Impact of Perceptions apropos Economic Growth

Niña Ann Margaret Geniston, Michelle Cabahug, Marjurie Lourince Zanoria and Kristine June Uy

Abstract

The Asian economy has been continuously growing since the beginning of the 21st century. Asian countries are starting to carve their names in the A-list of the growing world economy. Considering the stability of its excellent performance in a continual growth, the researchers endeavored to find out whether what a country's economic growth is reflected in the level of satisfaction of its citizens.Using exploratory data analysis, indices pertinent relating to general perception, social trust, security, government performance, and professional relations were calculated. Results showed that countries which are generally perceived to be not doing well in terms of economy seem to exhibit a higher level of satisfaction from its citizens.

Keywords: Asian Economy, perception, economic growth

1.0 Introduction

Asia's economy is full of interesting phenomena created through time. Take for example, the time when the region suffered from the Asian Financial Crisis in 1997 and the Global Financial Crisis in 2007-2008 which made the currencies and equity values of countries to fall dramatically. Asia survived and reached a remarkable milestone of a 30 percent share of global GDP in 2012, continuing to grow even greater in recent years.

Asia has now proven its emergence as an economic power through its sustained economic growth based on the continent's overall Gross Domestic Product (GDP) both in nominal and purchasing power parity measurements. In 2014, the Asian Development Bank conveyed a 6.2% GDP from 2013's GDP of 6.1%. Likewise, in the Asian Development Bank's recent outlook report, Asia's economy is projected to grow at 6.4 percent in 2015 making the region a major contributor to the world's economic growth.

According to the latest report of World Bank, three Asian countries have made it to the top ten of the largest economy in terms of nominal GDP in the world. These are the nations of China in the second spot, followed by Japan on the third rank, and India on the tenth place. In addition, Asia is also home to top countries producing fuel and oil, energy resources, and various notable tourist spots that also helped in the economic growth of the region. Moreover, other countries in Asia such as Hong Kong, South Korea, Taiwan, and Singapore are recognized as Asian Tigers because of maintaining exceptionally high growth rates and rapid industrial development. Indonesia, Philippines, Malaysia and Thailand are also acknowledged as Asian Tiger Cub Economies by reasons of having potentials like the four Asian Tigers in terms of economic development and industrialization.

Measuring the economic growth and industrialization of a country is mostly done by assessing the area's national income, which is the

total value of a country's output in a particular period. The economic growth of a country typically involves technological development. Industrialization of a country arises once the nation achieves the technological development needed in producing more output, thereby increasing more of a country's GDP. Reports about countries' economic performance were published by credible organizations and made available on the internet and reported as current issues. Despite the availability of the information, some individuals failed to appreciate such countries' advancement in relation to its economic performance and growth. It is because people don't just rely on numbers, but they also consider what they have perceived in their surroundings. Thus, the public's perception of economic growth varies due to numerous factors and does not always appear to agree with the reports of economic growth.

According to Robbins& Judge (2007) perception is a process where individuals choose, layout, classify, integrate and explain their impressions in order to give values to their environment. It is affected by factors in the object or target being perceived, and in the situation where perception has been made. In such process, consisting selection, organization, and interpretation of what an individual perceives, a particular person acquires signals from what he recognized in his surroundings. The signals travel to the brain creating perception.

Perception differs between various individuals since it is caused by numerous factors such as interests, knowledge, and expectations. Organizations may do what they think is right for good reasons but how the public sees the industry as whole will make it difficult for organizations to put these things into actions. Thus, public perception of economic growth and development are different among individuals.

Economic growth is an indicator to the economic development of a country. It is the increase in the wealth of a nation. Additionally, there are a number of ways to measure an economic activity of a country, and some of these indicators would include a nation´s GDP, stock market, inflation rate, and the exchange rate. Hassan (2004) mentioned that national income is best approximated by GDP and per capita income while Todaro and Smith (2003) defined economic development as an increase in living conditions, improvement of the citizens´ self-esteem needs, and a free and just society.

Asiegbu,Akujuobi and Chidiebere (2010) stated that economic growth and development requires a massive level of capital for a particular period. Like any other businesses, financial resources must be managed properly to result in economic growth. Managing one's capital has been the problem with the Third World countries. The capital to sustain economic growth is not harnessed properly either because of weak capital markets or poor financial infrastructure. Charles (2000) also expressed that a nation's economic development depends on the nature and quality of its government in aiding policies which directly affects economic development. Also, economic growth is affected by corruption, foreign direct investment (FDI), financial markets, poverty, and resources. Moreover, Hayek (2000) claimed that perception has a role in a nation's economic development. This claim is further strengthened by Lewis (2013) when he posited that human behavior affects growth and development. Human beliefs become more instrumental especiallywhen one recognizes that some institutions and beliefs

are consistent with growth but not with each other. Economic growth, then, depends on the attitude towards, thrift, wealth, and experiences, among others (Lewis, 2013).

