

MEASURING THE PULSE OF PROSPERITY: AN INDEX OF ECONOMIC FREEDOM ANALYSIS

A PROJECT REPORT

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MEASURING THE PULSE OF PROSPERITY: AN INDEX OF ECONOMIC FREEDOM ANALYSIS

1 Introduction

1.1. overview

Since 1996, various editions of economic freedom of the world (EFW) have rated the economic freedom of more than 100 countries. The initial publication covered 1975, 1980, 1985 and 1995.

in 1986, Michal walker of the Fraser Institute and Noble Laureate Milton Friedman were hosts to a series of conferences that focused on the measurement of economic freedom. Several other leading scholars including Nobel Prize Winners Gary Becker and Douglass North also participated in the series. The conferences, held from 1986 to 1994, eventually led to the the economic freedom in the world (EFW) index, which now uses 38 different components to measure economic freedom in five major areas: size of government, legal structure and protection of property rights, sound money, international exchange and regulation. Within the economics profession, theory has supported the idea that the level of economic freedom affects the incentives individuals face and therefore, economic performance. In the last two decades, ground has been made in empirical work to theory in this area. This has largely made possible and supported by the creation of various economics freedom indices.

In the following we bring out the meaning of certain terms which are related to understand economic freedom index.



What is economic freedom?

The key ingredients of economic freedom are personal choices, voluntary exchanges, freedom to complete, and protection of persons and Protection of persons and property. When economic freedom is present, the choices of individuals will decide what and how goods and services are produced. Of course, individuals will often find attractive to engage in exchange activities that are mutually advantages. personal ownership of self is an underlying postulate of economic freedom. Because of this self-ownership, individuals have a right to choose to decide how they will use their time and talents. On the other hand, they do not have a right to the time, talents, and resources of others. Thus, they have no right to demand that others provides things for them.

Institution and policies are consistent with economic freedom when they provide an infrastructure for voluntary exchange, and protect individuals and their property from aggressors seeking to use violence, coercion and fraud to seize things that do not belong to them. In this regard, the legal and monetary arrangements particularly are important. Governments promote economic freedom when they provide a legal structure and law enforcement system that protects the property rights of owners and enforces contracts in an even-handed manner. They also enhance economic freedom when they facilitate access to sound money. In some cases, the government itself may provide a currency of stable value.

Heritage foundation

The index of economic freedom was an idea developed by the heritage foundation in the late 1980s and was first published in 1994. Their goal was to develop a systematic, objective and empirical measurement of economic freedom in economics around the world.



Their methodology has gradually changed over the year as the data necessary for the construction of the index has grown over the 15 years the index has been published. In 2007, they upload the basic scale for each components from a ranking of 1 to 5, with lower scale scores reflecting more freedom, to a scale of 0 to 100, with higher scores reflecting more freedom.

The index now covers 183 countries and measures 10 separate components of economic freedom. As with all of the indices covered ,the components are to provide a portrait of a country's economic policies and institution , assigning a quantitative measures that establishes benchmarks by which to gauge strengths and weaknesses with regards to economic freedom.

1.2 Purpose

Higher averages incomes

Economic growth enables consumers to consume more goods and services and enjoy better standards of living. Economic growth during the 20th century was a major factor in reducing absolute level of poverty and enabling a rise in life expectancy.

• Lower unemployment

With higher output and positive economic growth, firms tend to employ more workers creating employment.

• Lower government borrowing

Economic growth creates higher tax revenues, and there is less need to spend money on benefits such as unemployment benefit. Therefore, economic growth helps to reduce government borrowing. Economic growth also plays a role in reducing debt to GDP ratios.

• Improved public services

Higher economic growth leads to higher tax revenues and this enables



the government can spend more on public services, such as health care and education etc. This enable higher living standards such as increased life expectancy, higher rates of literacy and a greater understanding of civic and political issues.

Money can be spent on protecting the environment

With higher economic growth a society can devote more resources to promoting recycling and the use of renewable resources.

• Investment

Economic growth encourages firms to invest, in order to meet future demand. Higher investment increases the scope for future economic growth creating a virtuous cycle of economic growth/investment.

Increased research and development

High economic growth leads to increased profitability for firms, enabling more spending on research and development. This can lead to technological breakthroughs, such as improved medicine and greener technology. Also sustained economic growth increases confidence and encourage firms to take risk and innovate.

• Economic development

The biggest factor for promoting economic development and sustained economic growth. Economic growth in south-east Asia over the past few decades as played a major role in reducing levels of poverty, increasing life expectancy and enabling more economic prosperity.

Using economic freedom index, we can achieve

The heritage foundations, index of economic freedom website features a heat map that allows you to view the changes in the world over time. In addition to being academically interesting, the change to economic freedom overtime can be a significant data source for investors particularly those interested in emerging markets.

The index of economic freedom can provide a guide as to whether



the potential for hot emerging market picks like the BRIC nations (Brazil, Russia, India and China) are actually seeing the policy changes necessary for that growth to benefit international investors. On opposite end negative changes in the index can be a signal to investors to trim their direct and indirect exposure to nation that are experiencing a decline.

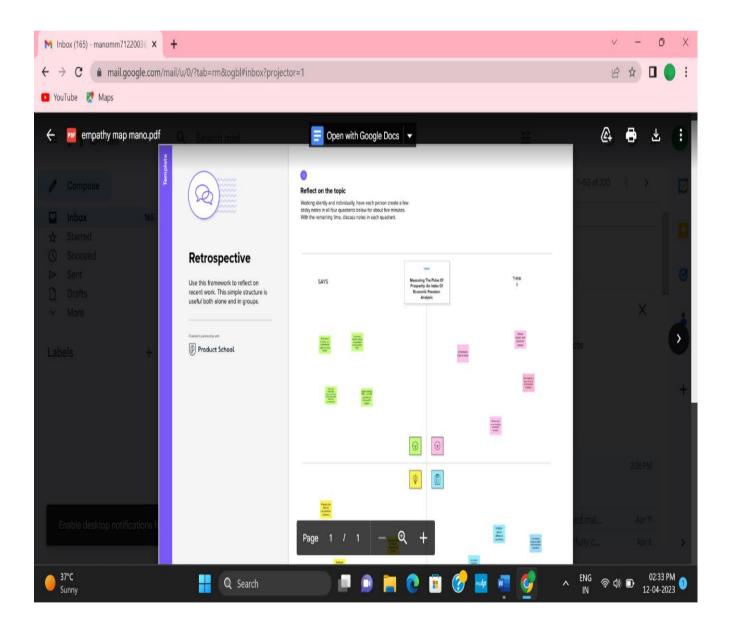
The index of economic freedom is a helpful-tools for a variety of audience, including academies, policymakers, journalist, student, teachers and these in business and finance. The index is an excellent objective tools for amazing 184 economies throughout the world and each country page is a resources for in depth analysis of a country political and economic development. The 12 economic freedom and accompanying historical data also provides a comprehensive set of principles and facts for those who wish to understand the fundamentals of economic growth and prosperity.



