VITTA

annual finance journal

FIC | SRCC

where knowledge meets opportunities.

VITTA 2023

launched by

Guhaprasath Rajagopal

Managing Director, J.P. Morgan Chase Bank

MESSAGE FROM THE PRINCIPAL

Since its foundation in 2009, the Finance and Investment Cell (FIC) of Shri Ram College of Commerce has played an important role in disseminating information in the fields of finance, economics, and geopolitics.

Over the years, the Cell has effectively led the drive for informed discourse of financial literacy, as well as various value-added publications such as the Annual Journal Vitta, newsletters, research reports, and website blogs.

Every year, FIC publishes Vitta, which embodies the excitement, vitality, and hard work of students while delicately presenting the Cell's year-long journey. Our heartfelt congratulations to the team on the successful launching of the thirteenth edition of Vitta This year's edition has a plethora of sections on finance sustainability, geopolitics, financial technology, and strange economic theories.

Further, with the immense support of Dr. Saroj Joshi, Convenor, Finance and Investment Cell, numerous events ranging from their popular annual fest "Episteme" to informative sessions have been conducted throughout the year. I hope the Cell continues this wonderful initiative of instilling financial acumen in young minds, as well as its rich tradition of academic pursuits and scholarly discourse, by creating an intellectually stimulating environment for all.

Prof. Simrit Kaur

MESSAGE FROM THE
TEACHER IN-CHARGE

Finance and Investment Cell, SRCC has been instrumental in creating a reputation for quality and thorough research.

FIC has broadened its horizons through detailed research reports, illuminating speaker sessions, engaging newsletters, insightful articles, and the curation of well-researched opinion pieces in Vitta, the yearly financial journal. For more than a decade, FIC has played an instrumental role in the transformation of learning financial and economic theory beyond the confines of the classroom.

The Finance and Investment Cell has reaffirmed its commitment to stimulating and analytical research with the publishing of this year's edition of Vitta. This year's edition of the journal is a collection of diverse and insightful perspectives on technology, economics, geopolitics, and sustainable finance.

I wish to offer my heartfelt congratulations to FIC and its members for the successful publication of its annual finance journal. I applaud the members’ verve and vitality and wish them the very best for future endeavours.

Dr. Saroj Joshi

MESSAGES TO THE
CABINET

"Bright face, charming smile and the playful wink" Throughout the tenure all of us looked upto her and admired her charming personality. She is a true mentor and friend, a role model to all of us. She has helped us to grow professionally and personally, and we are all grateful for her guidance. Always been a strong pillar for FIC and will always hold a special place here.

Candid in his views, playful in his conduct -Aarnav never let there exist a senior-junior discord. Up for all things fun and a call away for every piece of advice you need. He never let you take stress and helped find solutions to all the problems. Aarnav was there to sort out even the smallest of problems and you could be rest assured everything would go on well, when he was there.

Aaliah Janeja
PRESIDENT

Aarnav Raj Singh
PRESIDENT

Anshh is always a calm and approachable senior and working with him- it always felt that our ideas were valued and appreciated. The seniority status was never present in any of our conversations and it was great sharing some of the most memorable experiences at FIC with him.

Anshh Gupta
SECRETARY

Devesi is fun-loving and approaches things meticulously. She has often encouraged us to be enthusiastic towards our work and found a way to make it fun. She is a positive person, and when faced with problems- she does her best to solve them.

Devesi Verma
SECRETARY

MESSAGES TO THE
CABINET

Jyoti strikes the perfect balance between serious work and casual or fun conversations to lighten the mood. Initially, I found her to be intimidating but I soon came to terms with her borderline scary but sweet personality. Truly learnt a lot about pragmatism and thinking rationally through every decision from Jyoti.

Jyoti Rustagi
CHIEF COORDINATOR

Mansha was one of the greatest seniors, who consistently demonstrates unwavering commitment, never dwelling on past challenges. Her exceptional aptitude for handling last-minute crises is a testament to her remarkable abilities. She is characterized by her remarkable capacity to navigate and conquer challenges, always maintaining a forward-looking perspective.

Mansha Jain
CHIEF COORDINATOR

Pranav isn't just a technical wizard; he's also a fun person to be around. At first, he seemed quite stern and serious, but as we got to know him better, we discovered an incredible humorousness and a warm persona. His presence provides a hint of laughter and pleasure to each interaction, making him an honestly enjoyable senior.

Pranav Garg
DEPUTY COORDINTOR

Rishabh's calm and composed demeanour has always been a source of inspiration for us. We learned so much from him, not just about finance, but also about how to approach challenges. We are truly grateful for the opportunity to have worked with him as he is a great leader and at the same time a cheerful friend.

Rishabh Jain
RESEARCH DIRECTOR

MESSAGES TO THE
CABINET

Aditi is an exceptionally sweet and delightful individual who shines amid our bustling environment, radiating a remarkable sense of calm and composure. Her remarkable efficiency and work ethic as the Editor-in-chief consistently ensured the smooth execution of tasks. What sets her apart is the sheer joy and enrichment she brings to every interaction.

Aditi Singla
EDITOR-IN-CHIEF

Madhvi's calm and caring presence was like a comforting breeze in our team. Whenever we needed help or guidance, she was there with a warm and reassuring smile. Her skill in editing articles was outstanding, adding a polished touch to our work and demonstrating her commitment to excellence.

Madhvi Chauhan
EDITOR-IN-CHIEF

Shranay is a very nice person to be around. He's always up for a conversation about finance or football. During Episteme, while handing out refreshment boxes to the participants, he was so sweet to all of them - greeting them politely and wishing them the best. Having good seniors like him made our FIC experience so much more lovely - and we are grateful for that

Shranay Khatri
EDITOR-IN-CHIEF

Akanksha is an extraordinarily kind and compassionate senior. Her willingness to help others is truly invaluable. Interacting with her feels more like a friendship than a senior-junior relationship. She is a tremendous source of inspiration and encouragement through her presence alone.

Akanksha Bhatt
CORPORATE COMMUNICATIONS HEAD

MESSAGES TO THE
CABINET

Sanskriti is undeniably one of the sweetest and most understanding seniors one could ever come across. She is always ready to lend a helping hand, offering assistance on anything, whether it's college-related or life advice. Working with Sanskriti always made me feel more as though she is my batchmate. Her presence has been a source of immense inspiration and support.

Sanskriti Saraff
CORPORATE COMMUNICATIONS HEAD

Down-to-earth, cool as anything, funny - that's Mohit for you in a nutshell. Mohit is one of the sweetest people I've met through FIC. It is ridiculously easy to hold a conversation with him. Over the past two months, whenever I've seen him in college, I've been prepared for the light-hearted taunt, "Vitta kab aayegi?". That will, unfortunately, stop when he sees this edition, but I'm sure that in no time, he'll find some new banter for all of us to cherish.

Mohit Sammi
CREATIVE AND TECHNICAL HEAD

The sweetest and coolest senior for sure would be one name, Kashish. From ridiculously scolding in offline marketing meets to vibing in late-night event meets, this was one full package. The best of memes for all of us, one to cherish!

Kashish Bansal
PR AND MARKETING HEAD

Antra is one of the most helpful and fun seniors we interacted with at FIC. We got to work under her mentorship while hosting speaker sessions under Episteme - she taught us how to drive a conversation with the speaker effortlessly and be confident while speaking. Also, all FIC members remember the last speaker session of Episteme that she hosted with so much grace - even after a tiring day. We are really happy that we got a chance to work with her!

Antra Rajpoot
FEST COORDINATOR

MESSAGES TO THE
CABINET

Your mentorship has been instrumental in shaping our passion for finance and geopolitics. The perfect amalgamation of teamwork and commitment displayed by you shall guide us in our mission of financial literacy and inclusion.

Khushi Karira
SENIOR EXECUTIVE MEMBER

MESSAGES FROM THE **MEMBERS**

SAMARTH SHRIMAL

Being a member of the Finance and Investment Cell has been an incredibly challenging, transformative, and enriching experience for me. Without FIC, I might have remained with undefined goals and untapped potential. To call it just a society would be an understatement because within SRCC, it's a life-changing force, and FIC stands as its most exceptional embodiment. It challenges you to overcome obstacles and facilitates tremendous personal growth. With a legacy spanning generations of brilliant minds, FIC is a living testament to excellence, carried forward by its dedicated members. The tales of its achievements are countless, and the dedication of its members is unmatched. Being a part of FIC has been an immense privilege, and I hope this tradition of excellence continues to flourish with each passing day and year.

PURVI PANDITA

My time at FIC as a junior member was one of the most fun experiences in college. Over the course of my junior tenure, I got to learn so much- from working behind the scenes while organising Episteme, exercising creativity while designing events to attending research sessions and participating in intra-FIC events. One of the most important aspects that probably defined FIC for me was my bond with the seniors, who still remain my go-to advisors for everything. I vividly remember the late nights in college and the stress right before the event days and also the celebration after the successful completion of Episteme. FIC allowed me to gain one of the most memorable experiences of my life - and I will always remember it fondly.

DIVYANSH JAIN

FIC was one of the most discernible experiences of my first year in college. Along with gaining extensive knowledge and learning experience in areas ranging from research to managing events, I was also given close mentorship and guidance, which encouraged me to put my best foot forward. Perhaps most significantly, I was able to develop deep connections with fellow members and create moments that I will cherish for the rest of my life.

PRASHASTI JAIN

When I joined FIC, everything and everyone was new to me. But now when I look back I have a bag full of memories and one of the best people as my friends. FIC has helped me develop holistically and has taught me a lot of things beyond finance. FIC is not just about the work that we do, it is also about bonding, getting together, making lots of fun memories and growing and developing together.

HARSH VARDHAN MAHESHWARI

If I sit down and recall the best things that happened to me in my first year of college, FIC would be in almost everything. From fests to gossips, we did it all and we learned it all. To the best of friends and the best of seniors, I couldn't have asked for more.

PRAVEEN BHATIA

It's been an incredible and exhilarating journey. Starting from my induction and participating in numerous enlightening sessions with experts and experienced seniors, to hosting Episteme, and throughout all of this, creating unforgettable memories, the experience of FIC feels like a dream I wish I could relive 42 times. With the most caring seniors and talented juniors, FIC has been the ultimate package that my college life has offered me. I will forever appreciate this organisation for providing me with a platform to nurture my personal growth, for the wealth of knowledge it imparted, and the lifelong friendships it helped me forge along the way.

MESSAGES FROM THE MEMBERS

HARSHBIR SINGH AHUJA

FIC has been nothing short of a rollercoaster ride. I joined the Cell as a fresher with crippling FOMO and in no time, found myself surrounded by the best people, with the sharpest of minds and the warmest of hearts. FIC is a balanced amalgamation that just keeps on giving.

RISHIT SINGH

My experience at FIC has been transformative. The diverse learning opportunities, the supportive team, and the exceptional camaraderie have all made my time here incredibly rewarding. FIC is more than just an organisation; it's a home where I've grown both professionally and personally, and the memories and connections I've made are truly priceless.

OJAS GUPTA

My time at FIC has been one of the most enriching and fulfilling experiences of my college journey. Whether through enlightening finance sessions or remarkable connections with fellow members, FIC has provided incredible opportunities that have allowed me to develop profound insights, self-assurance, and critical thinking abilities. It has given me everything I could have ever wished for from my college experience: cherished memories, enduring friendships, and knowledge that surpass traditional classroom lectures. FIC has been an incredible platform for learning, personal growth, and building lasting friendships, and I am truly grateful for the experiences and opportunities it has provided.

UDIT BAGARIA

My journey at FIC has been truly memorable and has helped me learn a lot beyond just finance. The experiences helped me explore and develop my skills and grow as an individual. The best part about FIC was the people I worked with and the memories I shared with them will remain close to my heart.

DIVYANSH RATHORE

My experience with FIC has proven to be an enriching and transformative journey throughout my college tenure. The extensive exposure to a wealth of knowledge and the delightful camaraderie shared with esteemed seniors and fellow batchmates have collectively contributed to making this period feel akin to a paradise. It is worth noting that the research sessions and the collaborative brainstorming efforts involved in orchestrating the episteme have been undeniably the most rewarding aspects of my involvement. This collective experience has played a pivotal role in enhancing my interpersonal and professional aptitude.

NIDHI SINGH

FIC has been a transformative journey, connecting my thirst for knowledge with a sea of opportunities. It's more than just a place of learning; it's where my interests, ambitions, and character have been shaped and honed. FIC has left me with cherished memories, making it an unforgettable and enriching experience.

MESSAGES FROM THE

MEMBERS

RISHABH LAKHWANI

Being a part of FIC has enriched my life in ways that no other experience has. Through its interactive sessions, I gained valuable insight into the world of finance, made lasting friendships with a wonderful group of individuals, and gained skills that allowed me to work effectively in situations even the most challenging ones. These two years of being a member of FIC have sparked my curiosity, given me a treasure trove of unforgettable memories, and definitely made me a more responsible person. It has been an amazing journey of learning and sharing knowledge. I sincerely hope that FIC continues its legacy for many more years to come.

GAURANGI AGARWAL

FIC has played a pivotal role in channelling my enthusiasm for finance and geopolitics. FIC has not only provided valuable guidance for approaching situations rationally but also granted me the autonomy to make decisions, fostering holistic personal growth that encompasses qualities of teamwork and unwavering commitment. ‘Where knowledge meets opportunities’ is inevitably the unwavering reality of FIC.

KRITIK V. KUKREJA

The day I entered FIC, I had no idea about the rollercoaster journey ahead. FIC, with its mix of fun and responsibilities, is like a canvas of knowledge. It's where I've evolved as an individual and continually found motivation to better myself. From research sessions to event planning, from being a part of fund faceoffs to attending late-night meetings, and forming lasting friendships, FIC has given me a treasure trove of cherished memories.

GAZAL

My journey in FIC has been worth cherishing.There were a lot of new experiences and learnings.I made a lot of great bonds.The cell has helped me to push my limits and excel.From research sessions to Episteme, everything has contributed in making this journey worth remembering. Every opportunity provided in FIC has led to my growth in one way or the other.I must say being a part of FIC has been one of the best things in SRCC. I will treasure my tenure in FIC for lifetime.

TANISHA AGARWAL

It was the best thing that happened to me in SRCC. There are a lot of things that I learnt while being in FIC. It helped me grow, upskill, and make memories and connections. A tenure, that I will cherish moving forward.

SARA GUPTA

My journey so far as a part of the finance and investment cell, at SRCC has truly been incredible and memorable. I have experienced a plethora of multiple things, had so many unforgettable moments and experiences, and made memories I will cherish for the rest of my life. The cell is the true depiction of the saying that it is the people who make a society and it was actually the people who made the working of our cell so much fun. One thing I guarantee is that I am surely going to remember my time in FIC for the rest of my life. All the heart.

MESSAGES FROM THE **MEMBERS**

PRISHEETA

My experience in FIC was one of the most rewarding experiences of my first year in college. I gained valuable knowledge and skills, formed lasting connections with my peers and mentors, and learned how to work collaboratively and think creatively to achieve group goals. From writing articles to conducting a peer-to-peer research session and to organising an event, it has been all. Above all, FIC has become a family to me!

DEVANSH BAGRI

"You are the summation of the people you surround yourself with" and I believe it to be my privilege to work alongside such great minds that have made me literally push my limits. FIC has helped me grow professionally and more importantly personally. Being a part of FIC is without a doubt the biggest highlight of my first year. Gaining hands-on experience with all sorts of new things. I'll truly cherish my journey here - the late nights ideating and planning, attending the research sessions and workshops, running to the seniors with the smallest problems, and more than all that the memories and friendships created along the way. I am nothing short of proud to have been associated with FIC and certain of the society achieving greater heights in the future.

DEVANSH GARG

After SRCC, I can confidently state that FIC is the best thing that ever happened to me. My experience has been the ideal balance of learning new concepts and practical experience. The way that the Cell works provides exposure to all the wings leading to the holistic development of individuals. Being a member of FIC has always made me happy, and when I reflect on it, I see that enjoyment, fun, and learning all combine offering me a delightful experience.

VIDEH SACHDEVA

The best experience I had during my first year of college was being a part of FIC. The sessions that expanded my knowledge, the intra-quiz that tested me, and the insightful and thrilling fest that we organised and attended all helped me to be at my best. I have wonderful memories from the journey that I'll cherish always. Awaiting the opportunity to lead the cell to new heights and be with it always.

UJJWAL GOEL

My experience at the Finance and Investment Cell, SRCC was an enriching and stimulating one. I had the opportunity to meet some of the best minds of SRCC, develop new skills, gain practical exposure outside the classroom, and create lasting memories.

UDITA GOEL

"Which is more important", asked the big panda, "the journey or the destination?" "The company," said the tiny dragon. The journey with the Finance and Investment Cell has been great but what has been greater is the company, the JEMs, and the seniors. It not only taught me finance and investment but also teamwork and leadership. For every minute spent in the knowledge sessions, an hour was earned. Thank you so much FIC for all that you gave me. These memories will forever be cherished.

MESSAGES FROM THE **MEMBERS**

AYUSHMAAN BHATRA

The Finance and Investment Cell stands close to my heart. My tenure here at FIC has been one full of immeasurable joy, infinite knowledge, and fresh perspectives. FIC has been my home away from my home, the seniors have always been there for me and I've made friends for life. This organisation has an effect on you, making you grow into so much more than you could have ever imagined! Extremely grateful to be a part of this legacy!

PULKIT SOIN

My time spent in the finance and investment cell was a transformative experience that enriched my life in countless ways. Not only did I learn invaluable knowledge and skills in the field of finance and investing, but I also had the privilege of working alongside some of the most talented and kind-hearted individuals I have ever met. Organizing Episteme was undoubtedly one of the highlights of my time in the cell. It was a joy to work collaboratively with my peers, bouncing ideas off each other and watching them come to life. The sense of camaraderie and shared purpose we felt as we worked towards our goal was truly special, and the memories we created in the process are ones I will cherish for a lifetime.

SANYA YADAV

A society that to me was all about the seniors, really supporting and warm people. Instilled an interest in finance I never had. I wish all the luck in the world for the society.

KINJAL JAIMAN

My journey at FIC was so enriching and full of memories! A knowledgeable journey where we grew as members during the tenure and of course not to forget about how supportive seniors FIC had. Will always cherish this journey!

TEERTHA DHINGRA

The biggest blessing ever bestowed upon me is being a member of the FIC family. From comprehensive research sessions to ideating events at Episteme, It has always been an enriching journey. The fun we had at the time of offline marketing and the bonds that we made are the ones that we will cherish throughout our life. May FIC reach greater heights in future!

ANIRUDH JAIN

The most beneficial among all the work, contributions done was the knowledge insights from the research sessions. The research sessions indeed were excellent and helped me gain practical knowledge and experience. The hard work, and dedication of all the cabinet members and also the fellow juniors have truly been inspirational and have shown what it means to be a true and committed professional.

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Dissecting Sveriges Riksbank Prize in Economic Sciences

EDMUND STROTHER PHELPS: ANALYSIS OF INTERTEMPORAL TRADEOFFS IN MACROECONOMIC POLICY

Purvi Pandita

Born in the city of Evanston, Illinois in 1933, Edmund Strother Phelps is a distinguished American economist, whose groundbreaking research in the analysis of intertemporal tradeoffs in macroeconomic policy, earned him the illustrious Nobel Prize in Economic Sciences in 2006. Phelps' first tryst with economics was in his second year at Amherst when he dove into the book 'Economics' by Paul Samuelson. He then went on to study at Yale where he received his Ph.D. in 1959. Subsequently, Phelps became an esteemed professor at Columbia University, one of the most prestigious Ivy League schools in the United States.

Expectations and the Phillips Curve

Phelps challenged the assumption behind the original Phillips curve, which stated that there exists an inverse relationship between inflation and unemployment. According to this, an economy could achieve price stability if it was willing to tolerate higher unemployment. He disputed this hypothesis through an extensive fundamental analysis of wage and price-setting behavioural models taking into consideration the presence of asymmetric information in the economy.

He contributed to the micro-foundations of macroeconomics by proposing that individual agents have incomplete knowledge about the actions of others and must base their decisions on expectations. He formulated a mutation of the Phillips curve, known as the expectations-augmented Phillips curve, according to which inflation depends upon both unemployment and the expected inflation rate. His work emphasised that the tradeoff between inflation and unemployment could shift as expectations change and are incorporated into new labour contracts. Phelps' work has had a profound impact on how today's policy decisions facilitate future policymaking; low inflation today leads to expectations of low inflation in the future.

Dealing with Unemployment

Phelps developed the concept of the natural rate of unemployment. He argued that there exists a natural level of output and employment that is consistent with stable inflation (an equality between the actual and expected price level in the economy is implied) in the long run, as opposed to the traditional Keynesian view which posits that the interventionist government policies can influence the tradeoffs between inflation and unemployment through expansionary fiscal and monetary policies. Due to the neutrality of money in the long run, Keynesian economics specifically emphasised using expansionary fiscal policy to increase the level of aggregate demand which results in lowered interest rates and unemployment but higher inflation. This view is often known as 'fighting unemployment with inflation'. In contrast, the Friedman-Phelps model of stagflation is based on the notion of the natural level of unemployment. The central idea of Phelps' contribution, along with Milton Friedman, is that workers develop expectations of inflation, which makes it hard to deceive them about the true value of the real wage. This theory implies that fiscal and monetary policy can affect output and employment in the short run only, because of systematic errors in predicting inflation in the short run. However, in the long run, these policies will prove ineffective as workers and firms will anticipate the inflation rate correctly. Hence, unemployment will return to its natural level. This directly counters Keynesian views that inflation can be used to lower unemployment rates by fooling workers into accepting lower real wages.

Phelps and Friedman also laid out the foundation for the concept of the non-accelerating inflation rate of unemployment, commonly known as NAIRU. It represents the unemployment rate that is in alignment with no acceleration in inflation. While NAIRU and the natural rate of unemployment tend to converge to the same level, they may have different compositions and vary in the short run. NAIRU is likely to be more volatile in the short run since it is influenced by short-term factors such as wage inflation and changes in wage expectations. However, in the long run, both concepts reflect similar ideas. There exists a certain level of unemployment, composed of frictional and structural unemployment, caused by supply-side factors. Thus, utilising demand-side management, like fiscal and monetary measures, will have no impact on lowering the unemployment rate in the long run.

Phelps' research on intertemporal tradeoffs in macroeconomic policy has left an indelible mark on economics. His work has not only reshaped economic paradigms but has also influenced real-world policymaking to a great extent. His analysis of the Phillips curve, expectations, and the natural rate of unemployment has become a fundamental pillar of modern macroeconomic theory and policy influencing central banks and economists globally in their pursuit of sustainable economic growth.

THE IMPOSSIBLE TRINITY MUNDELL-FLEMING TRILEMMA MODEL IN ECONOMICS

Praveen Bhatia

Annexure

If we look up to the world in the Twenty-First century, the whole of it has gotten far more integrated than we perceive it to be. Thus, the trilemma model given by Robert Mundell and Marcus Fleming brings us to the Impossible Trinity that pertains to the economies. This article presents the functioning of the Mundell-Fleming model in global emerging markets. These markets seek to maintain the financial integrity of their economy with the world economy, governed monetary policy, and a pegged (fixed) Foreign Exchange rate (forex rate).In addition, the article will analyse the impacts of the three domains of trilemma on each other. It will provide an empirical analysis of the policy choices made over the decades, highlighting their outcomes and consequences.

Introduction

The trilemma in economics- the Impossible Trinity is the extension of the Keynesian open-economy macroeconomic policy model which was made by two prominent economists Robert Mundell and Marcus Fleming in the late 1960s. They made an empirical analysis of the model by systematically incorporating the free capital inflows in the Keynesian model.

Their theory was later recognised by other economists in 1976 and later came up to be known as the Mundell-Fleming Trilemma in the open-economy macroeconomic literature based upon Fleming's equations and Mundell's policy analysis. The theory was later analysed by a Frenchwoman Helene Rey whose argument backed the fact that countries open for financial integration and a floating exchange rate, do not necessarily enjoy a complete monetary autarky.

We will now begin our analysis by understanding the theoretical framework and working of the model which will depict the different combinations of the trilemma and their effect on the policy choice.

Literature overview

The theory is underpinned by a key assumption which states that there is a small open economy with perfect capital mobility. The Trilemma's theoretical framework implies that given the sets of achievable macroeconomic objectives, an economy happens to make a polarised binary choice between the three of the undermentioned macroeconomic objectives in the pursuit of national and international interests as their irreconcilable nature backs their facet of mutual exclusivity.

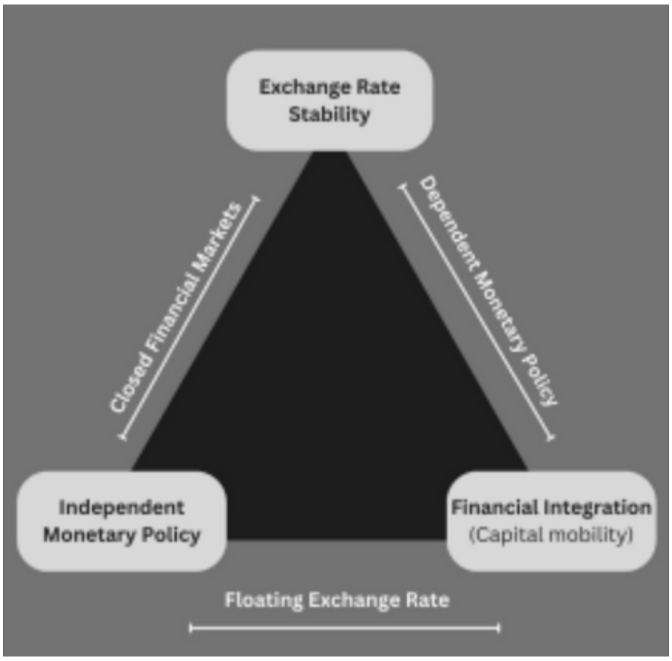
1. Monetary independence
2. Exchange rate stability
3. Financial integration

Furthermore, the model asserts that at a given juncture, an economy cannot simultaneously exercise control over the given three macroeconomic measures which are further pertinent to the equilibriums in the three markets associated with the trilemma which are Goods market, Money market and the Forex market (BOP).

The Trilemma

To better understand the trilemma, we will be deciphering six questions formed with the differential combinations of the three macroeconomic measures the model tries to explain. These 3 binary combinations form the sides of the trilemma triangle as shown in the figure.

- How do interest rates affect capital mobility in an economy?
- How do interest rates affect the forex rate?
- How does the forex rate affect capital mobility in an economy?
- How does the forex rate affect the interest rate regime of an economy?
- How does capital mobility affect the interest rate regime of an economy?
- How does capital mobility affect the forex rate?



Scenario 1:

The economy chooses a Fixed Exchange rate and free capital mobility depicted by the right side of our triangle implies that in the given scenario where a fixed (pegged) exchange rate has been adopted, foreign and domestic government bonds are perfectly substitutable further implying that National Interest Rate is equal to foreign interest rates.

\Whenever a country raises the National interest rate, investors are more likely to pull out money from the rest of the world and invest in that country in order to reap higher returns. Thus, capital inflow in the economy increases considering there are no such restrictions on capital mobility. Also, the country offering a higher interest rate is more likely to experience an appreciation in the value of its currency.

Now, if the country follows a floating exchange rate regime, the capital flows can be restricted due to the higher foreign exchange rate of the domestic currency which will discourage some of the investors from investing as they have to pay a higher price for carrying out the exchange. On the other hand, if a country is following a Fixed exchange rate regime, there is no such barrier due to the absence of a market mechanism. Hence, in such a country, the central bank maintains the demand and supply equilibrium by altering the forex rate reserves.

Now, assuming country A follows ‘scenario 1’ i.e. a Fixed exchange rate and free capital mobility, it wishes to decrease the money supply in the economy for which it raises the national interest rate by X basis points. This will induce investors to invest in A thereby increasing the demand for A’s currency. A cannot narrow down the investment limit as it maintains financial integration with international boundaries. Also, as A follows a fixed exchange rate regime, the government will have to intervene in the market and sell its currency in exchange for foreign currency to meet up the demand. Eventually the excess money will end up in the market.

Thus, this increased money supply in A’s economy is triggered by its own attempt to reduce it initially. Hence, this signifies that a free flow of capital and a fixed exchange rate if maintained will lead to lost control over the monetary policy of the country. This scenario illustrates that if the central bank alters the money supply using a monetary policy instrument, it only changes the balance sheet composition of government securities without substantially affecting the national interest rate or money supply.

Scenario 2:
The economy chooses to maintain financial integration and an independent monetary policy. This combination is shown by the lower side of our triangle where the fixed exchange rate is given up leading to a Floating exchange rate. Let's decipher the impact of the forex rate on national interest rates and capital mobility for getting our analysis on lucid grounds.

Whenever the foreign exchange rate of the domestic currency rises (appreciation), the interest rates are likely to fall. This is because a higher foreign exchange rate leads a country's exports to slump in the foreign markets as they have now become more expensive resulting in a downturn in economic activity. The central bank is now compelled to lower the interest rate in order to revive economic growth.

However, the relationship is complex and dependent upon many factors such as inflation, global market returns, central bank policy, etc. Conversely, a fall in the foreign exchange rate will lead to a rise in the national interest rate if other factors are held constant.

Furthermore, a fall in the foreign exchange rate of the domestic currency will increase foreign investments while reducing the capital outflow of the domestic currency.

Elucidating further, let's assume country B follows scenario 2 i.e. free capital flow and an independent monetary policy while compromising upon a stable exchange rate. Now, B intends to increase the supply of money which would lower the prevailing interest rate in the market which consequently generates an outflow of capital from the country as investors seek higher returns in the foreign markets. This induces incipient excess demand for foreign bonds and excess supply of B’s bonds. Furthermore, this change in demand and supply decreases the demand for its own currency substantially, which in turn decreases the foreign exchange rate.

Thus, in these scenarios, the monetary policy of the country is in precedence over the exchange rate. Cumulatively, a higher supply has a dual impact on the economy by decreasing the interest rate to increase investments in the economy driving up economic growth and weakening the national currency at the same time. However, the intended rise in domestic investments due to lower interest rates allows the economy to expand through the increased magnitude of net exports. Hence, it makes the fact quite apparent that the country is able to maintain monetary autarky at the cost of exchange rate instability.

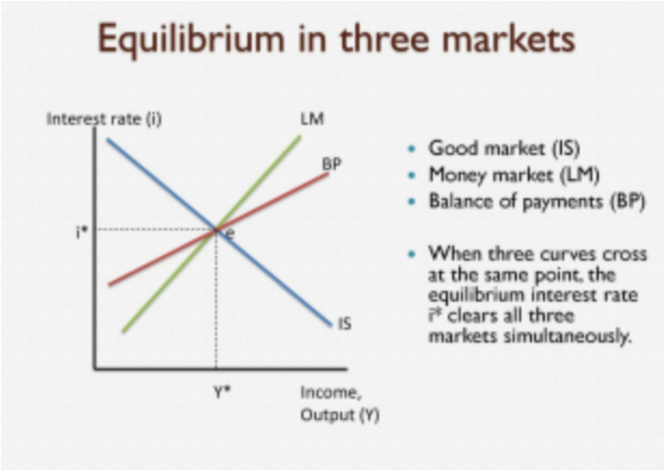
Scenario 3:

As an alternative approach to exercise control over the monetary policies by averting any outside influence while maintaining a stable exchange rate, it becomes requisite for countries to renounce their financial integrity. This scenario is shown by the left side of our triangle.

Now, assuming country C intends to increase the money supply in order to drive up the economic growth, monetary policy instruments like OMO(open market operations) and interest rates need to be altered. As the country will purchase treasury bonds from the market and will lower the interest rates, this moves up the bond prices but reduces the yield (interest on bonds) as well as the national interest rate. Now, lenders are compelled to relocate their funds to more profitable investments. As the foreign financial markets are not accessible to investors, this induces them to invest in their own country in different classes of assets. This prevents arbitrage between domestic and foreign interest rates.

