, more recently, the Korean economy only grew an average of 2.9% annually between 2011 and 2015.

Table 3. Descriptive Statistics of Key Economic Factors of South Korea.

<i>Foreign Direct Investment, % of GDP</i>		<i>Government spending, % of GDP</i>		<i>Exports, % of GDP</i>	
Mean	0.583077	Mean	11.57364	Mean	28.60
Standard Error	0.077321	Standard Error	0.25166	Standard Error	1.81
Median	0.41	Median	10.94	Median	29.195
Mode	0.23	Mode	14.64	Mode	#N/A
Standard Deviation	0.48287	Standard Deviation	1.866368	Standard Deviation	13.53841
Sample Variance	0.23316	Sample Variance	3.483331	Sample Variance	183.28848
Range	1.91	Range	6.9	Range	53.18
Minimum	0.01	Minimum	8.27	Minimum	3.16

Maximum	1.92	Maximum	15.17	Maximum	56.34
Sum	22.74	Sum	636.55	Sum	1601.81
Count	39	Count	55	Count	56

6. Brief History of Vietnam’s Economic Growth

In comparison to most nations, the amount of economic information available from Vietnam is limited. Most credible sources do not have economic data for Vietnam before 1986. However, in 1986, Vietnam made a number of reforms known as *Đổi mới* which includes a more liberal economic system. Between 1986 and 2015, Vietnam had an average GDP growth of 6.4%. In comparison, during the same time period, South Korea averaged only 5.9% of growth. Vietnam saw its first growth spike in 1989,

following the decision to withdraw Vietnamese troops from Cambodia. The next surge in economic growth was in 1992, when Vietnam’s GDP rose 8.65% following the adoption of a new constitution, which allowed yet more economic freedom. Vietnam averaged 8.8% the following five years. The growth was due not only to the constitution, but also the U.S. lifting 30-year embargo in 1994. The Vietnamese economy has remained steady since 1998. There were small fluctuations in growth, but Vietnam sustained an average growth 6.3% between 1998 and 2015.

Table 4. Descriptive Statistics of Key Economic Factors of Vietnam.

<i>Foreign Direct Investment, % of GDP</i>		<i>Government spending, % of GDP</i>		<i>Exports, % of GDP</i>	
Mean	4.882	Mean	6.778077	Mean	50.062
Standard Error	0.574920	Standard Error	0.299748	Standard Error	4.3416231
Median	4.86	Median	5.97	Median	50.275
Mode	0	Mode	5.76	Mode	49.97
Standard Deviation	3.148967	Standard Deviation	1.52842	Standard Deviation	23.78005
Sample Variance	9.915996	Sample Variance	2.33606	Sample Variance	565.4907
Range	11.94	Range	6.87	Range	85.83
Minimum	0	Minimum	5.47	Minimum	3.95
Maximum	11.94	Maximum	12.34	Maximum	89.78
Sum	146.46	Sum	176.23	Sum	1501.86
Count	30	Count	26	Count	30

7. Comparisons in Economic Growth

The combination of reviewing historical documents and analyzing raw economic data has provided many variables that have influenced growth in each of the three countries. This section intends to aggregate the results from both analyses.

7.1 Historical Comparison

All three nations saw tremendous growth since 1985. With a worldwide average of just under 3% during the same time period. However, despite the great growth of the GDP, the people of these countries have not necessarily benefitted the wealth equally. For example, the GDP per capita (PPP) in South Korea is \$8,165. Compare that to China, who has a significantly higher rate of growth, but only averages \$1,245 GDP per capita. Granted, China is the most populous

country in the world, its wealth is dispersed much more than that of South Korea. In comparison, Vietnam’s GDP per capita averaged only \$720 since 1985. However, despite the lower GDP per capita of both China and Vietnam both countries have seen great progress in recent years. In 2007, Vietnam had a GDP per capita of \$919, but in 2015 Vietnam increased to \$2,111 per capita. That is an 130% increase in wealth for the people of Vietnam. China’s advancement in GDP per capita is even more apparent and impressive. During the same period, China’s GDP per capita rose from \$2,695 per year to \$8,027 a year. That is an increase of 198% in that eight-year period. In contrast, South Korea’s GDP per capita only rose about 18%, but have a much higher value averaging \$27,221 in 2015.