2. Problem Definition & Design Thinking

2.1 Empathy Map

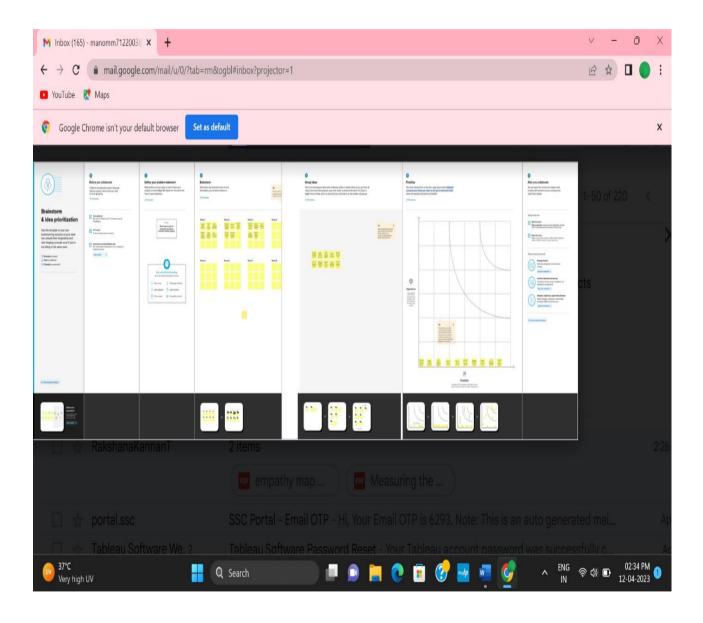
An empathy map helps to map what a design team knows about the potential audience.





2.2 Ideation & Brainstorming Map

Ideation is commonly more thought of as being an individual pursuit, while brainstorming is almost always a group activity.





3. Result

The all Visualization sheets, Dashboard, Story, MYSQL, and web integration screenshots have been attached.

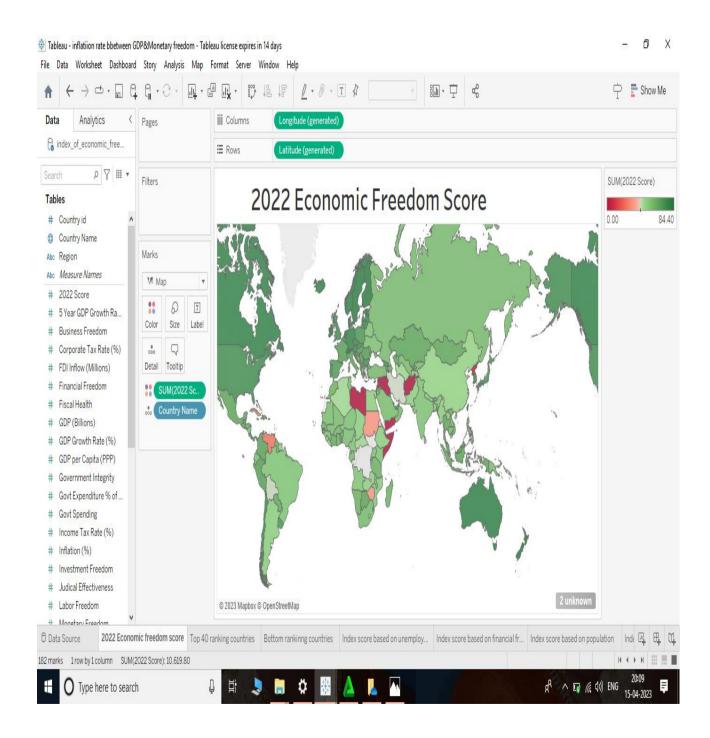


Figure 1: It represents the visualization of 2022 Economic freedom score. It compares the jurisdictions against each other for various aspects such as trade freedom, judicial effectiveness and tax burden.



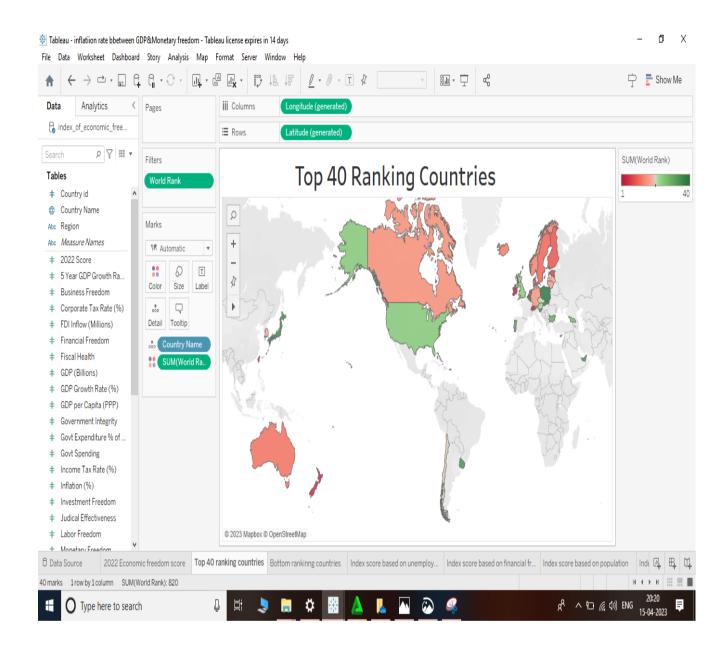


Figure 2: It represents the visualization of top 40 ranking counties.In top 40 ranking countries 2023 the first ranking country is singapore and the second country is switzerland.



