



World Economic Indicator

Organisation for Economic Co-operation and Development

BUSINESS PROBLEM

Using the given World Economic Indicator dataset, we have to perform Data Analysis to find meaningful insights on which of the factors country should focus on to Sustain GDP/CAPITA.

APPROACH

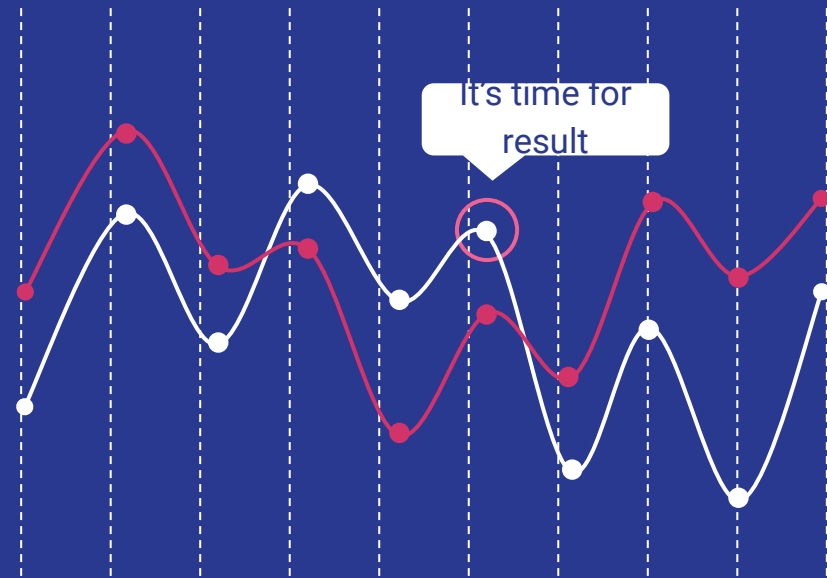
- We have performed data analysis on the several factors given in the data set and their effect on the GDP per capita of the country. We have imputed missing values after concatenating the data set into single data set by using a unique ID with the help of VLOOKUP.
- For the GDP column, the imputation methodology using aggregate method zero value is not used as the information given "GDP is a critical value, and the GDP of a country changes over a period of time depending on various factors".
- To handle the missing value in the GDP column first, we sort the dataset in ascending order to the region and then apply the IF Condition. If the cell's value is blank, i.e. missing value, only then we will replace it with the previous year's value, else that cell will hold its original value.
- Outliers are present in the dataset in columns such as Health exp/Capita, Energy usage, CO2 emission, Population Total, etc. But we don't need to handle these outliers for our analysis because it already instructed in the problem.

Data Used to Perform analysis

The Columns from the dataset used for our Consideration are as Follows.

- GDP/CAPITA
- Population
- Tourism Inbound
- Tourism Outbound
- Business Tax Rate
- Days to start business
- Ease of Business
- Internet Usage
- Health Exp % Capita
- Life Expectancy Total/Capita
- Lending Interest
- Birth Rate
- Population 15-64
- Total Population
- CO2 Emission

Analysis



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Factors on which country should focus to sustain GDP/CAPITA of Nation

- Last 12 years of countries data was taken into consideration for the analysis and their effect was studied on the GDP/CAPITA of the nation.
- We see that there is a Positive correlation between GDP/CAPITA and Health, which means Countries which are having more health Exp % have more GDP/CAPITA.
- It is estimated that the Average GDP/CAPITA of 208 countries is \$11323.097 but there is a great deal of variance in the GDP/CAPITA, which means that some countries are very rich and others are very poor, so there is no balance between them.
- Energy usage and CO₂ Emission shows positive correlation with GDP/CAPITA of the nation. Although this is not good for nature but it can be considered as Sign of growing economy (More Production more energy usage as well as more infrastructure development leads to more CO₂ emission).
- There are some countries that contribute more to GDP because of their large population. (which we clearly show from correlation) In general, a country with a high population contributes more to its GDP than a country with a low Population.