Hence, the country's foreign exchange rate remains unaltered as there is no influence of the foreign financial markets as they were there in Scenario 2 which depreciated country B's currency. Thus, the C is able to regain its monetary autarky and maintain a pegged exchange rate by simply giving up on its financial integrity.

Thus, the trilemma is perceived to have derived from the policy structure where the equilibrium in all the three markets that are Goods market, Money market and the Forex market (BOP) is achieved at a desired interest rate. It is shown in the graph below:



Conclusion

The relevance of the trilemma pertains even to the Twenty-First century as the economies adjust the combinations suitable to their respective economic conditions and policies.

Countries that have strong institutions can address financial instability resulting from financial integration by establishing long-lasting hard currency swap lines among their central banks and enhancing their banking supervision. On the other hand, developing countries with limited financial and fiscal capabilities are generally less vulnerable to sudden influxes of speculative capital and may choose to implement stricter capital controls.

Furthermore, Industrialised countries have always kept Trilemma's theoretical constraints alive, focusing their political efforts first on financial integration and monetary independence, by virtue of having greater control of their currency in fluctuating exchange rates, and then diverging towards less monetary independence to the benefit of exchange rate stability.

However, the case of developing countries is distinctly unique, as financial integration serves as a cornerstone of their economic development. During periods of crisis, these nations adopt a novel approach in addressing the Trilemma's challenges. This involves implementing macro-prudential measures and establishing swap lines between major economic powers and smaller counterparts, which can enhance their resilience to financial fragility. This strategic combination of measures has consistently provided them with greater flexibility, allowing them to alleviate constraints on exchange rate stability. This, in turn, enables them to reclaim a degree of monetary autonomy and reduce the dominant influence of industrialised countries.

While the original trilemma showed a straightforward connection between policy objectives and economic systems, achieving financial stability may require a more intricate approach that involves utilising a variety of policy tools to mitigate the risk of financial instability.

This greater guaranteed freedom has led countries to deviate from the pure basic theory of exclusivity of at least one of the three proposed political objectives. Instead, they have shifted their focus towards greater financial integration and increased monetary independence while simultaneously maintaining a moderate level of exchange rate stability.

AMARTYA SEN: REVOLUTIONIZING WELFARE ECONOMICS AND HUMAN DEVELOPMENT

Nidhi Singh

Introduction

Amartya Sen, an Indian economist born on November 3, 1933, in Santiniketan, India, stands as a beacon in the realm of economics and philosophy. Renowned for his groundbreaking work on the causes of famine, Sen's research has not only yielded practical solutions to alleviate the impact of actual or perceived food shortages but has also prompted a paradigm shift in development economics and welfare economics. His intellectual breadth has left an indelible mark on various domains within his field. He is hailed as a founding father of modern social choice theory. He was awarded the prestigious 1998 Nobel Prize in Economic Sciences for his contributions to welfare economics and social choice theory and for his interest in the problems of ociety's poorest members. Recognised with the highest honour of India, the "Bharat Ratna," Sen's exceptional contributions have also seen him assume the presidencies of esteemed institutions such as the American Economic Association, the Indian Economic Association, the International Economic Association, and the Econometric Society.

Amartya Sen's educational journey was marked by illustrious academic pursuits. He studied economics at Presidency College in Kolkata and Trinity College, Cambridge, where he was influenced by the works of esteemed scholars such as John Rawls, Karl Marx, and Adam Smith. However, it was his personal experiences of poverty and inequality in India that truly ignited his passion. Sen's exposure to diverse intellectual traditions left an imprint on his perspective regarding social progress and the importance of capabilities in attaining human well-being. His ideas have reshaped the understanding of well-being and shifted the focus towards holistic development and promoting social progress.

Contributions to Welfare Economics

Welfare economics is a branch of economics that focuses on evaluating and promoting the well-being and overall quality of life of individuals within a society. It seeks to analyze how resources are allocated to maximize societal welfare, considering factors like income distribution, social equity, and efficiency. It has been significantly influenced by Amartya Sen, the "conscience of his profession." His critique of traditional welfare economics centred on its sole focus on utility maximization, highlighting the flaws as it fails to capture the complexities and diversity of human needs. His methods for measuring poverty shed light on its causes and provided practical insights for improving economic conditions for the poor. His groundbreaking contributions revolutionized the field by addressing individual rights, information availability, and the capability approach.

The departure from traditional utilitarianism and incorporation of diverse capabilities made economics more relevant to real-world problems.

Social choice theory is a branch of economics and political science that explores how individual preferences are aggregated to reach collective decisions in a group or society. In the realm of social choice theory, Sen made noteworthy contributions through his exploration of Arrow's impossibility theorem. This fundamental theorem, originally formulated by economist Kenneth Arrow, demonstrated the inherent impossibility of devising a social welfare function that simultaneously satisfies all desirable properties. Sen's work on this theorem shed light on the intricate challenges and limitations associated with aggregating individual preferences into a collective social choice. It underscored the complexity of achieving a universally satisfying social welfare function, highlighting the need for careful consideration of trade-offs and compromises in decision-making processes involving diverse individual preferences and societal goals. His work has been used to improve the design of voting systems and other decision-making processes.

The capability approach, developed by Amartya Sen, is a framework that evaluates human well-being and development. It goes beyond traditional economic measures like income and GDP so as to focus on the actual opportunities individuals have to lead a valuable and fulfilling life. It focuses on individual freedoms and valued function and considers various dimensions of human life, including health, education, social participation, and political rights. This approach provides a nuanced assessment of individuals' quality of life and allows for a targeted and inclusive approach to development policies. This approach has been used by the United Nations Development Programme (UNDP) to measure human development since 1990.

Human Development

Human development refers to the holistic and multidimensional process of growth, learning, and progression that individuals experience throughout their lives. Amartya Sen has been a transformative figure in the field of human development, redefining the understanding beyond traditional measures of economic growth. He emphasized that development should extend beyond mere income or GDP growth and instead focus on expanding people's capabilities and freedoms. This comprehensive approach to human development encompasses various dimensions of well-being, such as education, healthcare, gender equality, and political rights. Education holds a pivotal role in Sen's perspective of human development. It not only enhances individuals' capabilities but also fosters economic growth and social progress. Furthermore, Sen stresses the significance of healthcare, recognizing that good health is vital for individuals to fully participate in society and achieve their aspirations. Sen emphasizes gender equality's vital role in human development, stressing its impact on overall well-being. He underscores the need to empower women for inclusive and sustainable development. Rather than focusing solely on income or material deprivation, Sen argues that poverty should consider people's capabilities and functions. This approach has given rise to influential indices such as the Human Development Index (HDI). The HDI incorporates measures of life expectancy, education, and income, providing a more comprehensive evaluation of development. Even though HDI offers a comprehensive alternative to purely economic measures, it does possess limitations. The HDI simplifies complex dimensions like health, education, and income into a single value, potentially oversimplifying their nuances. Inequalities within each dimension are overlooked, and the limited focus on a few indicators neglect aspects such as environmental sustainability or political participation. Equal weighting of dimensions might not align with societal priorities, and the use of threshold effects can categorize vastly different countries similarly. Despite its limitations, the Human Development Index (HDI) remains a valuable instrument for comprehending human development.

Impact and Critique Analysis

Sen's work has had a global impact on social policies and development strategies, leading to increased attention to education, healthcare, and gender equality. In the education sector, his ideas have prompted a shift towards prioritizing quality, inclusivity, and equitable access, resulting in inclusive education policies and scholarships for marginalized groups. Similarly, in healthcare, Sen's concepts have advocated for universal systems with a focus on equitable access, leading to initiatives targeting maternal and child health, investment in primary healthcare infrastructure, and the establishment of community health centres.

Sen's capability approach has guided policies addressing poverty, including the implementation of social safety nets, vocational training programs, and initiatives empowering marginalized communities. The use of the Multidimensional Poverty Index (MPI) has facilitated targeted interventions and resource allocation in poverty alleviation efforts. His groundbreaking ideas have left a mark on policy formulation and implementation, reshaping how governments and organizations approach social development. Sen's insights have led to a shift from focusing solely on economic growth to a broader consideration of human well-being. For instance, Sen's work has spurred efforts to improve access to quality education and healthcare, recognizing that true development is not just about increasing income but also enabling people to lead meaningful lives. In the realm of poverty alleviation, Sen's ideas have prompted policies that empower individuals with essential capabilities, such as access to education and healthcare, rather than simply providing financial aid. In his book Poverty and Famines, Sen argued that famines are not caused by food shortages, but by a lack of entitlements to food. This led to a new way of thinking about poverty and famines and helped to improve the response to famines in the years since.

However, while Sen's ideas have transformative potential, they also face challenges when applied in real-world contexts. Critics argue that the capability approach might be difficult to measure and operationalize effectively. For example, it can be difficult to measure capabilities, and there is no single agreed-upon definition of what constitutes a capability. Additionally, the cultural and contextual relevance of Sen's ideas is subject to criticism, as they have predominantly emerged from a Western philosophical tradition. Limited resources and competing demands require striking a balance between various dimensions of well-being while ensuring equitable distribution. Nevertheless, Amartya Sen's intellectual legacy continues to inspire policymakers to design more inclusive and human-centric strategies, ultimately shaping societies that prioritize the holistic development and empowerment of their citizens.

Enduring Legacy

Amartya Sen's contributions to welfare economics and human development have been nothing short of revolutionary. His ideas have not only challenged but fundamentally transformed traditional economic thinking by advocating for a comprehensive understanding of well-being and social progress. This shift from focusing solely on economic growth to encompassing broader dimensions of human flourishing has had a profound impact on both academic discourse and policymaking. His work has unveiled the interconnectedness of economic, social, and political factors in shaping human well-being. As the world grapples with contemporary global challenges, his ideas remain relevant and instrumental in guiding responses to issues like inequality, poverty, and sustainable development. His legacy endures as a guiding light, inspiring scholars, policymakers, and advocates to prioritize the holistic betterment of individuals and societies, ensuring a future that upholds the principles of equity, justice, and human dignity.

RATIONAL EXPECTATIONS

Rishit Singh

We all have expectations of what the future holds in store for us. Whether buying a stock or a house or investing our money in some other form, we all think and calculate the future returns from these assets. Simply put, we make rational choices based on dynamic, rational expectations constantly changing in different scenarios; this may seem obvious, but surprisingly, this rationality of the individual did not hold a central role in economic theory and analysis for a long time.

Robert E. Lucas Jr. won the 1995 Nobel Prize in Economics "for having developed and applied the hypothesis of rational expectations, and thereby having transformed macroeconomic analysis and deepened our understanding of economic policy." Regarded as one of the most influential economists, Robert Lucas was at the forefront of the revolution that transformed macroeconomic analysis starting in the 1970s. Each of his contributions is worthy of cementing his place as a pivotal economic figure. Here, we look into his Nobel Prize-winning theory, wherein he developed and incorporated the assumption of rational expectations into macroeconomics and made it operational mathematically. Economists have long strived to bridge the gap between microeconomic and macroeconomic analyses. However, before the 1970s, their efforts yielded unsatisfactory results, primarily due to a mismatch between models attempting to unify these two branches, which proved ineffective for predictive purposes, and those tailored for predictions and forecasting, which failed to align with established economic theories. This disconnect stemmed from the inherent challenge of reconciling the microeconomic assumption of rationality with the prevailing macroeconomic theories.

In 1972, Lucas introduced his innovation that changed how we deal with macroeconomics. He introduced the concept of 'Rational Expectations' and applied it to macroeconomics, specifically, the Phillips curve. The Phillips curve shows the inverse relationship between inflation and unemployment. It states that higher inflation is associated with lower unemployment and vice-versa. Economists like Milton Friedman argued that this trade-off exists only in the short run, i.e., the long-run Phillips curve is vertical. They argued that trade-off in the short run exists because when the government increases the money supply, prices rise and with an increase in nominal wages, workers are duped into accepting wages that appear higher in real terms than they are; they take jobs sooner than they would otherwise, lowering unemployment. Lucas extended this idea. He applied the assumption of rationality on the macroeconomic level. It stated that people would realise what is happening in the economy and adjust their expectations of wages and inflation accordingly. If a government increases the money supply, it would only work in lowering unemployment if the increase in the growth rate of money supply and inflation is more than public expectation. Otherwise, it will have no impact, and in the long run, 'rational expectations' will lead to only inflation.

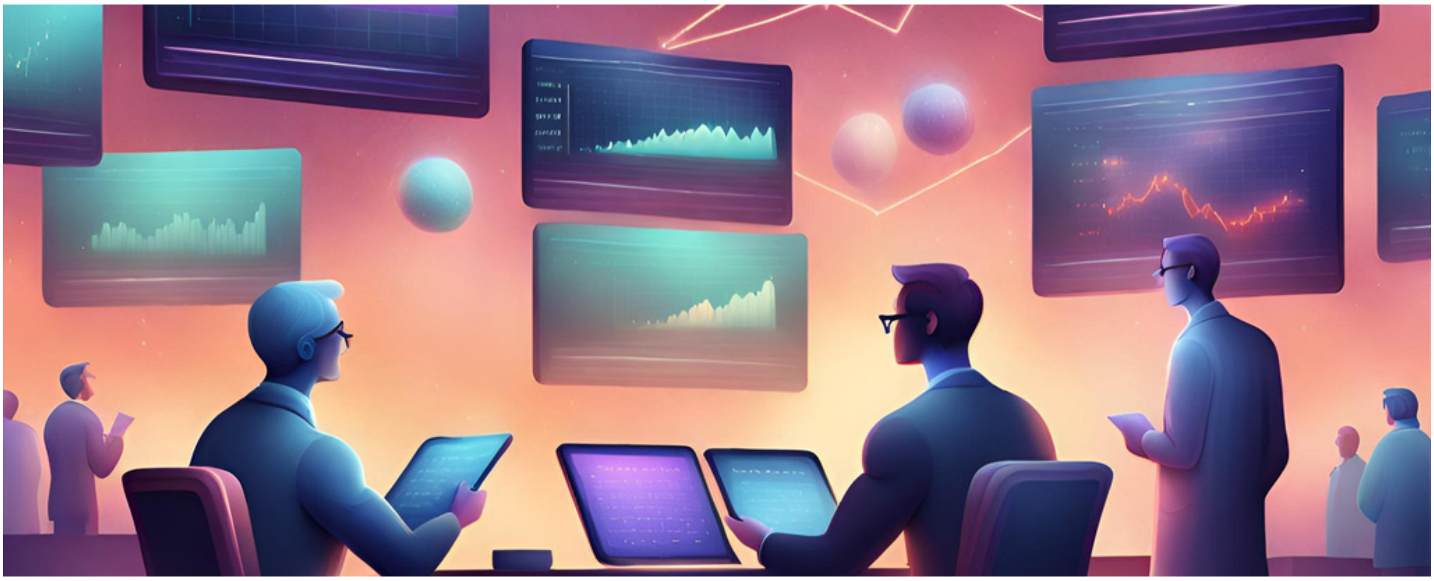
'Rational Expectations' revolutionised the world of macroeconomics. It also helped Lucas develop what is known as the 'Lucas Critique' of economic policymaking. As mentioned above, past economic models (mostly Keynesian) assumed rationality but did not account for rationality being dynamic. As a result, models used to derive empirical results from periods where people had certain expectations from government policies could not be used to predict results for a period with changed expectations, as these models may not be reliable when confronted with policy changes.

It also meant that all the previous data analysed through models that did not consider public expectation had a systematic flaw. It underscores the importance of understanding how individuals and markets respond to policy shifts, fundamentally reshaping how economists approach their analysis.

Lucas has had an impact on the field of economics as a whole. Every economist, whether supporter or critic, has faced the problem of the 'Lucas Critique'. He has several other contributions in taxation, developmental and supply-side economics.

In summary, Robert Lucas has left an enduring and substantial imprint on the field of economics. His intellectual legacy has reverberated throughout the global economic community. His seminal work, particularly the Lucas critique, has fundamentally redefined the paradigms of economic policy analysis. Irrespective of the perspectives taken by scholars, whether they extend approbation or criticism, it remains indisputable that Robert Lucas's multifaceted contributions have undeniably enriched the overarching discipline of economics. His scholarly endeavours have expanded the frontiers of knowledge within the field and have influenced how economists perceive and address economic phenomena, both in the theoretical and practical domains.

The John Dewey Distinguished Service Professor Emeritus in Economics at the University of Chicago passed away on May 15, 2023.



EFFICIENT MARKET HYPOTHESIS

Prashasti Jain & Harshbir Singh Ahuja

Contrary to the theme of this magazine, filled with fancy titles and even fancier introductions, this article will have an uncanny, efficient ring to it, just like the theory it aims to dissect. It is good to state that up front, but will we be able to demonstrate our claim of efficiency in practice? We will leave that for you to judge, much like the working of this theory.

The Efficient Market Hypothesis is a landmark theory in financial economics. Developed by the "Father of Modern Finance", Eugene F Fama, the theory is notorious for causing spirited debates. Are these deliberations efficient in themselves? John H. Coachrane's (Chicago Booth Review) take: "But people who don't know those definitions can say and write nonsense about the academic work." Make of that what you will.

We see shades of disappointment and frustration in this quote, signalling a possibly hazy perception of the Nobel laureate's ideas among the masses. In this information age, such misconceptions must be eradicated, as half-knowledge works for the harm of all and the benefit of none.

Meaning

The Efficient Market Hypothesis (EMH) is a theory in finance that asserts that financial markets are informationally efficient, meaning that asset prices in these markets fully reflect and incorporate all available information. In other words, it suggests that it is impossible to consistently achieve higher returns in financial markets by analysing past price data, public information, or any readily available information because it already manifests itself in current asset prices.

(Yes, ChatGPT came up with that definition. While writing about a market system being transparent, not being transparent ourselves would be hypocritical.)

Long story short: you cannot beat the market.

That seems strange when you think about it, possibly jeopardising your dream of becoming the next Warren Buffett. If true, is there any point in plotting excessively detailed charts or crunching jaw-dropping, voluminous data on Excel sheets? What about qualitative and quantitative analyses, all mere hoaxes? And down goes the slippery slope of gaslighting: the finance edition, a unique existential crisis, nihilism of an unforeseen nature.

Mechanism

Before jumping to conclusions and binning plans for a career in finance or outcasting Fama, it is essential to know how the theory works. The following are the assumptions of the Efficient Market Hypothesis:

1. **Rational Investors, Wise Decisions** – Investors are assumed to be astute individuals who make choices based on logic and self-interest. There is no room for emotions such as fear or greed.
2. **Symmetric Information** – Like gossip in a crowded market, information spreads freely and uniformly in the market and is absorbed quickly in the blink of an eye.
3. **Homogeneous Expectations** – Two investors analyse and draw similar conclusions when provided with the same set of data.
4. **Free Information, Zero Transaction Cost** – Investors trade freely and all the information is publicly available.
5. **Prices Reflect Reality** – Prices adjust quickly and efficiently to all available information. Any mispricing in the market will be instantaneously arbitraged way.

On the face of it, the efficient market hypothesis is based on perfect competition, implying that investors are rational, risk-averse and profit-maximising. Additionally, in our imperfect world, markets are assumed to be efficient in which prices of securities fully reflect available information. Even though, prices are rationally based, they are unpredictable and random, owing to the unpredictability of new information. Due to this reason, prices of stock are assumed to follow a 'random walk'.

Depending upon the different types of available information that affect the value of a security, the strength and efficiency of the above-mentioned assumptions can be justified.

- **Weak Form Efficiency** – Do prices have memory? Even if they do, historical prices do not have any relevance in the present or future. This is because the weak form of EMH asserts that current stock prices reflect the history of prices fully. It argues that prices being the most easily available information, should not profit anyone selectively. In a nutshell, this form directly targets the validity of technical analysis.
- **Semi-strong Form of Efficiency** – Proponents of this idea believe that current prices incorporate all the publicly available information including the financial as well as non-financial information related to a company. If this form is present in the market, neither technical nor fundamental analysis can help to beat the market consistently.
- **Strong Form of Efficiency** – The rationale for a strong form of EMH is that market prices reflect both the public and private information which promotes the foundation of an efficient market, unbiasedness. This means that people with insider information cannot earn more without investing in higher-risk securities.

To sum up, nobody has a monopoly on any information available that is relevant. For any information to reflect in the stock prices, the entire capital or majority of investors will have to be taken into consideration.

Discourse

The Efficient Market Hypothesis (EMH) enjoyed its golden era in the '60s and '70s. Based on solid theoretical and empirical foundations, the belief was that securities markets were extremely efficient in reflecting information about individual stocks and the broader stock market. The accepted view was that when information arises, the news spreads rapidly and manifests in the prices of securities without delay. However, over time, doubts started eating away at EMH's pie.

In "The Efficient Market Hypothesis and its Critics", Malkiel reviews and reputes the findings of three critiquing schools of thought: momentum investing, behavioural finance and fundamental analysis. With over 4,000 citations, this reliable paper has massively influenced financial theory; hence, it makes a good starting point for an investigation into the Achilles' heel and subsequent series of justifications and rebuttals regarding the hypothesis.

The CFA Institute summarises the critiques as follows:

1. Momentum Investing bases argues that if a market is truly efficient, the short-term serial correlations among stock prices should be zero, but several studies have shown examples of short-term serial correlations that are not zero, thus indicating the possibility of a discoverable pattern. Malkiel refutes this with the case study of 'The January Effect', and points out the fact that momentum investing has its own spells of underperformance and overperformance. This is a valid cornerstone of proponent reasoning: the opponents are just too focused on the exceptionally high-performing upper strata and rarely talk about the rest of the herd.

2. Behavioural Finance criticises the Efficient Market Hypothesis (EMH) by highlighting that investors are subject to cognitive biases and emotions that can lead to irrational decision-making. Market anomalies, underreaction, overreaction to information, noise trading, and limits to arbitrage can result in mispriced assets. Malkiel cites research indicating that underreaction is as common as overreaction and that postevent continuation of abnormal returns is as common as postevent reversals. In other words, what appears to be a trend according to the tenets of behavioral finance may merely be a random event.

3. Fundamental Analysis offers a compelling critique of the Efficient Market Hypothesis (EMH) by emphasising the potential deviation of market prices from intrinsic values. It argues that market prices do not accurately reflect an asset's worth every time. Anomalies and trends in the market demonstrate that mispricing is possible, providing opportunities for investors who conduct a thorough analysis to identify these deviations and capitalise on them. (Warren Buffett and Charlie Munger smile in the background.) EMH concedes the value of fundamental analysis but asserts that, due to swift information assimilation and competitive forces, it is challenging to sustainably profit from discrepancies between market prices and intrinsic values.

Conclusion

The debate over EMH goes back and forth, back and forth, a never-ending loop, with both sides claiming supremacy. The proponents will wax lyrical over the empirical data on the success of passive investing and the inability of most active portfolio managers to beat the market. The opponents will refer to bubbles, crashes, and the Oracle of Omaha, Buffett. The proponents will again categorise these as six-sigma events and how they are exceptions, not the rule. The opponents will fire back with apparently simple, intelligent investing. It just goes on and on and on.

Amid this chaos, it is paramount to realise that both sides have their virtues and vices; in the end, the decision is yours, the risk is yours, and so is the success, and so is the failure. Find what works for you, stick to it, and experiment as you see fit. Do you really care which side of the scale you lean on as long as you reap your required return? The authors of this article do not care.

Nihilist, optimist, conformist, rebel, whatever floats your boat, we are happy for you. As with everything in life, back your position on the spectrum with sound reasoning, and that should be good to go.

Finance teaching life lessons? The field just never ceases to amaze, does it?

Geopolitics

FRIENDSHIP/POLITICS: THE OPEC CARTEL

Harsh Vardhan Maheshwari

Oil is one of the most essential commodities; it fuels the global economy, affects international relations, and shapes geopolitical landscapes. Oil is also a source of conflict, cooperation, and competition among countries and regions. This article will dive deep into the oil friendships of the world, focusing on the OPEC countries and the Western world.

What are OPEC and OPEC+?

OPEC stands for the Organisation of the Petroleum Exporting Countries. It is a group of 13 oil-rich countries that control nearly 40% of the global oil supply. OPEC was established in 1960 by Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela to coordinate their oil policies and prices. Since then, OPEC has expanded its membership to include Algeria, Angola, Congo, Equatorial Guinea, Gabon, Libya, Nigeria, and the United Arab Emirates. OPEC+ is a coalition of twenty-three oil producing countries: thirteen OPEC members and ten non-OPEC nations. Founded in 2016, OPEC+ was a measure to deal with falling oil prices, partly caused by a surge in US shale oil production. The non-OPEC countries in OPEC+ are Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, Sudan, and South Sudan.

The main goal of OPEC and OPEC+ is to ensure a stable global oil market by adjusting production levels according to the demand and supply conditions. By doing so, they aim to maintain a fair and reasonable price for producers and consumers. However, their decisions often seem influenced by political and economic factors that may not always align with their collective interests.

How do OPEC and OPEC+ influence oil prices?

Oil prices are dependent on global supply and demand. Since OPEC and OPEC+ control a large share of the global oil supply, they have significant power to influence prices by changing their production levels. For example, if they decide to cut output, they reduce the oil supply, resulting in an up-move in price.

Conversely, with an increased output, the price goes down.

History is witness to OPEC and OPEC+ using their power to manipulate oil prices several times. One of the most notable examples unfolded in 1973-1974 when OPEC imposed an oil embargo on some Western countries that supported Israel during the Yom Kippur War, causing a quadrupling in oil prices and triggering an economic crisis in many countries. Another example was OPEC deciding not to cut its production during 2014-2016 despite a glut of oil in the market caused by the US shale oil boom, leading to a collapse in oil prices from over $100 per barrel to below $30 per barrel, and hurt many oil-dependent economies. However, this power to influence oil prices is not absolute. Other factors affect oil prices and are beyond their control. These include:

- The oil demand of juggernauts like China, India, Europe, and the United States depends on economic growth, population growth, industrial activity, transportation needs, environmental policies, and consumer preference.
- The supply from non-OPEC+ producers like Canada, Norway, Brazil, and the United States depends on exploration costs, production costs, technology, regulations, and geopolitics.
- The availability and price of alter - -native energy sources such as natural gas, renewables, nuclear, and coal sources affect the demand for oil and the competitiveness of oil producers.
- The speculation and hedging activities of traders, investors, and financial institutions in the oil futures and options markets reflect the expectations and uncertainties about the future trends of oil prices.

Major players in this cartel:

The Middle East is massively important from a strategic standpoint. The USA, France, Russia and India are four key players with different and sometimes conflicting regional interests and policies.

The USA is the largest consumer and producer of oil. It has a notable military presence and influence in the Middle East. It supports friendly regimes such as Saudi Arabia, Kuwait, and Bahrain. It has a history of intervening in conflicts such as the Iran-Iraq War, the Gulf War, and the Iraq War to protect its oil interests. However, it also faces challenges from terrorism, instability, and the rise of China. The USA is part of the security grouping known as the Quad, along with India, Japan and Australia, to counter China's growing ambitions. France is a major consumer and producer of oil in Europe. It has a more independent and nuanced stance toward the Middle East than the USA. It often criticises US policies and actions and cultivates closer ties with some of the region's adversaries, such as Iran, Iraq, and Libya. It also advocates for a more balanced and multilateral approach to regional issues. France is part of the European Union, which has imposed sanctions on Russia for its invasion of Ukraine.

Russia, a member of OPEC+, is another major producer and exporter of oil. It has a long-standing relationship with the Middle East, especially with Syria and Iran. It supports the Assad regime in Syria and opposes US sanctions on Iran. It also competes with the USA for influence and markets in the region.
India is a rising power and a major oil consumer and importer in Asia. It sources more than half of its oil imports from the Middle East. It has a complex web of geopolitical relations with the region, balancing between different actors. It is part of the Quad with the United States while maintaining ties with Russia. It buys cheap Russian oil while cooperating with Israel and the

UAE on energy projects. It abstains from UN resolutions condemning Russia's invasion of Ukraine while supporting Ukraine's sovereignty.

What are the challenges and opportunities for OPEC and OPEC+?

OPEC and OPEC+ face many challenges and opportunities in the current and future global energy landscape. Some of these are:

- **COVID-19:** The pandemic has caused a sharp decline in global oil demand due to lockdowns, travel restrictions, and economic slowdowns, putting downward pressure on oil prices and revenues for OPEC and OPEC+ countries. To cope with this situation, OPEC and OPEC+ agreed to implement a historic production cut of 9.7 million barrels per day in April 2020, gradually increasing to 5.8 million per day by January 2021. However, the recovery of oil demand and prices remains uncertain and depends on the progress of vaccination, the emergence of new variants, and the effectiveness of policy responses.
- **The Energy Transition:** It is the shift from fossil fuels to cleaner and more sustainable energy sources. The driving forces are climate change, environmental concerns, technological innovation, and social movements. The energy transition is a notable threat for OPEC and OPEC+ countries as it reduces the oil demand and lowers its value in the long term. These countries should diversify their economies, invest in renewable energy, and participate in global climate action to adapt to the new world order.
- **Geopolitical Tensions:** These are conflicts and disputes among countries and regions over various issues such as territorial claims, security interests, human rights, and trade. The geopolitical tensions affect OPEC and OPEC+ countries in different ways. Some are involved directly in wars or sanctions, such as Iran, Iraq, Libya, and Venezuela. Some of them are indirectly affected by the instability or hostility of their neighbours or rivals, such as Saudi Arabia, the UAE, and Russia. Some are allies or partners of powers such as the US, China, or the EU. The geopolitical tensions create risks and opportunities for OPEC and OPEC+ countries as they influence their security, diplomacy, and trade.

What are the implications for the Western world?

