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DIVING DEEP INTO INDIA'S BLUE ECONOMY - AN OCEAN OF OPPORTUNITIES?

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UNDERSTANDING THE U.S DEBT CEILING

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DIVING DEEP INTO INDIA'S BLUE ECONOMY -AN OCEAN OF OPPORTUNITIES?

India boasts a remarkably rich and illustrious naval history that spans across numerous millennia. Maritime trade and naval endeavors in the Indian subcontinent can be traced back to ancient times, signifying its deep-rooted connections with the sea.Being, one the fastest growing economies in the world today,India is looking for new avenues to continue fuelling its meteoric rise, but there is an ocean of growth it has yet to dip into, the Indian ocean. India has one of the most extensive coastlines in the world and is surrounded by the sea.Therefore, blue economy is indeed going to be vital to India's future growth.The sea represents a golden opportunity to drive into India's economic growth in the coming years.

SAILING THROUGH CENTURIES - INDIA'S NAVAL ODYSSEY

India's naval history encompasses several significant periods and transformations. The Indus Valley Civilization engaged in maritime pursuits and long-distance trade. The Maurya Empire established a formidable navy for coastal defense and trade. The Chola Dynasty witnessed the rise of the renowned Chola Navy, known for maritime supremacy. Various kingdoms like the Rashtrakutas, Hoysalas, and Vijayanagara Empire maintained naval forces for protection and trade. The arrival of European powers in the 15th century led to the establishment of trading posts and naval bases. The British East India Company's Bombay Marine eventually became the Royal Indian Navy. After independence, the Royal Indian Navy transformed into the Indian Navy, actively participating in conflicts, modernizing its fleet, and engaging in international exercises and missions. Today, the Indian Navy is recognized as one of the largest and proficient naval forces in the Indian Ocean, safeguarding maritime interests and contributing to regional stability.

OCEANS - THE NEW ECONOMIC FRONTIER

The Blue Economy signifies a thriving and auspicious economic frontier that revolves around sustainable endeavors rooted in our oceans. It encompasses a diverse array of sectors and industries that leverage the vast potential of oceans and their resources, all while maintaining a steadfast commitment to environmental sustainability.

1) Sustainable resource utilization:

The essence of the Blue Economy lies in its emphasis on responsible and sustainable utilization of ocean resources across diverse sectors, including fisheries, aquaculture, renewable energy, marine biotechnology, and mineral extraction. By implementing effective resource management practices, its objective is to attain enduring economic growth while ensuring the preservation of marine ecosystems and biodiversity.

2) Job creation and economic growth-

The Blue Economy presents a remarkable opportunity for significant job creation and driving economic growth. Thriving sectors like fisheries, coastal tourism, shipbuilding, offshore wind energy, and marine technology have the potential to generate a substantial number of employment opportunities. These sectors require a skilled workforce and foster innovation, leading to the growth and prosperity of local economies. Moreover, the Blue Economy plays a crucial role in sustaining livelihoods and promoting the comprehensive development of coastal communities.

3) Innovation and Technology Advancements

The development of the blue economy requires innovation and technological advancements. From advanced fishing techniques and aquaculture practices to renewable energy technologies and ocean exploration tools, the blue economy fosters research and development, driving progress in various sectors.

4) Sustainable Development:

The blue economy emphasizes the importance of sustainable practices and resource management. It promotes the conservation and protection of marine ecosystems, ensuring the long-term viability of ocean resources. By adopting sustainable approaches, the blue economy can support economic growth while preserving the health and resilience of the marine environment.

5) International Cooperation:

The blue economy is a global endeavor that often requires international cooperation. Collaborative efforts among nations can lead to the sharing of knowledge, resources, and technologies, fostering economic growth on a global scale.

-Sustainable development goal 14

SDG 14, "Life Below Water," is one of the UN's 17 global goals. It aims to conserve and sustainably use oceans, seas, and marine resources. The key targets include preventing marine pollution, ending overfishing, conserving coastal ecosystems, reducing marine pollution, promoting a sustainable blue economy, and advancing ocean science and technology. SDG 14 recognizes the importance of oceans for life on Earth and emphasizes their sustainable management to ensure long-term ecological and economic well-being.

Why Invest in the Sustainable Development Goals from a Business Perspective?

The SDGs represent a major opportunity for businesses to shape, steer, communicate and report their strategies, goals and activities, allowing them to capitalize on a range of benefits. There are a number of compelling reasons for businesses to pursue social impact and engage with the SDGs.

- A clear example is financing adaptation for resilient ports in the Pacific, as this has become an imperative for their survival. These investments thus become growth opportunities for any private investor willing to participate in this effort. Investors can be further incentivized when attractive financial structures are put in place, such as— depending on the market segment— investment guarantees, sustainability-linked loans, or climate insurance.

Achieving the SDGs create at least US$12 trillion in business opportunities

There is a clear business case for the private sector to invest in SDG implementation. According to the Business and Sustainable Development Commission, achieving the SDGs opens up some USD 12 trillion of market opportunities in the four economic systems examined by the Commission. These are food and agriculture, cities, energy and materials, and health and well-being. They represent around 60 percent of the real economy and are critical to delivering the SDGs.

