

# A Study of Economic Indicators of Gross Domestic Product Across the Asian Countries for the Period 2008-2009 to 2020-2021

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**Abstract**—Asian Countries comprises of forty-nine different nations of the world. Asian countries are ahead of other countries in terms of Gross Domestic Product (GDP) nominal and Gross Domestic Product Purchasing Power Parity (PPP) in the world. Countries in the Asian region are fastest emergent nations in the world. GDP is the most important tool to find the growth of any country. It is a most commonly used methods for assessing economic progress of any country in the world. In simple terms, GDP shows the well-being of a country. GDP determines the stability and stage of development of a country. It also helps in categorizing the country into developed, developing or under-developed country category. Higher GDP indicates positive growth of a country whereas the lower GDP indicates the negative development of a country. Increasing GDP is a favorable situation and shows the improvement in the economy of a country. Whereas the fallen GDP shows that economic condition of a country is in trouble and need to take essential measures. The study is to understand the concept of Gross Domestic Product (GDP) of Asian Countries. Also, to study the trend of economic indicators of GDP that is Real GDP, Consumer Price and Current Account Balance of Asian Countries for the period 2008-2009 to 2020-2021.

**Index Terms**— Asian Countries, Consumer Prices, Economic indicators, Nominal GDP, Real GDP.

## I. INTRODUCTION

The abbreviation of GDP is used for Gross Domestic Product which calculates the value of economic activity of a country. In other terms, GDP for one year is calculated by adding the market price, of all final finished goods & services manufactured or sold within a country during a specific period of time. GDP has a broad aspect which mainly has four components of personal consumption, investment, government spending and net foreign import & export. In general, these are the major four expenditures of a country which represents the market value of goods &

services. Asian countries GDP is analyzed in taking consideration the selected key economic indicators Real GDP, Consumer Price and Current Account Balances of a country.

## II. OBJECTIVES OF THE STUDY

To study the concept of GDP of Asian Countries  
To study the trend of Real GDP, Consumer Prices and Current Account Balance of Asian Countries for the period 2008-2009 to 2020-2021.

## III. DATA COLLECTION

The study is based on secondary date collected from research studies, journal, articles published in journals and information available on relevant websites on internet.

## IV. REVIEW OF LITERATURE

Nelasco, Shobana. (2013) has done Trend Analysis of External Debt of South Asian Countries and analysed the actual growth of borrowing and its components like long term, short term and IMF borrowing. Also, the study analysed 30 years of trend of the per capita debt and concluded on the similarities and differences between actual debt analysis and per capita debt analysis.

Walterskirchen (1999), on “The Relationship between Growth, Employment and Unemployment in the EU” analyses the macroeconomic links between economic growth with respect to GDP and the unemployment for the period 1988-98. Under this study, time-series analysis was adopted for individual EU countries and international cross-country analysis.

Tang, Hong & Habibullah, Muzafar & Puah, Chin-Hong. (2007), on “Stock market and economic growth in selected Asian countries” and proposed the introduction of stricter regulations to protect investors,

improve corporate practices and ensure a systematic and fair market for securities trading on stock exchanges.

#### V. ASIAN COUNTRIES OF THE WORLD BY GDP

The Asian regions are divided into two parts i.e. developed and developing countries. Japan and Four Asian tigers, Asian Dragons and Little Dragons of

Asian Countries are the market of Hong Kong, Singapore, South Korea and Taiwan are highly developed countries of Asian Countries. The other major nations are India, China, Russia and Malaysia which are yet to be come under developed countries. These are still developing countries besides being a successful country. Below is the list of Asian countries by GDP ranking, data by the International Monetary Fund.