The Western world refers to the countries and regions sharing a common heritage, culture, and values based on Western civilisation. The western world includes North America, Europe, Australia, and New Zealand. The Western world is also a notable consumer and producer of oil. The oil friendships in the world between OPEC and OPEC+ countries and the Western world have implications for both sides. Some of these are:

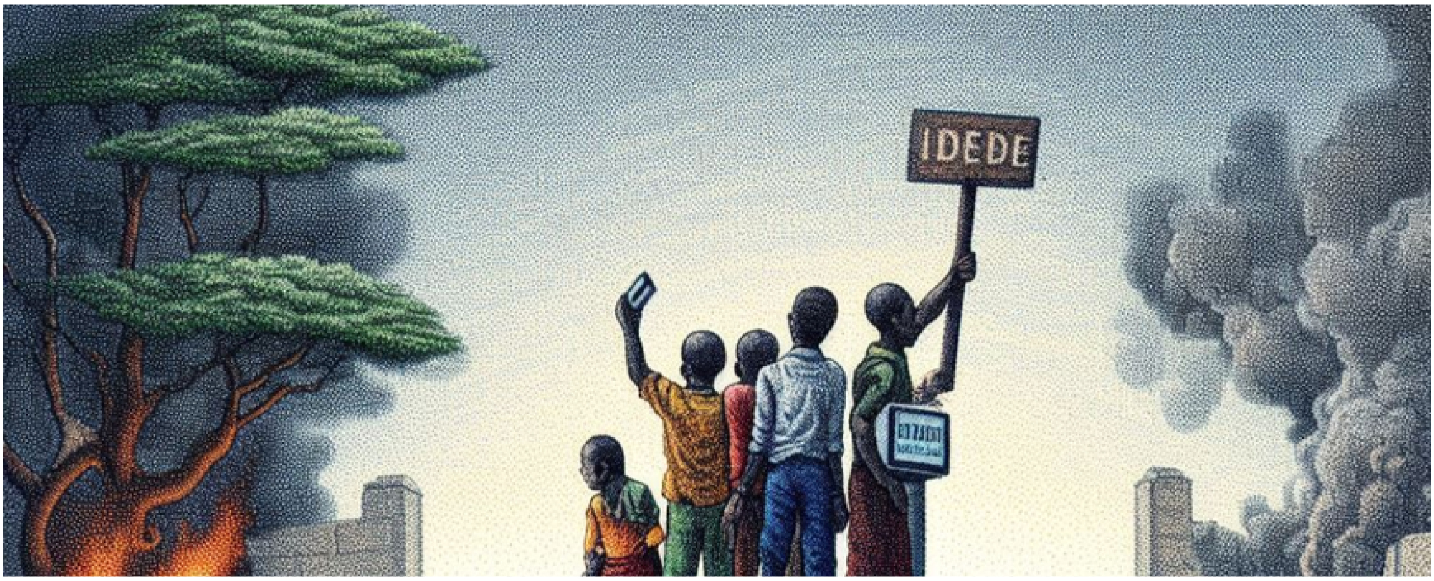
- **Economic Implications:** These implications are the effects of oil prices and production on growth, inflation, trade, and fiscal balance. Generally speaking, higher oil prices benefit OPEC and OPEC+ countries as they increase their revenues and foreign exchange reserves. However, higher oil prices also hurt their non-oil sectors as they reduce competitiveness and diversification. On the other hand, lower oil prices benefit the Western world as they reduce their energy costs and stimulate their consumption and investment. However, lower oil prices also hurt their oil sectors as they reduce their profits and employment.
- **Political Implications:** These are the effects of oil policies and interests on the relations, cooperation, and conflicts among both sides. Generally speaking, OPEC and OPEC+

countries have different political systems, ideologies, and agendas than the Western world, creating challenges and opportunities for dialogue, negotiation, and collaboration on various issues such as security, trade, human rights, and climate change. For example, some OPEC and OPEC+ countries are allies or partners of the Western world in combating terrorism, promoting stability, or advancing development. However, some are adversaries or competitors of the Western world in pursuing nuclear weapons, supporting proxies, or expanding influence.

- **Environmental Implications:** These are the effects of oil production and consumption on climate change, pollution, and biodiversity. Generally speaking, OPEC and OPEC+ countries have a higher carbon footprint than the Western world as they rely heavily on oil for their energy needs, contributing to global warming, greenhouse gas emissions, and air quality problems. On the other hand, the Western world has a higher responsibility than OPEC and OPEC+ countries to reduce its oil dependence and transition to cleaner energy sources, requiring innovation, investment, and regulation to achieve net-zero emissions by 2050.

Conclusion

Oil is a vital commodity that connects OPEC and OPEC+ countries with the Western world in complex ways. Oil is a source of wealth, power, and cooperation for both sides. However, it is also a source of conflict, competition, and challenge for both sides. Oil friendships are dynamic and evolving as they reflect the changing realities of supply and demand, technology and innovation, politics and diplomacy, and environment and climate.



THE GROWING DISILLUSIONMENT WITH DEMOCRACY IN AFRICA

Divyansh Jain

Introduction

In recent years, there has been a worrying trend across Africa of citizens losing faith in democracy. Although the continent has seen major political reforms since the 1990s, including the end of apartheid and the introduction of multi-party systems, trust in democratic institutions is declining. Surveys show the percentage of Africans who prefer democracy over other forms of government has fallen from 75% to 66% in the past decade. This erosion of confidence in democracy demands a closer examination of its root causes.

Historical Context

To understand the current disillusionment, it is important to consider Africa's history with democracy. The early post-independence period in the 1960s was marked by optimism about democratic governance. However, the euphoria faded as corruption, political instability and economic mismanagement took hold in many countries. This paved the way for military coups and one-party states. By the 1980s, authoritarianism was entrenched across much of the continent. Pressure for change grew but it was not until the 1990s that democratic reforms took hold, prompted by the end of the Cold War and internal pro-democracy movements. The 1990s saw multi-party elections introduced in countries like Zambia, Malawi and Ghana. Nelson Mandela's release and the end of apartheid brought democracy to South Africa. There was hope that Africa was on an 'irreversible' course to democratic consolidation.

Lack of Prosperity and Security

A key driver seems to be the failure of democratic regimes to deliver on promises of greater prosperity and security. Despite adopting democratic systems, many African nations continue to grapple with poverty, inequality and violence. Per capita GDP has even retreated in sub-Saharan Africa, leaving populations disillusioned about the future. For some, this makes alternative systems like autocracy more appealing if they can provide stability and growth.

Unmet Social and Economic Expectations

At independence, African populations had high hopes that self-rule would bring rapid social and economic development after decades of colonial neglect. But the reality has often been austerity, unemployment and lack of public services. Democratic governments have struggled to meet the needs and expectations of growing youth populations. With limited progress in reducing poverty and expanding opportunities, many citizens feel democracy has failed to tangibly improve their lives. This has seeded doubt about democratic efficacy.

The 'Resource Curse'

Some scholars point to the so-called 'resource curse' as an obstacle to effective democratic governance in Africa. Countries endowed with oil and minerals have tended to suffer more from corruption, authoritarian rule and conflict. The easy riches from natural resources seem to reduce incentives for democratic accountability, as governments can rely on resource revenues rather than taxes. For example, oil-rich nations like Angola, Equatorial Guinea and Gabon have very weak democratic systems. Their oil and mineral wealth sustains autocracies.

Phoney Democracies and Electoral Manipulation

Another major factor is the prevalence of "façade democracies" where opposition parties face barriers to winning power. While multi-party elections are held, leaders often tamper with voter rolls, restrict press freedom and misuse state resources to entrench their rule. Consequently, several long-serving African presidents have been in office for over 20 years, reinforcing perceptions that democracy is a charade.

Restrictive Laws

In many countries, rulers have passed laws that restrict the activities of opposition groups, civil society organisations and the media in the name of public order and security. But these laws enable persecution of critics and muzzling of dissenting voices. For example, Uganda has used public order laws to break up opposition rallies. Such restrictive legislation makes it difficult for genuine political competition to take root.

Weak Democratic Cultures

Some argue that democracy has faltered in Africa due to a lack of strong democratic cultures and norms in society. Colonial rule was an autocratic tradition that remained entrenched in rural areas. Democratic values like tolerance, compromise and civic duties are not deeply ingrained. This has provided fertile ground for corrupt practices like vote buying and patronage politics to override democratically accountable governance. More time may be needed for democratic cultures to become embedded.

Geopolitical Influence and Hypocrisy

Geopolitics has also damaged faith in democratic values. Western nations encourage democracy but overlook electoral manipulation and abuses by allies. This hypocrisy, coupled with support for autocrats by China and Russia, makes democracy seem less important to external powers. It deepens cynicism among Africans that democracy is not applied sincerely.

The Strategic Interests of Global Powers

Global powers like the United States and China have often prioritised their strategic interests in Africa over promoting democracy and human rights. For instance, the U.S. backed autocratic regimes in countries like Zaire and Ethiopia during the Cold War to counter Soviet influence in the region. China's current rise as an economic power has seen it forge close ties with authoritarian governments across Africa, further undermining democratic norms.

The War on Terror

Some experts argue the U.S.-led 'war on terror' has been detrimental to democracy promotion in Africa. Counter-terrorism efforts have seen Washington bolster military aid and cooperation with regimes guilty of poor governance, human rights violations and resistance to democratic reforms. Countries like Uganda, Djibouti and Ethiopia have used counter-terrorism as a pretext to clamp down on opponents and civil liberties. This has tarnished the image of democracy.

The Rise of Authoritarianism and Constitutional Coups

There are also worrying trends of rising authoritarianism and constitutional coups. Some leaders have altered term limits to extend their tenure, seriously undermining democratic institutions. Countries such as Uganda, Rwanda and Chad have seen such unconstitutional moves to prolong the rule of presidents. This consolidates power and creates despair over democratic progress.

Democratic Backsliding

In recent years, there has been a pattern of democratic backsliding and erosion of democratic freedoms in various African countries. Nations like Mali, Tanzania, Zambia and Mozambique which were seen as budding democracies in the 1990s have witnessed concerning slides into autocracy. Democratic institutions are being systematically weakened by executive aggrandisement and state repression. This democratic reversal has shaken faith in democracy.

Weak Democratic Oversight

Another challenge is that democratic oversight mechanisms like parliaments, judiciaries, electoral bodies and anti-corruption agencies remain weak and vulnerable to political interference in many African countries. They lack the independence and power to effectively check abuse of power by the executive branch. As a result, presidential powers go unchecked, enabling authoritarian tendencies to take root. This hinders meaningful democratisation.

The Power of Incumbency

In Africa's fledgling democracies, sitting presidents wield enormous financial and institutional advantages over their opponents. They can utilise state resources for patronage schemes and electoral campaigns. The media is often cowed into giving favourable coverage to the ruling party. Challengers face an uneven playing field, undermining the fairness and competitiveness of elections. This entrenchment of incumbent power has bred discontent.

Conclusion

Eroding belief in democracy has profound implications for Africa's political trajectory. As citizens disengage from political processes, civil society and accountability mechanisms weaken. With reduced civic participation, democratic institutions could atrophy. Reversing this requires urgent efforts to rebuild trust in democracy through good governance, transparency and upholding constitutions. If reforms instil confidence again, democracy can still gain firmer roots across Africa. But the challenges should not be underestimated. Sustained political will is needed to strengthen democratic cultures, institutions and processes across the continent.

SAUDI AND BRICS - A MODERN WORLD LOVE STORY

Kritik V Kukreja

The expanding relationship between Saudi Arabia and the BRICS nations constitutes a narrative filled with intrigue and global implications. Saudi Arabia's multifaceted motivations, the array of benefits accruing to BRICS nations, discussions surrounding a new currency, the watchful eye of the United States, and the potential ramifications for the global dominance of the US dollar all converge in a complex tapestry of possibilities.

Why does Saudi Arabia want to Join BRICS?

Saudi Arabia's aspiration to join the BRICS group is driven by a confluence of factors that have global implications in the realms of geopolitics and economics. At its core, Saudi Arabia is motivated by the need to diversify its economic landscape, reducing its historical over-reliance on oil exports. This heavy dependency on oil has made the Saudi economy exceedingly vulnerable to the capricious fluctuations of the global oil market, often resulting in economic volatility and uncertainty.

Through its overtures to the BRICS nations, renowned for their diversified and dynamic economies, Saudi Arabia is actively seeking avenues for economic growth and development that extend beyond the confines of its oil-centric focus. This strategic shift aligns with Saudi Arabia's overarching vision of becoming a more economically resilient and diverse nation. It represents a crucial step towards insulating itself from the perils of oil price volatility. However, the Saudi agenda extends far beyond economic diversification. It harbours aspirations of significantly bolstering its global influence. Blessed with vast energy reserves and a strategically pivotal location in the Middle East, it is acutely aware of its potential to play a pivotal role in shaping global energy policies and ensuring regional stability. The prospect of joining the BRICS group provides Saudi Arabia with a high-profile diplomatic platform that can amplify its voice on the international stage and enhance its impact on critical global issues, ranging from energy security to the delicate tapestry of geopolitical stability.

Why Is It Beneficial for BRICS Nations?

The incorporation of Saudi Arabia into the BRICS group brings a multitude of benefits for its member countries, transcending the scope of economic diversification to encompass a transformative energy collaboration. Saudi Arabia, with its abundant energy reserves and strategically vital geopolitical positioning, possesses the potential to provide BRICS members with an uninterrupted and dependable supply of energy resources.

This collaborative energy endeavour promises to significantly enhance the energy security of BRICS nations. It stands as a powerful mitigation measure against the potential risks stemming from geopolitical conflicts or market volatility, guaranteeing a stable energy supply
that not only fuels economic growth but also catalyses industrialisation and technological advancement across these nations. Moreover, such energy collaboration fosters the very essence of sustainable development, a pivotal component in navigating the evolving global energy landscape.

Saudi Arabia's substantial investment potential further augments the advantages for BRICS nations. These diverse investment opportunities can serve as a catalyst, propelling economic growth, infrastructure development, and technological innovation within the BRICS economies. This inflow of capital assumes unparalleled significance as BRICS countries collectively strive to recover from the profound economic disruptions inflicted by the relentless global pandemic, thereby fortifying their economic resilience and resuscitating their post-pandemic prospects.

US Response and Implications for Dollar Dominance

The United States keenly observes Saudi Arabia's expanding ties with the BRICS states. While committed to respecting the principles of national sovereignty and diplomatic autonomy, the US remains vigilantly attuned to the potential implications that this alliance may entail. The emergence of a new economic powerhouse, coupled with the tantalising prospect of an alternative to the long-standing supremacy of the US dollar, could prompt the US to recalibrate its economic and diplomatic strategies in response to these evolving circumstances.

The consequences of these recalibrations are manifold. The United States may find itself compelled to redefine its approach to international trade, investment, and foreign relations, as it holds the prospect of a new currency gaining prominence. Such a scenario could challenge the current dominance of the US dollar, thereby necessitating innovative strategies to safeguard US economic influence and the enduring global status of the dollar.

Benefits to India

From an Indian vantage point, the expanding partnership between Saudi Arabia and the BRICS members offers an abundance of advantages. India, with its ever-expanding energy needs, stands to gain a reliable and steadfast partner in Saudi Arabia to meet its substantial oil requirements. This alignment of interests guarantees a consistent and unwavering energy supply, a quintessential element in sustaining India's expanding economy and satisfying the voracious energy appetite of its expansive population.

Moreover, collaboration with Saudi Arabia on international platforms can yield manifold dividends for India's global influence. As India
In addition to the strategic and diplomatic dividends, the economic implications of this

partnership are diverse.

Saudi Arabia's diverse investment propositions present India with a much-needed stimulus for economic growth. These investments can serve as a catalytic force, driving infrastructure development, stimulating technological innovation, and propelling industrialisation. The infusion of capital is of paramount significance as India, much like other BRICS nations, endeavours to rebound from the profound economic shocks inflicted by the relentless global pandemic, thereby reinforcing its resilience and refreshing its post-pandemic economic trajectory.

Conclusion

The evolving relationship between Saudi Arabia and the BRICS nations represents a narrative of immense intrigue and profound global implications. Saudi Arabia's multifaceted motivations, the abundance of benefits that accrue to BRICS nations, the discerning gaze of the United States, and the potential consequences for the enduring dominance of the US dollar all converge in a complex and captivating possibility.

From India's perspective, this evolving partnership possesses the potential to help in a transformative era of strategic collaboration and sustained economic prosperity. Simultaneously, it contributes to the adjustment of global power dynamics. This rising collaboration underscores the fluid and dynamic nature of international relations, wherein unexpected alliances have the potential to exert a profound influence on global events, ultimately reshaping the course of history.

AFGHANISTAN: A COUNTRY ON THE BRINK

Ojas Gupta

Afghanistan, a nation at the centre of global attention for years, is currently grappling with a multifaceted crisis that threatens to push it into the abyss of collapse. The return of the Taliban in August 2021 marked a significant turning point, leading to a severe humanitarian disaster with millions of Afghans facing acute food insecurity, extreme poverty, and forced displacement. To fully understand the depth of this crisis, this article delves into its various dimensions.

The Humanitarian Crisis

Astonishingly, over 24 million people, representing more than half of the country's population, require immediate humanitarian aid. Among them, 13.1 million individuals are grappling with acute food insecurity, and a staggering 3.2 million children suffer from malnutrition.

The principal factor behind this humanitarian catastrophe is the abrupt cessation of foreign aid. Afghanistan heavily relied on international assistance to maintain itself. With this lifeline cut, the nation's healthcare system has been impacted badly. Numerous hospitals and clinics have been forced to shut down, leaving the remaining ones under-resourced and overwhelmed. The dire consequence is that millions now do not have access to fundamental healthcare services.

The education sector, once a beacon of hope for the nation's youth, has also suffered a significant blow. Many schools have closed, and those that continue to function do so under the shadow of underfunding and a shortage of qualified teachers, depriving millions of children of their right to an education and jeopardising their prospects.

Poverty is rampant in Afghanistan, with the country's GDP per capita being among the lowest globally. Millions of Afghans live below the poverty line, struggling to afford necessities such as food, shelter, and clothing. The Taliban's resurgence has further exacerbated this poverty crisis. The abrupt withdrawal of foreign aid has led to job losses and a substantial reduction in income, plunging numerous families into hardship and uncertainty.

Millions of Afghans have been forced to abandon their homes due to persistent conflict and violence. According to the United Nations, more than 3.5 million people have become internally displaced within Afghanistan's borders, and over 2.6 million have sought refuge in neighbouring countries. The consequences of this displacement can hardly be overstated. Many have not only lost their homes but also their sources of income and belongings. In addition, they face violence, exploitation, and abuse, both within their home country and during their arduous journeys to foreign pastures.

The crisis has had a particularly devastating impact on Afghan women and girls. They are more likely to experience poverty and food insecurity compared to their male counterparts. Furthermore, they face greater barriers to accessing education and healthcare. The restrictions imposed by the Taliban have further restricted their opportunities, with girls now being banned from attending secondary school and women facing prohibitions from working in many professions. This has led to an alarming gender disparity, a very sad situation in this modern era.

Recent Developments

Recent events have further exacerbated the dismal situation in Afghanistan:

- In August 2023, a substantial earthquake with a magnitude of 6.3 struck western Afghanistan, causing casualties and injuries. This earthquake was just the latest in a series of natural disasters.
- In September 2023, the United Nations issued a stark warning, stating that Afghanistan is on the brink of a "hunger catastrophe." The organisation reported that over 23 million people are currently suffering from acute food insecurity, a number that is expected to swell to a staggering 28 million by the year's end.
- In October 2023, the Taliban surprised many by announcing their intention to apply for membership in China's Belt and Road Initiative, a move seen as a desperate attempt to secure economic assistance. This decision highlights the depth of the economic crisis that has choked the nation.

The Uncertain Future

The future of Afghanistan is precariously balanced. The nation faces an array of challenges, including widespread poverty, forced displacement, and ongoing conflict. The Taliban, now in power, must address these issues. However, their ability to do so remains uncertain, and the potential for further instability and suffering looms large.

In my opinion, the international community bears a significant responsibility to assist Afghanistan. While organisations like the United Nations are providing much-needed aid, addressing the root causes of the crisis requires a more concentrated effort. The Taliban, as the de facto ruling power, must also take responsibility for providing necessities, including healthcare and education, to the Afghan population. It is equally crucial that they establish an environment where people can live in peace and security.

The future of Afghanistan hinges on the Taliban's ability to confront the nation's myriad challenges. Failure to do so could result in even more instability and suffering for the Afghan people.

The World Must Not Forget Afghanistan

"If you don't learn from the past, you repeat it."

The world must not forget the plight of Afghanistan. Its people find themselves in a horrific situation, desperately in need of help. Humanitarian aid must continue to flow, and a sustainable resolution to this crisis must be sought. Additionally, the Taliban must be held accountable for the human rights abuses that have been documented. Afghanistan's tragedy must not be erased from our collective memory. The nation requires ongoing support to overcome the brink of collapse and work toward a more promising future.

In summary, Afghanistan's crisis is a monumental challenge that demands compassionate attention from the global community. The humanitarian, economic, and security issues plaguing the nation are deeply interconnected, making the path to recovery even more complex. It is essential to recognise the gravity of the situation and work collectively to help Afghanistan regain its footing and offer its people the prospect of a brighter future.

NAVIGATING A 'DISORDERED WORLD'

Purvi Pandita

The uneven distribution of power often has a ripple effect on international politics. Global dynamics have a consequential effect on the economies of the world. What happens when this power shifts from one region to another? As history recounts, the outcomes of such global power shifts have rarely been peaceful. The economic rise of Germany in the second half of the nineteenth century eventually led to World War I. Similarly, the rise of the United States and the Soviet Union following World War II was the principle cause behind the Cold War. So, the question arises: are the tectonic plates of power shifting from the West to the East? Is the ebb of the Western-led liberal order being replaced by the global rise of Asian states? According to Goldman Sachs, China and India are projected to become the first and third largest economies in the world by 2050, with Asia contributing about sixty per cent to global output. A mere century ago, Asian economies were relatively modest, contributing no more than five per cent to the world's production. This stark contrast reflects the scale of transformation

The 21st century is predominantly characterised by globalisation, where states are heavily interconnected and co-dependent, and 'national' politics transcend beyond traditional geographical boundaries. This interconnectedness has significant implications for the way nations interact and cooperate globally, with international frameworks influencing the dynamics of these interactions. An "order" is an organised group of international institutions that help govern interactions among member states. These rules prescribe the acceptable forms of behaviour and proscribe the unacceptable forms of behaviour. Ironically, these rules are not set in stone for the dominant states who devise them. They are either rewritten or ignored at their convenience. For instance, 'black sites' of the CIA used to interrogate suspects connected to Al-Qaeda were often in violation of international humanitarian law. However, details from the official reports were redacted and the Supreme Court ruled them as 'state secrets', as published by the New York Times.

The most common way to categorise orders is on the basis of polarity and political ideology. The dominance of the United States in the 1990s can be cited as an example of a unipolar order, where the dominant power sets the rules, norms, and standards for other states to follow. Contrary to this, there is a balance of power among the major blocs in a multipolar order. World War II fought between Axis Powers and Allies illustrates multipolarity, as no single state held overwhelming dominance. Multipolarity often leads to a more complex and fluid international environment as different blocs may form alliances to pursue their own interests. On the basis of political ideology, a liberal order stands on the foundation of liberal democratic principles, individual rights and laissez-faire economics. However, there are fundamental flaws in the order which have slowly led to the erosion of Western influence.

As per John J. Mearsheimer, the famous American political scientist, "Liberal policies clash with nationalism over key issues such as sovereignty and national identity. Because nationalism is the most powerful political ideology on the planet, it invariably trumps liberalism whenever the two clash, thus undermining the order at its core." He also states how hyper-globalisation has made the global financial system less stable, leading to recurring financial crises that tend to metamorphose into political problems, thus eroding support for the liberal order.

Having endured two long centuries of British colonialism, navigating a complex partition, and persisting neighbourhood adversities, India's global standing has often been doubted. Yet, India has risen as a prominent global leader. It has mastered global cooperation with a commitment to not hinder the progress of other nations but to thrive simultaneously. The groupings India is a part of, like the QUAD, SAARC, and BRICS, are a testament to the previous statement.

In the realm of international politics, G7 holds a significant position, comprising Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. It has been hailed as the most influential group of countries so far. Even though India is a non-member, it has been invited to attend the G7 summit as a guest country consecutively since 2019. This is because of three reasons. Firstly, G7 cannot disregard India's opinion on global matters because of its rising influence and responsibility to the world. Secondly, despite the rise of both India and China, the world needs a responsible power like India on the world stage. The two nations differ in their attitudes completely. Thirdly, the participation of India in G7 reflects the significance of the Global South to G7. Similarly, G20 has the same framework as G7 but includes thirteen other rising powers. The GDP of these 20 countries contribute to eighty-five per cent of the world's production. The decisions of this grouping reflect the decisions of both the developing and the developed world. Moreover, India hosted the G20 summit in 2023.

China has always been an attractive destination for investors to manufacture their products due to the availability of cheap labour, low production costs, and huge consumer markets. However, the world order is changing. The winds of change have intensified due to global economic instability because of the Wuhan virus, and Russia-Ukraine war-induced supply chain disruptions. In recent years, the low production cost advantage has been declining due to rising inflation, there are simmering trade tensions with the US and the fear of sanctions looms large. As a result, China has started to lose its sheen as a manufacturing destination. The world is adopting the China Plus One strategy, where they are decreasing their sourcing dependence on China. Countries like Taiwan and Vietnam have greatly benefited from this business strategy, and the latter has even increased the production and export of consumer electronics. Multinationals are increasing investment in emerging countries like India due to its low production cost, large domestic market, dynamic Indian diplomacy, and conducive business environment. Additionally, the introduction of programs like Make in India and Production-linked Incentive schemes by the government have driven foreign investment into the economy.

India's soft power extends beyond its economic attractiveness. Our country's rich cultural heritage, diverse traditions, Hindi film industry's global reach, and vibrant art, music, and cuisine contribute to its global appeal. Moreover, India's significant diaspora across the world plays an indispensable role in its soft power projection. From the leadership of the World Bank's top executive and the Vice President of the United States to the Prime Minister of the UK and CEOs of global technology giants like Google and Microsoft, the presence of Indian-origin individuals in powerful positions worldwide exemplifies the substantial influence of the diaspora. According to the World Economic Forum, there are a staggering eighteen million migrants of Indian heritage living across the globe, constituting the world's largest diaspora. Additionally, a study conducted by the Economist revealed that nearly twenty-five people with Indian roots are leading S&P 500 companies, solidifying the diaspora's remarkable prominence.

IS RUPEE EYEING YUAN'S THRONE?

Samarth Shrimal

The changing world order.

Recent geopolitical conversation has hinted towards a change in global power balances. To the layman, this might seem an unfathomable disruption of the status quo and hence, an unviable proposition. However, those who are historically aware may acknowledge and appreciate the shifting power dynamics.

Ray Dalio, in his book 'The Changing World Order', makes a fairly compelling argument on why China is poised to be the next global power. Big Cycles dictate the fate of geopolitics - as one nation's power declines, another's empire stands. The current world order - the American world order - was formed after the Allied victory in World War 2 when the US emerged as the dominant world power. In 1944, the Bretton Woods agreement laid out the new world monetary system and established the dollar as the world's leading reserve currency.

And, so the American regime runs.

However, there are three significant challenges facing the U.S. presently - China's ascension as a global power, the substantial and increasing national debt, and the internal discord stemming from wealth inequality, which has given rise to populism. Although China's global position is largely controversial owing to its internal and external policies, one cannot turn a blind eye to its ambitious initiatives and strides. Ray Dalio identifies eight metrics to gauge an empire's power: education, inventiveness and technology development, competitiveness in global markets, economic output, the share of global trade, military strength, the power of their financial centre for capital markets, and the strength of their currency as the world's reserve currency. China, a global manufacturing hub, serves as the world's backbone, with massive advancements in technology, the Belt and Road Initiative, and its ability to attract global institutional money. In fact, China holds much of America's debt - an aspect that should have wrought grave concerns for the Biden administration. China has emerged as a potent challenger to the United States across a spectrum of dimensions, progressing at an accelerated rate. Should these trends persist, China is poised to outpace the United States in critical aspects that define global dominance or, at the very least, establish itself as a formidable competitor. Of particular relevance is the growing trend of de-dollarization, where nations are reducing their reliance on the US dollar in international financial systems and markets.

The BRICS countries, encompassing Brazil, Russia, India, China, and South Africa are actively taking measures to bypass the US-dominated global trade and financial infrastructure. For instance, they are pursuing arrangements with oil-producing nations like Iran and Saudi Arabia to conduct oil transactions in the Chinese yuan rather than the US dollar. This de-dollarization trend has raised concerns regarding the US dollar's status as the world's primary reserve currency. A telling example of this shift can be seen in the increasing use of the yuan. In 2022, the Chinese renminbi became the fifth most traded currency globally, and the third-largest in facilitating international trade settlements, with over 70% of China-Russia trade settled in yuan and rubles. This underscores China's ascent and the potential restructuring of the global financial order.

Any informed observer would want to supplement this discussion with the growing influence of India and thus, it is in order to discuss the same. The crux of the matter is to understand the dynamic of world power balances between India and China.

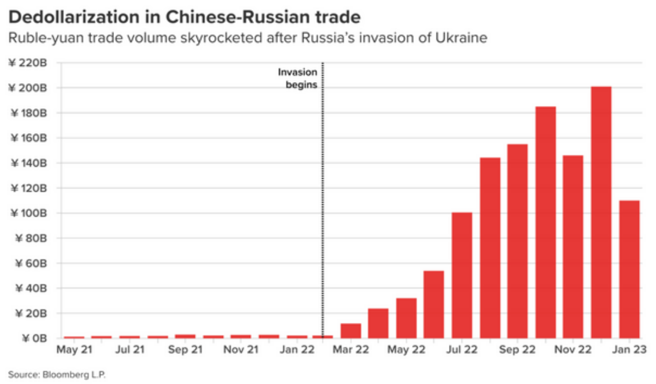
Biggest democracy. Largest population. Third largest army. Nuclear superpower. Technological epicentre. Best digital infrastructure stack. Growing political strength. G20 presidency. Robust foreign investments. Burgeoning trade. Rising middle-class.

India's current avatar points towards immense global influence on all fronts - political, military, financial, economic, cultural and social. In this grand tapestry of global economics, the rupee's stature is on an evident rise. The Reserve Bank of India has granted permission to 18 countries, including Germany, Singapore, Sri Lanka, the UK, Kenya, and others, to engage in bilateral trade using the Indian rupee. Moreover, India has already initiated rupee-based trade with its neighbouring nations, such as Nepal and Bhutan. India's persistent endeavours to encourage the adoption of the rupee in global trade signal a move towards reducing reliance on the US dollar and diversifying currency usage. While there are obstacles to overcome, the combination of increased exports, the potential for full capital account convertibility, and sustained economic growth may pave the way for the rupee to gain broader acceptance on the global stage.

The Triennial Bank Survey of 2022 shows a marginal increase in the share of dollars in daily turnover, but emerging economies are increasingly engaging in non-dollar-denominated trade.

So, de-dollarization is perhaps a looming reality.

Now, the question is - who will take the dollar's position? Chinese yuan or Indian rupee or some other currency? The Chinese yuan seems like the right answer - after all, yuanisation was a term often thrown around when China and Russia experimented with the idea amidst the Russia-Ukraine crisis. Moscow has swiftly escalated its utilisation of the Chinese yuan through two primary methods: increasing the yuan's proportion in Russia's reserves and transitioning to direct ruble-yuan trade, thus bypassing the use of the US dollar as an intermediary currency. China is more than willing to support Russia in this endeavour. Beijing's ultimate objective is to compete with the dominance of the US dollar and promote the internationalisation of the yuan. Russia serves as a critical testing ground, being the first major economy to embrace the yuan in this manner. Given the evident asymmetry in the relationship favouring China, Russia's sense of urgency allows the People's Bank of China to experiment with financial and monetary policies in a



controlled setting, facilitating the yuan's gradual evolution into a more globally recognized currency.

Where does the Indian rupee stand in the de-dollarization saga? India's meteoric economic rise is inevitable, nonetheless, the Indian rupee's ambition to dethrone the dollar or rather yuan's aspirations is far-fetched. India has all the growth cards in its hands but simply does not have the economic size to entirely influence global dealings. That China can do - given its GDP. In all possibility, if de-dollarization were to be fast-tracked, it would be a combined effort of the developing world to put forth its interests and establish a regime which reduces the undue influence the West has had for too long.

The Conundrums of Modern Economics

UNIVERSAL BASIC INCOME: BANE OR BOON?

Purvi Pandita

Imagine receiving a thousand rupees from the government for 'free' every month. Now, if this concept is extended to a macroeconomic level, it would be deemed an economic policy decision known as "universal basic income", one that is being seriously considered in the global economy today. UBI entails unconditional cash transfers from the government to all adult citizens regardless of their employment status or income level. The idea has gained momentum because of a rapid increase in automation in several sectors, including manufacturing. The presence of self-checkout counters in supermarket stores is such an example. Earlier, there would be a staff employee at the counter scanning the barcode of the products so that we could pay the bill. But now, automation has eliminated that job. The notion that artificial intelligence will eventually lead to unemployment and people will lose their jobs is what has given birth to this economic proposition. Job losses have been estimated to be so high in the future that people would need assistance from such government schemes to maintain a basic standard of living.