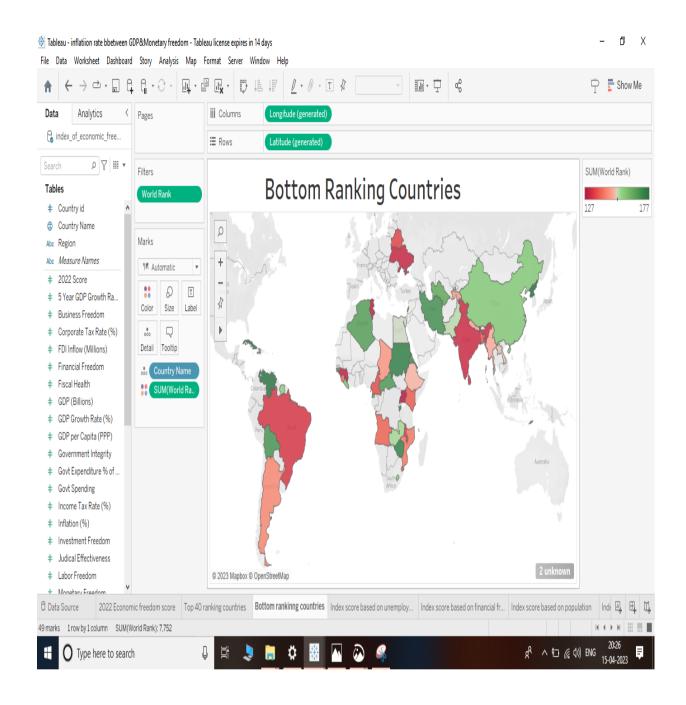


Figure 3: It represents the visualization of bottom ranking countries.In bottom ranking countries the country has the lowest value was in north korea which has 3 index point.



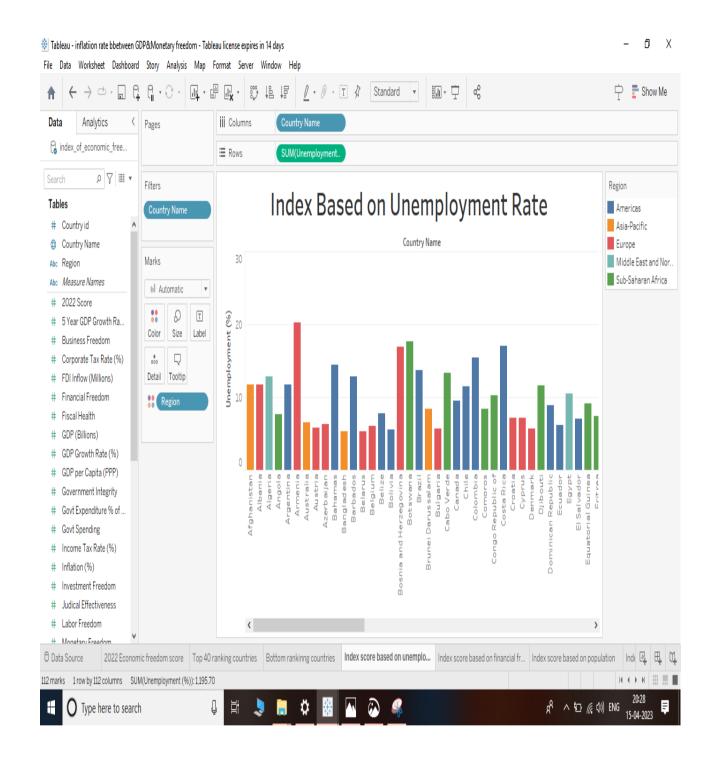


Figure 4: It represents the visualization of index based on unemployment rate. Natural unemployment is equal to the level of unemployment in a labor market at perfect equilibrium



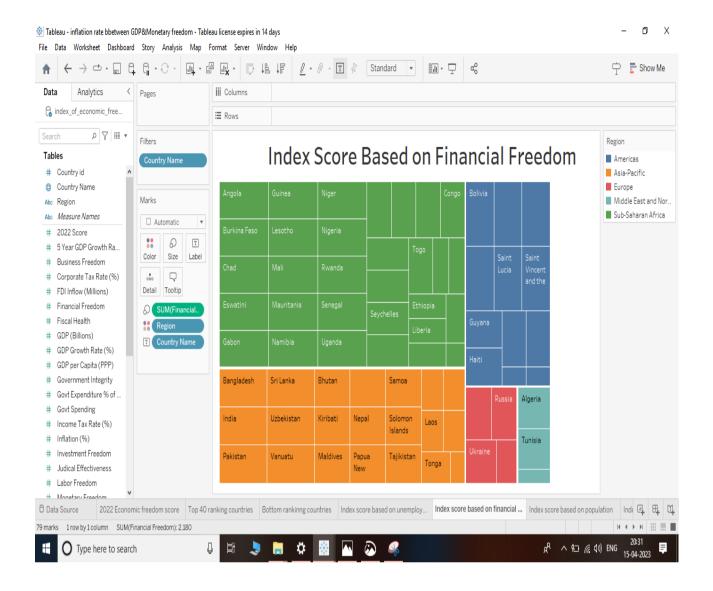


Figure 5: It represents the visualization of index score based on financial freedom. The index of economic freedom is an annual index published and created by the heritage foundation and the wall street journal to measure the economic freedom of nation around the world