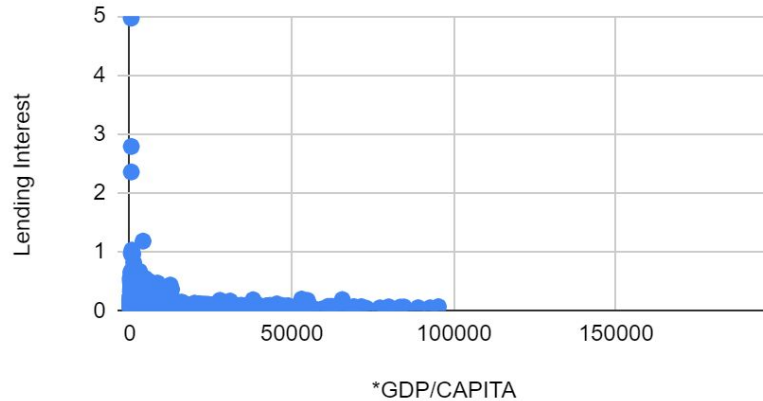
- Urbanization can also be considered as a factor for enhancing GDP/CAPITA of the nation. Countries having more population in the urban areas have better GDP/CAPITA compared to others.
- Business Taxation rule can also affects the GDP/CAPITA of the nation because its show negative correlation with the GDP/CAPITA of the nation.
- Birth rate also affect country GDP/CAPITA as we clearly saw a negative correlation between birth rate and GDP/CAPITA which indicates countries with high GDP/CAPITA have less birth rate.
- Both Mobile phone usage and internet usage shown a strong positive correlation with GDP/CAPITA which means as the internet and mobile sage increase GDP/CAPITA also increase.

THE FINAL VERDICT

- Country should focus on easing rules & regulations for the people newly starting the business, as it was found that countries having more ease of business & less starting days requirement have better GDP/CAPITA compared to others
- Digitization of country resources/economy can be factor to improve the literacy among the citizens & enriching the GDP/capita of the nation as it was found that Internet Usage and Mobile Phone Usage have extremely positive correlation with the GDP of the nation
- 2-child policy can also be an option for heavily populated countries as Birth Rate shows the strong negative correlation with the GDP/Capita of the nation. Countries having lower birth rate have However, make sure the country must be highly populated, else there can be adverse Effect of "population ageing" which in turn reduces the GDP/capita of the nation

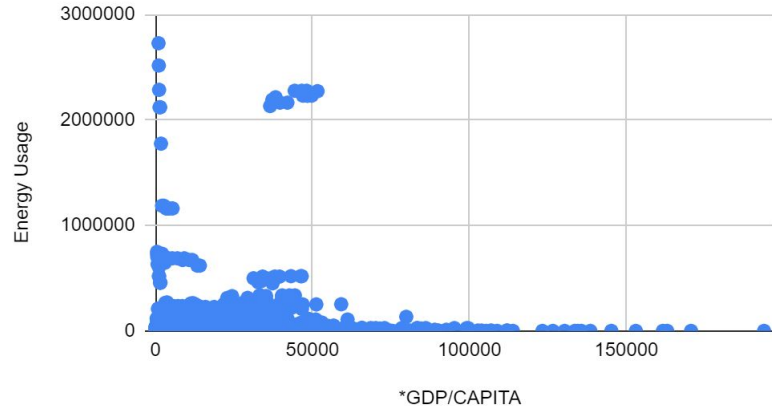
ANNEXURE

Lending Interest vs *GDP/CAPITA



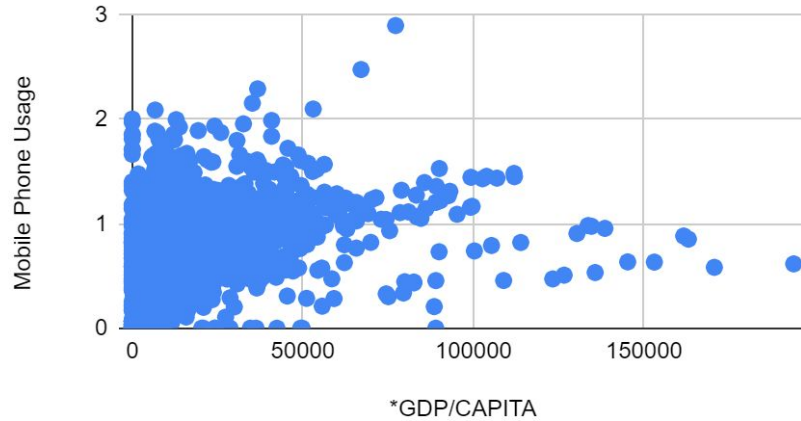
HIGHER the GDP/CAPITA LOWER the interest rate