-Blue economy can include a wide range of economic sectors:

- Fisheries and Aquaculture:

Sustainable fishing practices- Aquaculture, or fish farming, involves cultivating fish, shellfish, and aquatic plants in controlled environments. Sustainable aquaculture practices focus on minimizing environmental impacts, controlling nutrient discharge, preventing diseases and parasites, and using sustainable feeds. Proper site selection, responsible use of antibiotics and chemicals, and monitoring water quality are essential for sustainable fish farming.

- Transportation of goods and services by sea.

Shipping plays a significant role in global trade, transporting a vast majority of goods and commodities across continents. By utilizing container ships, goods can be efficiently transported in standardized containers, enabling economies of scale and reducing logistical costs. The transportation of goods and services by sea offers opportunities for international trade, economic growth, and access to global markets.

- Maritime tourism –

i. Nautical sports such as diving, windsurfing and boat

ii. Beach resorts/hotels winning and dinning , recreational activities, marine parks.

- Blue Biorefineries:

Blue Biorefineries is a company focused on developing technologies and processes to convert marine biomass and waste into value-added products. Their main objective is to utilize sustainable resources from the ocean, such as algae, seaweed, and other aquatic plants, to create biofuels, chemicals, and materials. The company aims to harness the potential of marine biomass to reduce reliance on fossil fuels and promote a more sustainable and eco-friendly approach to various industries. By utilizing these resources, Blue Biorefineries aims to contribute to the reduction of greenhouse gas emissions and create a more circular economy.

- Shipping sector(shipyards- producing luxury boats and cruise ships)

Mangroves plantations and carbon credits -

Mangrove plantation and carbon credits are interconnected concepts that involve the conservation and restoration of mangrove ecosystems to mitigate climate change and earn carbon credits

Mangroves are unique coastal ecosystems consisting of salt-tolerant trees and shrubs that grow in tropical and subtropical regions. They provide numerous ecological benefits, such as coastal protection, erosion control, habitat for marine species, and carbon sequestration. Mangrove plantation involves the deliberate planting or restoration of mangrove forests in areas where they have been depleted or degraded.

Carbon credits are a mechanism used to offset greenhouse gas emissions. One carbon credit typically represents the reduction or removal of one metric ton of carbon dioxide or its equivalent in other greenhouse gases. By conserving or restoring mangrove ecosystems, which sequester significant amounts of carbon, countries or organizations can generate carbon credits.

Blue Challenges

Employment across blue economy sectors, especially by small and medium-sized enterprises (SMEs), is the lifeblood of coastal communities. Yet decades of mismanagement, exploitation, and pollution have damaged marine ecosystems. Traditional fisheries and aquaculture are contaminated and overfished. Plastic waste plagues tourism and marine health. Agricultural, industrial, and sanitary effluents harm marine ecosystems and communities. Climate change batters coastlines with rising seas and increasing storm intensity.

-the coronavirus disease (COVID-19) pandemic and the lockdowns to control it have imperiled the blue economy and coastal communities in and around the region, as well as hampering progress toward—and financing of—the Sustainable Development Goals.

World bank specifies three challenges that limit the potential to develop a blue economy

- Current economic trends have been rapidly degrading oceanic resources
- Lack of investment in human capital for employment and development in innovative blue economy sectors.
- Inadequate care for marine resources and ecosystem services of the ocean.

Financing the Blue Gaps:

A summary calculation puts the total blue finance gap over a period for the Asia and Pacific region at $5.5 trillion.

However, gaps vary widely by market segment, as do the calculations and assumptions.

Beginning with low-investment market segments such as marine and river ecosystems and coastal resilience will enable capitalizing on early successes.

Establishing blended finance structures and enhancing the regulatory environment for blue economy sectors such as resilient ports, green ports, and marine offshore wind renewable energy will attract private investors and help unlock their full potential.

Concurrently, all partners should collaborate to prevent pollution from reaching the ocean in the first place.

The highest financing needs, resilient ports tops the list, as it faces existential threats from rising seas and storms.

-Investors remain bullish on Asia-Pacific,for ports and the urban/coastal infrastructure on which the blue economy depends, this finding is encouraging. The landscape is also supported by ADB’s forecast of $26 trillion needed by 2030 for the region’s infrastructure; this includes infrastructure that could support the blue economy.

TRACING THE TALES OF SEAFARING : THE BALI JATRA FESTIVAL

Shivaji Maharaj-The pioneer behind Indian Navy (revived)(landfocused approach)

-Shivaji Maharaj- recognized the strategic importance of …….. naval power and established a formidable naval force known as the Maratha Navy or the Maratha Sarkar in the 17th century.

-significant role in countering the naval dominance of the European powers, particularly the British, Portuguese, and Dutch, in the Arabian Sea and along the western coast of India.