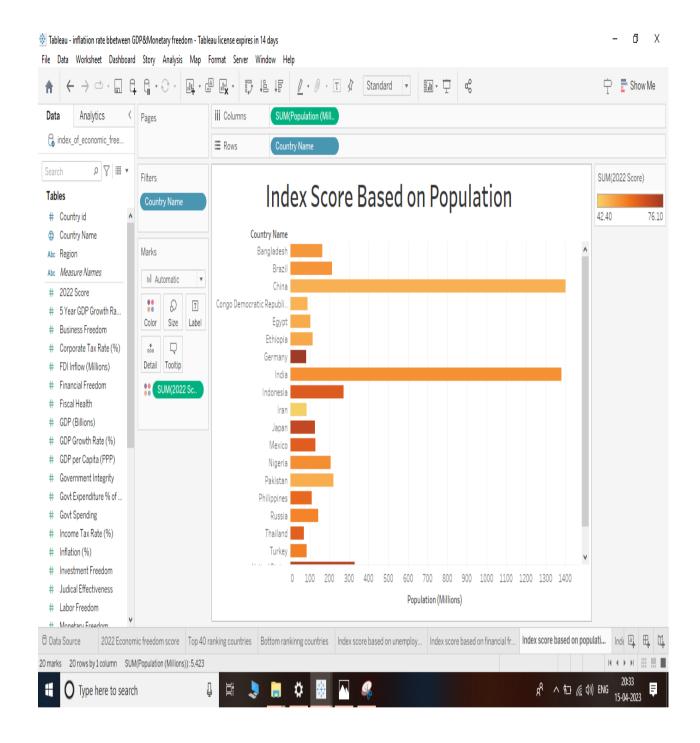


Figure 6: It represent the visualization of index score based on population. It also takes into cosideration some specific categories like property rights, judicial effectiveness, government integrity and tax burden.



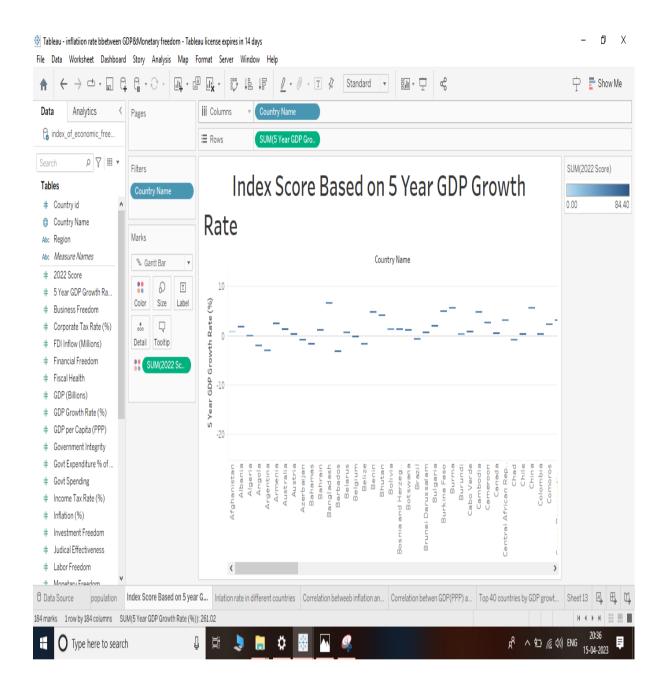


Figure 7: It represent the visualization of index score based on 5 year GDP growth rate. The 5 year GDP growth rate has a mean of 3.19 percent per year.



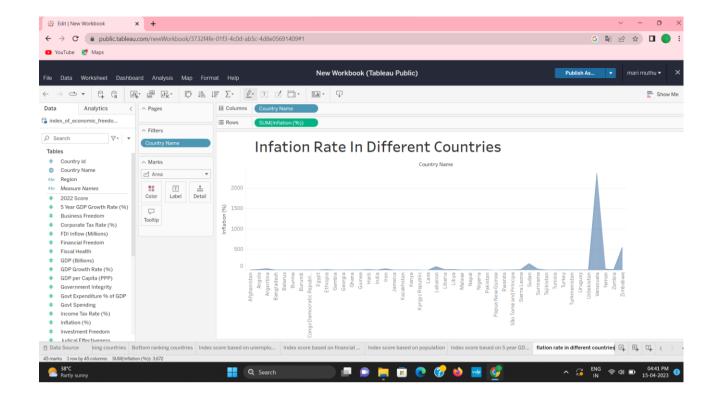


Figure 8: It represent the visualization of inflation rate in different countries. According to IMF, there are 40 countries, including the UK with the highest forecasted inflation rates in 2023.



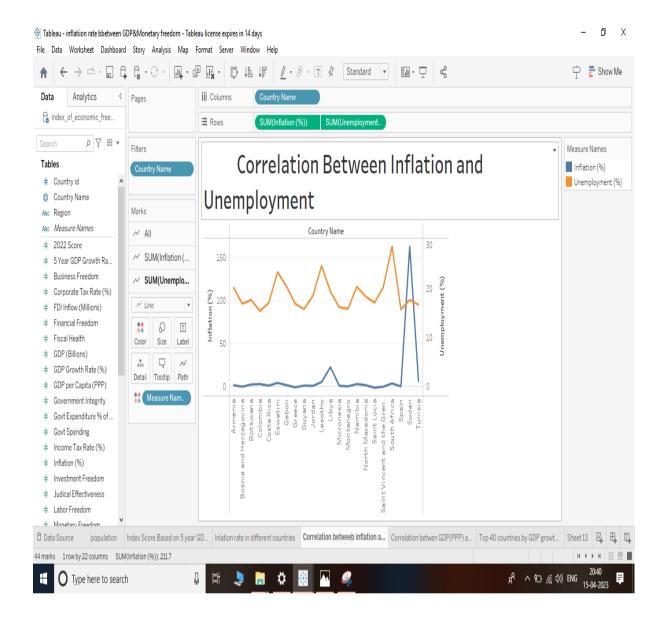


Figure 9: It represent the visualization of correlation between inflation and unemployment. As the inflation increases unemployment decreases and as unemployment increases inflation decreases.