The economic status of a country's citizens helps to determine its recognition as one of the best nations in the world. Usually, the standard of living of a country's residents reflects the country's economic performance. In addition, people's lifestyle, behavior towards positivity, and the surroundings could somehow suggest the extent of a country's economic accomplishment. The World Economic Forum's Global Competitiveness Report 2014-2015 noted thatthe Asia-Pacific region is home to three of the ten most competitive economies in the world.

Economic growth determines the extent of a country's development which can be measured using several approaches, but it is usually calculated from the data given by a country's GDP. Most economists believed that the capital is the only requirement for growth, and therefore,capital formation is given the greatest emphasis to bring about economic development of a country. Capital is a necessary, but not a sufficient, condition of progress. Aside from the common measuresof economic growth, this study has been completed to introduce the contribution of people´s perception to the economic growth itself. In connection with this, this paper considered the impact of citizens' attitudes in relation to their nation's economic growth.

2.0 Research Methodology

In order to determine the connection between people's perception in relation to the economic growth of a country, data were gathered through a process called data mining. Data mining is a powerful new technology with great potentials in helping individuals or varied businesses to focus on the most relevant information in the data they have collected about the behavior of statistics observed(Tiwari, 2014).

The researchers have chosen the top 13 largest economies in Asia based on the latest GDP ranking (i.e. 2014) by the World Bank. Considering that this paper looked into economy vis a vis perceptions of the citizens, it is deemed best to look into the countries who are performing well in this aspect. In addition, the latest available data were used in order to give more weight to the current perceptions of the citizens with regards their level of satisfaction in light of the current economic status of the countries. The following countries were included in this study: China, Iran, Indonesia, India, South Korea, Israel, Japan, Philippines, Malaysia, Saudi Arabia, Singapore, United Arab Emirates (UAE), and Thailand.

The following variables were considered as indicators in relation to perceptions about the individual's well-being, the community, and the government which would help in determining the effect of people's perceptions in relation to economic growth.

1. Education Quality - The quality of education plays a crucial role in affecting perceptions about economic growth. A good quality education is one that equips learners with capabilities they require to become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance individual well-being. Thus, it is considered as one of the variables. The rate in education quality data is the satisfaction rating of the individuals. The

rating is from zero to100 percent from which 100 percent is the highest.

2. Health care quality - The services provided for health care would improve the perception of individuals towards the economic growth of their country. The rate of health care quality in the data reflects the satisfaction rating of the individuals towards the health care quality experienced by them which ranges from zero to 100 %, and 100 being the highest.

3. Job - A job is a regular activity with payment such as trade, occupation, or profession. Individual's satisfaction with their jobs would reflect the good performance as an employee contributing to the productivity of the organization they belong. The score reflected in the data under this indicator vary between zero to100 percent.

4. Safety – Safety is being free from harm and danger in the surroundings. Without the feeling of being safe, people will perceive threat to their well being wherein the rate still ranges from zero to 100% and zero being the lowest.

5. Local labour market - A local labour market in an economy functions with demand and supply of labour. In this market, demand is the firm's demand for labour and supply is the worker's supply of labour. Both supply and demand of labour are influenced by changes in the bargaining power. The rate provided in the data ranges from zero to 100 %, and a higher percentage means greater satisfaction.

6. Trust in other people - Trust in others can be attributed to the economy. In economics, one's trust in others is often conceptualized as a person's reliability in transactions. It has been claimed that higher level of social trust is positively correlated with economic development and that a low level of trust inhibits economic growth. Percentage of scores is also used in this indicator, ranging from zero to 100%, 100 being the highest and zero as the lowest.

7. Community - Economic growth is often linked to the developments in the community. Community development is often associated with community work or planning involving stakeholders, foundations, governments, or contracted entities including non-government organizations (NGOs) and universities. Since most common citizens are visual and result-based, what they see around them gives rise to the perception they conceive; and then, associate them with their country's development rating ranging from zero to 100%.

8. Efforts to Deal with the Poor- A nation's government exerts efforts to help the poor by instituting programs that could help the less privileged people. Citizens would then believe that the economy is actually growing given the extent of the efforts by the government. In addition, having the government as an influence, the people themselves would also exert efforts to help those people in need. The data from this indicator is rated from zero to 100%, zero being the lowest, and 100 as the highest.

9. Trust to the National Government- The public's appreciation to the national government depends on what an individual citizens see and feel about itsperformance. Through this perception, the public could refer to the government's efforts to help maintain a stable economy by contributing the most of their efforts. Although some countries have no data for this indicator, it is normally measured from zero to 100 percent. The higher the rating means the higher are the trust of people on their government.