| Territory            | GDP nominal     | GDP nominal per capita | GDP PPP         | GDP PPP per capita | Location       |
|----------------------|-----------------|------------------------|-----------------|--------------------|----------------|
|                      | millions of USD | USD                    | millions of USD | USD                |                |
| China                | 14,140,163      | 10,839                 | 27,308,857      | 19,503             | East Asia      |
| Japan                | 5,413,054       | 39,048                 | 5,888,913       | 46,827             | East Asia      |
| India                | 3,800,183       | 2,900                  | 12,325,669      | 8,680              | South Asia     |
| South Korea          | 1,629,532       | 30,644                 | 2,319,585       | 44,740             | East Asia      |
| Indonesia            | 1,088,768       | 4,068                  | 3,737,484       | 13,998             | Southeast Asia |
| Saudi Arabia         | 804,000         | 34,683                 | 1,898,511       | 75,704             | West Asia      |
| Turkey               | 649,436         | 7,715                  | 2,346,576       | 28,264             | West Asia      |
| Taiwan               | 635,547         | 26,910                 | 1,300,212       | 55,078             | East Asia      |
| Thailand             | 509,200         | 7,295                  | 1,383,022       | 30,364             | Southeast Asia |
| Iran                 | 610,662         | 7,257                  | 1,470,661       | 17,661             | West Asia      |
| United Arab Emirates | 353,899         | 31,948                 | 746,350         | 69,434             | West Asia      |
| Israel               | 383,425         | 41,560                 | 354,197         | 39,121             | West Asia      |
| Hong Kong (PRC)      | 341,319         | 45,176                 | 490,880         | 64,927             | East Asia      |
| Malaysia             | 336,330         | 11,136                 | 1,078,537       | 32,880             | Southeast Asia |
| Singapore            | 337,451         | 58,484                 | 585,055         | 103,180            | Southeast Asia |
| Philippines          | 398,814         | 3,373                  | 1,085,758       | 9,818              | Southeast Asia |
| Bangladesh           | 348,891         | 2,064                  | 864,657         | 5,739              | South Asia     |
| Pakistan             | 284,214         | 1,388                  | 1,202,091       | 5,871              | South Asia     |
| Vietnam              | 340,602         | 3,498                  | 1,035,000       | 10,500             | Southeast Asia |
| Iraq                 | 178,112         | 4,438                  | 705,059         | 18,025             | West Asia      |
| Qatar                | 147,791         | 52,751                 | 365,835         | 132,886            | West Asia      |
| Kazakhstan           | 165,730         | 8,782                  | 537,664         | 28,849             | Central Asia   |
| Kuwait               | 108,656         | 22,252                 | 312,100         | 66,386             | West Asia      |
| Sri Lanka            | 81,120          | 3,689                  | 304,826         | 13,897             | South Asia     |
| Oman                 | 62,305          | 14,423                 | 203,959         | 47,365             | West Asia      |
| Myanmar              | 70,890          | 1,333                  | 355,609         | 6,707              | Southeast Asia |
| Uzbekistan           | 59,771          | 1,763                  | 297,222         | 8,999              | Central Asia   |
| Lebanon              | 18,734          | 2,745                  | 91,286          | 15,049             | West Asia      |
| Macau (PRC)          | 26,348          | 38,769                 | 77,360          | 115,913            | East Asia      |
| Azerbaijan           | 41,666          | 4,521                  | 187,260         | 18,615             | West Asia      |
| Turkmenistan         | 47,986          | 7,507                  | 121,885         | 20,410             | Central Asia   |
| Jordan               | 42,609          | 4,174                  | 97,161          | 9,648              | West Asia      |
| Bahrain              | 34,624          | 22,818                 | 76,123          | 50,931             | West Asia      |
| Yemen                | 20,948          | 645                    | 72,171          | 2,280              | West Asia      |
| Nepal                | 45,012          | 1,509                  | 176,123         | 5,800              | South Asia     |
| Cambodia             | 26,316          | 1,572                  | 76,934          | 4,664              | Southeast Asia |
| Laos                 | 18,653          | 2,567                  | 58,091          | 8,109              | Southeast Asia |
| Afghanistan          | 19,006          | 499                    | 76,486          | 2,094              | South Asia     |
| Georgia              | 16,316          | 4,405                  | 45,398          | 12,227             | West Asia      |
| Mongolia             | 13,385          | 3,990                  | 47,217          | 14,308             | East Asia      |
| Armenia              | 12,813          | 4,315                  | 32,909          | 11,083             | West Asia      |
| Brunei               | 10,647          | 23,117                 | 35,920          | 80,383             | Southeast Asia |
| Kyrgyzstan           | 7,480           | 1,148                  | 25,915          | 4,056              | Central Asia   |
| Tajikistan           | 7,898           | 834                    | 33,351          | 3,589              | Central Asia   |
| Maldives             | 4,712           | 12,464                 | 8,667           | 23,311             | South Asia     |
| Timor-Leste          | 1,920           | 1,456                  | 6,823           | 5,254              | Southeast Asia |
| Bhutan               | 2,587           | 3,431                  | 8,199           | 9,876.00           | South Asia     |
| Syria                | 20,379          | 2,114                  | N/A             | N/A                | West Asia      |
| North Korea          | 16,331          | 640                    | N/A             | N/A                | East Asia      |