The essence of the idea of a universal basic income – an unconditional cash transfer that is given to all. By not imposing eligibility criteria, except for factors like citizenship, established residency, and age (such as being above 18 years old), such a scheme avoids the contentious matter of exclusion and inclusion errors that are often present in needs-based targeting systems. Currently, no country has a UBI in place, although there have been small-scale pilots. Since the concept of universal basic income has never been tested on a large scale, nearly all the arguments for and against it are largely based on positive and negative assumptions.

Universal basic income is associated with the alleviation and eradication of poverty since everyone would be provided with enough money to bear their expenses and afford a decent standard of living. People might not feel compelled to take up jobs that pay paltry salaries. They could chase their passions and pursue their hobbies, which is expected to positively impact the overall level of productivity, happiness, and innovation in the economy. It may improve the quality of life for people belonging to the lower economic strata since they would not be forced into child labour to sustain themselves. Since it is a universal scheme, it is believed that the adoption of universal basic income would cut through red tape and reduce bureaucratic involvement. Therefore, it would be inexpensive to administer and regulate as compared to other welfare and unemployment benefit schemes, in which it is extremely difficult to ensure that the money is not being syphoned off and trickling down to the right destination.

However, evaluating the rationality of any policy decision involves considering both sides of the coin. It is also believed that free money would make people lazy and would not want to work, contrary to the assumption of increased happiness and productivity. If people stop working, how would the nation progress? Secondly, the distribution of free money would increase the disposable income of the citizens, which leads to a rise in consumer spending. If the average propensity to consume increases, the aggregate demand in an economy would also increase. If the supply chain does not allow for increased production to cope with the excess demand, it would create inflationary pressure and lead to a rise in prices. Increased prices would make goods unaffordable leading to a fall in the value of the basic income. Another negative assumption to be considered is overdependence on free money from the government. If people become accustomed to receiving money from the government, the economy might crash when such unilateral transfers stop, if the citizens are not self-sustained.

The most important question that pops into our mind is: where will the money come from? To arrive at an estimate of the cost of this scheme, let us assume a modest monthly payment of INR 1,500. As of 2021, the estimated population of India is approximately 1.4 billion people. To calculate the total cost of UBI, the desired amount of basic income and the frequency of transfers need to be ascertained. The estimated cost of UBI can be calculated as follows:

- *Total monthly cost = Monthly payment per person X Proportion of population above the age of 18 years*
- *Total monthly cost = INR 1,500 X 60% of 1.4 billion = INR 1.26 trillion*
- *(Note: It is assumed that 60% of the population is above the age of 18 years since India is a fairly young country.)*
- *To estimate the annual cost, we multiply the monthly cost by 12*
- *Annual cost = Total monthly cost X 12*
- *Annual cost = INR 1.26 trillion X 12 = INR 15.12 trillion*
- *GDP of India as of 2021 = US $3.19 trillion (approximately INR 263.50676 trillion)*
- *The proportion of the UBI scheme as a percentage of GDP is ~ 6%*

However, this is only a rough estimate of the cost of the UBI scheme. According to contrary beliefs, the cost is expected to be much less due to the increased amount of taxes that will be returned by the richer sections of the economy. Hence, the aftereffect of investing in the UBI scheme can be inferred by performing a multivariate analysis taking into account various factors like marginal propensity to consume, tax rate, and disposable income among others.

However, financing such schemes would divert government spending from other productive avenues like raising capital investment in infrastructure, education, and healthcare as well as cause an increase in the tax rate in the progressive taxation system. The same money could be invested in other channels to improve the quality of public services or increase the production capacity of the economy. The opportunity cost of the universal basic income policy is considerably high. As per Keynesian economics, a comparison between transfer payments and government expenditure multipliers can be used to derive conclusions. The transfer payment multiplier is generally expected to be less than the government expenditure multiplier. The intuition behind it is that the change in transfers enters spending decisions through consumption which depends on the marginal propensity to consume. In contrast, the government expenditure multiplier affects spending decisions directly, thus leading to a higher multiplier. Such spending directly contributes to economic activity, job creation, and overall output. It is an injection into the economy that does not have to be tied to the marginal propensity to consume or any indirect source before impacting the economy. In considering the universal basic income scheme as a solution to compensate for job losses caused by the rise of artificial intelligence and automation, it is crucial to recognize its limitations in terms of long-term sustainability. While technological advancements may result in certain job roles becoming obsolete, they also create new opportunities and demand for skills in emerging fields. In this rapidly evolving landscape, it becomes imperative for individuals to adapt by staying updated with new technologies and acquiring new skills. Emphasising continuous learning and reskilling can better equip individuals to navigate the changing job market and secure meaningful employment in the future.

DOUGHNUT ECONOMICS: MEET THE DOUGHNUT

Udita Goel

The traditional approach to economic development has led to several negative consequences, including environmental degradation, social inequality, and economic instability. According to the Global Footprint Network, humanity currently consumes resources and produces waste at a rate 1.7 times higher than what the planet can sustainably regenerate. This unsustainable consumption and production pattern has led to climate change, loss of biodiversity, and depletion of natural resources.

Moreover, the benefits of economic growth have been concentrated in the hands of a few, leading to increasing inequality. According to Oxfam, the wealth of the world's billionaires increased by $3.9 trillion between March and December 2020, while the pandemic pushed millions into poverty. In addition, the focus on GDP growth has led to economic instability, as seen in the 2008 financial crisis and the recent COVID-19 pandemic.

Doughnut Economics is a relatively new concept in economics that challenges the traditional growth-oriented approach to economic development. Developed by economist Kate Raworth, this theory advocates for a balance between human needs and planetary boundaries. The "doughnut" metaphor represents this balance - the hole in the centre of the doughnut represents the shortfalls in meeting human needs, while the outer ring represents the ecological boundaries of our planet.

The Doughnut model is a visual representation of the Doughnut Economics concept. The inner ring of the Doughnut represents the minimum social standards that must be met to ensure a good quality of life for all people, including access to food, water, energy, healthcare, education, and political voice. The outer ring represents the planetary boundaries that must be respected to ensure a safe and stable environment for future generations, including climate change, ocean acidification, ozone depletion, and loss of biodiversity.

The area between the two rings represents the "safe and just space for humanity" - a space where human needs are met without exceeding the planetary boundaries. The aim of Doughnut Economics is to ensure that all people have access to the resources they need to live a good life, while also protecting the natural systems that support life on the planet.

Doughnut Economics is built on seven principles that guide economic thinking towards a sustainable and just future:

- ***The economy is a subset of society and the environment:*** The economy cannot operate in isolation from society and the environment. Economic decisions must consider the impact on both people and the planet.
- ***Distributive justice and equity:*** The benefits of economic development must be distributed equitably to all members of society, and not just a few.
- ***Regenerative and restorative:*** The economy must be designed to restore and regenerate the natural systems that support life on the planet, rather than depleting them.
- ***Circular and distributive:*** The economy must be designed to operate in a circular and distributive manner, with resources and wealth flowing back into the system, rather than being extracted and hoarded.
- ***Collaborative and empathetic:*** The economy must be built on collaboration and empathy, with a focus on cooperation and mutual benefit, rather than competition and individual gain.
- ***Adaptive and resilient:*** The economy must be designed to be adaptive and resilient, with the ability to respond to changing circumstances and avoid collapse.
- ***Holistic and integrative:*** The economy must be viewed in a holistic and integrative manner, recognising the interconnectedness of social, economic, and environmental systems.

Doughnut economics can be a powerful tool to address the environmental crisis by providing a framework for sustainable development that respects the limits of the planet's resources. The model proposes that economic growth must be balanced with social justice and environmental sustainability, and provides a roadmap for achieving this balance.

One of the key components of this model is the identification of the ecological ceiling, which represents the planetary boundaries that should not be exceeded. These boundaries include climate change, biodiversity loss, land use, freshwater use, and chemical pollution. By setting clear limits on resource use, doughnut economics can help to prevent further environmental degradation and promote sustainable resource management.

In addition to identifying the ecological ceiling, doughnut economics also emphasises the need for regenerative practices that restore and protect the natural environment. For example, regenerative agriculture practices can improve soil health, sequester carbon, and reduce the need for synthetic fertilisers and pesticides. Other regenerative practices include sustainable forestry, regenerative fishing, and circular economy models that reduce waste and promote resource reuse.

Moreover, doughnut economics proposes a distributive economy that ensures that the benefits of economic growth are shared equitably among all members of society. This is particularly important in the context of environmental justice, where marginalised communities often bear the brunt of environmental pollution and degradation. By ensuring that everyone has access to basic necessities like food, water, healthcare, and education, doughnut economics can help to reduce poverty and promote social justice.

Several cities around the world have already adopted the doughnut economics model as a framework for sustainable development. For example, the city of Amsterdam has integrated the doughnut model into its long-term planning process, and the city of Copenhagen has launched a doughnut-shaped sustainability plan that aims to become carbon-neutral by 2025. These examples show the practicality and efficiency of this model as a tool for addressing the environmental crisis.

Another example of the application of doughnut economics is in the fashion industry, one of the most polluting industries in the world, with significant social and environmental impacts. Several fashion brands have started to adopt doughnut principles in their operations to create a more sustainable and just industry.

One of the major impacts of doughnut economics is the shift from a growth-based economy to a regenerative and distributive economy. The traditional economic model has resulted in increasing inequality and environmental degradation. Doughnut economics, on the other hand, proposes a model that ensures that every person has access to the basic necessities of life while staying within the planetary boundaries.

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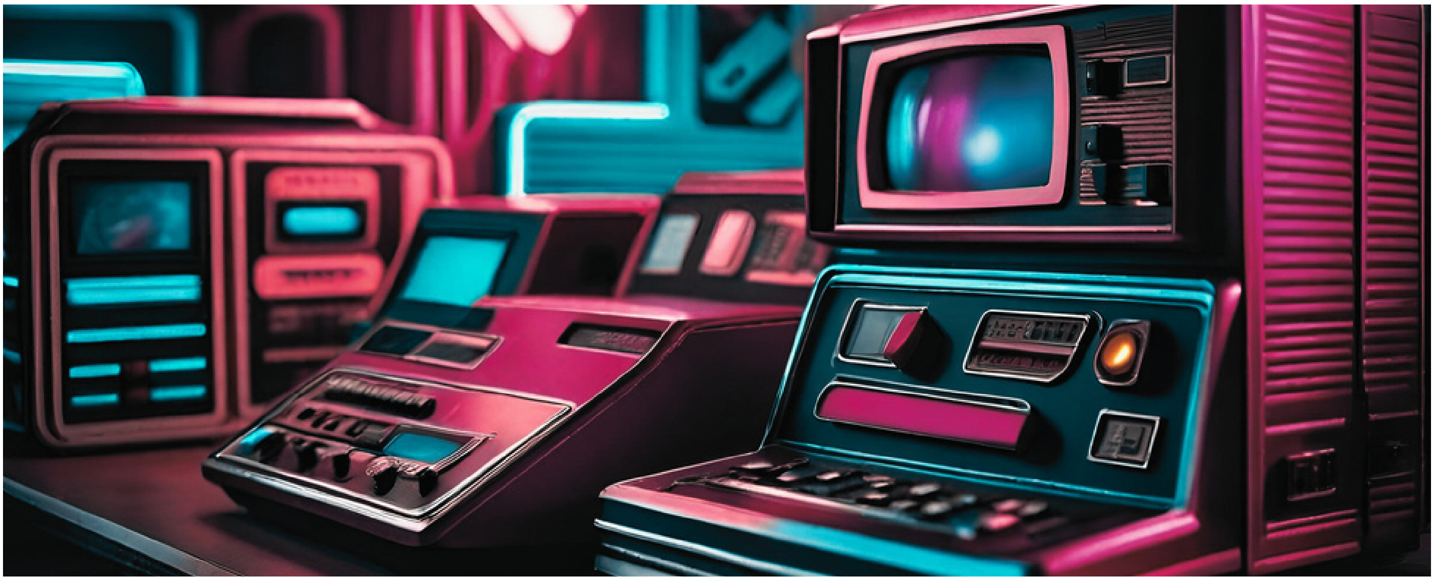
Implementing Doughnut Economics necessitates a reevaluation of our approach to economic development. This requires recalibrating our metrics of success to include not only economic indicators but also social and environmental ones. Rather than fixating on GDP growth alone, we must redefine prosperity in terms of the well-being of both individuals and the planet. Central to this paradigm shift is the transition to a regenerative and restorative economy, where waste is minimised, and resources are efficiently conserved and reused, ultimately fostering a circular economy. Equally important is ensuring the fair and equitable distribution of the benefits of economic development to all members of society.

This framework holds the potential to revolutionise our perspective on economic development and pave the way for a more promising and inclusive future for all.



THE DILEMMA OF HOW TO PRODUCE

Udit Bagaria

It has become an irreplaceable notion that technology is necessary for economic development and for improving the national income but deep down it disregards the loss of employment resulting from its adoption. The pace of adoption of new technologies has increased substantially but care needs to be taken to address this problem of layoffs arising out of it. Mercenary corporations adopt disrupting technologies to increase production efficiencies and gain competitive advantage over other companies but they overlook the disruption they cause to the livelihood of people.

We are living in the world of Artificial Intelligence and Machine Learning where all the companies in every industry be it steel, defence, automobile, FMCG and IT are spending millions and billions to enhance their production processes in the name of improved consumer welfare and improved standard of living. However, the subsequent layoffs of the workforce due to automation and the problem of reallocation leads to the question - do we really need new technologies?

This dilemma has often perplexed/baffled many economists and policy-makers with theories and research being undertaken to analyse past data and establish a relation between the two variables. Preliminary research findings suggest that though the displacement of jobs depends upon the size of the industrial sector and the service sector in the economy, technological upgrades lead to sudden demand shocks in the job market in all cases as an inevitable consequence. The research established that the employment level normalises after a few years due to the replacement of old jobs with new ones, there has been no solution to the ripples in the job market created because of the assimilation of production efficiencies through automation.

Structural Efficiencies

No country, whether developed or developing, can live free from this tradeoff between technology and jobs. However, the magnitude of the impact can vary depending upon the unique job market structure of every country.

Structural efficiencies in the labour market play a major role in the level of disruption. For countries with high labour efficiency, the workforce that is laid off gets employed under new roles created due to the new technology adoption provided the workers are skilled enough to undertake roles that require higher technical capabilities. For countries with inefficient labour mechanisms and a high level of unskilled labour, the adoption of new technologies often results in a huge shift of production activities from labour-based to capital-based production and the laid-off labour force is unable to shift to new jobs due to problems of reallocation and lack of skill. The negative impact on the unskilled labour force is generally greater than that on the skilled workers due to the increased skills requirement for the new jobs.

In the past few decades, we have witnessed greater job losses in the industrial and agricultural sectors than in the service sector because of a wider degree of automation in these sectors that replaced routine jobs. However, the technological developments in this decade pose an equal threat to jobs in all sectors, and even the jobs that were previously unimaginable to be performed without humans have been automated today. This has set an example that no job is safe from automation and has amplified the need to acquire new skills and knowledge to keep in touch with the changing technological landscape. The unskilled workforce faces the highest risk of job displacement and hence requires maximum attention, especially in the rural regions.

Job displacement tends to have a negative effect throughout the entire economy due to decreased consumer spending and subsequently lower economic output while at the same time giving rise to higher income disparities. The main purpose of technological improvement - an increase in public welfare, is lost because the increase in production efficiency and output is negated by the decrease in consumer demand due to loss of income.

The issue is multi-faceted and an ideal solution can be to strike a balance between technological innovations and jobs. Some economists have suggested that the tradeoff impact can be minimised by allocating production to labour and machines in such a way as to achieve maximum output at the full employment level. However, this ideal scenario is better established on paper than in real life since companies don't stop their production at full employment level as they can easily increase production efficiencies by investing in new technologies. Hence, the more realistic solution is to improve the labour market structure, provide social security nets, and upskill the entire workforce to easily shift to new jobs and have the requisite skills to complement the technology adequately. The shift in technology is inevitable and it only suits us that we focus on what is of more importance-upskilling.

Current Scenario

The recent developments in the AI industry, most notably - Chat GPT, have posed serious questions about the future of various job categories. The World Economic Forum estimated that AI developments will wipe out 85 million jobs worldwide by 2025 but on the bright side, it will also create 97 million new jobs in technological sectors. However, the major concern here is the lack of knowledge and abilities among the workforce to cater to these job requirements. The employees, on their own, will pay no attention to the impending disaster until the effects are actually felt. Instead, the problem requires the concerted efforts of all companies and the different governments to prepare the workforce for the challenges ahead. Policy initiatives at the national and international levels for investment in the upskilling of the workforce along with the joint measures taken by the companies to encourage and incentivise their workforce to take part in such programmes will be crucial in the near future. Countries with a huge working population and a high percentage of low-skilled labour (generally underdeveloped economies) are more susceptible to job replacements and hence must put greater focus on this rapidly developing landscape. At the same time, countries must be alert towards the job displacements happening and put in necessary measures to cushion the impact.

IS THE WORLD DROWNING IN DEBT?

Prashasti Jain

Tick, tick, tick... a sound we all recognise, much like the steady beat of a wall clock. But here, it's no timekeeper; it's an alarming sentinel. Imagine a clock that does not measure hours but tracks fiscal urgency by displaying the increasing national debt, both domestic and foreign, every second. Here we are talking about the world debt clock, which shows the real-time country-wise updates in the national debt along with its GDP, public debt to GDP ratio and external debt to GDP ratio.

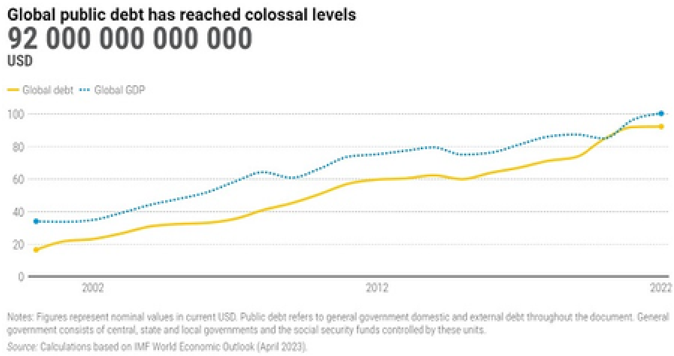
What is National Debt?

The national debt is a significant economic indicator and can reflect a country's fiscal health. It is the total amount of money that a country's government owes to external creditors and domestic lenders and is often referred to as government debt or sovereign debt. Governments borrow by issuing various types of debt instruments, such as bonds, Treasury bills and loans to cover budget deficits, fund public projects, finance operations, and address economic needs. However, when the public debt increases excessively or too quickly, it can become a hefty burden.

Why is the National Debt Soaring?

The world's growing debt is the result of simple math, each year there is a mismatch between spending and revenues. The developing world is currently experiencing this.

Public debt has skyrocketed, mostly as a result of two things. First, governments' efforts to fend off the effects of cascading crises on development have resulted in an increase in their financial needs. These include the COVID-19 epidemic, the housing crisis, and climate change, among others. Second, access to financing for developing nations is insufficient and expensive due to an unequal international financial architecture, where the borrowing cost is high for developing nations and massive variation in countries's access to liquidity in times of crisis prevails. As a result, since 2000, the total amount of public debt has multiplied more than five times, clearly outperforming the global GDP, which tripled over the same period.



What is it costing us?

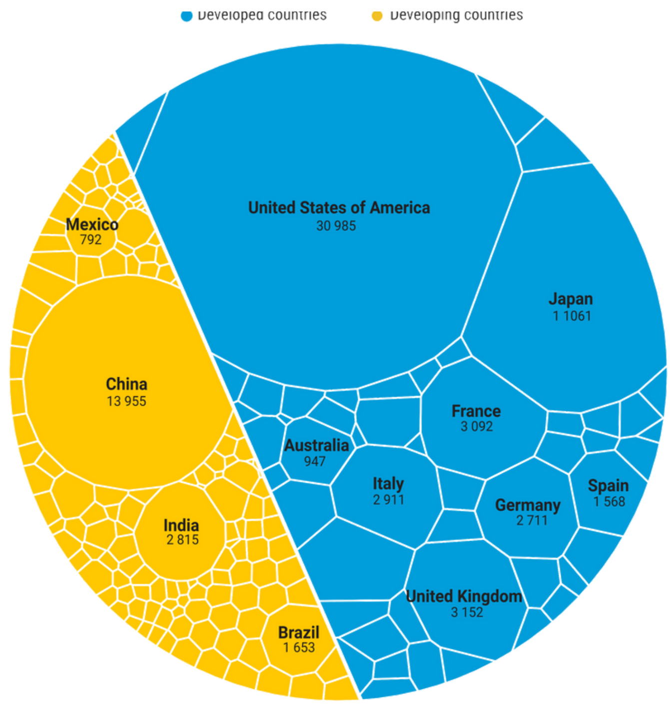
Nations are confronted with the daunting decision of either repaying their debt or prioritising the well-being of their citizens. Presently, 3.3 billion individuals reside in countries where funds allocated for interest outweigh investments in education and healthcare. The burden of debt hinders both the welfare of people and the health of the planet, disrupting the path to prosperity. The number of countries with high levels of debt has risen dramatically, from 22 in 2011 to 59 in 2022. However, public debt has risen faster in emerging countries than in rich countries over the last decade.

When developing countries borrow money, they have to pay substantially higher interest rates than wealthy countries, even before accounting for the exchange rate swings. African countries borrow at four times the rate of the United States and eight times the rate of Germany. In Africa, the amount spent on interest payments exceeds the amount spent on education or health. Asia and Oceania's developing countries (except China) are dedicating more dollars to interest payments than to health. Similarly, developing countries in Latin America and the Caribbean are spending more money on interest payments than on investment. High borrowing prices make it harder for poor countries to fund vital investments, further undermining debt sustainability and progress towards sustainable development.

If a government raises its national debt to a level that the market considers excessive, it will be forced to raise interest payments in order to find lenders. Banks do not need to lend to businesses to generate a profit because they can rely on a high return from a safe source. When banks are less interested in lending, interest rates for all borrowers rise. High-interest rates on loans raise business costs while decreasing the return on investment backed by debt. Businesses cease to expand in this case, and unemployment rises. When interest rates rise, the cost of mortgages on properties rises, as do rents. The rising cost of real estate causes firms to raise their prices in order to stay profitable. This, in turn, raises the cost of living and leads to inflation without economic development. A workforce facing rising living costs will seek better wages. This raises corporate costs and the price of goods, thus fueling inflation. It doesn't help that firms tend to minimize costs through employee compensation. Businesses will eventually be pressed to the verge of insolvency or will shift production elsewhere to save their profits.

ALMOST 30% OF GLOBAL PUBLIC DEBT IS OWED BY DEVELOPING COUNTRIES

Public debt by country in 2022 (USD billion)



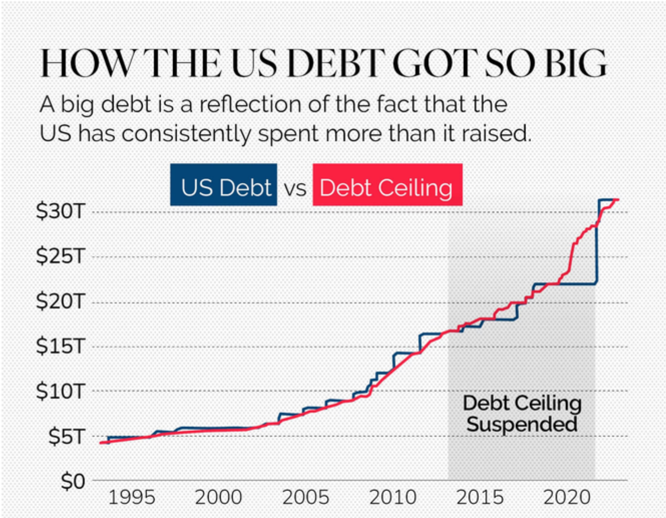
Source: UN Global Crisis Response Group calculations based on IMF World Economic Outlook (April 2023).

How did the US Debt get so Big?

A similar situation is faced by the world's largest economy, the United States, with a GDP of over $27 trillion. But, as a matter of fact, it also faces a huge debt challenge, with its debt reaching almost $32.5 trillion. This huge sum, the world's highest national debt, reflects years of big expenditure that has been significantly higher than what the US government has earned. The US Federal Government borrows money to cover its budget deficit. Since 2001, the budget deficit has averaged $1 trillion each year. The government borrows through issuing debt securities to investors, and a considerable portion of the money is maintained by the US government for social security programs such as Medicare, federal pensions, and so on. The government and Congress decide on taxation and expenditure, while the US Treasury Department borrows. With the enactment of the second Liberty Bond Act in 1917, the President was granted the authority to withdraw funds without the permission of absent legislators while also imposing a debt cap that could only be raised with the approval of Congress.

The current debt limitation model was established in 1939 when several borrowing ceilings for bonds were merged into a single debt ceiling of $45 billion. The US government has faced the possibility of exceeding the debt limit several times, and Congress has acted 78 times since 1960 to either permanently raise, temporarily extend, or change the definition of the debt ceiling. The United States reached the set debt ceiling level of $31.4 trillion in January 2023, and the Treasury launched the extraordinary measures procedure to allow the government to fulfil expenses.

On May 31, the House of Representatives passed the bill to suspend the US' current debt ceiling through January 1, 2025, with majority support from both Democrats and Republicans. US debt is expected to grow to almost 180% of GDP in 2053. This surge is driven mainly by three factors; demographics, rising healthcare costs and inadequate revenue. America's demographic shift, with 10,000 people turning 65 daily by 2030, requires financial preparation for a longer retirement and increased pressure on the federal budget. Healthcare is crucial for the nation's fiscal and economic future, accounting for nearly one-fifth of the economy and the second fastest-growing budget part. The US healthcare system is expensive but does not provide better health outcomes.



Improving the system's performance will improve Americans' lives and stabilise the fiscal and economic outlook. The U.S. tax code fails to fund promises due to insufficient revenue to cover spending, causing annual deficits and increasing the national debt balance. America's strength lies in its commitment to a better future for generations to come. However, the growing debt is hindering progress, causing challenges like inequality, healthcare, climate change, education, infrastructure, and security threats. Improper budgeting is unfair to future generations, who will inherit the debt.

What can be done to tackle the soaring national debt?

Amidst the pandemic, public debt reached unprecedented levels, surpassing the total global economic output. Presently, as government debt remains high, the combination of increasing interest rates and a robust US dollar is contributing to higher interest expenses. Consequently, this is putting pressure on economic growth, which is amplifying the potential risks to financial stability. Spending reductions are more likely in advanced economies to lower debt ratios. The likelihood of success also rises when fiscal consolidation is backed up by structural reforms that promote growth and sound institutional foundations. Fiscal consolidation and structural reforms can reduce debt ratios, but they may not be enough for countries in debt distress or facing increased rollover risks. Debt restructuring, a complex process involving domestic and foreign creditors, can be necessary when combined with fiscal consolidation. However, it can incur significant economic costs, reputational risks, and coordination challenges. Combining these measures can significantly reduce debt ratios, reaching 8 percentage points or more in emerging markets and low-income countries after 5 years. Different nations have employed a range of approaches at different points in time, with varying levels of effectiveness. However, there is no universal solution for debt reduction that guarantees equal success for all countries under all circumstances. Our leaders should take advantage of the numerous workable solutions to reduce deficits and enhance our outlook for the next generation in order to build a sustainable fiscal future that will contribute to economic growth and prosperity in the decades to come.

BEYOND RHETORIC: PROMISES, PERILS, AND POLICY TRADE-OFFS

Gaurangi Agarwal

Populism has emerged as a powerful force in today's political landscape. It has managed to captivate the hearts and minds of citizens across the globe, harnessing the collective frustrations and grievances of diverse populations, while simultaneously presenting substantial challenges to the formulation of effective economic policies. At the heart of this conundrum lies the tension between populist agendas, fiscal sustainability, and long-term economic stability. As governments around the world grapple with the intricacies of this phenomenon, it becomes increasingly crucial to dissect and analyse both the promises and potential pitfalls that populism offers, and to delve into the complex trade-offs it necessitates within the realm of economic policy.

The Populist Duality - Promise and Perils

Populism, with its charismatic leaders and impassioned rhetoric, often promises swift solutions to complex economic problems. It taps into the frustrations and grievances of the general public, appealing to their desire for change and the restoration of power to the "people." However, beneath the surface lies the challenge of translating these promises into workable economic policies that deliver sustainable growth and prosperity.

One of the key perils of populism is its tendency to prioritise short-term gains over long-term economic stability. Populist agendas, driven by the need for immediate results to maintain popular support, can undermine fiscal discipline and sustainability. Policies that focus solely on redistributive measures or short-term stimulus packages without considering the long-term consequences can have adverse effects on economic stability, leading to inflation, soaring public debt, and erosion of investor confidence.

The impact of populism on economic policy-making is particularly evident in the tensions it creates between popular demands and the need for fiscal prudence. Populist agendas often advocate for expanding public spending and social programs, which can be appealing to citizens facing economic hardship. However, the question of how to pay for these promises becomes a significant challenge. Increasing public spending without a sustainable revenue source can strain public finances and lead to deficits, debt accumulation, and potential austerity measures in the future.

Moreover, populism often thrives on protectionism and anti-globalisation sentiments, promising to shield domestic industries and workers from the perceived negative effects of globalisation. Such measures may resonate with specific segments of the population, particularly those who have experienced economic dislocation or job displacement due to international competition. They can hinder long-term economic growth and competitiveness. Limiting trade and foreign investments can reduce access to global markets, hampering innovation, and preventing economies from reaching their full potential.

The Balancing Act

Finding the right balance between meeting popular demands and ensuring sustainable economic policies requires policymakers to make crucial trade-offs. Striking a balance means avoiding the temptation to rely solely on short-term solutions or populist rhetoric that may undermine long-term economic stability. It entails prioritising investments in education, innovation and infrastructure, and creating an enabling environment for businesses to thrive, rather than focusing solely on immediate job creation or income distribution.

Furthermore, the craft of effective economic policy-making particularly when confronting the influence of populist tendencies demands transparent communication and evidence-based decision-making. Policymakers must articulate the potential trade-offs, acknowledging that addressing complex economic challenges requires difficult choices. Offering a clear and honest depiction of the challenges at hand, engaging in meaningful dialogue with citizens, highlighting the costs and benefits of various policy options, and ensuring that decisions align with long-term economic priorities can help enhance public understanding, and ensure that economic policies are constructed with a focus on the nation's long-term well-being.

In conclusion, populism undoubtedly poses a formidable challenge to economic policy-making, offering a mixed bag of promises and perils. While it can superficially draw attention to pressing societal issues and seem to amplify the voice of the people, a deeper analysis reveals that its impact on economic policies demands vigilant scrutiny and unwavering dedication to long-term economic stability. Striking a balance between the seductive allure of populism, the imperative of fiscal sustainability, and the preservation of long-term economic priorities necessitates difficult trade-offs. Succumbing to the short-term fixes often championed by populist leaders risks undermining the very foundations of economic prosperity. It is imperative for governments to unapologetically prioritise evidence-based decision-making, transparent communication, and the implementation of sustainable policy measures to effectively counteract the complexities of populism, steering economies toward a path of genuine, enduring growth and inclusive development.

UNIVERSAL BASIC INCOME: A PATH TO ECONOMIC EMPOWERMENT OR A DANGEROUS UTOPIA?

Ujjwal Goel

Universal Basic Income (UBI) is a concept that has been gaining increasing attention in recent years, especially with the onset of the COVID-19 pandemic; the idea is to provide a guaranteed income to every citizen, regardless of their employment status or income level. Proponents argue that it could be an effective solution to the growing income inequality and poverty in many countries; critics, however, say that it could be too expensive to implement and may discourage people from working.