10. Corruption Perception Index- CPI ranks 175 countries on a scale of zero to 100, with zero indicating high levels of corruption and 100 indicating lowest level. Developed countries typically rank higher than developing nations due to stronger regulations. It ranks countries according to the extent of corruption which is believed to exist like bribery, embezzlement of funds by those in authority, and the existence of fraud in some transactions.

All the data were taken from the 2014 Human Development Report (HDR) of United Nations Development Programme(UNDP) except for the Corruption Perception Index (CPI) which was taken from Transparency International. Said CPI data were for the year 2014. These selected indicators are levels of perception ranging from 0-100. The data obtained from HDR were levels of satisfaction and the closer the percentage to 100, the higher the satisfaction. These data were compiled, organized and underwent statistical treatment. The variables listed above were subjected to factor analysis to correlate the variable with each other and group those that has a high correlation with each other to create a characteristic.

After the factor analysis was done, each factor's indices were computed. To determine the indices, principal component analysis was done and rankings for how the country is affected by the perceptions were reflected. Thereafter, the question if the perception of individuals can affect the economic growth can now be answered.

3.0 Results and Discussion

In order to describe the variability and group together highly correlated perceptions listed above, it is necessary to examine the indicators previously mentioned. As such, Table 1 shows the selected Asian countries along with their respective indicators aboutinsightsof people. The perceptions considered are in relation to education quality, health care quality, job, safety, local labor market, trust in other people, community, efforts to deal with the poor, trust in the national government, and CPI or Corruption Perception Index.

Table 1: Indicators

Country	Education-quality	Healthcare-quality	Job	Safety	Local labour-market	Trust in other-people	Community	Efforts to deal with the poor	Trust in nation-algovernment	CPI
Indonesia	82	80	77	89	38	21	90	28	67	34
Malaysia	91	87	83	45	44	14	83	70	76	52
Philippines	83	83	83	66	65	14	90	82	76	38
Singapore	85	84	88	89	63	33	92	66	83	84
Thailand	91	88	97	74	73	27	95	67	70	38
Japan	55	75	79	77	16	33	85	33	17	76
China	62	65	72	82	38	57	80	68	..	36
South Korea	55	68	73	67	25	26	79	33	23	55
India	69	48	67	61	30	20	75	39	54	38
Saudi Arabia	65	56	90	77	73	36	93	80	..	49
UAE	83	82	87	90	47	18	93	85	..	70
Israel	62	69	80	63	26	26	79	14	34	60
Iran	61	52	67	55	22	..	76	58	56	27

The various perceptions referred to in Table 1 originated from the Human Development Report released by United Nations Development Programme (UNDP) for 2014. The Corruption Perception Index (CPI) reported by Transparency International also represented the year 2014. The CPI is measured on the scale of 0-100, zero being the most corrupt and one hundred for very clean. Panel data dating back years before 2014 was no longer explored since the researchers are only interested in current perceptions. This decision was reached in order to remove any lingering perceptions from significant and unusual events such as the Asian Economic Crisis.

As shown in Table 1, Singapore is observed to be least corrupt and has more trust in their government compared to the other countries, as evidenced by its corruption index of 84 and confidence to their government of 83. Similarly, UAE has the highest rate in terms of its efforts to deal with the poor and safety. UAE, together with Saudi Arabia, has a community satisfaction rating of 93 following Thailand's 95. Thailand also registered the highest in terms of job, healthcare quality, and education quality alongsideMalaysia. Also, Thailand and Saudi Arabia got a great satisfaction rate in the local labor market. China reflected the highest rating in terms of trust in other people.

A factor analysis is then done to group together variables that exhibit a high correlation in relation to the data presented in Table 1. Performing a factor analysis effectively organizes the factors to be considered. Table 2 shows the result of such analysis.

Table 2: Unrotated Factor Loadings and Communalities

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Communality
Education quality	0.920	-0.255	0.064	0.097	-0.111	0.938
Health care quality	0.815	0.271	-0.213	-0.354	-0.289	0.992
Job	0.820	0.370	-0.218	-0.261	0.203	0.968
Safety	0.179	0.744	0.610	0.140	-0.101	0.988
Local labour market	0.946	-0.034	0.054	0.125	0.259	0.981
Trust in other people	-0.213	0.936	-0.022	0.098	0.211	0.976
Community	0.859	0.415	0.210	-0.154	-0.028	0.979
Efforts to deal with the poor	0.830	-0.222	-0.300	0.219	0.124	0.892
Trust in national government	0.865	-0.275	0.121	0.343	-0.141	0.975
CPI	-0.173	0.732	-0.542	0.318	-0.189	0.997
Variance	5.3615	2.5395	0.9154	0.5381	0.3303	9.6849
% Var	0.536	0.254	0.092	0.054	0.033	0.968