-constructed a number of forts and naval bases along the coastline, including the famous sea forts of Sindhudurg and Vijaydurg, which served as the strongholds of the Maratha Navy. He also developed a fleet of warships known as "Ghurabs" and "Galbats," which were manned by skilled sailors and equipped with cannons and other naval weaponry.(Murudjanjeera)

Bali Jatra festival

-Bali Jatra is a vibrant and significant festival celebrated with great enthusiasm in the city of Cuttack, located in the Indian state of Odisha. This grand festival holds deep historical and cultural significance, commemorating the maritime trade journeys of Odia traders to distant lands like Bali, Java, and Sumatra.

The term "Bali Jatra" translates to "A Voyage to Bali" in the local Odia language, encapsulating the essence of the festival. It is believed to be rooted in the glorious past of Odisha's seafaring traditionsand the adventurous spirit of its people. Bali Jatra serves as a reminder of the maritime heritageand entrepreneurial endeavors that have shaped the region.

In conclusion, the blue economy represents not only a sustainable and environmentally responsible approach to harnessing the vast resources of our oceans but also a pathway to economic growth and prosperity. By prioritizing the conservation and responsible management of marine ecosystems, as well as promoting innovation and cooperation, we can unlock the immense potential of our oceans while preserving their beauty and biodiversity for generations to come. The blue economy is not just an economic concept; it is a vision of a harmonious relationship between humanity and the oceans, where both thrive together, benefiting our planet and all its inhabitants. It is a future worth pursuing, one that promises not only economic benefits but also a healthier and more sustainable world.

-Aarya Rawool and Hrishita Gavhane

CRYPTOCURRENCY:
THE PRINCE WHO NEVER BECAME THE KING

Sometime ago, everywhere you looked, cryptocurrency was on top of the world. The prices of the top cryptocurrencies had skyrocketed, and cryptocurrencies became the primary transaction source for many businesses.

The party is over now, though. 25 of the 45 biggest economies in the world have either partially or completely banned cryptocurrencies and even in the countries where cryptocurrencies are legal, people have stopped preferring the use of cryptocurrencies.

A market which once stood at an astounding market cap of USD3 trillion, plummeted by 362% in a span of just 2 years to now stand at a meagre USD828 billion.

Let us take you back to when Cryptocurrency was invented first.

In the late 2000s, people used online banking a lot, but they had some concerns about it. The transaction costs were felt to be high, but more than this concern, their main concern was that every transaction they made was known to the government. People started feeling that their data was not safe at all because it was owned by the government essentially. Then came along the founding father: Satoshi Nakamoto. Satoshi Nakamoto is a pseudonym, but he was the inventor of bitcoin, the first ever cryptocurrency.

On one hand, the Government's way of transactions helped store the data with the Government itself, but with the way bitcoin worked, it didn't have to be that way. In fact, the data would be stored with the person themselves and the Government would not have any information regarding the transactions made through cryptocurrencies. People loved this, they found a way to evade the Government's eyes. This may seem beneficial for the people from afar, but was it really what it seemed like? Not really, protection from the Government's eyes does make people feel a bit safer because they wish to have privacy, but this gives way to a whole lot of other issues.

The largest issue being illegal activities. Illegal activities, ranging from evading taxes by hiding incomes in the form of cryptocurrency, to even paying ransoms to people on the darkest areas of the internet for activities like drug dealings, human trafficking, and murders as well.

Cryptocurrency works this way through the Blockchain mechanism. Blockchains are literally chains of individual blocks, storing data. Of course, the data isn't stored by the government.

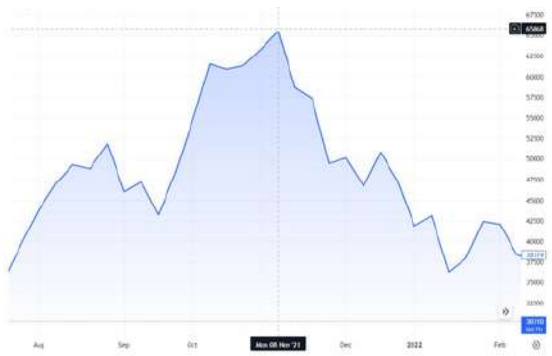
The Fall of Cryptocurrency

Why did cryptocurrency suddenly fall though?

There are plenty of reasons for the fall of cryptocurrency, the first one being related to how it works.

Is the blockchain faulty? No. but it works in a certain manner where in order to unlock a block, you have to solve some complex mathematical equations, which has a certain amount of cryptocurrency.

For example, on unlocking a block link of bitcoin, you get rewarded with 6.25 bitcoins, which was over Rs3 crores at its peak, but it is roughly Rs16 Lakhs even today.



(Highest Value of BTC in USD, as recorded on 8th November,2021. Source: TradingView.com)

This is called mining.

Why is that a problem? Mining bitcoin isn't just one specific chosen computer solving a complex mathematical equation, it is hundreds and thousands of computers doing so at the same time, racing to unlock it first. As a result, hundreds of computers have been deployed in one site to mine cryptocurrencies, using a lot of electricity as they operate simultaneously. Computers need air conditioners since they would undoubtedly become warm working day and night. In one mining station, you'll need at least fifty air conditioning units to accommodate hundreds of computers. The same process, carried out in several mining facilities, uses enormous amounts of electricity while just raising the air's concentration of hydrocarbons, which contributes to global warming.