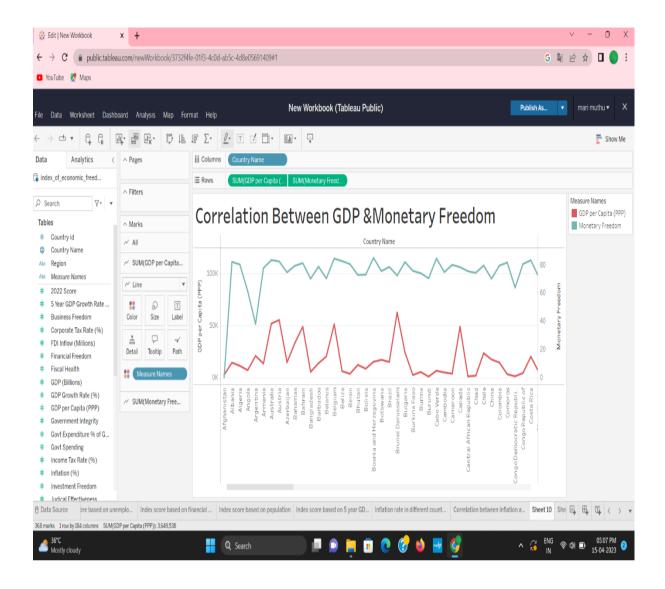


Figure 10: It represent the visualization of correlation between GDP (PPP) and monetary freedom. This means that the higher the economic freedom in a country, the lower the annual GDP growth rate.



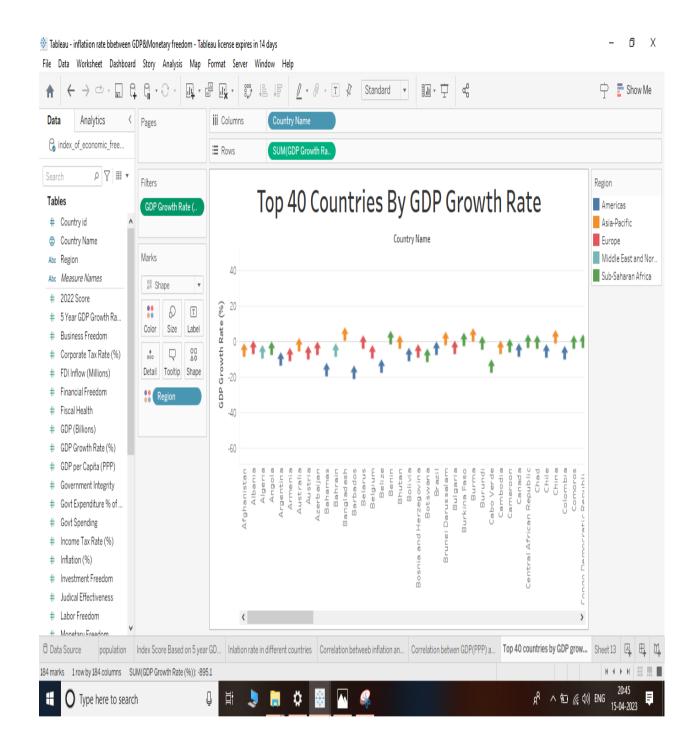


Figure 11: It represent the visualization of top 40 countries by GDP growth rate. The country which has the highest growth rate is maldives.



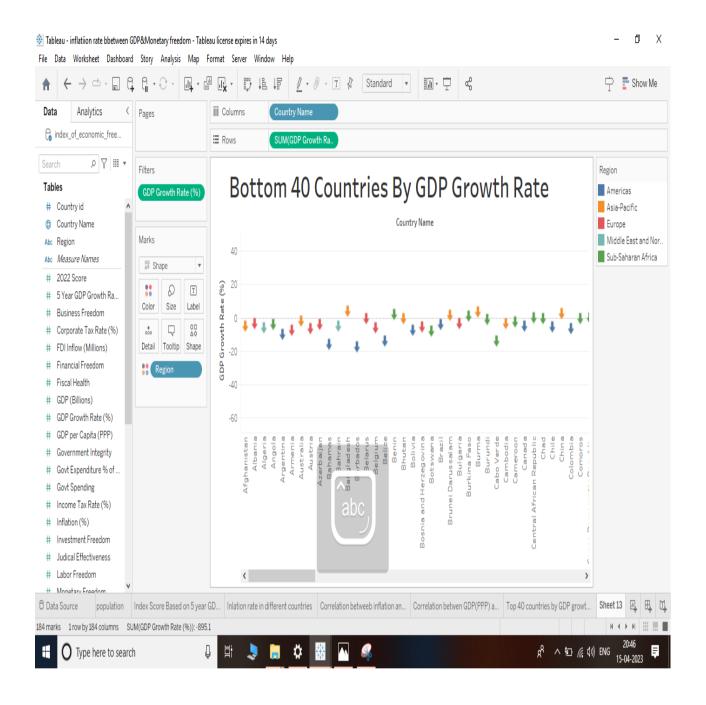
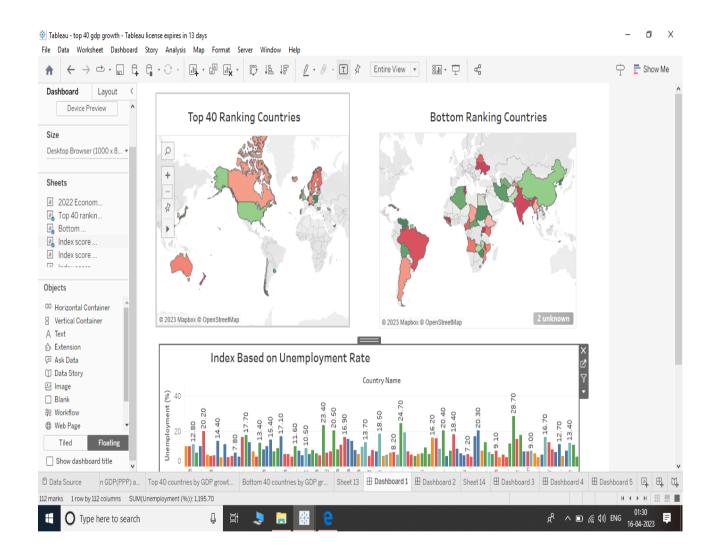


Figure 12: It represent the visualization of bottom 40 countries by GDP growth rate. The top 5 lowest are venezuela, yemen, south sudan, dominica and timor-leste.