As shown in Table 2, the various indicators initially examined are now grouped into five distinct factors. In factor 1, variables such as education quality, health care quality, job, local labor market, community, efforts to deal with poor, and trust in the national government earned the highest factors. Trust in other people is the only component of factor 2. Factor 3 is also a single component factor containing only safety. Trust in other people, and safety factors were comprised in Factor 2 and 3, respectively. The high factored loadings in factor 4 are efforts to deal with the poor, trust in the national government and CPI. Meanwhile factor 5 is ruled by the job, local labour market, and trust in other people which has high factor loadings than the rest of the variables.

Table 3 below shows the five factors and the corresponding indicators under each factor.

Table 3: Factors and Corresponding Indicators

Factor	**Indicators**
General Perception	Education quality, Health care quality,Job,Locallabourmarket,Community, Efforts to deal with the poor,Trust in national government
Social Trust	Trust in otherpeople
Security	Safety
Government Performance	Efforts to deal with the poor, Trust in national government, Corruption Perception Index (CPI)
Professional relations	Job, Local labour market, Trust in other people

Taking into account the factors in the above table, the researchers made use of the Principal Component Analysis in obtaining the weight of each factor. The succeeding table presents the General Perception Index (GPI) of the selected Asian countries, utilizing the following data:

Principal Component Analysis: Education quality, Health care , Job, Local labour, Community, Efforts to deal with the poor

Eigenanalysis of the Covariance Matrix
10 cases used, 3 cases contain missing values

Eigenvalue	1531.0	244.2	151.6	54.5	12.6	6.2	4.9
Proportion	0.764	0.122	0.076	0.027	0.006	0.003	0.002
Cumulative	0.764	0.885	0.961	0.988	0.994	0.998	1.000

Variable	PC1	PC2	PC3	PC4	PC5	PC6	PC7
Education quality	0.346	-0.122	0.307	-0.215	0.679	-0.264	0.440
Health care quality	0.238	-0.605	-0.173	-0.576	-0.194	-0.230	-0.353
Job	0.161	-0.386	-0.135	0.101	0.294	0.842	-0.039
Local labour market	0.485	-0.265	-0.049	0.747	-0.032	-0.310	-0.193
Community	0.131	-0.263	-0.037	0.027	-0.559	0.077	0.770
Efforts to deal with the poor	0.490	0.476	-0.704	-0.164	0.052	0.017	0.087
Trust in national government	0.552	0.322	0.599	-0.164	-0.314	0.258	-0.203

From which, the formulae in computing GPI and the results are as follows:

$$\text{GPI Raw Score} = \frac{0.346EQ+0.238HCQ+0.161JOB+0.485LLM+0.094COM+0.490EP+0.552TNG}{2.403}$$

Equation 1: GPI Raw Score

$$\text{GPI} = \frac{\text{GPI Raw Score}}{\text{Maximum GPI Raw Score}}$$

Equation 2: General Perception Index (GPI)

Based on Equations 1 and 2, the following table shows the general perception index of the selected Asian countries.

Table 4: General Perception Index

Country	Education-quality	Health-carequality	Job	Local labour-market	Community	Efforts to deal with the poor	Trust in national-government	Raw Score	Index	Rank
Indonesia	11.81	7.92	5.15	7.66	4.90	5.70	15.39	58.56	0.75	8th
Malaysia	13.10	8.61	5.56	8.88	4.52	14.27	17.45	72.41	0.92	6th
Philippines	11.95	8.22	5.56	13.11	4.90	16.72	17.45	77.93	0.99	2nd
Singapore	12.24	8.31	5.89	12.71	5.01	13.45	19.06	76.70	0.98	3rd
Thailand	13.10	8.71	6.49	14.73	5.17	13.66	16.07	77.97	1.00	1st

Japan	7.92	7.42	5.29	3.22	4.63	6.72	3.90	39.13	0.50	13th
China	11.59	8.35	6.26	9.95	5.66	18.00		59.82	0.76	7th
South Korea	7.92	6.73	4.89	5.04	4.30	6.72	5.28	40.91	0.52	12th
India	9.94	4.75	4.48	6.05	4.08	7.95	12.40	49.67	0.63	10th
Saudi Arabia	12.15	7.20	7.82	19.12	6.58	21.17		74.06	0.94	5th
UAE	15.51	10.54	7.56	12.31	6.58	22.50		75.02	0.96	4th
Israel	8.93	6.83	5.35	5.24	4.30	2.85	7.81	41.34	0.53	11th
Iran	8.78	5.15	4.48	4.44	4.14	11.82	12.86	51.69	0.66	9th

As reflected in Table 4, Thailand is the highest and Japan is the lowest. This result is an indication of Thailand having high rates in most of the indicators. In contrast, Japan garnered the bottom spot due to the low scores obtained in the trust in national government and local labour market indicators. Also, Japan has low scores on the other components.