Energy Usage vs *GDP/CAPITA



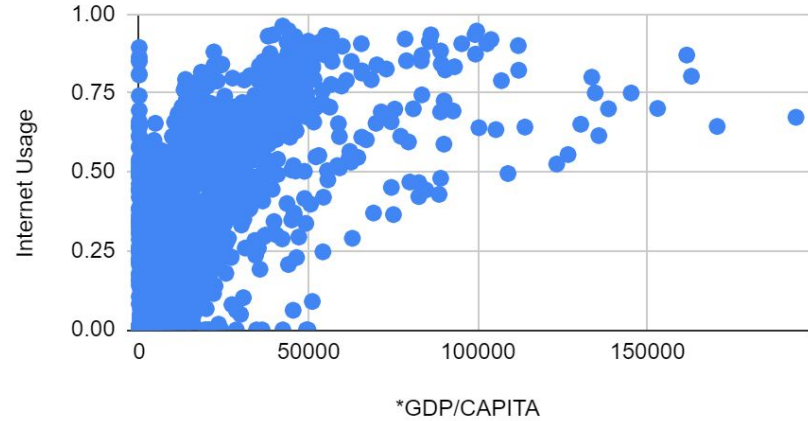
HIGHER the GDP/CAPITA, HIGHER the energy usage of Nation

Mobile Phone Usage vs *GDP/CAPITA



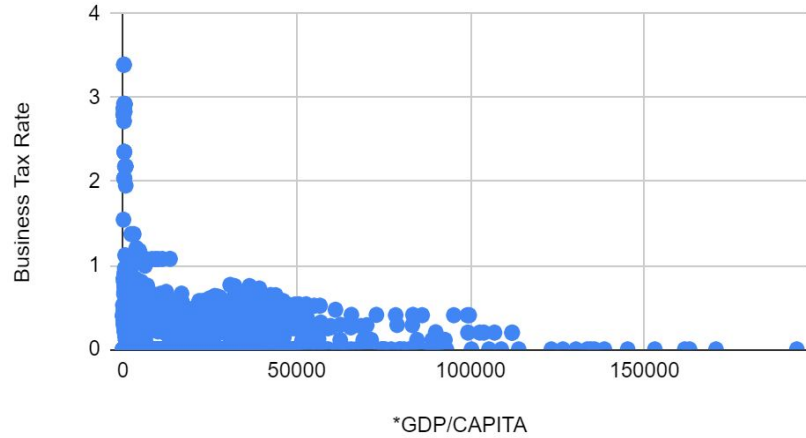
HIGHER is the GDP/CAPITA, usage of Mobile Phone Increase

Internet Usage vs *GDP/CAPITA



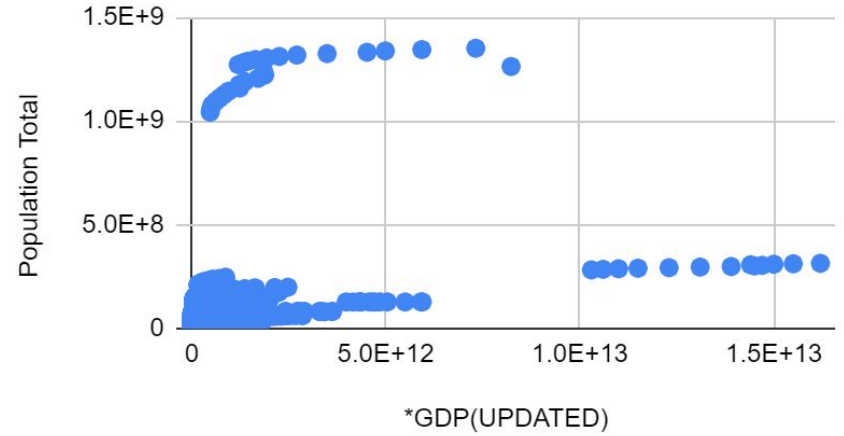
HIGHER is the GDP/CAPITA usage of Internet Increase