Plus, mining reveals some facts regarding blockchains, which have misled the users. The biggest fact which would make the users doubt cryptocurrency more: the promise of anonymity. During the mining process, there isn't just any random block that can be unlocked and verified, it is a chain of blocks, so they need to be verified one by one, in sequential order. So each time a new block is unlocked, the data is stored in the cryptocurrency's ledger, which can be accessed by ANYONE. The ledger shows when the coin was unlocked and even WHO was involved in the transaction.

But as mentioned, there are more reasons to cryptocurrency's fall. Another, bigger reason would be uncertainty.

Blockchain contributes to the creation of a decentralized ledger, which explains why the government or even central banks are unable to view user transactions on the cryptocurrency market. Due of people's desire for privacy, this was initially viewed as a benefit, but eventually turned out to be a disadvantage. In the event that your database is compromised, there is nothing you can do because neither the government nor central banks have access to these transactions. Additionally, a lot of people experience frequent scams because the transactions are final. People lost a lot of money as a result of the irreversible transactions brought on by the decentralised, permissionless system they desired. It can be tough to create a procedure in these circumstances that makes the work challenging for the attackers.

Both these problems in itself are big enough, but the biggest issue cryptocurrency faces is The Government.

How? Considering how permissionless bitcoin is, it stands to reason that the government would prefer against its use in their nation. They want to be able to see the transactions that clients conduct in order to ensure that nothing shady occurs close. Because of the way cryptocurrencies operate, it is not that easy to do. These factors have led to the usage of cryptocurrencies being entirely or partially outlawed in some of the world's most developed economies. The difficulty in solving this problem is that doing so would require altering how bitcoins operate. That is impossible because their functionality is what initially made them so popular.

Status of Cryptocurrency Now

All these reasons caused cryptocurrencies to fall off to a great extent. What was once considered to be the future, is now being banned in countries and is making users feel uncertain. This would point to the end of cryptocurrency, wouldn't it?

Speculations say, it isn't.

But how would a currency that has been banned by Governments, isn't completely trusted by the users itself and causes such a big increase in global warming, survive or come back from the dead?

Well, Cryptocurrency developers are trying to solve the problems they were facing to get back up. The process has already been started by the Ethereum CEO, Vitalik Buterin.

Vitalik Buterin decided to start developing a new formula through which the blockchain structure would work. In this formula, the whole core of the working would change which is an extremely tough task to do but something that felt the need to be done since crypto's value fell down too much.

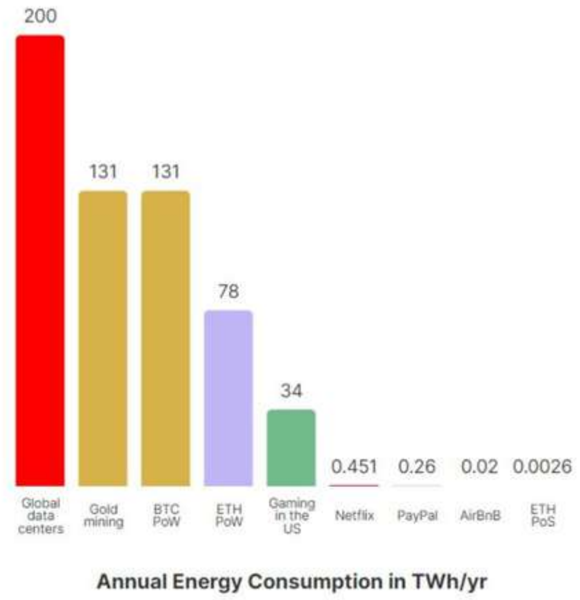
Out of all the major problems, they decided to start with the issues mining was causing.

The change in the core of working would mean that the process of solving the mathematical problems would change. Where it would be a race to solve a problem first, it was now pre-decided which computer would solve it, in order to unlock a block, after each computer puts in a little stake in the form of cryptocurrency itself. Following which, a single computer would be chosen to solve the equation. This helps because mining stations won't have to run hundreds and hundreds of machines like computers and air conditioning devices at once, because it is already known which computer would be doing the work.

The formula being changed causes users to have a Proof of Stake(PoS) rather than a Proof of Work(PoW) that they earlier had to.

But changing the core of the working is, as mentioned, an extremely tough task to pull off. It would be as hard as changing the engine of a fast moving car. Which means, most likely the whole thing could break apart. But to everyone's surprise, Ethereum actually pulled it off. A next to impossible task done with ease. The formula changed, there was a 99.5% drop in the blockchain's energy consumption, and according to the CEO of Ethereum, following the formula change, energy consumptions of the whole world fell by 0.2%. Ethereum, the 2nd largest cryptocurrency in the world took the first step towards bringing crypto back to life.

This is chart showing energy consumption levels of certain sectors in the year 2023.



(TWh= TeraWatt Hour| PoW= Proof of Work| PoS= Proof of Stake)

(Charts showing energy consumptions in different sectors, along with Ethereum Blockchain before the functioning changed(ETH PoW) and after the functioning changed(ETH PoS)

To put it into a better perspective, before the formula changed, Ethereum blockchain was consuming as much energy as the whole country of Chile.