Another factor would be Social Trust. This factor includes only one component which is trust in other people. Hence, no principal component analysis was done. In computing the Social Trust Index, the trust in other people of a country is compared to those of the other countries. The raw score for each country is then divided by the maximum raw score in order to have the Social Trust Index.

Table 5: Social Trust Index

Country	Trust in other people	Raw Score	Index	Rank
Indonesia	21	0.0646	0.3684	7th
Malaysia	14	0.0430	0.2456	10th
Philippines	14	0.0430	0.2456	10th
Singapore	33	0.1015	0.5789	3rd
Thailand	27	0.0830	0.4737	4th
Japan	33	0.1015	0.5789	3rd
China	57	0.1753	1.0000	1st
South Korea	26	0.0800	0.4561	6th

Table 5: Social Trust Index, continued

Country	Trust in other people	Raw Score	Index	Rank
India	20	0.0615	0.3509	8th
Saudi Arabia	36	0.1107	0.6316	2nd
UAE	18	0.0553	0.3158	9th
Israel	26	0.0800	0.4561	5th
Iran				11th

Acing the top spot, with the highest Social trust index is, China. The result of China's index meant that Chinese people have high trust in other people. On the other hand, Philippines and Malaysia have the lowest indices as reflected in table 5.

Security would also play an important role in the economic growth. Since the perception with regards to safety is the only component of security index, therefore, performing a principal component analysis is not needed. In computing the Security Index, the safety perception of a country's people is compared to the total of all the selected citizens of a country's opinions. Each raw scores of security index is divided by the maximum value of the raw scores to result at each country's Security Index.

Table 6: Security Index

Country	Safety	Raw Score	Index	Rank
Indonesia	89	0.09519	0.98889	2nd
Malaysia	45	0.04813	0.50000	11th
Philippines	66	0.07059	0.73333	7th
Singapore	89	0.09519	0.98889	2nd
Thailand	74	0.07914	0.82222	5th
Japan	77	0.08235	0.85556	4th
China	82	0.08770	0.91111	3rd
South Korea	67	0.07166	0.74444	6th
India	61	0.06524	0.67778	9th
Saudi Arabia	77	0.08235	0.85556	4th
UAE	90	0.09626	1.00000	1st
Israel	63	0.06738	0.70000	8th
Iran	55	0.05882	0.61111	10th

Based on table 6, Security Index of United Arab Emirates is the highest. The lowest index goes to Malaysia implying that their citizens do not feel secured in the community they live in. This implies that citizens in the United Arab Emirates exhibit the highest sense of security among the countries examined.

Government Performance Index is also a factor that will help determine the effect of perception to economic growth. This index is composed of variables pertaining to views of the people chiefly about the government's role in maintaining the nation's economy to perform well. The index is made up of opinions of the people with reference to the efforts of the government to deal with the poor, their trust in the national government, and the Corruption Perception Index. The principal component analysis shown below is used in determining the weights of the variables previously mentioned.

Principal Component Analysis: CPI, Trust in national govt, Efforts to deal with the poor

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Eigenanalysis of the Covariance Matrix
10 cases used, 3 cases contain missing values

Eigenvalue   941.51   330.11   130.83
Proportion    0.671    0.235    0.093
Cumulative    0.671    0.907    1.000


Variable                          PC1      PC2      PC3
NonCorrupt                     -0.209   -0.968   -0.139
Trust in national government    0.718   -0.056   -0.694
Efforts to deal with the poor   0.664   -0.245    0.706
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The principal component analysis is then used to create the equations for Government Performance Raw Score and Index. The formulae are as follows:

$$\text{GPI Raw Score} = \frac{-.209\text{CPI}+0.718\text{TNG}+.664\text{EDWP}}{1.173}$$

Equation 5 GPI Raw Score

$$\text{GPI} = \frac{\text{GPI Raw Score}}{\text{Maximum GPI Raw Score}}$$

Equation 6: Government Performance Index (GPI)

Based on the equations utilized in computing the government performance index, Table 7 is then presented.