The primary advantage of UBI is that it can reduce poverty and income inequality; studies have shown that UBI can help lift people out of poverty and provide them with financial security. Finland launched a two-year UBI experiment in 2017, providing €560/month to a group of unemployed individuals; the results showed that participants reported improved well-being and mental health and increased job search and training activities; it also found that recipients were more likely to find work than those who did not receive UBI. A study conducted in India (2021) found that a UBI of even a meagre ₹20,000/year could lift 33 million people out of poverty. Experts also suggest that UBI could provide a more streamlined welfare system that is less bureaucratic, and more efficient with relatively less corruption. For example, Iran introduced a UBI program to replace energy subsidies with direct cash transfers to citizens; this reduced administrative costs and minimised leakage in the subsidy system.

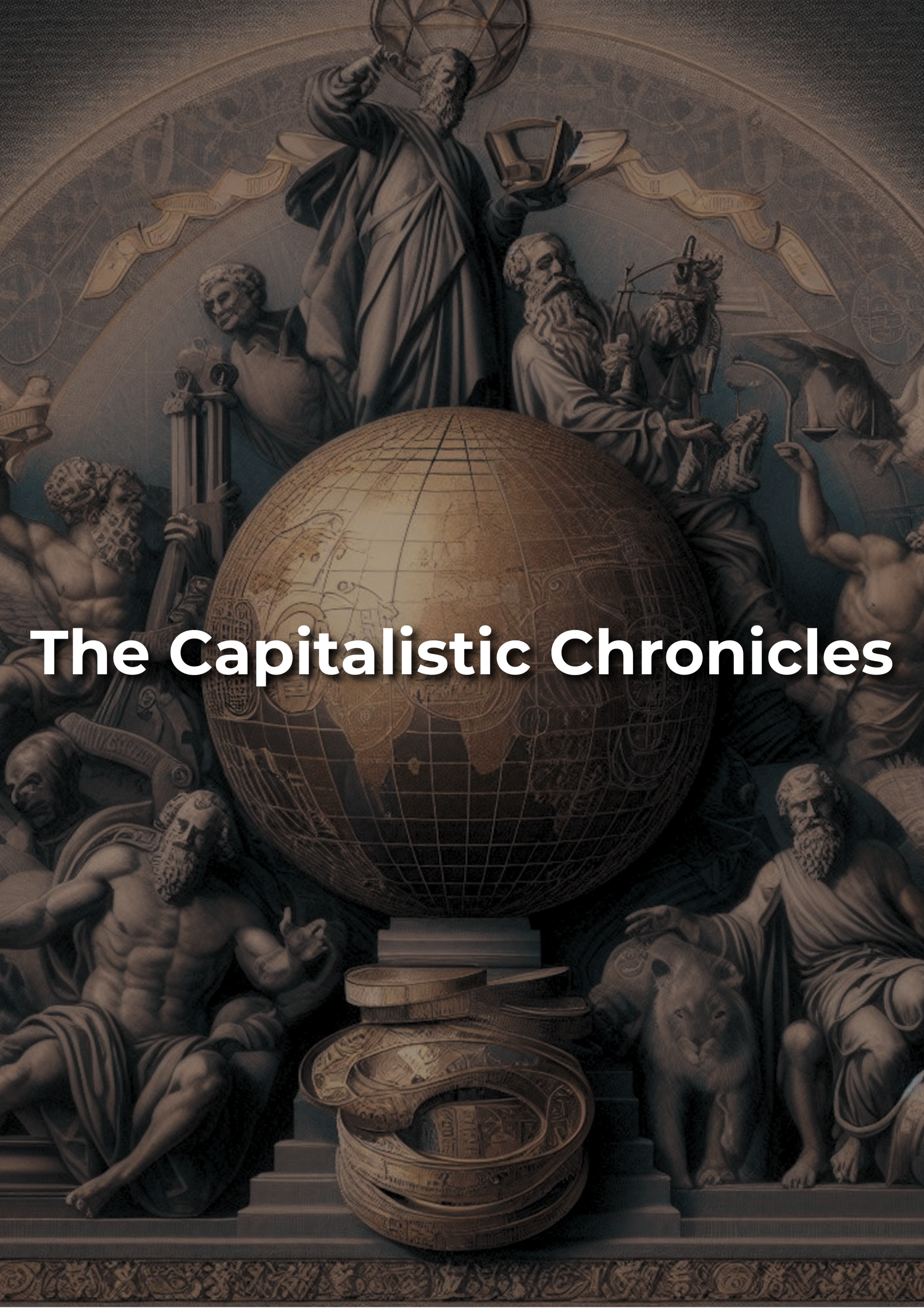
Another advantage of UBI is that it could provide a safety net for workers in industries vulnerable to automation. With the rise of automation and artificial intelligence, many jobs are at risk of becoming obsolete; UBI provisions will see individuals having a basic income to cover their basic needs, allowing them to focus on retraining, reskilling, and pursuing new avenues, fostering a more flexible and adaptable workforce that is better equipped to meet the demands of a rapidly changing labour market.

Furthermore, UBI can also encourage entrepreneurship and innovation, as individuals will have the financial stability to take risks and start their businesses without fearing financial ruin. Madhya Pradesh's UBI pilot program suggested that UBI can encourage entrepreneurship and innovation. A study by the Roosevelt Institute found that UBI could create up to 4.6 million new jobs and increase GDP by $2.5 trillion over 10 years (US).

However, there are also several concerns about UBI. One of the main criticisms is that it could be too expensive to implement. Providing a guaranteed income to every citizen would require significant funding, and it is unclear where this would come from. While some argue for reducing existing social welfare programs, others suggest new sources of revenue, such as a wealth tax or carbon tax; the reality is that the funding sources for UBI are unclear and inadequate, and there is a need for further research and exploration on this issue. In countries with high levels of debt, such as Japan, implementing a UBI program could exacerbate existing fiscal challenges.

Another concern is that UBI could lead to inflation. If everyone has a guaranteed income, prices could rise because of increased demand for goods and services; this could offset the benefits of UBI, as people would need to spend more money to purchase the same goods and services they were able to afford previously. However, recent evidence suggests that the impact of UBI on inflation is likely to be minimal. Several studies have looked at the impact of cash transfers on inflation in developing countries, where they are often used as a form of social assistance. These studies have found that while there may be a short-term increase in prices, the impact is typically small and short-lived. One study, for example, looked at the impact of cash transfers on inflation in Ecuador. The study found that while there was a slight increase in prices immediately following the cash transfer, the impact was short-lived, and prices quickly returned to their previous level.

Despite these concerns, UBI has seen some implementation with varying degrees of success. In addition to Finland’s experiment, UBI has been implemented in Alaska, where residents receive an annual dividend from the state oil revenue. In 2016, the Swiss government held a referendum on UBI, which was ultimately rejected by voters. However, the referendum sparked a global conversation. In the United States, several pilot programs have been launched in recent years. In 2019, Stockton, California launched a UBI pilot program, providing $500/month to 125 residents for 18 months. Preliminary results showed that the program led to an increase in full-time employment and a decrease in income volatility. In addition, a study by the Economic Security Project found that a $1,000 per month UBI could reduce poverty by 43% and boost the economy by $2.5 trillion over 10 years (US). The implementation of UBI requires careful consideration and planning. It is crucial to ensure that funding sources are sustainable and that the program is designed to target those in need. More Pilot programs and studies can help provide insights into the effectiveness of UBI and inform policymaking. In conclusion, UBI is a concept that has the potential to address several pressing social and economic issues, such as income inequality, poverty, and the impact of automation on the workforce. While there are concerns about the cost and potential drawbacks of UBI, evidence from pilot programs and studies suggests that it could be an effective solution. As the world continues to grapple with the economic impact of the COVID-19 pandemic, UBI may become an even more pressing issue, and it will be paramount to investigate its potential benefits and drawbacks.


The Capitalistic Chronicles

ADIDAS VS PUMA: BRAWL BETWEEN BROTHERS

Rishabh Lakhwani

The sportswear business is rife with rivalries. But a peculiar one was not present at the outset and developed unexpectedly over its history to become one of the most ferocious in the sector: Adidas vs. Puma, Rudolf Dassler and his brother Adolf were born in Germany in 1898 and 1900, respectively.

The Dassler brothers weren't always the sworn enemies they turned into over time. The two brothers collaborated on a pair of trainers in the convenience of their mother's laundry room. The Dassler brothers founded Gebrüder Dassler, sometimes known as Geda, their firm in 1919 to create a novel type of athletic shoe. The Geda brand had 12 workers by 1927, and the brothers eventually moved out of the laundry room. The brothers' landmark success came in the 1936 Berlin Olympics, where the competitors they provided with athletic shoes won five silver, three bronze and seven gold medals.

What led the brothers to end their ties?

As the Second World War raged on, Geda transformed. After the Nazi takeover, their factory was a notable supplier to Hitler Youth clubs. Following their service in the administration, the brothers enthusiastically joined the Nazi party. In contrast to Adolf, Rudolf supported National Socialism with considerably more fervour. The ideological gulf widened the already widening chasm between the two brothers.

The plant saw forced modifications during the war to manufacture weapons for the Nazis, first concentrating on the Panzershrek, a shoulder-launched anti-tank rocket derived from the American bazooka. Rudolf attempted to persuade the Nazi party's top brass to permit him to manufacture patented army boots, but his efforts were in vain. Until the Allies came in and took over their town, the Dassler factory would keep producing weapons and equipment for the Wehrmacht.

The Dassler factory underwent a devastating setback in the post-war era. After the war, the American denazification programme and the persecution of high-ranking Nazi party members would limit the brothers' cooperation. The Americans interviewed Rudolf because he was suspected to be a member of this elite group of Nazis. He was detained in a Hammelburg internment camp until his release on 31 July 1946, when it came to light that there was no basis for their suspicions.

Adolf wouldn't escape punishment either. In exchange for his cooperation, he was detained and put on trial by those responsible for denazification. He was determined to be a Belastteter, a group who benefited from Nazi government policies. As the second most serious offence during the trials, just below belonging to and cooperating with the Nazi party, it brought a 10-year penalty and the threat of Adolf losing his job at Dassler. The Nazi Party membership and his involvement with Hitler Youth were cited as evidence of this strong belief.

Only the half-Jewish mayor of Herzogenaurach, a dependable ally, could save him. His testimony that Adolf informed him of an impending Gestapo arrest and protected him on his land supported Adolf's claims of being unconnected to the Nazi party. Because of this, he was demoted to the status of a Minderbelasteter, which still carried a sentence of two to three years. As a result, Adolf would still lose control over the Dassler company, which his brother Rudolf would try to take advantage of.

Rudolf would provide a declaration as part of Adolf's appeal to have his status reduced from Minderbelasteter, claiming that Adolf had organised the production of weapons independently and for his gain rather than under duress. Rudolf also claimed that he had resisted the change in production but was helpless in stopping it because he was drafted into the Wehrmacht in 1943. The company's financial records, which indicated a loss of 100,000 German marks throughout weapon production, would evidence this as false.

Adolf's wife, Käthe Dassler, would refute most of Rudolf's assertions. She was successful in getting her husband downgraded to Mitläufer (Translated: Follower), allowing him to continue running the shoe factory with some oversight still needed from the denazification board. Adolf was formally permitted to take over the company's management again on 3 February 1947.

The brothers became mortal foes because of Rudolf's claims during the trials and his ongoing battle to remove Adolf from the company's leadership. With each family blaming the other for many of the issues they encountered during the war, relations between the two families grew increasingly antagonistic. As a result, Adidas and Puma were born.

A Town Divided

The beginning of Adidas and Puma, as we know them today, occurred in 1947. Aiming to rebrand while still in charge of the former Dassler shoe firm, Adolf created Adidas AG by combining his nickname, Adi, and his last name, Das. Similar to his brother, Rudolf also aspired to start a business. He came up with the moniker Ruda (Ru from his first name and Da from his surname name). He later changed it to PUMA Schuhfabrik Rudolf Dassler (Translated: Rudolf Dassler's PUMA Shoe Factory).

This intense competition between the two businesses would split them apart in Herzogenaurach, their hometown. The community earned the moniker "the town of bent necks" because it was believed that everyone would glance down to see what brand of shoes they were wearing.

Some people capitalised on this competition, such as handymen who went to Rudolf's house dressed in Adidas shoes to get a free pair of Puma shoes from his basement. Even the town's two football teams were divided between the companies, with 1 FC Herzogenaurach wearing Puma and ASV Herzogenaurach wearing Adidas.

History Cannot be Forgotten

The rivalry between Puma and Adidas remains, even though it is currently less relevant than the one between Nike and Adidas. It is not unexpected that the old town rivalry still manifests itself today, given the size of both enterprises in a vast and fiercely competitive industry. Despite the troubled histories of both businesses, their innovations should be duly credited in the annals of time. With his "screw-in studs," Adi Dassler revolutionised the sports shoe. This innovation would go down in history as the West Germans made a miraculous comeback against the Hungarians in 1954, winning the match 3-2, cementing both, Adi and his company's place in history.

Adidas vs. Puma: A Tale of Their Different Approaches

Adidas and Puma have competed with each other in terms of product innovation since the beginning. Football shoes with screw-in studs were invented by Adi Dassler's Adidas, improving players' footing on the pitch. In the meantime, Puma unveiled the first football boots with replaceable studs, enabling sportspersons to adjust to various playing environments. In addition to enhancing athletic performance, this innovative culture heightened brand competition as each company sought to push the limits of sports footwear.

Both Adidas and Puma understood the importance of athlete sponsorships and endorsements. They participated in aggressive marketing initiatives that featured teaming up with well-known sportspersons from different sports. Adidas signed a deal with football great Pelé and later developed a close bond with NBA superstar Kobe Bryant. Not to be outdone, Puma acquired sprinter Usain Bolt, who became their spokesperson, a true personification of quickness and agility.

Beyond new product development and athlete endorsements, Adidas and Puma competed fiercely over brand identity. Each business sought to forge a distinctive identity that would appeal to customers. Adidas promoted the "three stripes" emblem as a symbol of unity while positioning itself as representing performance, excellence, and teamwork. The distinctive cat emblem of Puma emphasised uniqueness, style, and a rebellious spirit.

The Legacy Continues

The sibling rivalry that formerly characterised the partnership between Adidas and Puma has diminished over time. The rivalry between the Dassler brothers is now a part of the history of both businesses; it is cited frequently in advertising and historical analyses. However, their ongoing fight for customer loyalty and market share shows the rivalry's long-lasting effects.

The story of Adidas and Puma serves as a reminder of the influence that innovation and competition have on industries. It emphasises the significance of brand differentiation, athlete endorsements, and successful marketing techniques in winning over consumers' hearts and minds. Adidas and Puma are examples of the enduring impact of two brothers whose aspirations and conflicts influenced the sportswear industry.

In conclusion, the rivalry between Adidas and Puma is more than just a tale of sibling rivalry; it is also a tale of success, invention, and the unrelenting quest for greatness. These companies have made an irrevocable impact on the athletic gear market. This tale serves as a reminder that even in business, family ties can shape destiny and transform industries through the story of Adi and Rudi Dassler and their long rivalry.

AIR JORDAN: SOARING THROUGH STYLE AND LEGACY

Harsh Vardhan Maheshwari

Nike's Air Jordan is more than just a shoe. It is a cultural phenomenon transcending basketball, sports, fashion and lifestyle. It symbolises excellence, innovation and style and has captivated generations of fans and consumers worldwide. But how did it all start? How did Nike create one of the most iconic and influential sneakers ever? How has it evolved to remain relevant and dominant in the cut-throat market? This article will explore the history, marketing, growth and changing dynamics of Nike Air Jordan, the sneaker that changed the game.

The History of Nike Air Jordan

The story of Air Jordan began in 1984 when Nike was a struggling brand selling running shoes and facing fierce competition from Adidas, Reebok and Converse. Nike needed a breakthrough to revive its basketball division and attract new customers. The opportunity came in the form of Michael Jordan, a rookie basketball player who had just joined the Chicago Bulls after a stellar college career at the University of North Carolina. Jordan was a rising star with incredible talent, charisma and personality. He was also looking for a shoe deal, but his first choice was Adidas, not Nike.

Nike's marketing executive Sonny Vaccaro saw the potential in Jordan and convinced his superiors Phil Knight and Rob Strasser to gamble their entire basketball budget on him. They offered Jordan an unprecedented five-year, $2.5 million deal with royalties. They also promised him something no other brand could offer: a signature shoe line. Jordan's agent David Falk, who coined the 'Air Jordan' negotiated the deal and persuaded Michael to sign with Nike.

Nike hired Peter Moore, a creative director, to design the first Air Jordan shoe. Moore took inspiration from Jordan's nickname 'His Airness' and his ability to fly in the air. He also incorporated the colours of the Chicago Bulls: red and black. The result was a sleek, stylish and innovative shoe that featured a leather upper, a rubber cup sole, an Air-Sole unit in the heel and a winged logo on the ankle. The shoe was released on April 1, 1985, and retailed for $65.

The Air Jordan 1 was an instant hit with customers, who loved its bold look and performance. However, it also faced controversy from the NBA, which banned it for violating its uniform policy that required shoes to be majorly white. Nike paid the $5,000 fine for each game that Jordan wore the banned shoes and used it as a marketing strategy to create hype and demand. Nike ran an ad campaign with the slogan: The NBA can't stop you from wearing them. Air Jordan 1. The shoe that revolutionized basketball. The campaign was a grand success, as Nike sold over 1.5 million pairs of Air Jordans in the first six weeks.

Models that introduced new features, designs and technologies succeeded the Air Jordan 1. Some of the most notable ones include:

- ***The Air Jordan 2 (1986):*** was made in Italy and had no Nike Swoosh logo.
- ***The Air Jordan 3 (1988):*** introduced the elephant print pattern and the Jumpman logo.
- ***The Air Jordan 4 (1989):*** mesh panels and plastic wings for support.
- ***The Air Jordan 5 (1990):*** reflective tongues and clear rubber soles.
- ***The Air Jordan 6 (1991):*** two holes on the tongue for easy pull-on.
- ***The Air Jordan 7 (1992):*** no visible Nike branding and geometric patterns on the upper.
- ***The Air Jordan 8 (1993):*** crossover straps and fuzzy patches on the tongue.
- ***The Air Jordan 9 (1994):*** words in different languages on the sole.
- ***The Air Jordan 10 (1995):*** stripes on the outsole representing Jordan's achievements.
- ***The Air Jordan 11 (1996):*** patent leather and carbon fibre plates.
- ***The Air Jordan 12 (1997):*** stitched lines resembling a rising sun.
- ***The Air Jordan 13 (1998):*** holograms on the heel and paw-like pods on the sole.
- ***The Air Jordan 14 (1999):*** Ferrari-inspired features such as vents and logos.

Each model of Air Jordan reflected its talisman's personality, style and career milestones. They also coincided with his dominance on the court, as he led the Bulls to six NBA championships in eight years. He became the most popular and successful athlete in the world, winning multiple awards, breaking records and inspiring millions of fans.

The Marketing of Nike Air Jordan

The success of Air Jordan was not only due to its quality and innovation but also because of its brilliant marketing strategy. Nike used a combination of advertising, storytelling, celebrity endorsement, product placement and cultural relevance to create a loyal fan base for the brand.

Nike's advertising for Air Jordan was creative, catchy and memorable. It used slogans such It's gotta be the shoes, Be like Mike, and Is it the shoes? It also featured celebrities, notably Spike Lee, Bugs Bunny and Michael Jackson to add humour, entertainment and star power to the ads. Some of the most famous ads include:

- ***The Banned Ad (1985)*** showed Jordan wearing the Air Jordan 1 and a voiceover: On September 15, Nike created a revolutionary new basketball shoe. On October 18, the NBA threw them out of the game. Fortunately, the NBA can't stop you from wearing them.
- ***The Mars Blackmon Ad (1988)*** starred Spike Lee as Mars Blackmon, a character from his film She's Gotta Have It, who was obsessed with Jordan and his shoes. He asked Jordan questions such as "What makes you the best player in the universe? Is it the vicious dunks? The haircut? The shoes?" and answered them with "It's gotta be the shoes."

- ***The Hare Jordan Ad (1992)*** featured Jordan and Bugs Bunny playing basketball against a group of bullies. The ad was a precursor to Space Jam, which starred Jordan and the Looney Tunes characters.
- ***The Failure Ad (1997)*** showed Jordan talking about his failures in basketball and how they motivated him to succeed. He said, “I’ve missed more than 9,000 shots in my career; lost almost 300 games; 26 times; been trusted to take the game-winning shot and missed; failed over and over and over again in my life, and that is why I succeed.”

Nike’s storytelling for Air Jordan was compelling, emotional and authentic. It told the story of Jordan’s journey from a young boy who loved basketball to a global icon who changed the game. It also narrated the tale of how each model was inspired by Jordan’s life, achievements and challenges. Some of the most notable stories include:

- ***The Flu Game Story (1997)*** recounted how Jordan played in Game 5 of the NBA finals against the Utah Jazz while suffering from food poisoning. He wore the AirJordan 12 and scored 38 points, leading the Bulls to victory.
- ***The Last Shot Story (1998)*** described how Jordan made his final shot as a Bull in Game 6 of the NBA Finals against the Utah Jazz. He wore the Air Jordan 14 and scored 45 points, clinching his sixth championship.
- ***The Comeback Story (2001)*** explained how Jordan returned to basketball after retiring for three years. He wore the Air Jordan 16 and joined the Washington Wizards as a player and part-owner.
- ***The Hall of Fame Story (2009)*** celebrated his induction into the Naismith Memorial Basketball Hall of Fame. He wore the Air Jordan 1 and gave a speech reminiscing his career and legacy.

Nike’s celebrity endorsement of Air Jordan was strategic, influential and diverse. It signed other athletes, musicians, actors and influencers who shared Jordan’s values, vision and style. They wore Air Jordans on and off the court, creating buzz and demand for the sneakers. Some of the most notable endorsers include:

- ***Carmelo Anthony:*** The basketball player joined Team Jordan in 2003 and has his signature line of sneakers under the brand.
- ***Eminem:*** The rapper collaborated with Air Jordan on several limited-edition sneakers that featured his lyrics, logos and colours.
- ***Will Smith:*** An actor who wore Air Jordans in his TV show The Fresh Prince of Bel-Air and his film Bad Boys.
- ***Travis Scott:*** A rapper who partnered with Air Jordan on several sneakers bearing his signature cactus jack logo, reverse swooshes and hidden pockets.

Nike’s product placement for Air Jordan was subtle, smart and effective. It placed Air Jordans in movies, TV shows, video games and other media platforms that reached millions of viewers and consumers. They became part of pop culture and fashion trends, appealing to different audiences and generations. Some of the most notable placements include:

- ***Do The Right Thing (1989):*** The film by Spike Lee featured a scene where a character named Buggin’ Out got angry when someone stepped on his white Air Jordan 4s.
- ***Seinfeld (1994):*** The TV show had an episode where Jerry Seinfeld wore a pair of black Air Jordan 6s.
- ***NBA 2K11 (2010):*** The video game had a mode called 'The Jordan Challenge' where players could relive 10 of Jordan’s most memorable games.
- ***The Last Dance (2020):*** a documentary series that chronicled Jordan.

Nike Air Jordan is a remarkable brand that has revolutionized the sneaker industry and culture. It has created a legacy of excellence, innovation and style that has lasted for over three decades and counting. It has leveraged the power of Michael Jordan, the greatest basketball player of all time, and his story, to create a loyal and passionate fan base that spans generations and geographies. It has also used effective marketing strategies, such as advertising, storytelling, celebrity endorsement and product placement, to create hype, demand and relevance for its products. It has also adapted to changing trends, preferences and customer needs by introducing new models, features, designs and collaborations. Nike AirJordan is not just a shoe but a phenomenon that has changed the game.

JP MORGAN: THE FINANCIER WHO OWNED AMERICA

Divyansh Rathore

"The wise man bridges the gap by laying out the path by means of which he can get from where he is to where he wants to go"

The physical embodiment of this saying stands absolutely true for the legendary banker John Pierpont Morgan, or should I say, not just a banker but a financier to the most powerful economy of the world in the 20th century- the United States of America.

Sickly Start

Morgan was a visionary banker and financier whose contributions to the growth of modern banking, the industrialisation of America, and the world economy are unparalleled. Let's explore the life and impact of this extraordinary individual who was frequently referred to as the person who "owned America." Talking more about his domination, it has been said that he can bankrupt or save a company from collapse with just a signature. Though diagnosed with several diseases, he was born into privilege as his father, Junius Spencer Morgan was a successful banker. He ensured that John received a good education. However, John developed rheumatic fever, following this, his father made the decision to have him live alone and sent him to the Azhore Islands, situated in the middle of the Atlantic Ocean. John completed his studies in 1857 in Boston, Switzerland, and Germany. He was poised to enter the business world promptly upon turning 19, coinciding with the time when his father held a partnership position at George Peabody and Co., a London-based merchant banking firm. His entry into the banking industry was a turning point that sparked a period of dramatic change in the financial environment. Morgan quickly rose to the top of the financial elite thanks to his grasp of the complexities of finance.

Morgan understood early on in his career in banking that building successful relationships was essential for success in the financial sector. He was adept at navigating social circles and cultivating relationships with powerful people who would later play a crucial role in his climb to fame. His capacity to forge alliances and win support led to the development of an industry-spanning network, ensuring that his power extended beyond the realm of conventional banking. But it wasn't only his social grace that got him forward; what made him stand out was his unmatched financial sagacity. A turning point in Morgan's career came when he took part in the underwriting and restructuring of significant railway businesses. Morgan's strategic thinking spotted possibilities where others saw obstacles at a time when the railway industry was at a crossroads, trying to handle debts and operational complexity, his expertise in restructuring went far beyond financial sheets; it also included a thorough comprehension of market dynamics, asset value, and strategic repositioning. Morgan had a natural ability to analyse intricate financial networks, spot inefficiencies, and design solutions that not only saved companies but also took them to new heights.

The Case of General Electric and US Steel

JP Morgan's crucial involvement in managing the reorganisation and consolidation of many industries that moulded the fundamental structure of the American economy is one of the most enduring markers of his long career. As a foresightful investor, Morgan possessed a special capacity to see possibilities where others saw obstacles, a quality that became especially clear in his transformational influence on significant businesses like General Electric and U.S. Steel. For instance, Morgan made it possible for Edison General Electric and Thomson-Houston Electric Company to unite in the case of General Electric. This tactical choice not only pooled resources but also tapped into the combined brainpower of these two creative powerhouses. The resulting merger enhanced the company's scientific capabilities and put it at the forefront of the electrical revolution that was sweeping the country.

Morgan also had an impact on the steel manufacturing industry. He cleverly combined several steel businesses, including Andrew Carnegie's enormous steel empire, to produce a corporate giant that ruled the sector, the United States Steel Corporation. In addition to streamlining processes, this change enabled economies of scale, creating the foundation for higher production and profitability. This tactical move had a significant influence on the American economy, spurring infrastructural growth, urbanisation, and the establishment of the modern industrial superpower that the United States would become.

The Panic of 1907

The United States experienced the Panic of 1907 as a result of a confluence of events that included a stock market fall, a bank run, and a lack of liquidity. Financial institutions teetered on the verge of ruin, threatening to unleash a domino effect that might destroy the economy as fear and uncertainty seized the nation. JP Morgan's participation became crucial in the middle of this confusion. His imposing presence and status as a financial titan gave him a special ability to shape the way things turned out. Realizing the seriousness of the crisis, he rallied other bankers and organized a group of important players to pump the financial system with much-needed cash. This show of cooperation and resolve made it evident to the markets that a coordinated effort was being made to stabilize the situation. Morgan's impact went beyond only providing funding. He used his strategic prowess to pinpoint and deal with the crisis's underlying causes. He mediated discussions between banks, enticing them to work together and increase each other's reserves. He went out to foreign financial institutions in an exhibition of his unrivalled network to gain international assistance, further strengthening the frail system.

The Expanding Vision of JP Morgan

Beyond the boundaries of the United States, Morgan's influence was comparable to that of a conductor of the world's financial system. His influence was felt on all continents, and in the early 20th century, he played a crucial part in promoting economic cooperation between the United States and European nations as well as promoting financial stability. JP Morgan emerged as a key figure at a time of geopolitical unrest and economic unpredictability, leveraging his financial expertise to establish worldwide financial balance by bridging nations. Morgan's participation in assisting European nations to generate finance through bond issuances was one of his most impressive projects. He managed successful efforts to entice American financiers to back European governments because of his unmatched credentials and extensive contacts on both sides of the Atlantic. This capital injection not only supplied much-needed funding for rehabilitation but also powerfully conveyed the idea that promoting stability and progress required global collaboration.

MOATS: BUFFETT'S MONEY MACHINES

Harshbir Singh Ahuja

You're Sir Edward Dalyngrigge, a 14th-century English knight and Member of Parliament. Amid the Hundred Years' War between the kingdoms of England and France, you are summoned by Richard II, King of England. Following serious deliberation, you have been entrusted with defending England's south coast from raids by the French. You build a castle down in Bodiam, East Sussex to stop the French Battalion in its tracks. Bodiam Castle must not fall, for if it does, tyranny awaits your countrymen. ***Protecting the Castle***

How do you make sure the castle stands strong in the face of an impending French attack? You could recruit the best English knights, stock your arsenal with the best weapons, and prepare well in advance for a siege. Take a minute to come up with other ideas that might prove effective. Done?

Now let's look at a very simple yet incredibly effective defence mechanism: the moat. A moat is a ditch dug around a castle's perimeter to fend off attacks. Usually filled with water, it cuts off direct access to the castle's walls, giving the enemy a puzzling headache when it comes to figuring out a viable attack plan. If the enemy fails to devise a suitable strategy in time, you win, all thanks to a ditch filled with water: yes, it's as simple as that. ***Economic Moats and Castles***

Just like Sir Edward built a moat around Bodiam Castle to protect it from attacks, the top-level management of every corporation would also be interested in building an economic moat around its business so that its market standing and profits stay safe and the company's empire can expand without worrying about an attack 24/7.

Investopedia defines an economic moat as a distinct advantage a company has over its competitors that allows it to protect its market share and profitability. The distinct advantage could be rooted in trade secrets, patents, goodwill, cheap production, or even creative marketing strategies; you could take anything and build moats of varying strengths around your business. Fill your moat with water and lots of piranhas to keep your competitors out of sight.

Economic Moat is a term used quite frequently by the Berkshire Hathaway spearheads Warren Buffett and Charlie Munger. I first came across this term while I was reading (or at least trying to read) The Warren Buffett Way by Robert Hagstrom.

Types of Moats

Just as different moats surround different castles (some dry, some wet, some filled with piranhas, others filled with crocodiles), there exist different types of economic moats in the business world as well. Morningstar lists five sources of economic moats in its Economic Moat Rating document. These are described as follows:

- ***Intangible Assets:*** These cover the intellectual property rights that a business possesses such as patents, trademarks, and trade secrets. Coca-Cola has an exceptional economic moat in this regard; the same could be said for any famous Chole Bhature vendor in your area whose recipe is only known to the employees of the stall.
- ***Switching Costs:*** If the cost of switching from your enterprise to another is high for customers, you've got a comfortable switching cost moat. A simple real-life example of this phenomenon would be the hassle one has to go through to transfer data when switching over from Android to iOS and vice-versa.
- ***Network Effect:*** This effect explains the flow of new customers to a business that has a considerably established user base. If given a choice to select a chatting platform, the majority would choose WhatsApp; the same goes for Zerodha's customer growth in recent years, and Uber is another excellent example of the same.
- ***Cost Advantage:*** If you can offer a decent product to the market at a lower price than your competitors, you have a significant cost advantage over them that would attract customers to your product. Economies of Scale is the buzzword that highlights this type of moat. Walmart has an excellent cost advantage moat thanks to its large scale and efficient store network management.
- ***Efficient Scale:*** Paul Larson of Morningstar describes this economic moat as being characterised by a limited market being efficiently served by one or a very small number of companies. Let's say your locality requires only one grocery shop, and Raman Gupta has already met that requirement by opening his shop. Now, it's not that competitors cannot enter your locality's markets because of lack of funds or any other cause. It's just that the market won't be lucrative enough for them to set up their venture in your locality, and they will look for opportunities elsewhere. Raman Gupta effectively has himself an efficient scale moat in this case.