Source: "International Monetary Fund World Economic Outlook" (December-2019)

China has recorded highest Gross Domestic Product (GDP) nominal 14,140,163 million of USD and GDP Purchasing Power Parity (PPP) 27,308,857 million of USD as per the data retrieved from International Monetary Fund by December 28, 2019. After China, Japan has recorded with GDP nominal 5,413,054 million of USD and GDP PPP 5,888,913 million of USD then India with GDP nominal 3,800,183 million of USD and GDP PPP 12,325,669 million of USD. Nominal GDP is measured without considering the impact of inflation whereas Real GDP is a measure which is calculated after considering the price inflation, that is, GDP deflator. Hence Real GDP is more favorable for comparison of data over a period as it considers the price inflation. Consumer Price Index (CPI) is a weighted average price of change in price of all the goods & services consumed. It is the most effective economic indicator or tool of finding the inflation or deflation. CPI also shows the relationship between the change in price and cost of living. CPI and GDP are the two important aspects for a healthy economy. Current Account Balance consists of trade balance, net factor income and net cash transfers. Trade balance is the difference between the total value of import and export of goods and services. Net factor is the result of difference between investment generated in a country and investment

made by a country. Positive current account balance shows the surplus whereas the negative current account balance shows the deficit status of a country. Surplus country is a net lender country and the deficit country is a borrower country of the world. The ratio of current account balance with gross domestic product shows the level of country to be in the international competitive market.

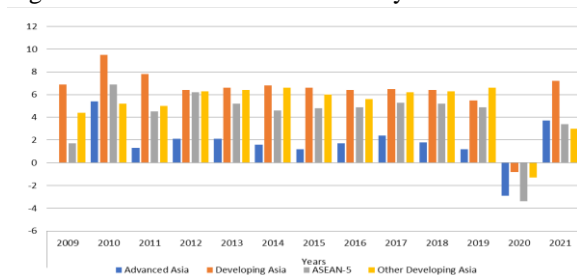
Asian Countries are divided into four categories i.e. Advanced Asia, Developing Asia, ASEAN-5 and Other Developing Asian countries. Advanced Asia comprises Japan Korea, Australia, Taiwan Province of China, Singapore, Hong Kong SAR, New Zealand, Macao SAR. In Developing Asia, China and India are covered. In ASEAN-5, Indonesia, Thailand, Malaysia, Philippines and Vietnam. Other Developing Asia comprises Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Fiji, Kiribati, Lao P.D.R., Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nepal, Palau, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Timor-Leste, Tonga, Tuvalu, and Vanuatu. Composite data are provided for different country groups classified by economic characteristics or regions. Unless otherwise stated, composite country groups represent calculations based on at least 90% of the weighted group data.

VI. DATA ANALYSIS

Real GDP (Annual Percent Change of GDP):

| Years | Advanced Asia | Developing Asia | ASEAN-5 | Other Developing Asia |
|-------|---------------|-----------------|---------|-----------------------|
| 2009  | -3.0          | 6.9             | 1.7     | 4.4                   |
| 2010  | 5.4           | 9.5             | 6.9     | 5.2                   |
| 2011  | 1.3           | 7.8             | 4.5     | 5                     |
| 2012  | 2.1           | 6.4             | 6.2     | 6.3                   |
| 2013  | 2.1           | 6.6             | 5.2     | 6.4                   |
| 2014  | 1.6           | 6.8             | 4.6     | 6.6                   |
| 2015  | 1.2           | 6.6             | 4.8     | 6                     |
| 2016  | 1.7           | 6.4             | 4.9     | 5.6                   |
| 2017  | 2.4           | 6.5             | 5.3     | 6.2                   |
| 2018  | 1.8           | 6.4             | 5.2     | 6.3                   |
| 2019  | 1.2           | 5.5             | 4.9     | 6.6                   |
| 2020  | -2.9          | -0.8            | -3.4    | -1.3                  |
| 2021  | 3.7           | 7.2             | 3.4     | 3                     |