Table 7: Government Performance Index

Country	Efforts to deal with the poor	Trust in nationalgovernment	CPI	Raw Score	Index	Rank
Indonesia	15.84996	56.42834	-6.05797	66.22032	0.63885	9th
Malaysia	39.62489	64.00826	-9.26513	94.36803	0.91040	2nd
Philippines	46.41773	64.00826	-6.77067	103.65532	1.00000	1st
Singapore	37.36061	69.90376	-14.96675	92.29762	0.89043	4th
Thailand	37.92668	58.95498	-6.77067	90.11099	0.86933	6th
Japan	18.68031	14.31764	-13.54135	19.45660	0.18770	13th
China	99.23516		-16.53626	82.69890	0.79783	7th
South Korea	18.68031	19.37092	-9.79966	28.25157	0.27255	11th
India	22.07673	45.47956	-6.77067	60.78561	0.58642	10th
Saudi Arabia	116.74725		-22.50769	94.23956	0.90916	3rd
UAE	124.04396		-32.15385	91.89011	0.88650	5th
Israel	7.92498	28.63528	-10.69054	25.86972	0.24957	12th
Iran	32.83205	47.16398	-4.81074	75.18530	0.72534	8th

With the three variables considered in the government performance index, the Filipino citizens have recognized that its government performed well in uplifting the economic status of the country. This is reflected in the Philippines' government that is reported to have been doing well in improving the economy of the country. On the contrary, Japan, scoring a lower perception of the people towards their government's efforts due to some issues regarding nuclear power reliance, resulted to be the lowest in the rank.

Insights of the citizens pertaining to their jobs,

the local labour market, and trust in other people compose the next index, which is the Professional Relations Index. A high satisfaction rate of a person about his job, the local labour market, and trust given to other people could make the organization more productive, and consequently contribute to the country's national income.

Principal Component Analysis: Job, Local labour market, Trust in other people

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Eigenanalysis of the Covariance Matrix
12 cases used, 1 cases contain missing values

Eigenvalue  430.55  141.74  25.09
Proportion   0.721   0.237  0.042
Cumulative   0.721   0.958  1.000


Variable                 PC1     PC2     PC3
Job                    0.339  -0.052  -0.940
Local labour market    0.940   0.066   0.335
Trust in other people -0.045   0.996  -0.072
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$$\text{PRI Raw Score} = \frac{.339\text{JOB}+0.940\text{LLM}+-0.045\text{TOP}}{1.234}$$

Equation 7 PRI Raw Score

$$\text{PRI} = \frac{\text{PRI Raw Score}}{\text{Maximum PRI Raw Score}}$$

Equation 8: Professional Relations Index (PRI)

The equations used in the computation of the professional relations index yielded the succeeding values in Table 8, showing the PRI among the chosen countries.

Table 8: Professional Relations Index

Country	Job	Local labourmarket	Trust in otherpeople	Raw Score	Index	Rank
Indonesia	21.15316	28.94652	-0.76580	49.33387	0.60703	7th
Malaysia	22.80146	33.51702	-0.51053	55.80794	0.68669	6th
Philippines	22.80146	49.51378	-0.51053	71.80470	0.88353	3rd
Singapore	24.17504	47.99028	-1.20340	70.96191	0.87316	4th
Thailand	26.64749	55.60778	-0.98460	81.27066	1.00000	1st

Japan	21.70259	12.18801	-1.20340	32.68720	0.40220	13th
China	19.77958	28.94652	-2.07861	46.64749	0.57398	8th
South Korea	20.05429	19.04376	-0.94814	38.14992	0.46942	11th
India	18.40600	22.85251	-0.72934	40.52917	0.49869	10th
Saudi Arabia	24.72447	55.60778	-1.31280	79.01945	0.97230	2nd
UAE	23.90032	35.80227	-0.65640	59.04619	0.72654	5th
Israel	21.97731	19.80551	-0.94814	40.83468	0.50245	9th
Iran	17.75841	16.16888		33.92729	0.41746	12th

Taking into consideration the three variables shown above, Thailand garnered the topmost spot, given the high percentage of satisfaction of its people in both job and local labour market. Conversely, Japan positioned at the bottommost ranking of the said index due to recent reports that the country has problems with regards to the shrinking working-age population.

Lastly, to summarize the indices which would depict the economic growth of a nation, the researchers further used Principal Component Analysis to calculate for the Overall Perception Index (OPI). General perception, social trust, security, government performance, and professional relations are utilized in this analysis. The performance of principal component analysis resulted in the following data weight assignments and the equations related to the computation of the OPI are displayed below.