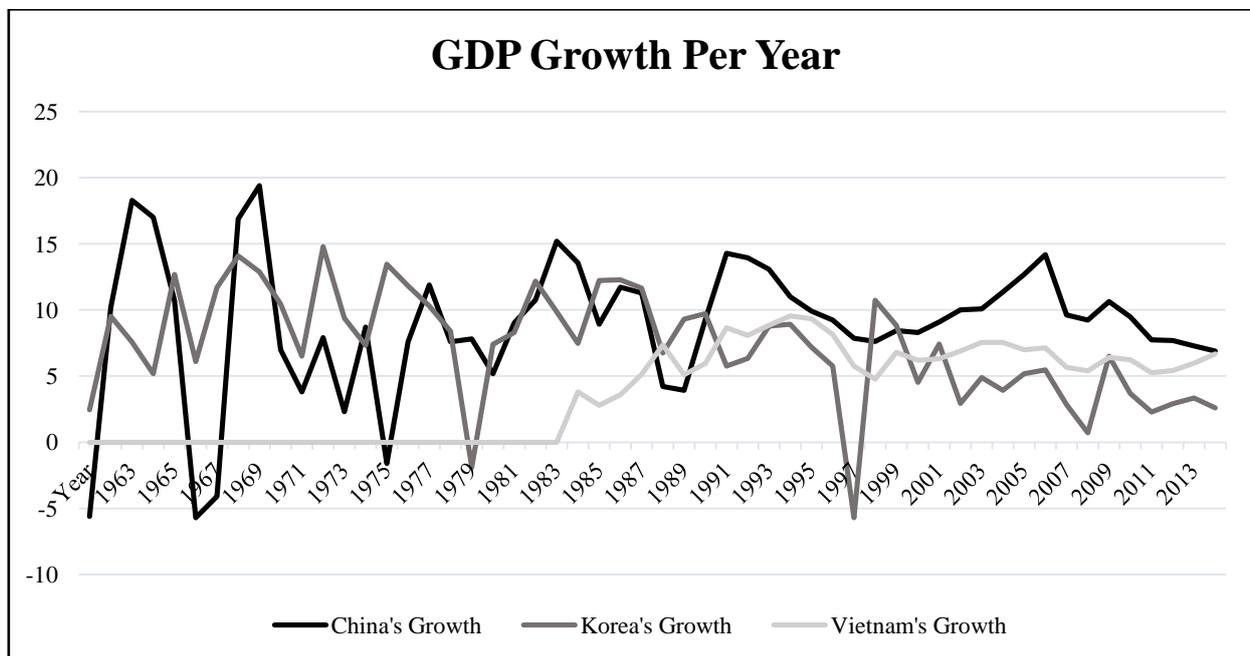
Table 5. Comparison of Descriptive Statistics of GDP Growth %.

Annual GDP Growth Comparison (1985-2015)					
China's Growth		Korea's Growth		Vietnam's Growth	
Mean	9.759032258	Mean	5.97483871	Mean	6.429354839
Standard Error	0.468822904	Standard Error	0.679006844	Standard Error	0.290626293
Median	9.48	Median	5.77	Median	6.32
Mode	9.23	Mode	5.77	Mode	#N/A
Standard Deviation	2.610295456	Standard Deviation	3.780550111	Standard Deviation	1.618138716
Sample Variance	6.813642366	Sample Variance	14.29255914	Sample Variance	2.618372903
Range	10.35	Range	17.98	Range	6.75
Minimum	3.93	Minimum	-5.71	Minimum	2.79
Maximum	14.28	Maximum	12.27	Maximum	9.54
Sum	302.53	Sum	185.22	Sum	199.31
Count	31	Count	31	Count	31

This data shows that all three countries have shown steady economic growth, but the rate at which this growth is passed onto the people differs. South Korea has a major head start on both China and Vietnam and their much higher GDP per capita reflects their ability to grow earlier than the other two

countries. However, both China and Vietnam are growing at incredible rates and though it will take these countries some time before they experience the same level of development as Korea, they are both clearly making progress both as nations as a whole and individually.

Table 6. Historical Fluctuations of GDP Growth %.



7.2 Statistical Comparison

A number of different analyses were completed in order to determine correlation between many variables. In most cases, the most significant and useful results came from tests that utilized annual GDP growth % as the independent variable. From these analyses we discovered that certain variable affected the growth of a nation’s economy more than others. For example, it was discovered that, in China, the most significant dependent variables were total exports,

final consumption (as percent of GDP) and manufacturing valued added. In comparison, South Korea also revealed net exports as a significant variable, but also showed that the percentage of people living in urban areas was also a significant factor to the growth of the South Korea’s economy. Vietnam showed a combination of the previous two results by showing a significant correlation between percent of urban population and manufacturing value added.