Other than the whole mining activity change, the blockchain system changed in such a way that you could store your own data, and even make money from it.

Make money from your own data? How is that even possible?

It is possible, and that is what companies like Meta have been doing, storing and accessing your data, and then selling it to other giants, but in the Web3.0 system that Vitalik Buterin is trying to develop, your data would be stored with you, and you would have an access key to your data. You use blockchain networks to use applications, and when you log off, they won't have access to your data anymore. You can access it again once you log on, through your identification credentials.

These still aren't the biggest issues cryptocurrency is facing, the biggest one being regulation by the government. The reports by SEC (Securities Exchange Control),USA, are the counterparts of SEBI, India. They did not mention a lot about the environment in their reports, since their preference was consumer protection. Their only concern right now is the security of their consumers and protecting them from being scammed. Moreover, the blockchain working hasn't changed 100%, the data you own through blockchains can still be accessed by other people working on the blockchain, they will not be able to get access to your name or phone number exactly, but other data that you store on the blockchain.

Conclusion

Right now, cryptocurrency is far from being salvaged. Regular people do not trust the system. A big reason being that it doesn't have any intrinsic value, meaning that only demand and supply forces control it. Even if we temporarily set aside the largest issue, government rules. These currencies' values fluctuate greatly, and there are still some unknowns with regard to the security measures. The government provides a security component that the people can rely on while utilising a country's central banking system; this is not the case with cryptocurrencies. Even the climate change issue has not yet been fully resolved. Only Ethereum's blockchain system, not the blockchains of any other cryptocurrencies, has altered yet. Therefore, the numerous computers deployed in mining stations won't be removed; instead, they will continue to mine other cryptocurrencies, which will need electricity as well. So, the energy consumption hasn't been reduced, it has just been transferred.

Essentially, other cryptocurrencies should follow in the footsteps of Ethereum to survive. If all the cryptocurrencies did so, and if the security problem could be solved, with proper protocol, cryptocurrency could come back to life. In fact, the Web 3.0 could even transform into an access area for the whole internet rather than just the finance sector.
But at the end of the day, it is all speculation, with ifs and buts, nobody knows if or when will it happen.

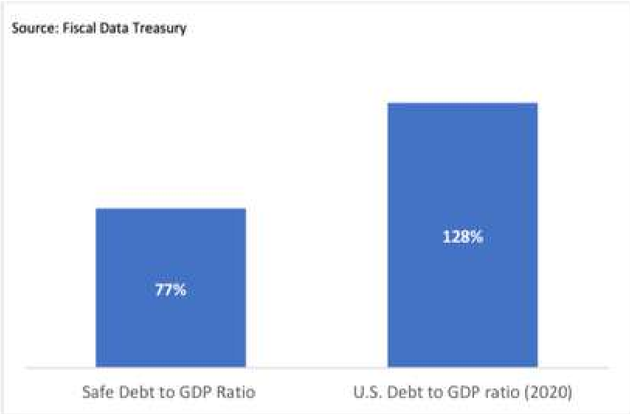
-Sarthak Sharma

UNDERSTANDING THE U.S DEBT CEILING

INTRODUCTION

The United States of America (USA) is at the forefront of global politics and economics and is a bastion of financial integrity across the globe. However, the most advanced economy in the world has had a long-standing problem with surging national debt. As of January 2023, the U.S. had hit its debt ceiling of 31.4 trillion dollars, raising serious concerns about the country defaulting. If action was nott taken, the country's Treasury Department could have run out of money to pay its bills by June 5. Finally, after months of debate, the U.S. Congress approved a bill that suspended the debt ceiling until January 2025. This bill came into action after President Biden signed it on June 3, two days before the deadline. The U.S. debt situation is critical for the entire world and sheds light on the global debt problem.

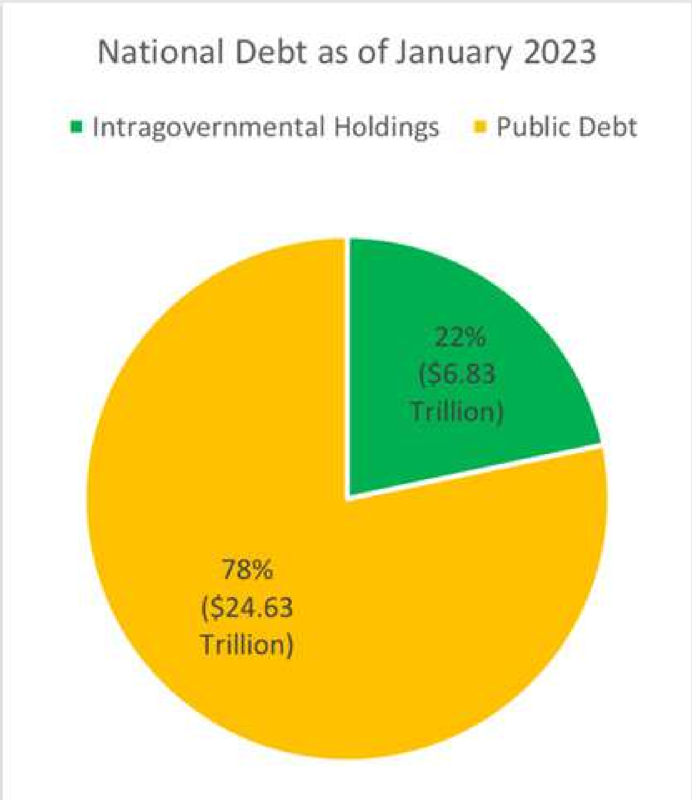
According to the World Bank, any country with a debt-to-GDP ratio of more than 77% over time may experience economic slowdowns. These nations can also expect a reduction in annual growth of 1.7% for every percentage point above 77%. Although this ratio does not predict whether a nation will default on its debt, it is a measure for assessing its economic health. To put things in perspective, the U.S. in 2020 had a debt-to-GDP ratio of 128 % (Source: Fiscal Data Treasury), which is the highest it has been in the preceding 150 years, even taking into account the times during the Great Depression, the World Wars, and the coronavirus pandemic.