Fig. 1 Source: International Monetary Fund World Economic Outlook



From the above graph it is clear that GDP percent is declined in the pandemic year. Apart from this it is to be noted that GDP is higher in Developing Asia at 9.5 percent (year over year) compared to rest Asian Countries. China and India are part of this region with 10.3 percent and 10.1 percent (year over year). In Advanced Asia, real GDP grew at 5.4 percent (year over year) in 2010 compared with negative 3.0 percent

in 2009. In ASEAN-5, GDP is highest at 6.9 percent in the year 2010 and lowest at negative 3.4 percent in

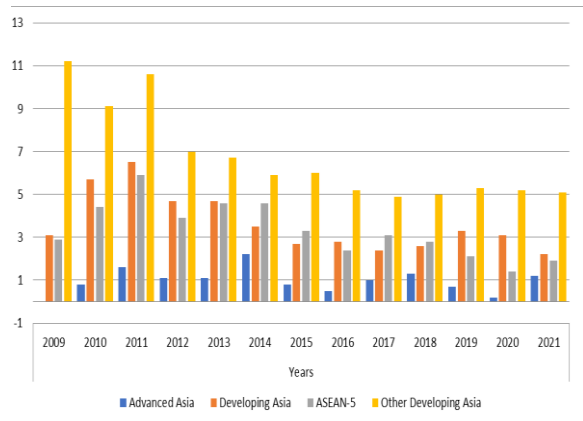
the year 2020. Similarly, GDP is higher at 6.6 percent in the year 2014 and lowest at negative

1.3 percent in the year 2020 for other developing Asian countries.

Consumer Price (Annual Percent Change of GDP):

| Years | Advanced Asia | Developing Asia | ASEAN-5 | Other Developing Asia |
|-------|---------------|-----------------|---------|-----------------------|
| 2009  | -0.1          | 3.1             | 2.9     | 11.2                  |
| 2010  | 0.8           | 5.7             | 4.4     | 9.1                   |
| 2011  | 1.6           | 6.5             | 5.9     | 10.6                  |
| 2012  | 1.1           | 4.7             | 3.9     | 7                     |
| 2013  | 1.1           | 4.7             | 4.6     | 6.7                   |
| 2014  | 2.2           | 3.5             | 4.6     | 5.9                   |
| 2015  | 0.8           | 2.7             | 3.3     | 6                     |
| 2016  | 0.5           | 2.8             | 2.4     | 5.2                   |
| 2017  | 1             | 2.4             | 3.1     | 4.9                   |
| 2018  | 1.3           | 2.6             | 2.8     | 5                     |
| 2019  | 0.7           | 3.3             | 2.1     | 5.3                   |
| 2020  | 0.2           | 3.1             | 1.4     | 5.2                   |
| 2021  | 1.2           | 2.2             | 1.9     | 5.1                   |

Fig. II Source: International Monetary Fund World Economic Outlook



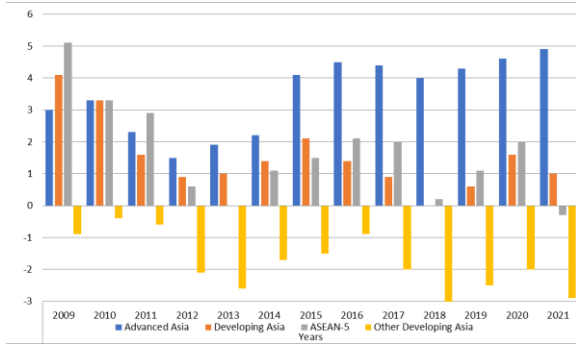
percent (year over year) compared to rest Asian Countries and the lower is 5.0 percent (year over year). In Developing Asia, consumer price is higher at 6.5 percent (year over year) in 2011 compared with lowest 2.2 percent in 2021. India is major contributor in consumer price with 8.9 percent compare to china with 5.4 percent in the year 2011. Consumer price has reduced to 5.5 percent and 0.9 percent of India and China respectively in the year 2021. In ASEAN-5, Vietnam grew at 18.7 percent at highest in the year 2011 compare to other Asian countries and lowest of Malaysia at negative 1.1 percent in the year 2020.