(The complete set of statistics from the regressions can be found in figures 1-3 in the appendix.)

Despite the discovery of some variables showing signs of significance, there were some results that were initially a surprise. For all three countries, the same variables were used for the regression analysis. However, China's r-square for using the same dependent variables only showed a coefficient of determination of 21.5 (South Korea and Vietnam had r-squares of 49% and 45% respectively). This result, while surprising at first, might be explainable by the history of China.

The economic data from these test stretch from 1961 to 2015. During that time period, as mentioned in the previous sections, China was under rule of a command economy and a central plan. This is likely to alter the results because they are not subject to the same market forces that free markets are affected by. There have also been reports that the Chinese government has not always reported economic data that is completely accurate. Between central control of the economy and dishonest reporting, one can see how this might lead to a discrepancy in the data.

Following the initial regressions, a test was then conducted in order to uncover what effect the US GDP growth and GDP total have on the economies being studied. In this test, the variables that had a t-statistic that was insignificant were removed and the economic data for the United States were inputted. From this test, there was only a 5% increase in China's coefficient of determination when adding the statistics from the US. However, there was a more significant impact when the US statistics were added to South Korea's regression analysis. The coefficient of determination increased 12% following the addition of the US economy to the test. This could show that the United States is a more important trade partner to South Korea than it is to China.

8. Conclusions

Each of the three countries have very different patterns of growth, each with variables that have affected their economies differently. However, the statistical analyses have revealed that urban population, total exports and manufacturing value added all have significant impacts on the nation's GDP. Other initial conclusions drawn from the historical research indicates that political reforms that encourage trade openness is a major contributing factor to the growth of each economy. The research showed significant spikes in growth surroundings each countries adoption of new constitutions. Generally, those constitutions had policies in place to increase trade openness. This allows for the elimination of tariffs, increased openness to foreign investment and an added emphasis on exporting.

It is important to note that even though all three countries have experienced incredible growth at different periods of

time, the patterns to their growth varied greatly. China's growth has been the most significant and they were able to expand their economy by opening their country to foreign investment and decreasing the idea of self-reliance. Additionally, they were able to identify their competitive advantage of having a surplus of low-wage labor in comparison to other countries. These aspects allowed China's economy to explode and become the top manufacturing country in the world in 2010. South Korea, on the other hand, saw their economy flourish between 1962-1980. Their growth can be attributed to their emphasis on growing their human capital and using highly skilled labor to focus on the high-tech industrial markets and using flexible public enterprises to offset market failures. Vietnam is fairly new to the development process, but their growth can be highly attributed to the fact that China's wages are increasing. As China continues to develop and evolves into a consumer-based market, the manufacturing jobs that once belonged to them are being outcast to lesser-developed nations in the region. Vietnam is one of the beneficiaries of these economic changes occurring in China.

Going forward, we can expect China's economic growth to slow over time as they transition into a more developed and stable state. Not to say that their global impact will falter, but rather, their growth will just plateau in the coming years. South Korea has been considered a developed nation and a high-tech industry for a number a years and it can be assumed that they will remain players when it comes to both the technological and financial sectors in the foreseeable future. Finally, Vietnam is the newest to begin their development. However, they are likely to continue to develop as China's wages rise and many of the manufacturing jobs continue to move to other countries where there is an abundance of low-wage workers.

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Appendix

Figure 1: Regression Analysis for China

IV: Annual GDP Growth %

Regression Statistics	
Multiple R	0.464262979
R Square	0.215540113
Adjusted R Square	0.09787113
Standard Error	7.24105578
Observations	47

ANOVA					
	df	SS	MS	F	Significance F
Regression	6	576.2635405	96.04392342	1.831749606	0.1173379
Residual	40	2097.315553	52.43288882		
Total	46	2673.579093			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	69.27079686	36.56523635	1.894444116	0.065411909	-4.630302462	143.1718962	-4.630302462	143.1718962
Urban population (% of total)	-0.189608937	0.610171148	-0.310747137	0.757606432	-1.422810828	1.043592953	-1.422810828	1.043592953
Imports of goods and services (current US\$)	6.51071E-12	4.28305E-11	0.152010994	0.879942409	-8.00531E-11	9.30745E-11	-8.00531E-11	9.30745E-11
Exports of goods and services (current US\$)	-2.56097E-11	2.89667E-11	-0.884109951	0.381920282	-8.41536E-11	3.29341E-11	-8.41536E-11	3.29341E-11
Final consumption expenditure, etc. (% of GDP)	-0.906517843	0.40898548	-2.216503733	0.032407363	-1.733108331	-0.079927354	-1.733108331	-0.079927354
Manufacturing, value added (current US\$)	1.50696E-11	3.40705E-11	0.442306413	0.660649939	-5.37895E-11	8.39287E-11	-5.37895E-11	8.39287E-11
GDP per capita (current LCU)	2.61397E-05	0.00258196	0.010123964	0.99197271	-0.005192195	0.005244474	-0.005192195	0.005244474