Business Tax Rate vs *GDP/CAPITA



LOWER is the Business Tax Rate,HIGHER is the GDP/CAPITA

Population Total vs *GDP(UPDATED)



HIGHER is the POPULATION ,HIGHER is the GDP/CAPITA

AVERAGE
of
*GDP/CAP
ITA

YEAR

Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Grand Total
Africa	1431.8	993.44	977.69	1135.2	1401.9	1630.7	1832.5	2085.2	2498.9	2150.6	2386.9	2601.6	2770.4	1838.2
	33203	69266	03909	28137	77956	07389	75297	20509	42013	31932	43658	40245	28666	51255
Asia	6030.1	4268.1	4291.1	4576.1	5152.6	5628.3	6296.8	7180.2	7788.2	7881.0	8666.5	9944.0	10857.	6812.4
	74298	91393	71978	99844	50118	11524	41388	5866	63962	47254	31772	12621	61931	05702
Europe	17331.	16501.	17983.	21655.	25046.	26841.	28966.	33846.	36885.	32164.	30788.	28577.	27511.	26469.
	92613	13374	2116	37779	96876	40732	48077	52731	87269	94032	47415	73748	4418	34614
Middle East	13702.	10732.	10861.	11924.	13695.	15962.	18025.	19434.	23119.	18321.	19957.	23696.	24932.	17258.
	54073	44727	16379	95452	23942	51776	53251	30797	97831	65645	65837	09708	64973	9803
Oceania	8942.7	4995.1	3314.2	3788.8	4360.5	5062.9	5276.4	5904.0	6227.6	6501.9	6554.8	7641.2	8522.7	5930.2
	70405	29777	33283	10947	76517	29337	26394	51237	95687	4559	35366	6099	83566	65315
The Americas	9869.5	7412.1	7476.0	7653.9	8210.6	8907.8	9730.6	10749.	11544.	11380.	11282.	11345.	11771.	9795.0
	44703	20472	21359	75898	86595	24919	41441	9162	62642	84247	94596	50534	12538	59781
Grand Total	8982.5	7393.2	7636.5	8714.2	9934.6	10828.	11803.	13495.	14829.	13344.	13300.	13379.	13557.	11323.
	12525	73796	46682	39287	2032	88214	07593	08153	4952	56049	6694	63852	66521	097

REGION WISE SUMMARY

Region	AVERAGE of *GDP/CAPITA	AVERAGE of Energy Usage	AVERAGE of Tourism Inbound	COUNTA of Country/Region
Africa	1838.251255	9634.046444	798539092.5	689
Asia	6812.405702	105001.8077	5384639487	442
Europe	26469.34614	55374.34615	10442353053	624
Middle East	17258.9803	37630.05917	2458974194	169
Oceania	5930.265315	9085.692308	2484360526	195
The Americas	9795.059781	71514.8549	5156050847	572
Grand Total	11323.097	50776.63917	4957415957	2691

- Average GDP/CAPITA of america is highest.
- Average energy usage of Asia is highest.
- Average tourism of Europe is Highest.

SUMMARY

To Sustain the GDP growth by any Nation by focusing on managing population control, improving health, infrastructure, optimising Energy usage , improving in tourism sector,improve business related rule like tax, minimum day qualified to start business , low lending tax rate etc.

The background is a solid pink color. In the top right corner, there is a decorative arrangement of geometric shapes: a light pink triangle pointing down-right, a dark pink square, and another light pink triangle pointing up-right, all partially overlapping. A large, faint pink triangle also points from the top right towards the center of the slide.

THANK YOU