Principal Component Analysis: General Percep,Social Trust, Safety, Government Perf, Professional

Eigenanalysis of the Covariance Matrix

Eigenvalue	0.15997	0.04979	0.01607	0.00956	0.00060
Proportion	0.678	0.211	0.068	0.041	0.003
Cumulative	0.678	0.889	0.957	0.997	1.000

Variable	PC1	PC2	PC3	PC4	PC5
GeneralPercep	0.500	0.015	0.066	-0.009	-0.863
Social Trust	-0.068	-0.896	-0.422	-0.088	-0.086
Safety	0.064	-0.441	0.861	0.228	0.093
GovernmentPer	0.718	-0.027	-0.246	0.519	0.392
Professional	0.474	-0.044	0.128	-0.819	0.292

$$\text{OPI Raw Score} = \frac{.5GPI + -0.068ST + .064S + .718GPI + .474PRI}{1.688}$$

Equation 9 OPI Raw Score

$$\text{OPI} = \frac{\text{OPI Raw Score}}{\text{Maximum OPI Raw Score}}$$

Equation 10 Overall Perceptions Index (OPI)

Table 9 presents a summary of the OPI among the selected Asian countries. Subsequently, it also shows the ranking of the selected Asian countries with the results of the five indices representing the perceptions of people.

Table 9: Overall Perceptions Index

Country	General Perception Index	Social Trust Index	Security Index	Government Performance Index	Professional Relationship Index	Overall Perception Index	Rank
Indonesia	0.75111	0.36842	0.98889	0.63885	0.60703	0.68733	8th
Malaysia	0.92877	0.24561	0.50000	0.91040	0.68669	0.86424	6th
Philippines	0.99955	0.24561	0.73333	1.00000	0.88353	0.98744	1st
Singapore	0.98381	0.57895	0.98889	0.89043	0.87316	0.92952	4th
Thailand	1.00000	0.47368	0.82222	0.86933	1.00000	0.95888	2nd
Japan	0.50195	0.57895	0.85556	0.18770	0.40220	0.35058	13th
China	0.76732	1.00000	0.91111	0.79783	0.57398	0.72208	7th
South Korea	0.52468	0.45614	0.74444	0.27255	0.46942	0.41301	11th
India	0.63713	0.35088	0.67778	0.58642	0.49869	0.58976	10th
Saudi Arabia	0.94990	0.63158	0.85556	0.90916	0.97230	0.94811	3rd
UAE	0.96219	0.31579	1.00000	0.88650	0.72654	0.89129	5th
Israel	0.53019	0.45614	0.70000	0.24957	0.50245	0.41246	12th
Iran	0.66301		0.61111	0.72534	0.41746	0.64531	9th

As shown in the table above, the Asian countries together with their indices are displayed, to sum up the factors previously considered. The overall ranking shows the Philippines to be the top competitor among the other Asian nations. This result, however cannot be clearly pointed out immediately by the fact that Philippines only rank first on government performance index although it has good positions on the security and social trust indices. Comparing the results above to the actual rank of the Asian countries' economies based on GDP by the World Bank, Philippines ranked last among the 13 countries chosen, with China at the topmost place.

With reference to the table, the culture and the manner of people handling their everyday life could explain why Philippines turned out to be the leading economy in line with its people's perceptions. According to the 2013 study on Asian countries' Happiness Indexconducted by Eden Strategy Institute, the Philippines ranked third behind Singapore and Malaysia. In 2014, the Philippines ranked 8th in Jetpac's list of "The World's Happiest Countries" based on actual smiles analyzed from more than photos people shared on Instagram. Moreover, in 2015,Philippines ranked 90th in the 2015 World Happiest Reportby the Earth Institute at Columbia University. The rankings were based on a "life evaluation score," which takes into account a range of factors, including good health, access to education, political freedom, quality of relationships, and trusting communities. However,

these results are in stark contrast to the common perception that the Filipinos are one of the happiest people, as averred by foreigners who see us smile and laugh despite the crisis and difficulties in life. Additionally, according to the 2010 study of the National Statistical Coordination Board, the top three factors that make Filipinos happy are family, health, and religion. The surveys show that in spite of the hardships of life the Filipinos are facing due to the economic struggle of the country, they still feel satisfied and happy with what the country has made so far.

Table 9 could also be utilized to which perception a country could work out on to make their citizens more satisfied with the nation's administration. For example, Japan's economy is the second largest in Asia and ranks third in the world economy's ranking based on GDP by World Bank. Despite such ranking, Japan turned out to be the last in the economy with respect to the perceptions reflected by its citizens.Japan's overall index, however shows a low score of 31%. Among the five indices, Japan ranked the lowest score in the government performance index in which the people's trust in national government is in contrast with the country's CPI. This perception of Japan's people towards their government must be influenced by the government's refusal to listen to its people with regards to Japan's promise in avoiding its reliance on nuclear power. Also, Japan's general perception index is quite small where trust in the government is one variable. Thus, the Japanese government should work hard in gaining the public's trust by protecting their citizens' interests first before anything else to avoid any turmoil that could affect Japan's economy in the future. Additionally, in the recent ranking by the World Bank of the World's largest economy, China resulted to place at the second place, and first across Asia, but led to position itself on the 7th spot with its citizens' perceptions. Although China ranked first regarding social trust index, it was not enough to put itself on a higher position to correspond with its level in GDP.