Figure 2: Regression Analysis for South Korea

IV: Annual GDP Growth %

Regression Statistics	
Multiple R	0.700699086
R Square	0.49097921
Adjusted R Square	0.416747011
Standard Error	3.109325773
Observations	56

ANOVA					
	df	SS	MS	F	Significance F
Regression	7	447.6115376	63.94450538	6.614100338	1.73636E-05
Residual	48	464.0595246	9.667906762		
Total	55	911.6710622			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	6.672908841	3.3098124	2.01609881	0.049404952	0.018084989	13.32773269	0.018084989	13.32773
Gross domestic savings (current US\$)	5.45983E-12	1.4012E-10	0.038965353	0.969079628	-2.76271E-10	2.8719E-10	-2.76271E-10	2.8719E
Urban population (% of total)	0.095273649	0.087766463	1.08553592	0.283106257	-0.081192653	0.271739951	-0.081192653	0.271739
Imports of goods and services (current US\$)	1.18173E-10	6.19171E-11	1.908567232	0.062307534	-6.31973E-12	2.42666E-10	-6.31973E-12	2.42666E
Exports of goods and services (current US\$)	-2.04812E-10	7.07955E-11	-2.893010991	0.0057213	-3.47156E-10	-6.24683E-11	-3.47156E-10	-6.24683E
Final consumption expenditure, etc. (current US\$)	3.85989E-11	7.85741E-11	0.491242227	0.625493865	-1.19385E-10	1.96583E-10	-1.19385E-10	1.96583E
Manufacturing, value added (current US\$)	4.92774E-10	1.68734E-10	2.920418052	0.005311612	1.53511E-10	8.32037E-10	1.53511E-10	8.32037E
GDP per capita (current US\$)	-0.006191086	0.004203484	-1.472846359	0.147320008	-0.014642756	0.002260585	-0.014642756	0.002260

Figure 3: Regression Analysis for Vietnam

IV: Annual GDP Growth %

Regression Statistics	
Multiple R	0.675593366
R Square	0.456426397
Adjusted R Square	0.290990952
Standard Error	1.300032426
Observations	31

ANOVA					
	df	SS	MS	F	Significance F
Regression	7	32.63988351	4.662840501	2.758939584	0.030948267
Residual	23	38.87193911	1.690084309		
Total	30	71.51182262			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.832383771	5.975927155	0.139289478	0.890433896	-11.52976342	13.19453096	-11.52976342	13.19453096
Gross domestic savings (current US\$)	-5.01683E-12	3.1366E-10	-0.015994505	0.987376714	-6.53871E-10	6.43837E-10	-6.53871E-10	6.43837E-10
Urban population (% of total)	0.35857444	0.272623046	1.315275599	0.201379666	-0.205389299	0.922538178	-0.205389299	0.922538178
Imports of goods and services (current US\$)	8.83905E-11	1.28355E-10	0.688638228	0.49793905	-1.77133E-10	3.53914E-10	-1.77133E-10	3.53914E-10
Exports of goods and services (current US\$)	-1.56174E-11	1.14958E-10	-0.135853318	0.893119287	-2.53426E-10	2.22191E-10	-2.53426E-10	2.22191E-10
Final consumption expenditure, etc. (current US\$)	-4.41757E-11	3.85155E-10	-0.114695976	0.909681522	-8.40929E-10	7.52578E-10	-8.40929E-10	7.52578E-10
Manufacturing, value added (current US\$)	-2.5772E-10	2.13403E-10	-1.207670123	0.239446607	-6.99178E-10	1.83737E-10	-6.99178E-10	1.83737E-10
GDP per capita (current US\$)	-0.002823865	0.024442765	-0.115529696	0.909028031	-0.053387577	0.047739847	-0.053387577	0.047739847