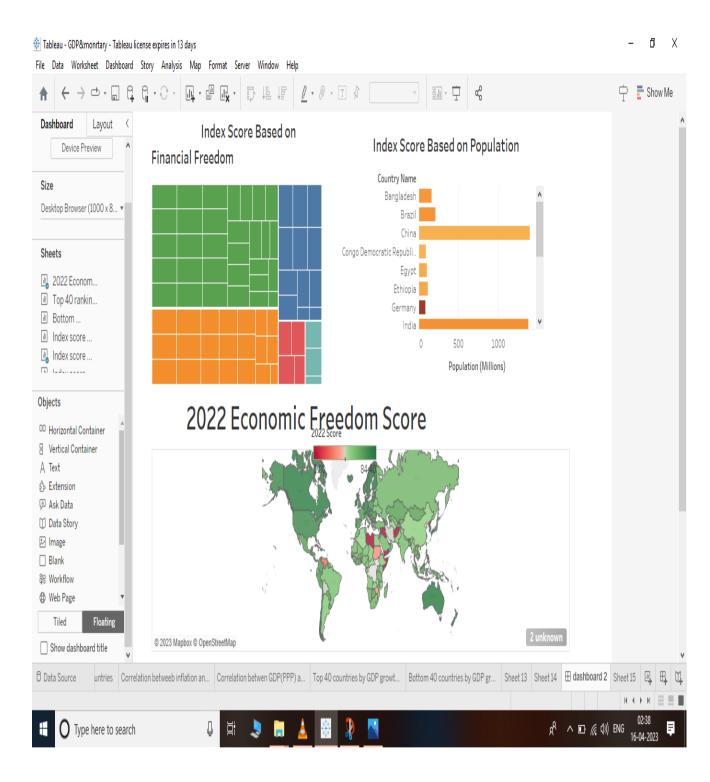
DASHBOARD:

A tableau dashboard is a collection of charts assembled on a single view, whereas a story is a collection of charts or dashboards assembled on multiple views.