Valuation of the size of an economic moat is beyond the scope of this article. However, the reader can refer to this detailed Credit Suisse document for further information.

Musk on Moats

Here's what Elon Musk had to say about moats back in 2018:

"*First of all, I think moats are lame, they're like nice in a sort of quaint, vestigial way. But if your only defence against invading armies is a moat, you will not last long. What matters is the pace of innovation. That is the fundamental determinant of competitiveness.*" Shots fired.

Warren retaliated that being a low-cost producer, for example, is a significant moat that helps safeguard your profits and market standing. "I don't think he'd want to take us on in candy," Buffett said jokingly. (Context: Buffett bought See’s Candies for $25 million in 1972) Elon being Elon, tweeted that he would start a candy company and that it would be amazing. Elon successfully taking on big names in the automotive industry with Tesla is one of the success stories that has come out of attacking the castle and overwhelming the moat held by established players. His point of view is undoubtedly shared by many entrepreneurs driven by innovation first, and safety second.

At the end of the day, it’s a matter of personal choice: would you attack the castle or would you place your money on the defence? And that, in a way, is the beauty of the world of investments; everything you see is almost certainly subjective; the odds of a black-and-white scenario in the markets are fascinatingly rare.

Life is supposed to be lived in the grey; the markets are no exception.
There’s something poetic about that which makes me smile.

SAMSUNG'S REMARKABLE TRANSFORMATION: FROM GROCERY STORE TO TECHNOLOGY GIANT

Divyansh Jain

Introduction

The rise of Samsung from a humble grocery store to a prominent technology corporation is a testament to its capacity for innovation, strategic decision-making, and adaptability in volatile market environments. The company's growth through diligent effort and perseverance is inspiring, and its success is remarkable. Samsung's pioneering products and their impact will, most certainly find a way into the history books. Introducing a personal touch to technical discussions can improve engagement and deepen comprehension.

Early Years and Establishment

In its early days, Samsung started as a modest grocery store that focused on trading locally sourced goods. As the business grew, Samsung began to explore further opportunities and identified the potential in the textile industry; this prompted the establishment of Cheil Industries Co., Ltd. in 1948, which marked the start of Samsung's expansion into various business sectors. With the establishment of this new business venture, Samsung's diversification efforts began to take shape, and the company continued to evolve into the globally recognised brand it is today. Through strategic planning and innovation, Samsung has established itself as a leader in various industries, including electronics, telecommunications, and many others.

Key Turning Points in Samsung's Transformation

Shift towards Electronics in the 1960s

Samsung's metamorphosis into an electronics powerhouse has several key turning points. One such momentous shift was during the 1960s when South Korea experienced rapid industrialisation. This wave of progress prompted Samsung to move into the electronics market, and they began manufacturing black-and-white TV sets and radios. This strategic decision marked the company's initial foray into an industry that would soon define its future success.

Strategic Decision-Making in the Face of Economic Challenges

Facing economic challenges, Samsung's Chairman Lee responded with a bold plan dubbed "The Second Foundation." He urged employees to focus on three core philosophies: globalisation, multi-industry strategy, and higher-quality products. By adopting this directed approach, Samsung navigated the turbulence of financial difficulties while keeping an eye on the shifting landscape of technological innovation.

Investment in Research and Development

Perhaps one of the most critical turning points in Samsung's dramatic transformation was its decision to invest heavily in research and development. Recognising that next-gen products were necessary to ensure continued growth, Samsung invested in R&D facilities dedicated to creating disruptive technologies. This focus on innovation ultimately led to the development of semiconductor devices that catapulted Samsung Electronics onto the global stage.

These landmark developments allowed Samsung to survive economic challenges and establish itself as a global powerhouse in consumer electronics. From its humble beginnings in a small country undergoing rapid industrialisation, through periods of economic turmoil and uncertainty, and fueled by continuous investment in research and development, Samsung has displayed a remarkable ability to adapt, innovate, and maintain its position as one of the leaders in its industry. With over five decades of evolution and transformation behind them, it is clear that Samsung's willingness to embrace change has been pivotal in shaping its impressive trajectory.

Innovation and Adaptation to Market Conditions

Innovation and adaptation to Market Conditions have been crucial factors in the success of technology companies. Samsung has exemplified these traits. Its ability to remain at the forefront of cutting-edge technologies, identify emerging market trends, and balance product quality with affordability has allowed it to thrive in a competitive landscape.

Development of Cutting-Edge Technologies

Samsung's commitment to developing market-defining technologies, such as OLED displays and System LSI Processors, has played an instrumental role in distinguishing the brand from its competitors. By staying ahead of the curve, Samsung can deliver product offerings that showcase commitment to creating new, innovative technology that breaks boundaries and revolutionises the industry.

Identification and Capture of Emerging Market Trends

Analysing emerging market trends has also been vital to its growth strategy. Samsung's foresight in recognising the potential of LCDs during the early 2000s allowed it to capitalise on a quickly growing segment within the electronics space. Samsung continues this forward-thinking approach by investing heavily in artificial intelligence (AI); this ensures readiness for what's next and gives a chance to lead the pack in developing new technologies that align with future demand.

Balancing Product Quality with Affordability

Samsung has also managed to walk a fine line between offering premium technology at competitive prices. By providing top-notch products without sacrificing affordability, it has maintained strong appeal amongst customers while standing toe-to-toe with other leading technology brands. The ability to produce high-quality devices at reasonable prices has attracted a diverse consumer base that appreciates innovation and value.

Strong Global Presence and Brand Recognition

Samsung has successfully carved a niche through its strong global presence and brand recognition. The company has achieved this by adopting strategic expansion and acquisition approaches, extending its market reach while fortifying its competitive edge in various markets. Such strategies enabled Samsung to build a robust and versatile product lineup that caters to the ever-evolving consumer demands.

Furthermore, Samsung has embraced collaboration opportunities with other industry leaders, displaying its commitment to innovation and future growth prospects. By forming alliances with renowned companies like IBM, Microsoft, and Google, Samsung not only broadens its technological capabilities but also accesses vital resources required for continued success in an increasingly competitive landscape. These strategic partnerships allow Samsung to explore newer market segments by incorporating cutting-edge technologies into offerings, ultimately enhancing user experience.

Conclusion

As we reflect on Samsung's remarkable trajectory, it is evident that the company's meteoric rise is attributable to various factors. From its inception as a modest trading firm in South Korea to its current status as an international titan, Samsung has always borne an unwavering dedication to innovation and an agile approach to responding to global and local market trends.

One crucial element that propelled Samsung's growth was its ability to diversify its business across multiple sectors. Samsung started with humble beginnings in the food export industry before branching into textiles, insurance, and even shipbuilding. However, the strategic decision to enter the electronics industry in the late 1960s set the stage for Samsung's outstanding success in years to come. This diversification proved vital during periods of market uncertainty and economic instability - by spreading its risks across various industries, Samsung weathered storms when others faltered.

Another essential factor in Samsung's ascent was its commitment to investing heavily in research and development (R&D). Over the years, Samsung recognised that building cutting-edge technology requires substantial resources and dedicated personnel. With this in mind, the company invested strategically in R&D centres across the globe, enabling it to stay ahead of emerging technological trends and provide an edge over competitors when introducing revolutionary products.

Samsung's ability to adapt and seize opportunities has also been instrumental in its growth. As markets evolved, so did their strategies. In 1993, when faced with heightened competition and stagnating growth, Samsung's then-chairman, Lee Kun-hee recognised that radical change was needed. He famously challenged his employees to "change everything except your wife and children," emphasising the importance of agility in remaining future-focused. This mentality allowed for swift shifts in strategy whenever necessary, enabling Samsung to stay competitive in a rapidly evolving global marketplace.

Apart from these factors, another crucial contributor to the unparalleled triumph of this conglomerate was its commitment to understanding consumer behaviour, preferences, and emerging markets. Samsung invested in studying and learning from other successful companies to develop marketing strategies that resonated with different local audiences.

This consumer-centric approach has played a central role in establishing Samsung's presence in various market segments and winning the loyalty of millions of customers worldwide.

Nevertheless, Samsung continues to face intense competition from other industry giants, such as Apple, Google, and Xiaomi. Yet, Samsung has always risen to the challenge, continually pushing its boundaries through innovation and superior products. Its success in memorable product lines like the Galaxy smartphones is evidence of the company's resilient spirit in an evidence of the company's resilient spirit in an ever-changing landscape.

In conclusion, Samsung's journey showcases how a small trading firm transformed into a global juggernaut through strategic decision-making, business diversification, expansion, and relentless dedication to innovation. With strong leadership and an unwavering commitment to delivering quality products that improve people's lives, Samsung's growth story seems far from over.

SILICON VALLEY ORIGIN

Udit Bagaria

Silicon Valley, as is known across the world today, is the North Californian region that pioneered the American technological revolution of the twentieth century and still serves as a centre for technological innovation and development. For the unversed, many multibillion-dollar tech companies including HP, Intel, Apple and Visa originated in Silicon Valley. In fact, the term 'Silicon Valley' was first adopted in the 1970s, owing to the region's association with silicon transistors but geographically, Silicon Valley actually corresponds to Santa Clara Valley in California.

Stanford University: The Foundation Stone

Leland Stanford was an American industrialist and politician of the nineteenth century, who owned an 8100-acre ranch in the Santa Clara region, located in Palo Alto, that was famous mostly for its fruit orchards at that time. In 1891, Stanford's son, whom he had sent to Europe for education died due to contracting typhoid fever and a distraught Mr. Stanford decided to establish a university in his son's memory. Stanford University rose to popularity in 1909 after its president David Starr Jordan invested in the development of the audion tube by Lee de Forrest, a remarkable invention that was responsible for the beginning of the electronic revolution in the early 1900s.

Frederick Terman, another notable figure, who completed his undergraduate degree from Stanford, rejoined the university in 1925 after completing his Ph.D. from MIT. Terman was angered by the fact that the university graduates would move to jobs with engineering firms on the East Coast, to tackle the problem he encouraged his students to establish businesses in the valley region to employ Stanford graduates and also invested in these companies. Two of his students, William Hewlett and David Packard, upon his advice, started the company Hewlett-Packard in the region in 1939 and this paved the way towards the formation of more electrical and aerospace companies in the region. The region's growth was aided by the increased demand for radios, radar systems and headsets by the US government during the Second World War. Terman returned to Stanford University in 1945 as the dean of the School of Engineering, where he established the Stanford Industrial Park, the world's first university research park.

Adding the Silicon to Silicon Valley

In 1947, William Shockley invented the point-contact transistor in AT&T's Bell Laboratory, another remarkable invention that slowly led to the development of microprocessors. Later on, in 1956, Shockley founded the Shockley Semiconductors Laboratory in the university park to commercialize his invention and hired the most talented engineers from the region. However, eight of his engineers, popularly known as the 'Traitorous Eight', resigned from the company owing to their disagreement over the use of silicon in transistors and went on to establish Fairchild Semiconductor in 1957.

The invention of the integrated circuit in 1959 by Robert Noyce at Fairchild was the major breakthrough that went on to shape Silicon Valley and led to the development of modern computing systems. In the meantime, the United States government realised the importance of significant investments in research and innovation to achieve technological dominance over its enemies like the Soviet Union. As a result, the companies in the Santa Clara region became the major suppliers to the defence and space programs of the US government. Companies were encouraged to take risks and there was an abundance of investment opportunities available to foster invention and development of new technological products.

NASA's space programmes, including the Apollo mission, were aided by the supply of integrated circuits from companies like Fairchild Semiconductor and Texas Instruments. In 1968, Robert Noyce and Gordon Moore left Fairchild Semiconductor and co-founded Intel. The company made headlines three years later when it launched the world's first microprocessor, the Intel 4004. On January 11, 1971, journalist Don Hoefler's article titled 'Silicon Valley, USA' was the first official mention of the term in print media and the term was subsequently adopted by the world.

By the mid-1970s, government investments in the region had reduced and were replaced by private financing from venture capitalists. In 1972, two venture capital firms: Kleiner Perkins and Sequoia Capital were established in Silicon Valley. Meanwhile, established technological companies were also successful in drastically reducing the costs involved in manufacturing microprocessors and were able to develop a plethora of affordable consumer applications using them.

The advent of personal computers and computer software and subsequently, the arrival of the age of the Internet was a transitional period for Silicon Valley that introduced new companies in these sectors like Apple, Microsoft and Cisco. Stanford University continued to play its part in the development with its students establishing Sun Microsystems in 1982 and Yahoo! in 1994 and a plethora of other technology startups. The success and prosperity of these companies continued over the years until the dot com bubble burst in 2001. In spite of the huge losses to investors and companies alike, Silicon Valley continued to thrive over the years and to date, maintains its status as one of the top research and development centres in the world.

In the present-day world, Silicon Valley is still home to the highest number of venture capital funds in the world and many of the multi-billion dollar companies' headquarters are still situated in this region. Silicon Valley holds importance in the technological revolution of the United States and the world thanks to the artificial intelligence companies based out of the region.

The Digital Dawn

FROM DATA TO DECISIONS: HOW AI IS REVOLUTIONIZING EFFICIENCY IN FINANCE

Rishabh Lakhwani

Artificial intelligence (AI) has become a powerful force of transformation that profoundly affects every aspect of contemporary life. It impacts various sectors, economies, cultures, and everyday activities, ushering in a time of unheard-of change and creativity. AI-driven diagnostics and individualised treatment plans are revolutionising patient care in the healthcare industry, resulting in more precise diagnoses and better outcomes. As AI algorithms adjust the curriculum to specific student requirements, boosting engagement and information retention, education is transitioning towards personalised learning. AI-powered automation is transforming several sectors by improving efficiency, simplifying supply chains, and optimising industrial processes. AI-driven sentiment analysis and language translation are removing obstacles in communication and promoting international relationships. Additionally, AI is becoming increasingly essential to environmental sustainability, helping with resource management, climate modelling, and renewable energy optimisation.

Artificial intelligence has existed since English mathematician Alan Turing asked, "Can machines think?" in the 1950s. Siri and Alexa have gained widespread recognition, but the financial sector has also swiftly caught up with the changing winds. The financial services sector, according to Citigroup, spends the most money on AI outside of its ecosystem. This rise has accelerated in recent years due to the development of big data, cloud computing, inventive hardware, and quicker special-purpose systems.

AI's incorporation has changed the game in today's quickly changing financial landscape, catapulting the sector into a new era of efficiency and innovation. As financial organisations struggle with massive amounts of data and arduous decision-making procedures, AI is taking centre stage as a potent tool for turning unactionable data into practical insights. With a focus on machine learning algorithms for credit scoring and risk assessment, portfolio optimisation, AI-driven regulatory compliance, fraud investigation, and the promising integration of blockchain and AI in financial applications, this article delves deeper into how AI is reshaping the finance sector.

AI in Regulatory Compliance and Fraud Investigation

E-commerce growth has improved convenience while also fostering a surge in online scams. Some banks spend about $500 million to combat anti-money laundering (AML) and KYC procedures annually, according to a KPMG report. Each year, US banks spend over $70 billion on compliance alone. 53% of all registered companies in India have fallen prey to online financial fraud. Customers may become leery of using credit cards and other gadgets; consequently, businesses must improve their procedures to safeguard against such malpractices and preserve client loyalty. AI changes the game in this arena as ML (Machine Learning) algorithms simultaneously examine billions of data points to identify fraudulent activities.

Financial crimes don't have a predetermined set of laws and norms. Each type of financial fraud differs from the others. With ML, self-learning and calibration have become powerful tools for appropriately managing financial risks. Banks currently load their previous data into monitoring systems to categorise incidents as fraud-based or non-fraud-based using the same AI self-calibration capability. Algorithm training, back training, and validation sequences are all involved in this procedure.

For a better experience, organisations are now using AI-based fraud prevention alternatives. DI (Decision Intelligence), a tool from Mastercard is a good illustration: an established baseline compares new customers instead of classifying a transaction based on historical data (as it becomes constrained to a set of conditions). Every new transaction is evaluated in real time against this baseline. Mastercard benefits from this in two ways: first, fraud rates drop, and second, 'false positives' resulting from tight algorithms are kept in check. False positives are transactions that are rejected because they don't follow the algorithms but are truly clean. According to the Javelin Strategy Report 2015, false positive transactions amounted to $118 billion in retail losses.

All top traders endorse AI and ML because they influence the stock market. According to one industry participant, artificial intelligence is to trade what fire was to prehistoric people, thanks to sentiment analysis enabled by AI. With this, the system automatically picks up on new financial industry trends, allowing traders to make wiser, intuitive selections.

Algorithmic Trading (AT)

Automatic/ Algorithmic trading involves entering trading rules into a program and utilising it to execute trades. There is hardly any human interaction at all. When AT is integrated with AI and ML, a structure that predicts the outcomes considerably more quickly and accurately (also known as HFT) is produced. This type of trading can assess the best prices while considering various market moods. Aldridge and Krawciw (2017) estimate that AT currently holds a 40% market share and is widely employed in trading firms, hedge funds, corporations, bank trading options, etc. Katana, a well-known AI trading programme demonstrates various techniques to obtain bond values more quickly. According to news reports, Katana has resulted in quicker decisions 90% of the time (as compared to conventional approaches).

Undoubtedly, AI will help the financial sector become more efficient, safer, and more productive. With businesses investing billions in this area, it won't be long before the finance industry is fully AI-enabled.

Machine Learning Algorithms for Risk Assessment and Credit Scoring

Machine learning algorithms powered by AI have completely changed credit scoring and risk assessment in the lending industry. Traditional approaches frequently relied on a few variables, which led to arbitrary conclusions and erratic results. Financial organisations can now use big data to make more precise and anticipatory credit decisions thanks to the development of AI.

Machine learning algorithms comb through massive datasets such as credit history, income, outstanding debts, employment stability, and unusual sources like social media behaviour. These models range from traditional decision trees to cutting-edge neural networks.
Algorithms can spot complex patterns, connections, and correlations that human analysts might overlook. As a result, it is possible to evaluate borrowers' creditworthiness with higher accuracy, which lowers default rates, optimises loan portfolios, and boosts confidence in lending strategies.

Blockchain and AI Integration in Financial Applications

A revolutionary step forward in improving financial transparency, security, and efficiency is the amalgamation of AI with blockchain technology. When combined with AI's analytical skills, blockchain's decentralised and irreversible structure opens up new possibilities for financial application innovation.

Self-executing contracts with predefined circumstances are made possible by smart contracts, a foundational component of blockchain technology. By authenticating, carrying out, and overseeing these contracts, AI can help ensure compliance and reduce the need for middlemen. Additionally, the combination of blockchain and AI improves asset traceability, allowing for real-time audits and minimising fraud and errors. Blockchain technology's transparent and secure features boost the trust and integrity of financial transactions; AI helps with decision-making, resulting in a synergistic relationship that enables financial institutions to operate more confidently.

Portfolio Optimization

Portfolio optimisation carries out the famous financial axiom: you may increase profits while assuming fewer risks. Large amounts of data must be processed, which is a laborious and error-prone headache.

Machine Learning changes the landscape of optimising portfolios by handling enormous amounts of data and finding patterns, creating non-linear relationships and reducing dimensionality, and accurately analysing the complicated link between risk and return. In the end, reinforcement learning enables the computer to learn and continuously advance, surpassing the capabilities of humans.

By streamlining procedures, lowering operational inefficiencies, and enabling financial experts to make better-informed judgements, the integration of AI and finance has set the ground for a revolutionary shift. The financial industry is about to experience a significant upheaval thanks to machine learning algorithms, portfolio optimisation techniques, AI-driven compliance checks, and the incorporation of blockchain technology. AI will surely transform the utilisation of data and decision-making. The financial industry will thrive in an era of extraordinary efficiency and innovation as it continues to develop and change the landscape.

GOING MICRO, GOING MAD: HOW INSTAGRAM REELS AND YOUTUBE SHORTS ARE MAKING US CRAZY

Divyansh Jain

The digital age has ushered in an era characterized by an incessant barrage of content, all competing for our ever-dwindling attention spans. From endearing animal vignettes to captivating snippets from television shows, the allure of short-form videos has become an integral part of our online existence. However, in this era of unceasing digital stimulation, we must pause and contemplate the potential repercussions on our mental well-being. This comprehensive article aims to delve deeper into the burgeoning phenomenon of short-form video content, typified by platforms such as Instagram Reels and YouTube Shorts. By exploring the intricate interplay between these videos and our mental health, we will underscore the dopamine-driven mechanisms at play and the subsequent consequences that may arise.

The Ubiquitous Appeal of Short-Form Videos

To initiate our exploration, we must first understand why short-form videos have experienced an unprecedented surge in popularity in recent years. Platforms like Instagram Reels and YouTube Shorts have bestowed upon users the ability to create and consume bite-sized content that is tailor-made for our dwindling attention spans. In an age where instant gratification is paramount, these platforms provide a quick and entertaining fix for those seeking immediate diversion. The constant influx of new video content keeps users perpetually engaged, ensnaring them in an endless cycle of consumption.

Unearthing the Dopaminergic Enigma

Short-form videos possess a unique capacity to induce the release of dopamine in our brains. Dopamine, a neurotransmitter intricately linked to pleasure and reward, surges each time we encounter novelty and excitement, engendering a palpable sense of pleasure. This neurological response serves as the linchpin that sustains our engagement, compelling us to scroll through video after video, ceaselessly pursuing the next dopamine hit.

However, the ceaseless deluge of dopamine can precipitate adverse effects on our mental well-being. The highly addictive nature of short-form videos can undermine productivity and erode our attention spans. Instead of devoting our focus to significant tasks, we find ourselves ensnared in the web of mindless scrolling, perpetually chasing fleeting sensations.

"The daily hour-long ritual of scrolling—utterly annihilating one's attention span." - Anonymous

Uncovering the Detrimental Ramifications

While short-form videos undeniably possess entertainment value, they also harbour a darker underbelly. Prolonged exposure to sensationalized content can trigger heightened anxiety, stress, and addiction. The more time we allocate to these platforms, the more our mental well-being may languish in the shadows.

The Algorithmic Abyss

One of the pivotal factors exacerbating the negative repercussions of short-form videos is the algorithmic nature of these platforms. Instagram Reels and YouTube Shorts employ sophisticated algorithms to curate content based on user preferences and engagement. This means that the more time we invest in watching and engaging with specific types of videos, the more the algorithm perpetuates similar content into our feeds.

This algorithmic feedback loop perpetuates an echo chamber filled with sensationalized and addictive content, ensnaring us in an unceasing scroll, bombarding us with videos that may not be conducive to our mental health.

"Dopamine receptors lay in ruins, and an hour of your life vanishes into the abyss of these applications. It's time to reconnect with reality." - Anonymous

Adopting a Mindful Approach

So, what measures can be taken to safeguard our mental health in the dopamine-driven realm of short-form videos? It commences with mindfulness and heightened awareness of our consumption habits. Here are steps that can be employed to maintain a healthy equilibrium with these platforms: Set Time Limits: Allocate designated time slots for video consumption and adhere to them rigorously. Establishing boundaries is pivotal in thwarting excessive scrolling and nurturing a harmonious balance.

- **Unfollow Detrimental Accounts:** Exercise discernment regarding the content you consume. Unfollow accounts that consistently produce sensationalized or deleterious videos. Instead, seek out creators who impart informative, uplifting, and relatable content.
- **Engage Intentionally:** While navigating platforms like Instagram Reels and YouTube Shorts, be deliberate in your video selection. By actively curating the content you consume, you can cultivate a more enriching and positive experience.
- **Take Breaks:** It is imperative to periodically disengage from the consumption of short-form videos. Embark on walks, immerse yourself in literature, or partake in activities that nurture your mental and physical well-being.

By espousing these mindful practices, we can regain control over our digital consumption habits, thus shielding our mental well-being from undue harm.

The Role of Content Creators

As consumers, we bear a solemn responsibility to exercise prudence in our content consumption. Nevertheless, content creators also wield a pivotal role in shaping the landscape of short-form videos. They must remain cognizant of the potential impact their content exerts on the mental health of their audience.

Championing Authenticity and Responsibility

Content creators are impelled to champion authenticity and responsibility in their content creation endeavours. Instead of chasing fleeting views and engagement metrics, they should concentrate on crafting meaningful and informative videos that enrich the lives of their audience. By propagating positive messages and nurturing a supportive community, creators can serve as a counterbalance to the adverse effects of sensationalized content.

Conclusion

The ascendancy of short-form video content on platforms such as Instagram Reels and YouTube Shorts has incontrovertibly revolutionized our media consumption habits. While these videos offer entertainment and intrigue, they also carry the potential to take a toll on our mental health. The ceaseless scrolling, the dopamine-driven quest for the subsequent video, and the algorithmic vortex conspire to foster feelings of anxiety, stress, and addiction.

To fortify our well-being, we must approach the consumption of short-form videos with mindfulness and prudence. Through the establishment of boundaries, the curation of our content feeds, and deliberate engagement, we can ameliorate the deleterious consequences and regain sovereignty over our digital existence.

In the realm of content creation, we bear the onus of producing authentic and responsible content. By prioritizing the welfare of our audience and fostering a culture of positivity, we can contribute to a healthier online ecosystem.

Hence, when you next find yourself ensnared in the inexorable scroll of Instagram Reels or YouTube Shorts, remember to reconnect with reality, to savour the present moment in the tangible world that surrounds you.

RENEGED PROMISES OF FINTECH

Divyansh Rathore

Fintech is signalling a paradigm change in the areas of financial management and access to financial services by fusing the worlds of finance and technology. This thriving and developing industry is reshaping existence by giving creative solutions that are convenient, accessible, and effective. People now have access to a variety of seamless financial management tools thanks to fintech, including digital wallets, mobile banking, real-time transactions, and automated investing opportunities. Fintech has expanded the reach of banking services to previously underserved communities, allowing them to participate in the formal economy by bridging gaps in financial inclusion. Additionally, easy access to credit and loans through fintech has enabled people to start their own businesses and deftly handle unexpected financial hardships. It is blatantly obvious that fintech is guiding reforms through democratizing monetary services and enhancing economic well-being given its significant ramifications on remittances, investment horizons, and personal fiscal management. Many people have been drawn in by the attraction of revolutionary promises in the constantly changing world of financial technology (fintech). However, underneath the veneer of innovation, there is a story of broken promises, raising concerns about the integrity of the sector and the ramifications for its stakeholders.

The Allure of Frictionless Transactions

The groundbreaking idea of frictionless transactions, which sought to transform the landscape of financial activity by smoothly integrating technology into regular economic contacts, was at the forefront of fintech's promises. Users all around the world now enjoy unrivalled convenience thanks to this digital development, which gives them the ability to execute a variety of financial operations with ease at their fingertips. The characteristic of contemporary financial technology quickly evolved into the capacity to quickly transfer money, pay bills, keep track of transactions, and manage accounts using intuitive, user-friendly programs. However, a complicated and important concern surfaced among the extraordinary ease that frictionless transactions brought, one that puts a lot of focus on the fintech industry's cybersecurity sector. Users excitedly welcomed these cutting-edge digital platforms, but as technology advanced quickly, so did worries about data security and identity theft. The identical features that made transactions quick and easy also exposed possible security holes that nefarious actors may use to compromise private financial data.

Fintech firms were forced to strike a careful balance between ease and security. They struggled with the pressing issue of protecting their systems against an ever-evolving range of cyber attacks while simultaneously attempting to retain the flawless user experience that had attracted mass adoption. The need to protect personal information, financial information, and transaction records increased as technology advanced, raising the stakes. Fintech companies started a persistent search for effective cybersecurity solutions to solve these issues. Technologies for encrypting data were developed to protect sensitive information during transmission and storage, ensuring that even if intercepted, the data would remain unintelligible to unauthorized persons. Face scanning and fingerprint recognition have become popular multi-factor authentication technologies that offer an additional degree of security against unauthorized access. An industry-wide reaction to protect the security of these frictionless financial transactions was motivated by the following surge in worries about data security and identity theft.

A Fading Dream: An Inclusivity Mirage

The goal of fintech was to close the gap between those who have bank accounts and those who don't. However, the disparity continues, highlighting the failures of these once-promising initiatives.

Fintech's emergence had the potentially game-changing potential to transcend conventional regional boundaries and democratize access to financial services. Still, the sad truth is that this potential has not yet been completely realized. Instead, a worrying and enduring phenomenon that widens the digital gap and exacerbates existing inequities in our global society has evolved. Fintech was expected to close gaps and empower underserved groups, yet strangely, distant and marginalised communities are left out of the very developments that were meant to pull them up. The digital infrastructure itself is one of the biggest obstacles. The usage of fintech applications and services is generally not feasible in remote places due to poor internet access and technical infrastructure. Even the most cutting-edge financial systems are inaccessible to people in these areas without dependable access to mobile networks and high-speed internet. Even if fintech solutions were available, it would be challenging for people to use them because of the lack of requisite hardware, such as cell phones or laptops.

Security: A Challenge to Guarantee

The formerly unshakeable pledges of impregnable safety inside the fintech business now ring hollow in a time when data breaches and cyber hazards have grown distressingly prevalent. As the globe saw an exponential rise in digital transactions and the migration of financial activities to online platforms, the commitment of fintech firms to preserving personal data faces new problems that doubt their fidelity to security.

Data breaches are becoming more frequent and sophisticated, exposing a disturbing truth: even the most secure financial systems are not immune to the persistent creativity of hackers. The year 2021 witnessed the fintech sector grappling with data breach repercussions, incurring a hefty toll of over US$ 5.72 billion on average, as revealed by the IBM Cost of Data Breach Report 2021. The foundation of trust that fintech businesses carefully laboured to build is eroded with each high-profile breach and the accompanying disclosure of private client information. Beyond the immediate financial losses, these breaches have far-reaching effects on people's privacy, undermine faith in digital financial systems, and frequently result in identity theft and fraud. As indicated in research conducted by Cybersecurity Ventures, the cumulative monetary damages arising from diverse manifestations of cybercrime, encompassing the costs linked with recuperation and containment, totalled a substantial $3 trillion in the year 2015. This numerical value saw an increase, ascending to a staggering $6 trillion by 2021, with projections pointing to the possibility of an annual surge to as much as $10 trillion by the year 2025. Through the implementation of automation, it becomes feasible to thoroughly scan all accessible transactions for potential warning signs. The utilization of automated fraud-detection mechanisms can diminish reliance on human personnel while proving to be economically efficient.

The Hype of Blockchain

Blockchain, which was once hailed as the pinnacle of safe and quick transactions revolutionizing the finance sector, is still struggling to find widespread adoption. While the world's industries have been enthralled by its promises of efficiency, transparency, and decentralized control, the road to integration frequently runs into opposition within the dense and ever-evolving web of complex regulatory frameworks controlling the financial sector.

The ability of blockchain technology to completely reimagine how financial transactions are carried out and recorded is what makes it so alluring to the fintech industry. Traditional centralized systems sometimes struggle to meet the degree of security and trust provided by the blockchain, which is decentralized and stores transactions in an indelible and impenetrable record. The use of blockchain, however, is not without its challenges, especially in the highly regulated and interconnected world of fintech. When trying to accommodate the decentralized nature of blockchain, regulatory authorities that are meant to ensure stability, consumer protection, and anti-money laundering measures frequently run into difficulties.