HOW IS THE U.S. DEBT STRUCTURED?

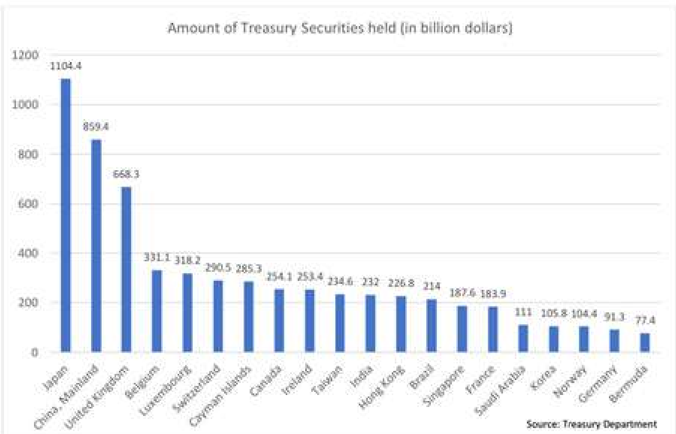
A nation experiences a deficit whenever its expenses outpace its income. The government then borrows money in order to cover this deficit. Since the start of the financial crisis in 2007, the U.S. has been running a deficit of more than $1 trillion annually. The federal government in the U.S. meets this deficit by issuing marketable securities in the form of Treasury bills and other government securities.

This national debt mainly comprises intragovernmental holdings and debt held by the public. Intragovernmental debt refers to the debt the Treasury Department owes to other federal agencies in the country. For example, the Social Security Trust Fund generates more revenue than required and invests the extra revenue in U.S. treasury bonds. On the other hand, public debt refers to debt held by foreign governments, U.S. banks and investors, mutual funds, pension funds, insurance companies, state and local governments, and the Federal Reserve.



Source: Fiscal Data Treasury

The most fascinating aspect of this debt is the foreign ownership. Out of the total of 7.4 trillion dollars owned by foreign governments in January 2023, Japan owned the largest share (1.1 trillion dollars), followed by China (859 billion dollars) and the United Kingdom (668 billion dollars). (Source: Treasury Department)



Source: Treasury Department

Often in times of economic uncertainties and challenges, the U.S. bond has emerged as the safe instrument for investing. Despite having such low rates of interest, foreign governments have preferred the U.S. bond as it has been backed by the U.S.'s strong economic dominance and perception of low risk of default.

However, Japan's and China's holdings over the past few years have had a declining trend. A big reason behind this could be the belief that there is a relatively higher risk of U.S. defaulting than before, even though the absolute percentage of that risk remains low.

WHAT IS THE DEBT CEILING, AND WHAT DOES THE RECENT ACTION IMPLY?

Introduced in 1917, the debt ceiling is an instrument used by the U.S. Congress to limit the maximum amount of debt the U.S. government can have at a particular point in time. Interestingly this debt ceiling has been increased seventy-eight times since 1960 and suspended eight times. Raising the ceiling allows the federal government to extend its borrowing by a specific amount, while suspending it can enable the government to exceed the ceiling temporarily. Thus, under both the scenarios, the government can borrow more to pay its previous debts and meet expenditures.

Currently, the debt ceiling has been suspended, with both the Republicans and Democrats making compromises. As per the bill, the new debt limit will be set at whatever level the debt is on January 1, 2025, when the suspension ends. According to the Congressional Budget Office, this new bill could save approximately 1.3 trillion dollars in estimated discretionary spending and another 188 billion dollars in interest payments over the next ten years.

WHY HAS U.S. DEBT ACCUMULATED SO MUCH?