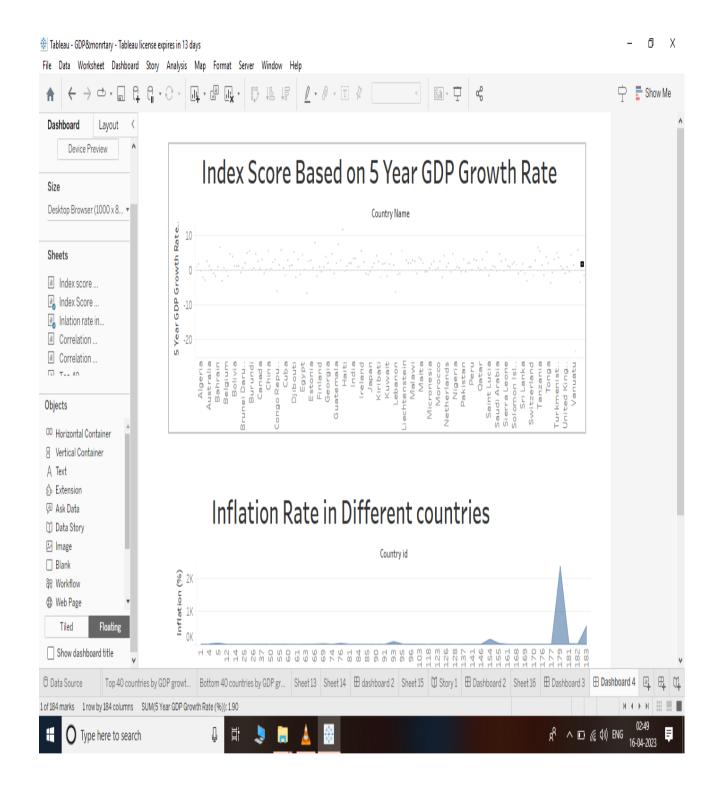
DASHBOARD - 1





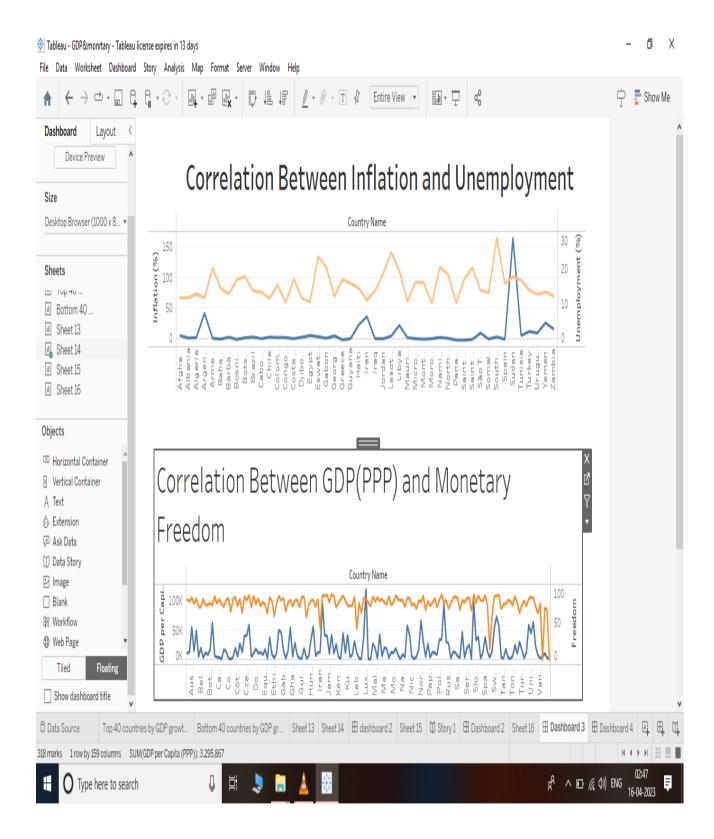
DASHBOARD - 2





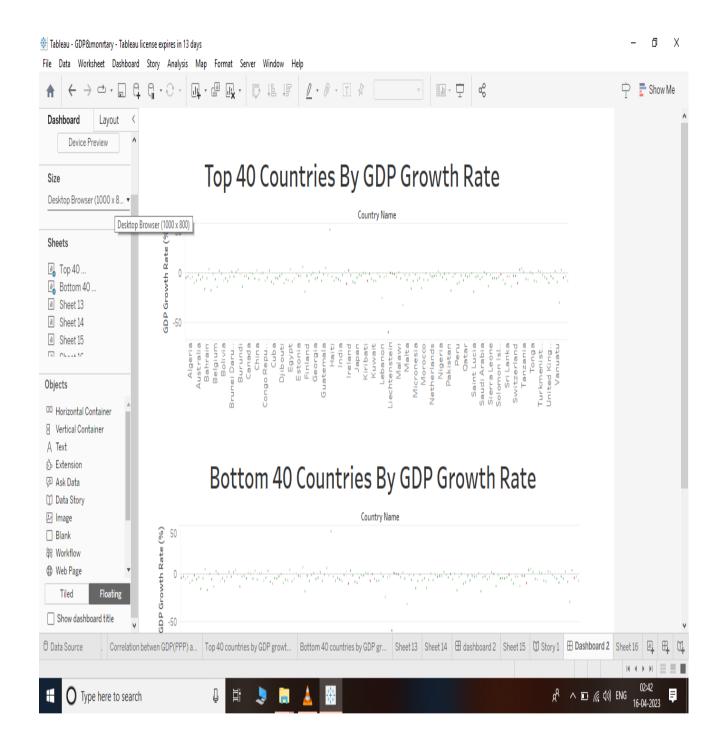
DASHBOARD -3





DASHBOARD - 4



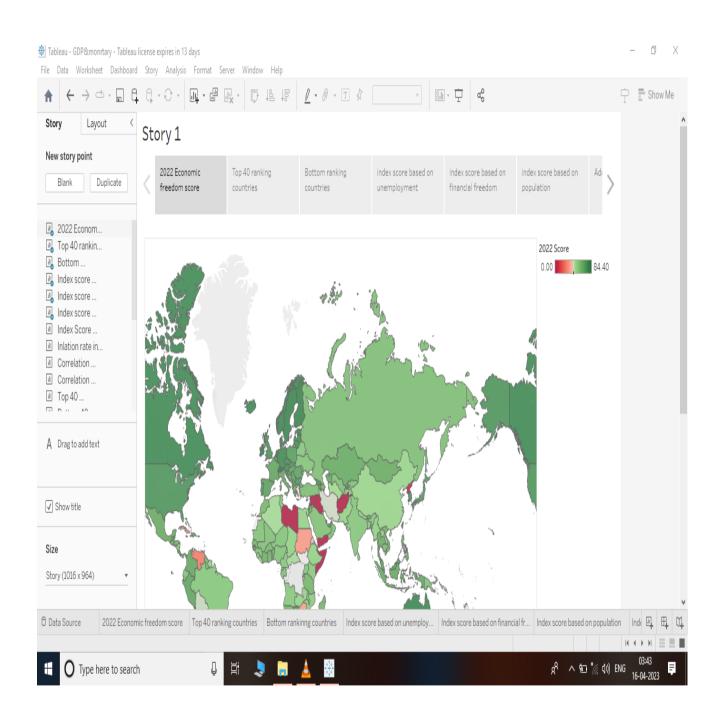


DASHBOARD - 5



STORY:

A story is a sheet so the methods you use to create, name and manage worksheets and dashboard also apply to stories.

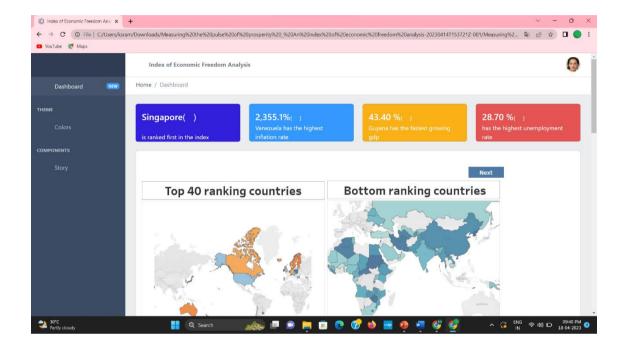


Story

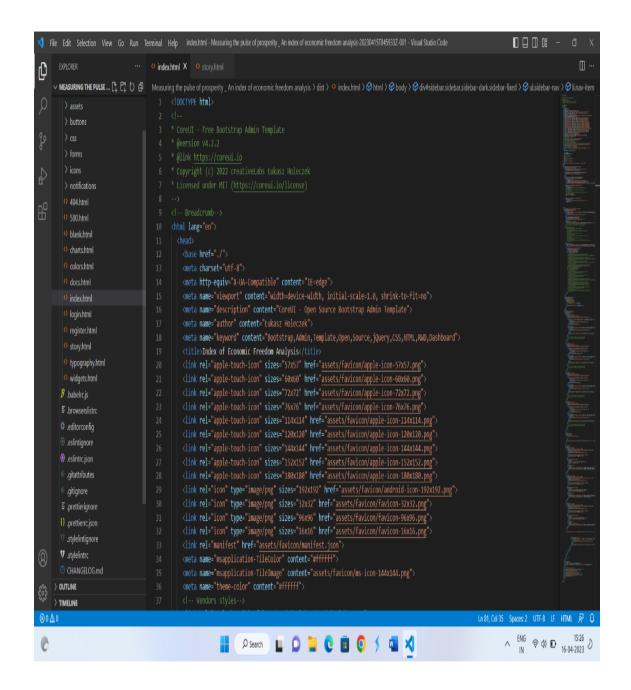


WEB INTEGRATION:

Web integration is the process of aggregating and managing data from different websites into a single, homogenous workflow.