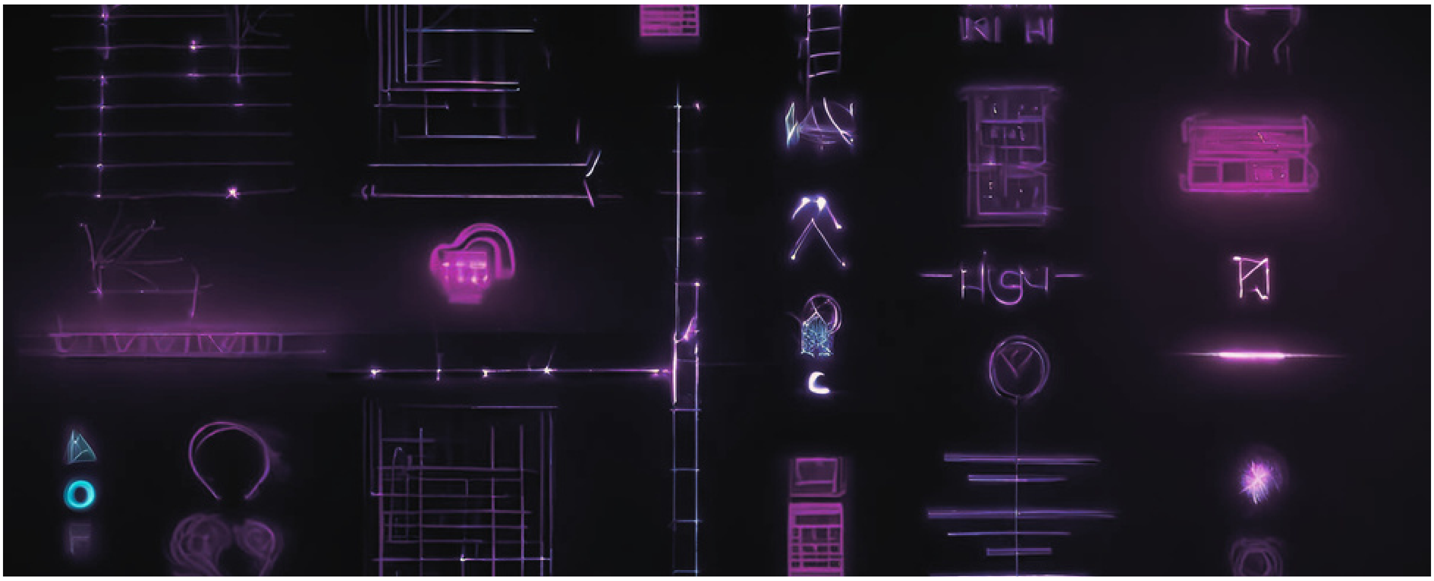
A series of prominent blockchain trials within the banking and finance sector have faced setbacks this year, casting doubt on the technology's potential within financial services.
The most significant setback was encountered by the Australian Stock Exchange, which abandoned a project initially announced seven years ago to transition share clearing and settlement to a blockchain-based platform. In light of this, the exchange incurred a charge of A$250 million ($168 million) and issued an apology, acknowledging the need to start the project anew from the ground up.

To account for the complexity of blockchain-based transactions, traditional financial rules that were created around centralized systems and intermediaries must be reevaluated and, in many cases, updated.

Conclusion

The broken promises in the fintech industry serve as a sobering reminder of the complex difficulties posed by the fusion of technology and finance. The fintech sector, which is forging ahead into new territory, is at a fork in the road where it must learn vital lessons from instances of broken promises. These experiences not only bring to light the difficulties, but also emphasize the need for the sector to go forward with a firm commitment to openness, inclusion, and accountability, ushering in a period of innovation that keeps to its promises.

The temptation of challenging established financial paradigms led to the emergence of fintech, which was powered by the powerful confluence of financial knowledge and technology innovation. Bold declarations about the intention to revolutionize payments and democratize access to financial services. The lessons discovered from broken promises in the financial industry go beyond simple failures; they provide a useful guide for forging a more resilient and meaningful future.



THE POWER OF ALGORITHMS: UNVEILING THE INFLUENCE OF RECOMMENDATION SYSTEMS

Nidhi Singh

In the digital age, recommendation systems have become ubiquitous, guiding our choices in everything from entertainment to shopping to information consumption. This article delves into the remarkable world of recommendation algorithms, exploring their mechanisms, impacts on user behavior, ethical considerations, and potential future developments. By examining the intricate interplay between algorithms and human decision-making, we gain a comprehensive understanding of the far-reaching influence of recommendation systems.

The Rise of Recommendation Systems

In today's digital landscape, recommendation systems have emerged as a pivotal force in shaping user experiences across diverse domains. These systems, rooted in the science of information filtering, hold the remarkable ability to predict and tailor content, products, and interactions to individual preferences. Across various domains, recommendation systems have revolutionized user experiences and interactions. From e-commerce giants like Amazon, Netflix, and Spotify utilizing recommendations for product and content suggestions, to social media platforms such as Facebook, Twitter, and LinkedIn connecting users with friends, groups, and relevant posts, and even in the realm of online advertising where targeted ads are on the rise, recommendation systems play a pivotal role. Through the assimilation of user data encompassing browsing history, prior interactions, and preferences, these systems illuminate customized pathways through the digital maze. This personalization, propelled by the insights of recommendation algorithms, not only intensifies user involvement but also significantly shapes decision-making processes. As we delve into the intricate workings of recommendation systems, we unveil a profound transformation in the way users interact with digital content, where the algorithms craft the modern digital journey.

Mechanics of Recommendation Algorithms

At the core of recommendation systems lie intricate mechanics that fuel their functionality. These systems encompass various types, including content-based, collaborative filtering, and hybrid systems, each contributing distinct approaches to generating recommendations. Data collection encompasses the gathering of diverse user interactions. Content-based systems scrutinize users' historical preferences and characteristics, aligning them with the attributes of items to make suggestions. A classic example of a content-based recommendation algorithm can be found in music streaming platforms like Spotify. In this scenario, the algorithm generates recommendations for users based on the characteristics and attributes of songs they have previously shown interest in. For instance, if a user frequently listens to songs from the "Indie Folk" genre, the content-based algorithm would analyze the attributes of these songs, such as tempo, acousticness, energy, and lyrical themes. It then creates a profile of the user's preferences based on these characteristics.

Collaborative filtering, on the other hand, capitalizes on collective user behavior, identifying patterns in their interactions to predict preferences and present recommendations based on the preferences of similar users. For instance, take an online movie streaming platform where users can rate movies on a scale of 1 to 5 stars. User-Based Collaborative Filtering starts by creating a user-item matrix, where rows represent users and columns represent movies. Each cell in the matrix contains the rating given by a user to a particular movie. To make a recommendation for a user who hasn't seen a particular movie, the algorithm searches for users with similar preferences. It measures similarity based on how closely their ratings align across common movies they've both rated. Once similar users are identified, the algorithm suggests movies that the similar users have rated highly but the target user hasn't seen yet. For instance, if User A and User B share similar tastes and User A has rated a movie highly that User B has not yet watched, the algorithm might suggest that movie to User B. Since not all users rate all movies, this matrix is typically sparse.

Hybrid systems ingeniously amalgamate these methods, leveraging their respective strengths to provide more accurate and diverse suggestions. In this process, data collection and analysis play an indispensable role. The quality of the recommendations generated by a recommendation system depends on the quality of the data that is used to train the system. Analyzing this data empowers recommendation systems to discern user preferences, identify correlations, and predict future preferences. This intricate interplay of algorithmic methodologies and data insights orchestrates the mechanics behind recommendation systems, delivering suggestions that seamlessly align with user preferences and behaviors. Nonetheless, even as data analysis strengthens recommendation systems, it introduces complexities. Ensuring the quality of data and tackling bias become of utmost importance. The precision of suggestions relies on the breadth and inclusiveness of the dataset. Distortions in data, frequently mirroring societal biases, can unintentionally lead to recommendations that lack balance. Therefore, responsible data collection and robust analysis techniques are vital to mitigate these concerns.

Impact on User Behavior

The advent of recommendation systems has brought about a transformative impact on user behavior leaving a profound mark on how individuals interact with digital content. The personalization and customization of user experiences lie at the heart of this impact, as these systems utilize intricate algorithms to analyze user preferences and behaviors, tailoring suggestions that resonate on an individual level. This not only enhances user engagement but also fosters a sense of connection and relevance. In the realm of e-commerce, recommendation algorithms wield the power to sway purchasing decisions, presenting users with products closely aligned with their tastes and past behaviors.This curated shopping experience has the potential to significantly influence users' buying choices, driving sales and reshaping market dynamics. In the domain of media streaming and news platforms, these algorithms reshape content consumption patterns by offering suggestions that cater to specific interests, consequently shaping the information users are exposed to. While this can be advantageous in terms of content discovery and engagement, it can inadvertently lead to content homogenization, where users are exposed to a limited range of perspectives, potentially hindering their exposure to diverse viewpoints and inhibiting critical thinking. The fine-tuned personalization of recommendations can potentially create "filter bubbles" and "echo chambers" wherein users are predominantly exposed to content that reinforces their existing beliefs and preferences. This can result in a skewed perception of reality and hinder the exploration of alternative perspectives. This dichotomy between enhanced customization and potential information isolation underscores the multifaceted influence of recommendation systems on the complex landscape of user behavior. The challenge lies in striking a delicate balance between delivering tailored experiences that captivate users and ensuring a healthy information ecosystem that encourages diversity of thought and open dialogue. As these systems evolve, understanding their complex influence is essential for fostering a digital landscape that enriches user experiences while safeguarding the integrity of information and opinions.

Algorithmic Bias and Fairness

Algorithmic Bias and Fairness are critical aspects that demand careful consideration in the realm of recommendation systems. Algorithmic bias refers to the presence of unfair or discriminatory outcomes in automated decision-making processes driven by algorithms. Algorithmic fairness, on the other hand, involves designing and deploying algorithms in a way that avoids or minimizes bias and discrimination. Fairness aims to ensure that algorithmic decisions do not disproportionately harm any particular group and that outcomes are consistent across different demographic segments. Ethical concerns arise as biases in training data or algorithm design can lead to unequal representation and treatment of various user groups. These systems, designed to enhance user experiences through tailored content, inadvertently possess the capacity to perpetuate and amplify existing societal biases. To address this, the use of diverse and representative training data becomes paramount, ensuring that the algorithms learn from a wide spectrum of user behaviors and preferences , curbing the risk of algorithmic favoritism. Moreover, mitigation strategies, such as algorithmic auditing, transparency, and regular evaluations, play a pivotal role in rectifying biases and promoting fairness. Additionally, transparency in algorithmic operations, elucidating the criteria and mechanisms behind recommendations, fosters accountability and enhances user trust. Ultimately, the ethical concerns surrounding the reinforcement of stereotypes highlight the delicate balance that recommendation systems must strike between personalization and fairness. As technology continues to evolve, it is imperative to recognize and address these challenges to ensure that recommendation systems are leveraged to enhance user experiences without perpetuating harmful biases and stereotypes.

Psychology

The psychology behind recommendations delves into the intricate factors that influence user behavior and perception within the realm of recommendation systems. Central to this dynamic is the cognitive mechanism underlying user trust in recommendations. Users tend to place their confidence in algorithms due to their perceived expertise and ability to process vast amounts of data. In the quest for an optimal user experience, recommendation systems navigate the intriguing balance between serendipity and predictability. Serendipity, characterized by unexpected and delightful discoveries, infuses excitement and novelty into user interactions. However, users also seek a level of predictability that aligns with their preferences, ensuring that the recommendations resonate with their interests and needs. Navigating this balance is crucial to maintaining engagement while avoiding overwhelming users with content that feels disconnected from their interests. Tailored suggestions trigger a sense of recognition, akin to a friend recommending something they know the user would enjoy. This fosters a positive emotional connection, generating feelings of validation and understanding, leading to heightened user enjoyment and loyalty. By deciphering these psychological intricacies, developers can craft recommendation algorithms that not only enhance user engagement but also resonate deeply with users on a psychological level.

Future trends

The landscape of recommendation systems is poised to undergo remarkable transformations through emerging trends and innovations. Advances in deep learning and the broader realm of artificial intelligence are set to revolutionize recommendations. These technologies will enable algorithms to gain a more nuanced understanding of user preferences, unlocking the potential for highly accurate and personalized suggestions. Another noteworthy trajectory is the integration of context-aware recommendations, where algorithms take into account not only user preferences but also the context in which those preferences are expressed, resulting in more relevant and timely suggestions. Moreover, the evolution towards anticipatory recommendations holds promise. By analyzing historical behaviors and patterns, algorithms can proactively anticipate user preferences, streamlining the decision-making process and offering suggestions before users even realize their own desires. According to a recent study by Gartner, it is projected that by 2025, approximately 80% of businesses will have incorporated AI-driven recommendation systems, marking a substantial surge from the existing adoption rate of 20%. As these future trends and innovations shape the landscape of recommendation systems, users can anticipate a more sophisticated, tailored, and intuitive digital experience. The global market for the usage of Recommendation Engine was valued at USD 2.69 billion in 2021. It is anticipated to surpass USD 15.10 billion by 2026, reporting a CAGR of 37.79% during 2022-2026.

The way ahead

In conclusion, the impact of recommendation algorithms is undeniable, reshaping how we navigate digital landscapes across various domains. As we reflect on their profound influence, it's imperative to underscore the importance of responsible development and deployment. The rapid growth of recommendation systems necessitates a strong ethical foundation, and the call for guidelines and regulatory frameworks has become even more urgent. The potential for these systems to enhance human experiences is immense, provided we address ethical considerations and heed the lessons of responsible usage. Striking a balance between advancing commercial interests and safeguarding user well-being remains an ongoing challenge, requiring ongoing vigilance and collaboration across industries.

In the end, by harnessing the power of recommendation algorithms appropriately and integrating them into our digital experiences responsibly, we can pave the way for a future where technology serves as a channel for positive change while respecting the values and autonomy of individuals.

WHAT'S YOUR MOAT, HUMANITY?

Samarth Shrimal

Human anatomy is a very peculiar subject. We like to call ourselves the species of the future, but our anatomy says otherwise - and in this discord, may lie an apocalyptic tale. The evolution of the homo sapiens has been a grave laggard to the developments of the modern world. The Mismatch Hypothesis addresses the growing inconsistency between the contemporary technological environment and our evolved psychological mechanisms - an irregularity that can lead to negative consequences on the social, physical, and mental fronts.

Historically, the utility of human endeavour has been profound - communication, electricity, space exploration, vaccines, etc. Humans played a crucial role in shaping societies, cultures, and the world at large due to their unique abilities, social organisation, and adaptability. From endurance during the nomadic age to community development in the medieval ages to communication and innovation in recent ages, we have held unquestioned importance - and rightly so.

Amidst all, science has truly flourished. The application of scientific knowledge for practical purposes - more so. The advent of technology and the all-encompassing buzzword AI is well-journaled and acknowledged. Therefore, discussing the plausibly ominous ramifications of AI is a more engaging proposition. In addressing the question of human utility in the binary age, an evaluation of man's equation with technology suffices.

Sundar Pichai once remarked - in 2016 - that AI will be more profound than fire and electricity to humankind. Little did he know what 2023 saw in the AI space, and more importantly, the pace at which deployment synergies came about. If a fairly rudimentary chat UI has such widespread adoption - with corporations, governments and the general public integrating novel use cases every instant - what would faster, more intelligent systems be capable of doing? "The prospect of us starting to depend indiscriminately on poorly understood black boxes, currently offered by megacorps, that actually works shockingly well" is worrying. Corporate powerhouses have massive resources at their disposal, resources they will heavily deploy to get ahead in the AI race. Therefore, as they thrust AI R&D with all engines blasting, one can only imagine the power they will wield over humanity. The competitive spiral here is concerning: "driven by FOMO and frenzy, (companies) will be compelled to adopt these technologies, as the efficiency gains enjoyed by (their) contemporaries will exert a natural pressure that leaves those who don't, behind."

AI anxiety among employees is real.

Kailash Nadh, the CTO of leading brokerage firm Zerodha expresses his skepticism around ChatGPT in his blog, "I cannot recall the last time a single tool gained such widespread acceptance so swiftly, for so many use cases, across entire demographics."[5] The recent developments beg a vital question - what is humanity's moat? Decision-making? Cognition? Emotions? Creativity? Intuition? In all candour, this article cannot answer this question but it's important to put it out there. The freakishly impressive capabilities of AI lately may answer all the questions addressed above in little to no time. All we have to do is wait.

Why is the AI revolution any different from the Industrial Revolution - if they wrought the same concerns? As I see it, it has to do with cognition - steam engines were operated by humans but AI doesn't necessarily have to. Sure, initially humans will be at the helm, but eventually AI will self-regulate and operate seamlessly. Digital life is augmenting human capacities and disrupting aeons-old human activities. As AI and allied technologies fuse over all realms of human activity, the fading of human relevance is obvious. Where, then, do humans stand in the new world order? Human autonomy and agency are at risk as key decisions are ceded to code-driven tools. While this may be done with considerations of efficiency and cost-effectiveness, the broader scheme of things may unveil a grim reality wherein data loss, privacy concerns, diminishing cognitive skills, cybercrime, capitalistic greed, etc. abound. Yet another concern has to do with the black-box nature of deep learning models, which underscores the algorithmic opacity of AI. We are transitioning to a world where machines are doing virtually everything - but the caveat here is that even the engineers behind these machines cannot explain the hows and whys of the outcomes.

"This raises mind-boggling questions. As technology advances, we might soon cross some threshold beyond which using AI requires a leap of faith. Sure, we humans can't always truly explain our thought processes either—but we find ways to intuitively trust and gauge people. Will that also be possible with machines that think and make decisions differently from the way a human would?"

Cynically said, humans have possibly reached saturation. In dissecting the human vs. technology debate, one could always argue that humans are just glorified response generators embedded with emotion and philosophical disposition - a condescending typewriter really. As Kailash Nadh writes, "The steady, deliberate, and gradual erosion of human agency must get us long before sentient AI wakes up." Nevertheless, as an ardent believer in the innate capabilities of man, I do not see an "I, Robot" reality. Man is considerate enough to progress humankind but also self-centred enough to ensure he doesn't lose relevance.

THE 5G REVOLUTION

Rishit Singh

Introduction

The latest communication standard, 5G, is not just a mere extension of the previous 3G and 4G/LTE but a new system that combines Wi-Fi, 4G, wireless access technologies, and millimetre waves; it also leverages various aspects like cloud infrastructure, virtualised network core and intelligent edge services; referred to as the "Network of Networks" 5G combines current and future communication networks.

An undeniable advancement in technology, 5G represents far more than a simple progression from its predecessors. With its capability to provide speeds potentially 100 times faster and accommodate 1,000 times the capacity of present-day mobile networks, 5G will provide unparalleled dependability, minimal latency, decreased energy consumption, and extensive connectivity, both indoors and outdoors - the outcome will be a form of high-speed internet that is not just exceptionally fast but ubiquitous. 5G provides a wide array of applications and utilities, broadly classified as enhanced mobile broadband (eMBB), Massive Internet of Things (MIoT), and mission-critical services (MCS). The performance and range of applications will broaden with the evolutionary progression of the 5G standard itself.

Core Characteristics

The most important characteristics of 5G are the three core service categories - eMBB, URLLC, and mMTC which together enable the delivery of applications and utilities stated above.

- **eMBB**: The 5G enhanced mobile broadband will provide rapid gigabit range speeds (up to 10Gbps!) for high bandwidth uses like real-time HD video streaming, AR/VR games, etc. 5G eMBB will enable seamless connectivity in crowded spaces and harsh environments, widespread coverage for reliable user experience, and continuous real-time communication - resulting in faster download speeds and improved user experience.
- **URLLC:** Ultra-reliable low-latency communication is one of the key features

and use cases of 5G technology; designed to provide extremely reliable and low-latency communication services, it is suitable for applications that require near-instantaneous data transfer and a high level of reliability that is essential for applications where data transmission errors can have severe consequences, like remote surgery or critical infrastructure control. URLLC is a crucial enabler for various industries, including healthcare, automotive, and manufacturing, as it opens up new possibilities for real-time and mission-critical applications.

- **mMTC**: Massive Machine-Type Communications enables the connection of a large number of devices together; it supports connection densities of up to one million devices per square kilometre, ten times the ability of the 4G/LTE network. 5G mMTC can provide the infrastructure needed to support huge networks of cellular-connected sensors. It can potentially transform the Internet of Things (IoT) into Massive IoT (MIoT). It has widespread utility in agriculture, newly emerging smart cities and IoT applications.

The potential of 5G is exemplified through its service classifications as mentioned above. These designations contribute to the advancement of intelligent systems for enhanced transportation safety, precision agriculture, monitoring of patients from a distance, digitised logistics, efficient smart grids, and intelligent traffic management systems, among various other applications. According to a report by PwC, in aggregate, the adoption of 5G will add $1.3tn to global GDP by 2030. 5G holds the key to the future.

5G and the Economy

For the coming few years, the contribution of 5G will be minimal since companies are still working on infrastructure to roll out and make this technology available to everyone. But as 5G spreads further, it will positively impact the global economy.

Healthcare

The COVID-19 pandemic exemplified the need for a sound healthcare system. Increased use of robotics, AI and IoT systems in healthcare can be combined with the modern 5G standard to strengthen the healthcare system. 5G enables smooth real-time connectivity; this will enhance connectivity between doctors and patients resulting in shorter and fewer hospital visits and a more refined telemedicine experience.

Manufacturing

The COVID-19 pandemic also highlighted the importance of reliable and smart supply chains. The modern production process is very intricately put together. Cutting-edge machinery and robots are fitted with an extensive range of sensors linked to potent analytical engines in the cloud, evaluating performance, overseeing production timelines, upholding supplies, and coordinating all tasks on the factory premises. With the removal of the necessity for wired links, 5G will enhance the high-speed manufacturing milieu by introducing notably enhanced flexibility. Moreover, the 5G-enabled factory possesses the capability to sustain connections amidst significantly more sensors compared to both wired and past wireless setups. 5G applications in manufacturing are projected to add up to $134bn to global GDP by 2030.

Finance

The post-covid world is highly digitalised. More and more customers, whether retail or institutional rely on digitalised online financial services for virtually everything from simple transactions to large-scale investing; this allows firms to align the potential of 5G with this wave of digitalisation to restructure and broaden the scope of several services provided to customers.

With 5G technology, banks and other financial companies can create new and better virtual experiences for their customers. They can reduce the need for physical bank branches and provide more services online. 5G can also help in areas like AI-powered ‘robo-advice’, using robots to give advice, using drones to check properties, and improving security with things like facial recognition; this shift to using 5G and digital technology in finance can potentially add $85bn to global GDP by 2030.

Conclusion

5G represents a pivotal stride towards the future. In an era of rapidly evolving 'smart' technologies, where automation and artificial intelligence drive our daily lives, the demand for robust communication protocols becomes increasingly imperative. In the age of smart cities, where advanced utilities, healthcare, education, production, finance, and virtually every facet of modern life rely on cutting-edge technologies, the potential of 5G to empower these innovations is paramount. However, it is crucial to address the challenges associated with such advancements. Building advanced infrastructure comes at a substantial cost. Beyond the financial burden, society bears the hidden costs of nature depletion, community displacement, increased pollution, and more. Therefore, we must sustainably pursue progress. Rapid technological developments, such as 5G, should not be driven solely by political or military motives. Instead, we should view powerful technologies like 5G as integral components of our social infrastructure, necessitating careful regulation and conscientious usage to foster all-around societal advancement.

The ESG Frontier

DIVERSITY AND INCLUSION DRIVING FORCE OF ESG

Gazal Manchanda

Environmental, Social and Governance (ESG) is a concept that has recently gained importance. This term has led to drastic changes in the corporate world but the general public is still unaware of what ESG has in store for them. Some consider it akin to Corporate social responsibility (CSR) while others think that it is just an element of sustainable business practices being espoused to make the vision of our triple bottom line true. ESG is a much broader concept that has become the driving force of our economy. The corporate world is no longer limited to fastening only on their profits, share price, and company valuation. They have developed a vision of business that is not only profitable but also sustainable, a business that is equally beneficial to the corporate world as well as society. ESG is a framework used to assess an organisation's business practices and performance on various sustainability and ethical issues. It is used to assess an association's business practices and performance on colourful sustainability and ethical issues. ESG includes - ESG investing, reducing the hothouse emigrations, promoting diversity and inclusivity but is not limited to these generalities.

Diversity and inclusion in the workforce are considered to be the driving forces of ESG. Diversity and inclusion (D&I) at the workplace have become distinct components within the ESG dimensions, within numerous studies and methodologies developed in the literature, mostly by focusing on their measurement but also on illustrating their implications on the financial performance and, correspondingly, on the risks associated with specific activities of organisations. The workforce is the most dynamic element of today's business. It is not as easy to recruit and retain the workforce as it used to be a few decades ago. The aspirations of the workforce are changing continuously. It is no longer possible to strive with a workforce possessing a similar thought process. The new trend is having a workforce that is diversified not just based on characteristics like caste, religion, creed, and sex, but on characteristics like perspectives, viewpoints, thinking skills etc. This empowers the workforce and drives the business toward faster and more effective growth rates.

Diversity and inclusion are not just sources for profitability but also for the good business practices which every business is prioritising a lot. It is killing two birds with one stone.

What do you mean by Diversity and Inclusion?

Diversity is the collective mixture of employees' differences and similarities (including individual characteristics, values, beliefs, experiences, backgrounds, preferences and behaviours).

Inclusion is the culture in which a mix of people can come to work, feel comfortable and confident to be themselves and work in a way that suits them and delivers what the business needs.

Nowadays, every company is striving to create an environment where every employee is treated equally. They take care of the fact that no one in the organisation is being treated wrongly. This has led to various advantages for the employees, the business and the society as a whole. But the question that comes here is does employing different people mean diversity and inclusion? Is this the real meaning of diversity?

The answer is no. Just consider a company that has employed people from diverse backgrounds but when it comes to decision-making, their board of directors doesn't reflect this diversity. Here this can't be called true diversity. This is diversity for the namesake. Occasionally, unintentional bias can occur in an organisation, leading to discriminatory attitudes and preconceptions.

What we are talking about is true diversity and inclusion, an environment where women have equal opportunities to present their views as men, and where there is no discrimination between employees just because they are a part of a particular category. Slowly and steadily, this is happening. We are gradually attaining our dream of this true diversity in the workforce. The studies show that now 32% of the topmost positions in management are held by female employees and this number is expected to grow in the coming years.

How is this true diversity and inclusion helpful?

There are various advantages of diversity, equity and inclusion. Research shows that shareholders want to invest in sustainable and resilient businesses, and are focusing on ensuring the D&I agenda is seen as an asset and not a liability for any organisation they invest in. Regulators are keen to assess compliance with essential reporting standards, including gender pay gap disclosure and the forthcoming Corporate Sustainability Reporting Directive, which prioritises non-financial reporting aspects such as diversity and equal opportunities.

Companies prioritising diversity and inclusion have a higher retention rate of employees which helps in reducing the recruitment cost of the company. Research reported better business performance among organisations with 30% or more women on their executive teams, with a performance differential of 48% between the most and least gender-diverse organisations. Companies with greater inclusion and diversity show:

- 3-9% higher sales revenue.
- 72% higher likelihood of increased consumer NPS.
- 158% higher likelihood of innovating effectively.
- Increased employee engagement and well-being.
- Reduces stress levels in the organisation.
- Less attrition rate.
- More committed employees.

Conclusion:

Diversity and inclusion constitute pivotal pillars within any organisation's workforce, yet the journey toward achieving genuine diversity and inclusion is undeniably challenging. It entails confronting various hurdles, overcoming struggles, and engaging in meaningful battles. Nevertheless, the rewards far outweigh the efforts, as a flourishing, inclusive organisation becomes a beacon in society. Realising this vision necessitates reforming policies and reevaluating hierarchical structures within the organisation. Over time, it becomes evident that companies embracing diversity and inclusion, consistently outperform their counterparts.

ESG AND ITS GROWING IMPORTANCE IN THE BUSINESS WORLD

Praveen Bhatia

What is ESG?

Employed as a method of evaluating investments, environmental, social, and governance (ESG) investing takes into consideration a company's policies and practices that encourage responsible behaviour. In today's financial world, many mutual funds, brokerage firms, and robo-advisors have adopted ESG principles, providing an assortment of investment choices that cater to these standards. The advantages of ESG go beyond promoting ethical investment since it safeguards portfolios by avoiding companies involved in questionable or hazardous undertakings. Within the ESG investment world, concerns over authenticity are increasing. There is worry that corporations may make false claims about their ESG achievements. Therefore, the importance of transparency and sturdy evaluation techniques is emphasised.

The genesis of Environmental, Social, and Governance (ESG) investing can be traced back to the evolution of ethical investment practices and the imperative to align financial returns with broader societal and environmental concerns. Ethical investing was initially established in the 1900s, as a means of steering clear of questionable industries. However, it shifted towards a more inclusive and data-driven technique. Coinciding with widespread global attention on issues like social inequality, climate change, and corporate governance lapses, the early 2000s proved to be a turning point for ESG. This era highlighted how a company's financial success is closely linked to its environmental, social, and governance obligations.

Investors quickly realised the potential of ESG investing when they began incorporating data-driven assessments of companies' ESG practices, policies, and performance into their decision-making process. The financial sector has undergone a paradigm shift with more individuals and organisations embracing ESG investing principles. This is substantiated by data which shows exponential growth in ESG-focused assets under management (AUM). According to the Global Sustainable Investment Alliance, global ESG AUM reached $40 trillion in 2020. This unprecedented growth trajectory has propelled the dual benefits of pursuing financial returns while fostering positive societal and environmental impacts.

ESG inclusions:

ESG inclusions encompass 3 board set factors - Environment, Social and Governance for the diminution of risk and augmentation of positive directing of funds.

Environment

- ***Climate Change Risk:*** Climate change is the most important issue in today's business environment. According to the Intergovernmental Panel on Climate Change (IPCC), global temperatures have risen by about 1.2°C above pre-industrial levels. This escalation poses significant risks to companies around the world. Climate-related risks could cost the global economy as much as $23 trillion by 2050 if left unchecked, according to a study by the Global Risk Institute. As a result, investors are increasingly questioning companies' strategies for mitigating these risks.

- ***Resource management:*** Effective resource management is not only beneficial to the environment but also has economic benefits. Companies that optimise resource efficiency can reduce costs by 10% to 20% and according to the World Business Council for Sustainable Development (WBCSD), adopting circular economy principles could lead to an economic opportunity of $4.5 trillion by 2030. Investors are interested in evaluating how effectively companies manage resources, as this directly affects profitability and sustainability.
- ***Biodiversity and Ecosystems:*** Companies are increasingly under scrutiny for their impact on biodiversity and ecosystems. For instance, data from the UN Environment Programme indicates that the global annual economic cost of land degradation alone is estimated at $300 billion. Investors are evaluating corporate commitments to biodiversity conservation and responsible land use practices.

Social

- ***Labour practices:*** Ensuring fair and ethical labour practices is a vital societal issue. Data from the International Labour Organization (ILO) reveals that nearly 25 million people worldwide are victims of forced labour, with a global economic cost estimated at $150 billion annually. Investors scrutinise companies' labour practices, including fair wages, workplace diversity, and compliance with labour rights, because these factors can significantly affect a company's reputation and long-term success.
- ***Community engagement:*** Effective community engagement is increasingly seen as a business imperative. Investors are scrutinising companies' efforts to build positive relationships with the communities in which they operate, recognising the potential for economic benefits and greater social empowerment.
- ***Human rights:*** Respect for human rights is essential to responsible business conduct. Underscoring the importance of this aspect in the corporate world, 44% of global companies assessed have a policy on human rights due diligence. Investors are increasingly concerned about companies' obligations to uphold human rights in all aspects of their operations, as violations can lead to reputational damage and legal consequences.