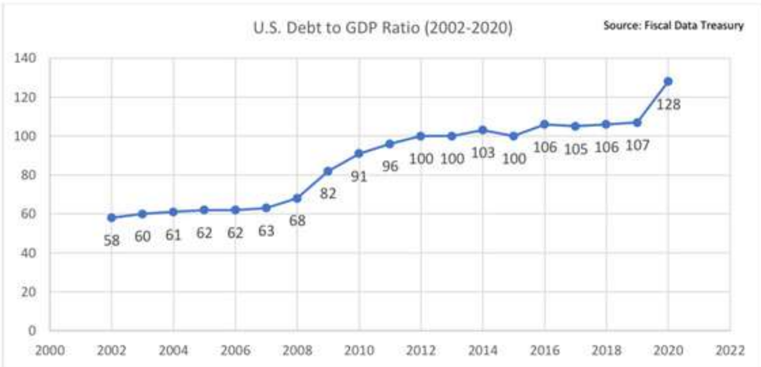
Between 1988 and 2021, the U.S. debt has increased by more than 800%. These have been due to multiple tax cuts, federal relief programs, funding of wars, and increases in spending provisions, by both Democratic and Republican governments.

The Decline of the Dollar as the global reserve currency

After the end of the practice of convertibility of the U.S. dollar to gold, the petrodollar system started emerging. In the 1970s, the U.S. signed an agreement with OPEC members, ensuring that almost all oil deals worldwide occurred in the dollar. In addition, the signing countries would reinvest their surplus dollars into U.S. treasury bonds and bills in exchange for security and armed protection.

The trend of liberalisation and globalisation in emerging economies during the 1980s and 1990s led to an increase in global trade. This furthered the dominance of the U.S. dollar, as most of the world trade was carried in that currency. The U.S. also held a special place in the world's major monetary institutions and settlement mechanisms, such as the World Bank, the International Monetary Fund (IMF), and the Society for Worldwide Interbank Financial Telecommunications (SWIFT).

For all these reasons, the dollar became the world's reserve currency. The huge external demand for the dollar meant that the U.S. could fund the debt deficit to a great extent and keep its interest rates low. However, after the 2008 financial crisis, economic slowdowns in Europe and U.S. brought down global trade drastically. According to the World Bank, trade as a percentage of global GDP fell from 61% in 2008 to 52% in 2009. Thus, this fall in trade resulted in lower demand for dollars globally, dampening U.S.'s ability to finance its deficit. This fact can be evident from the following chart (Source: Historical Debt Outstanding and Bureau of Economic Analysis), where we see how the Debt to GDP ratio skyrocketed after 2008.



If we examine the previous three to four years, we can see that many emerging economies, such as India, Brazil, China, and Russia, are employing the practice of de-dollarisation. De-dollarization is not a new concept, but it has recently been on the rise as a result of the change in the geopolitical scenario brought on by the growing influence of China and its yuan, the removal of Russia from the SWIFT system, and the changing relationship between the U.S. and Saudi Arabia. While the U.S. dollar continues to be the most widely held currency globally; as of March 2022, it made up 58% of the world's foreign exchange reserves, which is the lowest proportion since 1994. Additionally, central banks across the world are increasing their purchases of gold, with 1126 tonnes being bought in 2022, which is the highest since 1950. (Source: Indian Express). Thus, through de-dollarisation, countries are reducing their reliance on the U.S. dollar by exploring alternatives such as gold, local currencies, and even cryptocurrency.

Though de-dollarisation currently has a minimal impact on U.S. debt, it could become a defining factor in the coming years as the demand for the currency falls and the U.S. looks to finance its deficit through other mediums.

Federal Relief Programs

The dot com bubble burst in the early 2000s, and the wars in Iraq and Afghanistan added more than 6 trillion dollars to the U.S. debt (Source: The Guardian). However, the main reason the U.S. debt reached such a high level has been because of the federal relief provided to combat the COVID-19 pandemic and the 2008 Financial crisis. The size of the relief packages had made it difficult to finance them solely through the revenue earned. As a result, the government has run massive deficits during both times creating the need to borrow huge amounts.

After the Great Recession of 2008, the U.S. introduced the American Recovery and Reinvestment Act with an initial commitment of 787 billion dollars, which was later increased to 831 billion dollars. (Source: Investopedia) This relief was meant to revive and improve various sectors of the economy, such as healthcare, infrastructure, and education. It also promised tax cuts and aimed at creating jobs in the economy. Additionally, funds worth 475 billion (Source: Treasury Department) were committed under the Troubled Asset Relief Program to stabilize the financial system.

In response to COVID-19, the U.S. introduced the 'Coronavirus Aid, Relief and Economic Security (CARES) Act and the American Rescue Plan (ARP) Act which promised close to 2.2 trillion and 1.9 trillion dollars in relief respectively. Including these two acts and other relief measures, roughly 5 trillion was allocated to help the country deal with the deadly pandemic. (Source: New York Times)

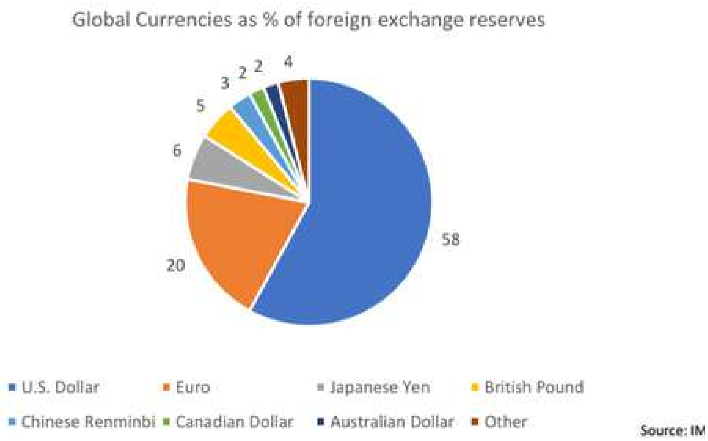
WHAT HAPPENS IF THE U.S. BREACHES ITS DEBT CEILING?