Philippines' overall perception index of 0.98744 or 99 %turned out to be the highest among the 13 Asian countries selected. This result implied that the Philippines will be at the top spot if the economic growth of all countries will be measured by the citizens' perceptions. Moreover, such index score shows that Filipinos are truly one of the most optimistic people in the world. According to the Fourth Quarter 2014 Social Weather Report, 41 percent of Filipinos expect their lives tobe much better this year, while 6 percent expect otherwise, yielding a very high net optimism score of 35.To examine further the reasons as to why the Philippines turned out to be the lead among the 13 countries, and Japan being the last, the principal component analysis of the indices could be taken into consideration. The perceptions related to government performance weighed the most in computing the overall perception index of the country. Such government performance index is the main reason Philippines ranked first, and Japan at the last spot, granted the indices they got. It can be inferred from the overall results that people's perceptions in one way or another does not coincide with the countries' economic status. Somehow, the citizens' perceptions of those countries performing well like Japan, China, India, and South Korea are surprisingly low given such countries' escalating economic growth. Moreover, the countries with the highest rank in the results like the Philippines, Thailand and Singapore do not correspond with their status by the World Bank,

although these countries are known to be Asian Tiger and Asian Tiger Cub Economies.

More and more Asian countries have now surpassed the economies of the European communities. Take for example China and Japan, which managed to be ahead of United Kingdom and Germany in GDP rankings. Furthermore, a significant number of Asian countries are now dominantly considered as emerging markets. With the booming Asian economy, individuals must have embraced the success of their respective nation's economy, and their perception must probably have walked hand in hand with such success.

On another note, the researchers highlighted the top three nations in terms of the results of the five indices brought about by the perceptions of people. These are satisfaction with individual selves and community, trust in other people, safety, government's efforts and activities, and engagement relations. Table 10 below shows this.

Table 10: Top Three Countries in Specific Index

RANK	General Perception	Social Trust	Security	Government Performance	Professional Relations
1	Thailand	China	UAE	Philippines	Thailand
2	Philippines	Saudi Arabia	Singapore; Indonesia	Malaysia	Saudi Arabia
3	Singapore	Japan	China	Saudi Arabia	Philippines

Table 10 shows that Thailand has claimed two top spots out of the five indices but its other three indices are still admirably high. Philippines, on the other hand turned out to be the most satisfied country in terms of government performance. The country managed to hit the second spot in General Perception implying a high satisfaction in well-being and communityfactors despite the devastating calamities that hit the country in 2013. On the top spot in Social Trust Index is China and UAE for Security Index.

In addition, the researchers performed multivariate cluster analysis to group the countries according to similar characteristics and relationships which resulted to three clusters.The number of observations in each group is 4, 6, and 3. First group is comprised of Indonesia, India, Iran and China. Cluster 2 is composed of UAE, Saudi Arabia, Singapore, Thailand and Philippines. Meanwhile, Japan, South Korea, Malaysia and Israel were includedin Cluster 3. Inaddition, countries classified in Cluster 3 are the bottom 3 in the overall index. The same three countries registered the lowest scores in the Government Performance Index. In the same index, countries in Cluster 1 managed to ace high Government Performance Index and average indices were grabbed by Cluster 2. Also, all countries in cluster 2 got high points in the General Perceptions Index while cluster 1 got average points in the similar index. Hence, countries in Cluster 3 should exert actions and efforts to improve citizen's trust in their government and gain the support of its projects even with an admirable performance in terms of GDP.

4.0 Conclusion

Undoubtedly, Asia's economy is continuously expanding. The region has become an economic power in the 21st century considering the large number of the population it is holding.

With the results of the analysis, most countries rank differently compared to their original position by the World Bank. In all of the five indices, different countries appeared to be on the top spots. Philippines, for example, beat other Asian countries in the overall index by maintaining good positions of the three out of the five indices identified. In contrast, Japan with a high GDP following China was at the bottom spot.Given the high percentage of satisfaction of most Filipinos, some of them would tend to lax about improving their standard of living. The reason of such attitude is because of the contentment they have felt with what the country could offer. Consequently, it would be a factor that could delay the country's economic growth by citizens who have the potentials but settled for mediocrity.

In conclusion, the researchers posit that a citizen's satisfaction and perceived contentment as to a country's progress is not confined to its economic development. The results seem to lean towards pointing out that countries showing more economic progress have citizens who are less satisfied. This may be because citizens of "richer" countries are used to a certain standard of living and, as such, demand that it be maintained or improved. On the other hand, citizens from countries whose economic growth still see more areas for improvement appear to be easier to please or satisfy.

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