It is clear from the above graph that consumer price percent is higher in Other Developing Asia at 11.2

Current Account Balance (Annual Percent Change of GDP):

| Years | Advanced Asia | Developing Asia | ASEAN-5 | Other Developing Asia |
|-------|---------------|-----------------|---------|-----------------------|
| 2009  | 3             | 4.1             | 5.1     | -0.9                  |
| 2010  | 3.3           | 3.3             | 3.3     | -0.4                  |
| 2011  | 2.3           | 1.6             | 2.9     | -0.6                  |
| 2012  | 1.5           | 0.9             | 0.6     | -2.1                  |
| 2013  | 1.9           | 1               | 0       | -2.6                  |
| 2014  | 2.2           | 1.4             | 1.1     | -1.7                  |
| 2015  | 4.1           | 2.1             | 1.5     | -1.5                  |
| 2016  | 4.5           | 1.4             | 2.1     | -0.9                  |
| 2017  | 4.4           | 0.9             | 2       | -2.0                  |
| 2018  | 4             | -0.1            | 0.2     | -3.1                  |
| 2019  | 4.3           | 0.6             | 1.1     | -2.5                  |
| 2020  | 4.6           | 1.6             | 2       | -2                    |
| 2021  | 4.9           | 1               | -0.3    | -2.9                  |

Fig. III Source: International Monetary Fund World Economic Outlook



Current Account Balance has deficit balance in other developing Asian countries compared to rest Asian countries. Advanced Asian countries have positive balance compare to developing asia and ASEAN-5 countries. Whereas overall highest balance recorded by ASEAN-5 at 5.1 percent in the year 2009.

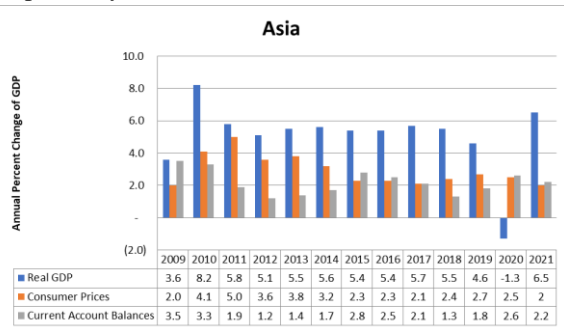
### VII. CONCLUSION

Overall Analysis of Asia :

Real GDP has increase from 3.6 percent in 2009 to 6.5 percent in 2021 in entire Asia. Negative 1.3 percent of GDP has been recorded in the year 2020.

There is fluctuation in consumer price throughout the period but the lowest is 2 percent in 2009 and 2021 which grew at 5 percent in 2011 but then remain constant and fall to 2 percent in 2021.

There is a drastic fall in Current Account Balance from 2009 to 2021 that is from 3.5 percent to 2.2 percent respectively.



The basic goal of this study is to understand the economic indicators of GDP of Asian countries by applying the simple techniques for the period 2009-2021. As Gross Domestic Product is the important tool in finding the growth of the country. There is a scope for development of GDP through the selected key economic indicators. Real GDP has improved over the studied period with positive impact on consumer price. There is scope of further improvement in upcoming

years. Current Account balance needs to be improved in other developing Asian countries which have deficit balance. One important point needs to be made it clear about the absence of other indicators of measurement of GDP from study. It was difficult to cover all the indicators which affect economy and it brings up the need for further exploration. It is left on the further researchers to investigate the other factors or indicators of GDP of selected Asian countries.

### REFERENCES

- [1] Tang, Hong & Habibullah, Muzafar & Puah, Chin-Hong. (2007). Stock market and economic growth in selected Asian countries. *European Journal of Economics, Finance and Administrative Sciences*.
- [2] Asghar, Nabila & Nasreen, Samia & Hafeez-ur-Rahman,. (2012). Relationship between FDI and Economic Growth in Selected Asian Countries: A Panel Data Analysis. *Review of Economics & Finance*. 2.
- [3] Nelasco, S. (2013). Trend Analysis of External Debt of South Asian Countries. 4(12), p. 155.
- [4] World Economic Outlook. International Monetary Fund, (2009-2021).
- [5] Key Indicators for Asia and the Pacific. (2019).