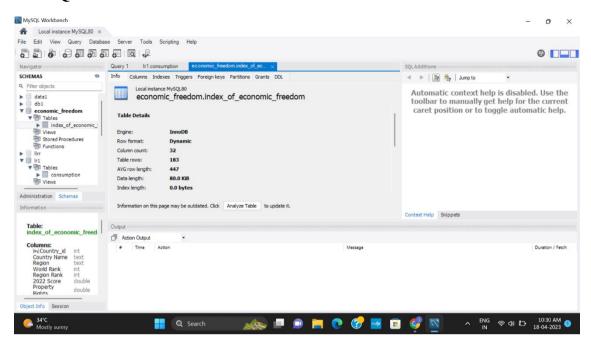








MYSQL:



4. ADVANTAGES & DISADVANTAGES

Advantages

- ➤ The rate of economic growth is higher; real gross domestic product grew an average of 2.4 percent per year in the freest economies over the 1993 to 2002 period and declined 0.5 percent per year in the least free economies.
- There is more investment and foreign direct investment.
- ➤ The productivity of invesment is higher -more than 70 percent higher than in the group of least free economics.
- ➤ There is less poverty average per capita income.
- ➤ The distribution of income is more equal-the income share of the poorest 10 percent is almost 20 percent higher in the freest economies than in the least free countries.
- ➤ People live longer; the average life expectancy at birth is 76 years in countries.
- ➤ The lives of children are improved.
- There is more human development in terms of health ,education, living students and other measure of well-being.
- ➤ There is less corruption in business and government.



Disadvantages:

- ➤ High rates of unemployment or underemployment.
- ➤ Increasing inequality, with many not being included in the growth process.
- ➤ High rates of poverty and low growth.
- ➤ Volatile growth depend on one source.
- ➤ Distribution of major economics activities due to the pandemic, e.g. Tourism.
- Lack of fisal space to save jobs and address pandemic.
- ➤ Macroeconomics instability and recurrent balance of payments shocks.
- Low protectivity due to poor human captital development.
- > Skills mismatch between skills you have the jobs and want to create.
- Lack of quality jobs; high levels of informality in the economics.

5. APPLICATION

The fraser institute continued to rank Hong Kong as the world's freest economy in the Economic Freedom of the world 2022 Annual Report. Hond Kong has gained the top rank since the inception of the report. Among the five areas of assessment, Hong Kong continued to rank top in "Freedom to Trade Internationally" and "Regulation". Hong Kong Special Administrative Region (HKSAR) Government today we comed the recognition.

Singapore's economic freedom score is 83.9, making its economy the world's freest economy in the 2023 index. Its score about the same as in 2022. Singapore is ranked 1st out of 39 countries in the Asia –Public region, and its overall score remains significantly higher than the world and regional averages.



The fountation of singapore economic freedom are sustained by strong protection of property rights and effective enforcement of anti-corruption laws. Tax rates are competitive, and the global commerce boosts productivity while facilatating the emergence of a more dynamic and competitive financial sector.

6. CONCLUSION:

On the international and national level, a greater level of economic freedom is found to be correlated with greater wealth, and an increase in economic freedom means an increase in growth. The relationship is complex though and not every component that makes up the international indices is positively correlated. It is not clear if the same as developed countries. The results in this area are likely affected by a reverse causal relationship. The IEF and EFW are strongly correlated, and regarding the U.S., the trend is the same between the two international indices and the average of the EFNA. The IEF has a lower ranking of all countries on average and little inconsistency.

It is possible that the economic freedom is increased because of growth but it is normally thought, as well as supported by empirical studies, that growth income levels, and well-being in general are the result, and not the csuse of business activity and gains from trade, which are enhanced by the institution in place. Within a large spectrum of countries, government size may be an exception to this .It was found to be negatively correlated when using a large number of countries with greate variation, but not so among the U.S. states and is not significant within a smaller sample of developed nations.

The Economic Freedom Index serves as valuable tool for cross country and regional comparision. It provide a framework for understanding the institution that are correlated to greater prosperity. It is useful to view



over time and provide insight into general trend of growth or well-being that we can expect a nation to experience due to an instituted or policy change. What is does not provide are on how to implement appropriate institutional changes. Some are more straight-forward such as lowering marginal tax rates dones through policy. Regardless, any answer or improvement will take many years or even genration to implement. The answer to whether the agents that institute policies are actually interested in the long run effects of more economic freedom is a question better answered within the public choice literature.

7. FUTURE SCOPE

In the next coming years, we will see two nations new nations added to the list of top ten economics with shift in position. According to 2022 estimates, Russia and Italy are the ninth and tenth largest economies in the world, respectively. However, it is projected that Italy will move out of the top ten in 2023 while Russia exit by 2025, making way for two new entrants to the list. In 2022, 66% of the world's GDP of \$101.67 trillion is contributed by the top ten economies, and by 2027, this percentage is projected to 67% for GDP of \$130.84 trillion.

We expect that the weight of global GDP will shift more towards Asia over the next 30 years our economists wrote in their latest report. In 2050, the world's five largest economies are projected to be China, the U.S., India, Indonesia and Germany.

India remains the fastest-growing economy in the world with the current estimates surpass in fast growth in emerging and development Asia as well as projection on china's economy. India is the world's seventh largest economy, sitting between France and Italy. Its GDP growth recently dipped to 5.7%; still, India is growing faster than any other large economy except china. By 2050, India's economy is projected to be the world's second, largest beyond only china.



India has emerged as a bright spot mind a scenerio of global economic uncertainities. India stands tall backed by strong macroeconomics fundamentals, fiscal displine ,high saving rates, robust domestic demand and demographic trends. India has overtaken the United Kingdom to be the world's fifth largest economy. According to IMF's latest october 2022 outlook, India economy is expected to clock a growth of 6.8% in 2022, down by a tad (0.6 percentage point) since july forecast. With a projected growth of 6.1% for 2023, India is one of the fastest-growing trillion-dollar economies in the world. India is a domestic consumption –led economy with exports contributing roughly 20% to its GDP. Over the years ,the rising middle class and corresponding shift in spending pattern have strengthened its consumption. India's nominsl GDP for 2022, which is assessed at \$3.47 trillon, is poised to be \$5.37 trillion by 2027 based on IMF estimates, which will make India the third-largest economy in the world, pushing japan down to fourth spot.

8. Appendix:

Source code:

https://drive.google.com/file/d/1qSrGIVpSqG4MvPOdg5d6U 2sS8mALGqfB/view?usp=share link