If the U.S. economy breaches its debt ceiling, it could cause a collapse of financial markets in every corner of the Earth. Firstly it is almost certain that the U.S. economy would plunge into recession, triggering unemployment and causing economic slowdowns. According to a Moody's Analytics report, even if the debt ceiling was breached for a week (where the government is not able to borrow more in order to pay off bondholders and other expenses), close to 1.5 million jobs could be wiped off, and if persisted for a long period 7.8 million jobs would disappear. The unemployment rate would increase from 3.4 % to 8%, and 10 trillion dollars of household wealth could be wiped off due to a stock market fall.

The U.S. could also experience a fall in its credit rating, similar to 2011. This increase in credit rating would lead to an increase in interest payments exacerbating the debt problem even more. In 2011, Congress struck a deal to increase the debt ceiling just two days before the deadline on which Treasury would run out of money, similar to the current situation. As a result, the credit rating agency S & P Global downgraded U.S.'s creditworthiness from the AAA rating (highest credit quality) to A.A. + (second highest). This downgrade was done for first and only time in the country's history, and it marked a serious blow to the U.S. stock market, which was still recovering from the 2008 Financial Crisis.

According to the Government Accountability Office, the delay in bringing the deal into force cost the U.S. nearly 1.3 billion dollars in borrowing costs. In the current scenario, the credit rating agency, Fitch, put U.S. debt on negative watch but agreed to resolve this by September once the debt limit agreement was finalised.

Lastly, a breach in the debt ceiling could also have severe repercussions in other countries. The U.S. dollar still remains the de facto global currency with no major competitors. A default or even an atmosphere of uncertainty could cause investors to sell Treasury bonds and lead to a weakening of the dollar. The diminished dollar value would mean that the value of the world's forex reserves would drop, causing lower-income countries that are heavily indebted to enter political and debt crises.

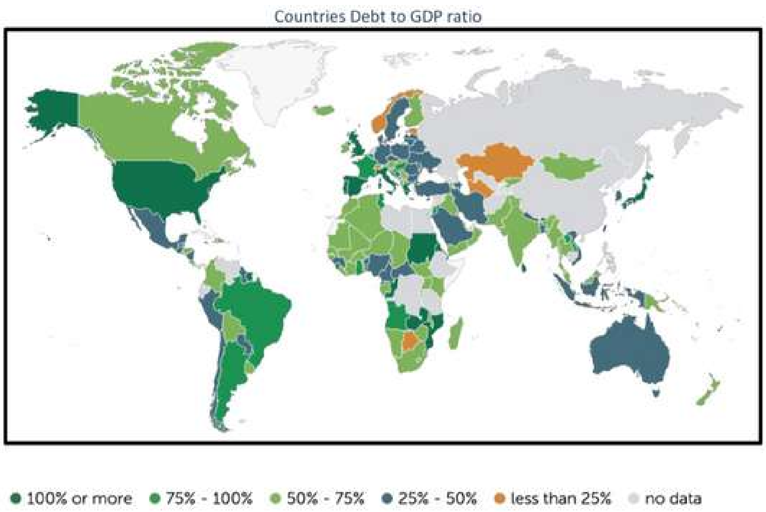


Conclusion

For now, the U.S. and the world have avoided a major crisis by shifting the deadline to a future date, much like the action in the past. The debt ceiling has been very cleverly suspended to 2025 to protect the political campaigns of Democrats and Republicans for the 2024 national elections.

However, a significant point to note is that the U.S. is not the only country with a recurring debt problem. Some other countries have a debt-to-GDP ratio much higher than the U.S. As a result, governments worldwide must focus on finding a solution to the debt problem as soon as possible rather than simply postponing it because if the debt bubble bursts, the entire world would be in ruins.

Country	Debt to GDP ratio
Japan	221.32
Greece	212.4
Sudan	181.97
Eritrea	176.25
Singapore	163.89
Italy	146.55



(Source: Map is taken from International Monetary fund))

-Hriday Amonkar

REFERENCES

Diving deep into India's blue economy -An ocean of opportunities

https://www.eib.org/en/stories/blue-economy-ocean
https://www.iora.int/en/priorities-focus-areas/blue-economy
https://www.worldbank.org/en/news/infographic/2017/06/06/blue-economy

Cryptocurrency-The prince who never became the king

https://consumer.ftc.gov/articles/what-know-about-cryptocurrency-and-scams
https://www.kaspersky.com/resource-center/definitions/what-is-cryptocurrency
https://www.investopedia.com/tech/three-people-who-were-supposedly-bitcoin-founder-satoshi-nakamoto/

Understanding the U.S. debt ceiling

https://www.imf.org/en/Home
https://fiscaldata.treasury.gov/

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