Governance

- ***Board composition:*** The composition of a company's board of directors is a key governance factor. Data shows that companies with diverse boards are more innovative and financially successful. A study of 22,000 companies found a link between gender diversity on boards and improved profitability, according to the Peterson Institute for International Economics. Investors analyse the independence, diversity and expertise of board composition to assess governance quality.
- ***Executive compensation:*** Linking executive compensation to firm performance is a key issue of governance. According to the Economic Policy Institute, since 1978, US CEO compensation has increased by 1,322%, while employee compensation has only increased by 18%. Investors are increasingly calling for transparent and performance-based executive compensation packages to ensure that incentives are aligned with shareholder interests and long-term sustainability.
- ***Anti-corruption measures:*** Preventing corruption and unethical behaviour is fundamental to good governance. Corruption remains a global problem, according to Transparency International's Corruption Perceptions Index, with more than two-thirds of countries scoring below 50 on the index. Investors carefully scrutinise companies' anti-corruption measures, including policies, reporting mechanisms, and compliance with international anti-corruption standards, because corruption scandals can lead to significant financial and reputational damage.

The comprehensivity of ESG investing allows investors to assess the wholesome outlook of the company and whether the company is able to align with its financial objectives.

The Relevance of ESG

- ***ESG-Related Risks: Identification and Mitigation:*** ESG factors play a vital role in reducing corporate risk. Research by the Carbon Disclosure Project (CDP) shows that companies that fail to manage climate-related risks could face a loss of up to 45% of their profits. This underscores the importance of identifying and managing ESG-related risks. Analysis of historical data shows that companies with poor ESG performance tend to face greater regulatory, legal and reputational risks. By examining ESG metrics, investors can uncover hidden risks and manage them proactively, helping to build stronger and more resilient portfolios. Effective ESG integration involves developing strategies to mitigate identified risks. These strategies may include reducing carbon footprints, supply chain transparency or improving labour practices. By leveraging data-driven insights, investors and businesses can implement targeted risk mitigation actions, ultimately ensuring financial stability and long-term value.

Enhanced reputation

- ***Public Perception and Brand Value:*** Public perception and brand value are intrinsically tied to ESG performance. A survey conducted by Nielsen found that 66% of global consumers are willing to pay more for products and services from companies committed to positive social and environmental impact. According to the survey by Brand Finance, businesses with higher ESG ratings have brand values that are 5% higher than those of their competitors. Investors are becoming more aware of the financial benefits of favourable public opinion and brand value, encouraging them to take ESG considerations into account when making investment decisions.

- ESG matters for customers and investors. Impact investments surged, growing 17% yearly to $715 billion in assets from 2015 to 2020. Edelman's survey highlights that 64% of consumers are "belief-driven buyers," favouring companies with values. ESG-focused firms gain a competitive edge and better access to funding.

Beyond risk mitigation and reputation enhancement, ESG also holds the potential to unlock new opportunities, attract investment, and foster sustainable growth in an increasingly conscious and interconnected global economy.

The Importance of ESG

Financial Performance: Companies with higher ESG ratings tend to have better financial performance, according to an MSCI ESG Research study. Companies with a high ESG rating outperformed their low-ESG counterparts by approximately 12 per cent over a five-year period. Additionally, Harvard Business Review research indicates that businesses with strong ESG profiles are more likely to have lower capital costs, thereby increasing financial returns. The significance of ESG considerations for investors looking for sustainable and profitable opportunities is emphasised by these findings.

Long-Term Sustainability and Profitability: Environmental, social, and governance (ESG) factors contribute to long-term sustainability and profitability. Companies with better ESG performance are better able to weather economic downturns. For instance, ESG-focused funds were more resilient than conventional funds during the COVID-19 pandemic, resulting in smaller declines in returns. ESG integration promotes innovation, resource efficiency, and brand loyalty in addition to resilience, all of which directly affect profitability. As a result, investors are increasingly realising that ESG is a path to long-term financial success.

Regulatory Trends: ESG reporting and disclosure are being mandated by regulatory bodies and governments around the world. The Sustainable Finance Disclosure Regulation (SFDR) of the European Union, requires participants in the financial market to disclose how they incorporate sustainability risks into their investment decision-making process. Companies must embrace ESG transparency and align their operations with changing legal requirements in light of the proliferation of regulations.

Legal and Financial Implications of Non-Compliance: Companies that fail to address ESG issues run the risk of having their reputations damaged. According to a Deloitte survey, 65 per cent of executives think that non-financial ESG performance will be just as important as financial performance in the next five years. The significance of ESG compliance for long-term viability is brought to light by this shift in perception. Financially, noncompliance can have a significant impact on a company's ability to attract investors and customers as well as reduce access to capital.

Thus, data demonstrating its positive correlation with financial performance and its growing significance in regulatory frameworks support the significance of ESG.

Economic Implications

Job Creation: ESG initiatives have the potential to significantly drive job creation. The renewable energy sector, driven by ESG concerns, is anticipated to generate over 24 million new jobs worldwide by 2030, according to World Economic Forum (WEF) data. In a similar vein, the International Labor Organization (ILO) has reported that, over the course of the next two decades, the transition to a green economy—a central ESG objective—could result in the creation of up to 60 million jobs worldwide.

Stimulating Economic Growth: ESG practices can foster innovation and new market opportunities, which in turn can stimulate economic growth. By 2030, the Business and Sustainable Development Commission projects that 380 million new jobs and $12 trillion in economic opportunities could be created through the implementation of sustainable business models based on ESG principles. This data indicates that ESG-driven economic growth has the potential to alter economies and industries.

Benefits to Businesses and Economies: The resource efficiency of ESG benefits both individual businesses and economies as a whole. According to a study conducted by Accenture Strategy, businesses that implement resource-efficient strategies have the potential to cut their annual carbon emissions by 4.3 gigatonnes. In addition, increased resource efficiency enhances economic competitiveness as a whole. Resource efficiency driven by ESG is good for businesses' bottom lines as well as for the sustainability and prosperity of nations.

Geopolitical Relevance of ESG Investments: ESG investments are influencing international dynamics as countries and regions compete for global leadership in sustainable technologies and practices. For instance, the Green Deal of the European Union aims to establish the EU as a technological and sustainable development powerhouse. China's aggressive designs for sustainable power and electric vehicles highlight its yearnings for ESG predominance. ESG investments play a crucial role in the geopolitical landscape, influencing trade, alliances, and shifts in global power.

Unilever's ESG initiatives

Unilever, a global manufacturer of consumer goods, has made environmental, social, and governance (ESG) a central tenet of its business strategy. The Sustainable Living Brands portfolio of products from Unilever that incorporate sustainability shows impressive growth. These brands outperformed Unilever's other brands by 69% in 2020, according to the company's annual report, indicating strong consumer demand for sustainable products. The company's commitment to ESG principles is demonstrated by its achievement of 100 per cent sustainably sourced palm oil in 2020.

Unilever's ESG commitment goes beyond financial performance. They have successfully capitalised on the fact that 73% of consumers polled in 2020 were willing to pay more for sustainable products. Besides, Unilever's social drives, for example, its handwashing effort, "Lifebuoy," have had a critical cultural effect. Over a billion people participated in the campaign, which contributed to improved public health and hygiene. This combination of economic success and social responsibility shows how ESG can be used for long-term growth while also helping society.

Conclusion

Environmental, Social, and Governance (ESG) considerations have advanced from being merely ethical considerations to formidable drivers of financial performance and sustainability in investment and finance. The multifaceted relevance and significance of ESG, as well as its profound impact on the financial world, have been highlighted by this article.

Responsible investing, corporate strategies, and global economic landscapes are all being influenced by ESG, which is at the forefront of the financial world's changing landscape. Not only is it a wise decision to acknowledge the financial importance of ESG, but in the 21st century, it is an essential step toward financial success, resilience, and sustainability. Utilising ESG's financial potential will be crucial for individuals, organisations, and nations navigating the intricate financial landscapes.

ESG FUNDS: INVESTMENTS OF THE FUTURE

Kritik V. Kukreja

Introduction

A new type of investing has evolved in our quickly changing world, where environmental and social concerns are taking centre stage: ESG funds. ESG, which stands for Environment, Society, and Governance, is radically changing the financial landscape.

Traditional financial practices are being reevaluated as we stand at a fork in the road. Profit, formerly thought to be the main aim of investment, is now being supplemented with a more inclusive viewpoint that includes our planet's well-being and social peace. ESG funds represent this developing mentality, ushering in a new era in which investments are about more than just financial merits but also social impact.

What exactly is an ESG Fund?

ESG funds represent a paradigm change in which financial development is combined with a firm commitment to environmental sustainability, social responsibility, and ethical governance. These funds aren't just interested in financial gains; they carefully select firms that thrive in three critical areas: the environment, society, and governance.

Consider the environment. ESG funds fund businesses that use clean energy, manage waste effectively and contribute to environmental preservation. Their investments have a rippling effect across the corporate sector, encouraging innovation in sustainable technology and practices.

Within the ESG framework, society is of exceptional importance. ESG fund managers target companies prioritising fair labour practices, fostering respect for local communities, and encouraging diversity and inclusion. ESG funds encourage beneficial societal change by investing in such enterprises, striving for a healthy cohabitation between corporations and the communities they serve.

The third pillar of ESG, governance, emphasises the importance of responsible leadership and ethical behaviour. ESG investments are drawn to companies that maintain proper risk management methods, make transparent judgments and prioritise shareholder rights. Such governance practices boost individual firm stability and help sustain the financial ecosystem's health.

Why are they popular among investors?
Consider investing in firms that share your beliefs and actively work to better the world; this is precisely why ESG funds are gaining popularity among investors. Beyond monetary gains, these investments allow individuals to connect their portfolios with their own ideas and objectives.

ESG investments provide a light of hope in a world marked by escalating environmental concerns, social inequality, and governance failures. They enable investors to use their financial power to promote a more sustainable and fair future. As more investors recognise the potential of ESG funds to create good change, a virtuous cycle emerges, driving corporations to embrace responsible practices and connect their plans with societal and environmental well-being.

What distinguishes them from ordinary funds?
ESG funds carefully select portfolio elements, focusing on firms with strong ESG performance. These entities don't just generate profits but also work towards substantial societal and environmental reforms.

Conventional funds, while frequently focused on maximising profits, may not pay close attention to ESG considerations. This divergence highlights the fundamental shift brought by ESG funds—a shift away from a myopic focus on short-term returns and towards a comprehensive strategy that includes the long-term sustainability of businesses and the environment.

What is the size of ESG funds?
Currently, ESG funds are not as large as standard funds. However, they are gaining popularity. As worldwide awareness of environmental and social concerns grows, so does the attraction of ESG investing; this is especially true in nations like India, where there is a growing understanding of the need for ethical investing.

India, a country rich in various cultures and stunning scenery, is dealing with issues such as pollution and socioeconomic injustice. ESG funds emerge as a beacon of hope and development in this scenario. ESG funds contribute not just to financial progress but also to societal upliftment by investing in firms committed to tackling these important concerns.

ESG Funds from India's Point of View
In India, we see a confluence between ESG funds and the country's ambitions for sustainable development. Environmental issues and the need to address socioeconomic inequities have hampered India's growth. In this setting, ESG funds act as catalysts, guiding investments to companies with the potential to effect good change.

As Indian firms embrace ethical practices and prioritise ESG considerations, the country's reliance on ESG funds expands; this is more than simply a financial shift; it is a purposeful attempt to construct a better, fairer future for India and its people.

Conclusion
Finally, ESG funds propose a revolutionary investing path that goes beyond financial rewards and intersects with environmental stewardship, social equality, and ethical governance. Their growing popularity reflects a widespread desire to be a part of good change and to use financial power for the improvement of the world.

While ESG funds may not yet outweigh traditional funds in terms of size, their impact is evident, particularly in emerging markets such as India. We are entering an age in which the power of money converges with the imperative of responsible, sustainable, and ethical business practices as we embrace the possibilities of ESG investing. ESG funds are more than simply investments; they are tools of development, guiding us toward a future in which financial growth and environmental growth coexist.

THE JUXTAPOSITION OF JUST TRANSITIONING: RECONCILING SOCIAL JUSTICE AND CAPITALISM

Gaurangi Agarwal

In recent years, the urgent need for sustainability and climate action has made the concept of a ***"just transition"*** an essential discourse within global economic debates. A just transition refers to the meticulous management of societal and economic shifts towards a more environmentally sustainable and equitable future. However, reconciling social justice and capitalism poses a challenging task, requiring a comprehensive analysis of the complexities involved in addressing social and income inequalities while transitioning to a more sustainable economy.

Capitalism, as an economic system, has brought undeniable progress and prosperity to societies worldwide. However, it has resulted in significant wealth disparities and social inequalities. Transitioning to a sustainable economy requires mitigating these disparities while ensuring that the transition itself is just and inclusive.

Addressing Inequalities

One key aspect of a just transition is addressing income inequalities. Currently, the inequitable distribution of wealth further perpetuates social disparities and impacts marginalized communities disproportionately. To create a more just society, the transition must provide opportunities for decent work and a fair income. This can be achieved through policies promoting green job creation, wage subsidies, and upskilling programs for workers in industries impacted by the transition, such as fossil fuels. In doing so, the transition can effectively address income inequality, providing economic security to vulnerable households and communities. For instance, the regional training on Youth empowerment for a circular economy in Africa is part of UNDP's initiatives to support young people to become more involved in entrepreneurial and innovative activities in the opportunity-rich agribusiness sector.

According to the African Development Bank, the potential of Africa's agribusiness sector is such that it is predicted to reach $1 trillion by 2030. This support is deployed through training, mentoring and skills programmes that promote employment, entrepreneurship, innovation, and leadership. The different circular economy efforts, in accordance with the Institute for Security Studies (ISS), can aid in Africa's economic development, improve the sustainability of development, and increase Africa's resistance to potential threats.

What are the Social Impacts?

Another critical aspect to consider is the social impact of the transition. Historically marginalized groups, such as indigenous communities and low-income populations, have often borne the brunt of environmental damage caused by unsustainable practices. Consequently, these communities must be empowered and included in decision-making processes regarding the transition. Indigenous knowledge and practices can offer valuable insights into sustainable development strategies. An inclusive approach, with the active involvement of all stakeholders, can lead to better outcomes in terms of social justice.

Addressing social justice within a capitalist framework also requires a reevaluation of the current mechanisms of wealth creation and distribution. Capitalism tends to prioritise profit-driven enterprises, which can undermine social and environmental goals. To reconcile social justice and capitalism, it is necessary to redefine economic success to include not only financial gains but also social and environmental factors. This would entail promoting metrics such as the triple bottom line, where businesses are evaluated based on their social, environmental, and financial performance. By incentivising sustainable practices and responsible corporate behaviour, capitalism can better align with the principles of social justice.

Furthermore, fostering an equitable transition necessitates robust social safety nets and support systems. As some industries decline during the transition, workers must be protected from the adverse impacts of job losses or relocations. Effective social safety nets should encompass unemployment benefits, healthcare coverage, and access to affordable housing, ensuring that no one is left behind. By guaranteeing basic needs, societies can reduce social and economic inequality during the transition.

The juxtaposition of just transitioning, reconciling social justice and capitalism, requires a comprehensive analysis and intentional action. While capitalism has undeniably contributed to economic growth, harnessing its potential for social and environmental benefits necessitates careful consideration. Addressing income and social inequalities, actively engaging marginalized communities, redefining our metrics of economic success, and strengthening social safety nets are key steps toward creating a just transition. By intertwining social justice and capitalism, we can forge a path toward a sustainable future that leaves no one behind.

THE RISE OF ESG CONSULTING: DRIVING SUSTAINABLE BUSINESS

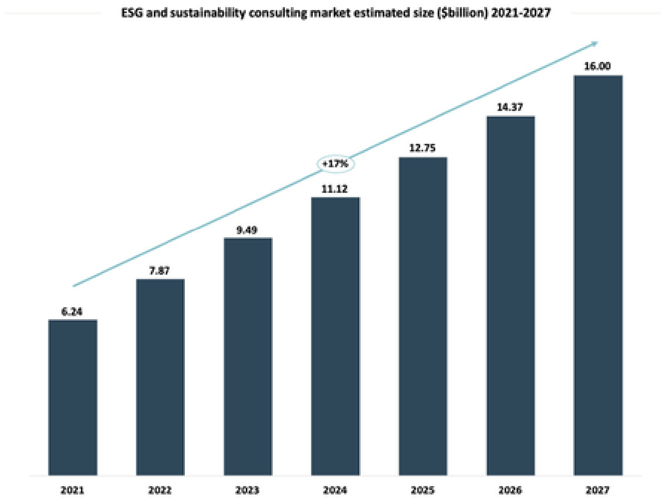
Prashasti Jain

"ESG consulting is the compass guiding businesses towards a future where success is measured not just in profits but in a positive impact on people, the planet, and prosperity."

ESG integration and Global commitments

Gone are the days when financial performance alone defined a company's success. Nowadays, a fresh perspective on success has arisen, including how well a company does financially and its dedication to environmental protection, social accountability, and transparent governance. The above quote perfectly captures the core of ESG (Environmental, Social, and Governance) consulting, a revolutionary force that is altering the corporate landscape. ESG Consulting bridges the gap between profit and responsibility by combining the fundamentals of sustainable business with workable growth plans.

Under the Paris Agreement, a total of 197 nations are committed to achieving net zero carbon emissions by 2050, aiming to mitigate the impact of climate change. Companies must adopt an ESG-first strategy to contribute to a sustainable society. ESG integration in investment decisions is becoming increasingly important, with sustainable funds reaching a record $3.9 trillion last year. Although ESG has taken such a prominent place on the agenda, many mid-market businesses appear unable to meet the challenge. Lack of support from senior management is hindering many companies' ESG ambitions, and it can be difficult to calculate the carbon or social impact of each link in a supply chain, which further hinders change. The need for outside expertise that specialises in ESG has been on the rise. Fortunately, the ESG consulting industry is expanding quickly and is bringing about positive change by putting ESG at the forefront of business strategy for organisations. According to a report published by research and advisory firm Verdantix, the ESG and sustainability consulting industry as a whole is expected to develop at a 17% CAGR between 2022 and 2027. Additionally, the global market for ESG consulting will grow to $16 billion by 2027.



Source: Verdantix. Consultancy.uk analysis.

ESG Consulting as a Revolutionary Force

Considering the data, doesn't the prospect of pursuing a career as an ESG consultant seem promising to you? These professionals hold a range of duties, each offering distinctive value to an organisation. ESG consultants can help companies conduct an ESG audit, analyse their practices and competitive advantages, and offer guidance on ESG risk issues and solutions. ESG policy monitoring and reporting help businesses track progress and identify areas for improvement. ESG consultants develop effective strategies by identifying areas of interest, objectives, and tangible tactics for implementation. They provide support throughout the strategy's formulation, execution, tracking, reporting, and use of ESG technology. They also assist in effectively communicating a company's ESG initiatives, boosting engagement and its business profile among clients, investors, and employees. ESG consulting is crucial for businesses to mitigate risks, identify vulnerabilities, and create value. It helps businesses shield themselves from potential crises and strengthen their long-term sustainability. Prioritising ESG considerations gives companies a competitive edge in a world where consumers influence consumption. ESG consultants help businesses craft strategies that resonate with ethical consumers, resulting in customer loyalty, market expansion, and a positive reputation, enhancing a company's bottom line and advancing responsible commerce. It helps companies achieve long-term viability by harmonising immediate objectives with future generations' needs. By transforming businesses into stewards of the environment, they nurture ecosystems, reduce carbon footprints, and mitigate resource depletion. This stewardship addresses ecological concerns and ensures adaptability and prosperity in a resilient world.

Investor sentiment has shifted, with financial stakeholders prioritising ESG performance. This shift leads to a symbiotic relationship between ESG consulting and investor confidence. Robust ESG strategies attract socially responsible investors and facilitate transparency, promoting informed decisions and accountability between companies and their financial backers. Stewardship is important in today's changing world. It means carefully using and managing money to make profits while also considering the environment and society. This shows the finance industry's commitment to balancing financial success with the well-being of the planet and people. This balancing act is not just a trend; it's a strategic change that can change how the industry works.

Beyond the confines of specific organisations, the revolutionary influence of ESG consulting resonates across industries. Market leaders who follow the advice of ESG experts and adopt sustainable practices pave the way for changes in the entire industry. A culture of shared accountability is fostered as competitors are encouraged to do the same. Businesses collectively pioneer sustainable technology, resource-efficient processes, and moral business models in industries that develop into innovation hubs. The Sustainable Development Goals (SDGs) of the United Nations are particularly relevant to ESG consultancy. Businesses aid in solving issues like poverty, inequality, and climate change by integrating their company strategy with these global ambitions. The ripple effects extend beyond economic boundaries, encompassing social betterment and environmental conservation.

Challenges in ESG adoption

However, there are some difficulties in the field of ESG consulting. Due to the subjectivity of ESG criteria, there is a possibility of "greenwashing," in which businesses portray themselves as sustainable while taking no real action. To ensure that sustainable pledges are genuine and actionable, ESG consultants must navigate this terrain with care. ESG Consulting has challenges related to data availability and quality. For accurate assessment and strategic development, reliable data is crucial. The effectiveness of analysis and benchmarking might be hampered by differences in data availability and quality between industries. To deliver thorough insights, ESG consultants are entrusted with negotiating these contradictions. Despite these difficulties, ESG consulting has a bright future. Businesses from all industries will increasingly look for help negotiating the challenging sustainability landscape as worldwide awareness of ESG imperatives continues to rise. The scope and accuracy of ESG consulting services will probably undergo a revolution due to the advancement of technology, particularly AI-driven insights and data analytics. These tools will improve predictive modelling, increase data accuracy, and offer comprehensive solutions for companies aiming for sustainability.

Conclusion

In conclusion, ESG consulting is a critical driver for changing the corporate landscape. It gives businesses the freedom to adopt a comprehensive strategy that incorporates governance, social, and environmental factors into their plans and daily operations. ESG consulting helps firms achieve sustainable performance by promoting resilience, accelerating innovation, and boosting stakeholder involvement. It has an impact on sectors, laws, and social standards, in addition to specific businesses. ESG consulting serves as a beacon pointing businesses in the direction of a future where ethical and sustainable behaviour is not only a choice but a core business requirement as we stand at a crossroads of global challenges and opportunities.

ESG AND CSR: EXPLORING CONFLICTS AND SEEKING UNITY

Ojas Gupta

Navigating the vast landscape of corporate responsibility and sustainability can often feel like embarking on a challenging expedition. With numerous acronyms floating around, confusion is easy. ESG (Environmental, Social, and Governance) and CSR (Corporate Social Responsibility) are critical in shaping contemporary business practices.

ESG, which stands for Environmental, Social, and Governance, refers to criteria for evaluating a company's sustainability and ethical practices. ESG activities focus on minimising negative environmental impacts, promoting social welfare, and ensuring good corporate governance. CSR, or Corporate Social Responsibility, encompasses a company's voluntary actions to improve society, including philanthropy, employee volunteer programs, sustainable business practices, and community engagement initiatives.

ESG and CSR are terms often used interchangeably in discussions about responsible business practices. While they share some similarities, there are key differences between them. ESG focuses on evaluating a company's performance in three specific areas: environmental impact, social responsibility, and corporate governance. It takes into account factors such as carbon emissions, waste management, labour practices, diversity and inclusion policies, board composition, executive compensation structure, and more. Essentially, ESG looks at how well a company manages its impact on the environment and society while maintaining strong governance standards.

In contrast, CSR refers to a set of voluntary initiatives taken by companies to contribute positively to society: philanthropic activities like donating to charities or supporting community development projects.

The main difference between ESG and CSR lies in their scope and focus. ESG is more comprehensive, encompassing not just philanthropy but also environmental sustainability efforts and ethical business practices reflected in good governance principles.

While both concepts aim to promote sustainable business practices with positive impacts on society, they approach them from different angles.

In today's world, businesses are increasingly being held accountable for their impact on society and the environment. As a result, concepts like ESG and CSR have gained significant importance. The relevance of ESG and CSR in business practices cannot be overstated. Consumers are becoming more socially conscious and are seeking out brands that align with their values. By prioritising ESG factors and embracing CSR initiatives, businesses can build trust with consumers while mitigating risks associated with environmental degradation or unethical behaviour. Moreover, adopting ESG principles can lead to cost savings through improved efficiency in resource utilisation. Companies investing in renewable energy sources or adopting eco-friendly manufacturing processes reduce their carbon footprint and benefit from reduced operating costs over time.

Furthermore, investors are increasingly considering ESG metrics when making investment decisions. Businesses that demonstrate strong performance across these areas tend to attract more capital as investors recognise the long-term value-creation potential arising from responsible corporate behaviour.

Implementing ESG and CSR initiatives is crucial for businesses looking to make a positive impact on society while maintaining strong ethical practices. However, the effective implementation of these activities requires careful planning and strategic decision-making. Businesses need to assess their current operations and identify areas where they can integrate ESG principles; this may involve conducting sustainability audits or reviewing policies related to environmental conservation, labour rights, diversity and inclusion, corporate governance, etc. Once gaps are identified, companies can develop action plans that outline specific goals and targets for improvement. These plans should be aligned with the organisation's mission and values while considering stakeholder expectations. Financial and human resources must be allocated towards these initiatives, including investment in technologies that promote sustainability and employee training programs that foster a culture of social responsibility.

Regular monitoring and evaluation are essential components of implementation. By measuring progress against established goals through key performance indicators (KPIs), organisations can identify areas where adjustments may be needed or celebrate successes. Collaboration with external stakeholders such as NGOs or industry associations is valuable in implementing ESG and CSR initiatives; by working with like-minded partners, businesses can amplify their impact while building meaningful relationships within their industries.

Successful implementation of ESG and CSR requires commitment from all levels of an organisation. It involves integrating sustainable practices into day-to-day operations and fostering a culture that promotes responsible business behaviour. By doing so effectively, companies can enhance their reputation and contribute positively to addressing global challenges, creating shared value for themselves and society.

Looking ahead, the future of ESG and CSR is poised for significant growth and evolution. Societal expectations are shifting towards more sustainable practices and responsible business conduct, requiring organisations to prioritise these areas. Key trends shaping the future of ESG and CSR include heightened stakeholder engagement, the role of technology, regulatory developments, and the integration of ESG factors into investment decisions.

Heightened stakeholder engagement is a defining trend in the future of ESG and CSR. Stakeholders demand greater transparency and accountability from companies regarding their environmental impact, social initiatives, and governance practices; this means that businesses must actively engage with their stakeholders to understand their concerns and incorporate them into their strategies.

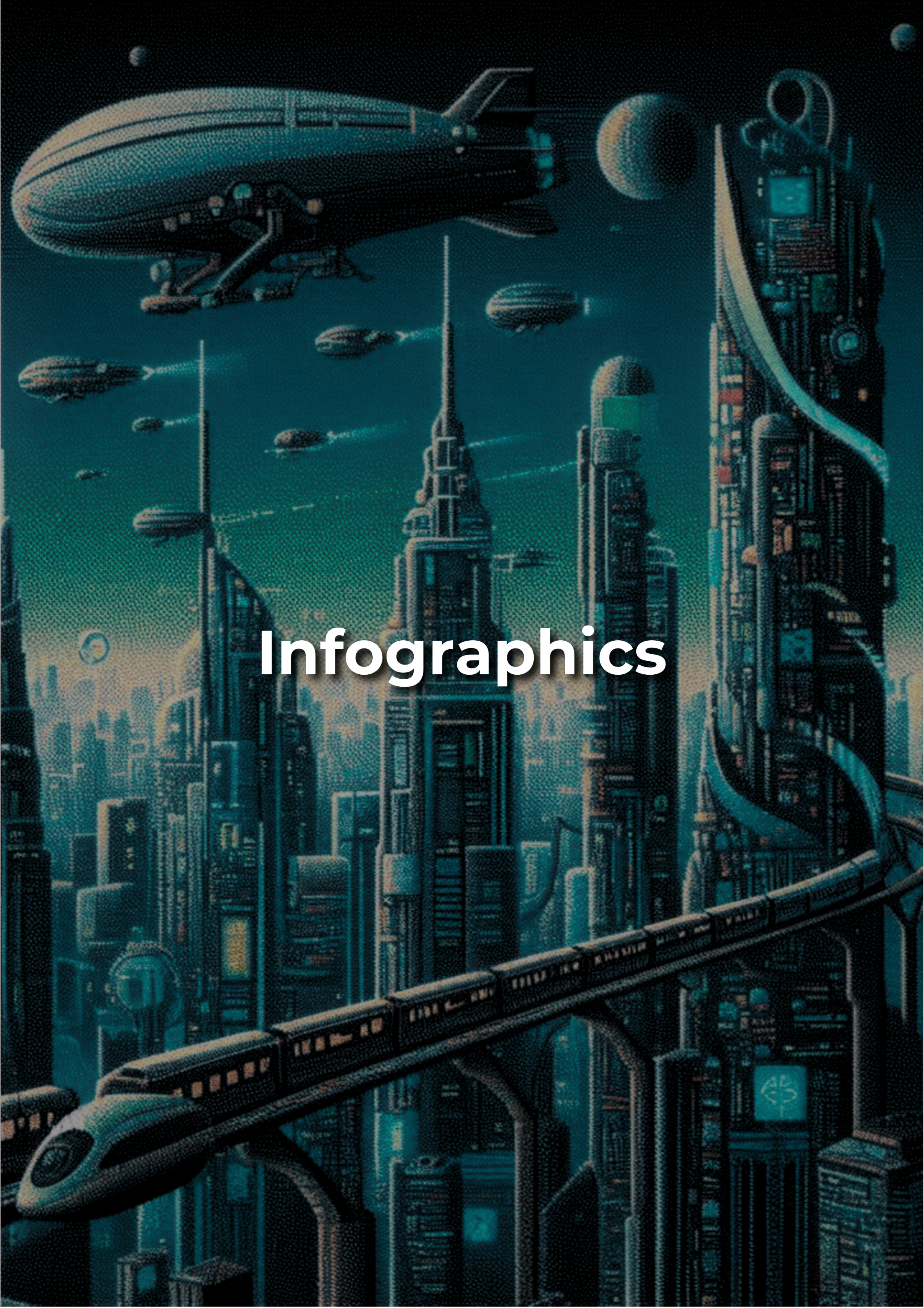
Technology is set to play a crucial role in advancing ESG efforts. From leveraging data analytics to track progress on sustainability goals to implementing blockchain solutions for supply chain transparency, technology offers innovative ways for companies to drive positive change. By utilising cutting-edge technologies, businesses can enhance the accuracy and transparency of their reporting, making it easier for stakeholders to assess their ESG and CSR efforts.

Regulatory developments will also significantly impact the future of ESG. As governments worldwide seek to address pressing global challenges such as climate change or income inequality through policy measures, companies will face increasing pressure to comply with regulations related to environmental protection, labour rights, diversity and inclusion, among others. These regulations will necessitate that businesses integrate ESG principles and CSR initiatives into their operations, ensuring they meet the evolving legal requirements.

Additionally, the integration of ESG factors into investment decisions is gaining momentum. Contemporary investors consider non-financial metrics when evaluating potential investments, recognising that strong performance in areas such as carbon emissions reduction, employee well-being, and community engagement can contribute to long-term value creation. Companies that prioritise ESG principles and report progress transparently can attract investments from socially responsible investors who prioritise sustainability alongside financial returns.

In conclusion, ESG and CSR are powerful frameworks that have become crucial in shaping modern business practices. While they share common goals of promoting responsible business practices and positive societal impact, they approach these goals differently. ESG focuses on specific environmental performance indicators, social responsibility, and ethical governance, while CSR involves diverse activities such as philanthropy and community engagement. Embracing these trends will enable businesses to create shared value, aligning economic success with responsible practices. As societal expectations evolve, organisations prioritising ESG and CSR will be better poised to thrive in the ever-changing landscape of corporate responsibility and sustainability.

Infographics



Average Returns (2010-2022)

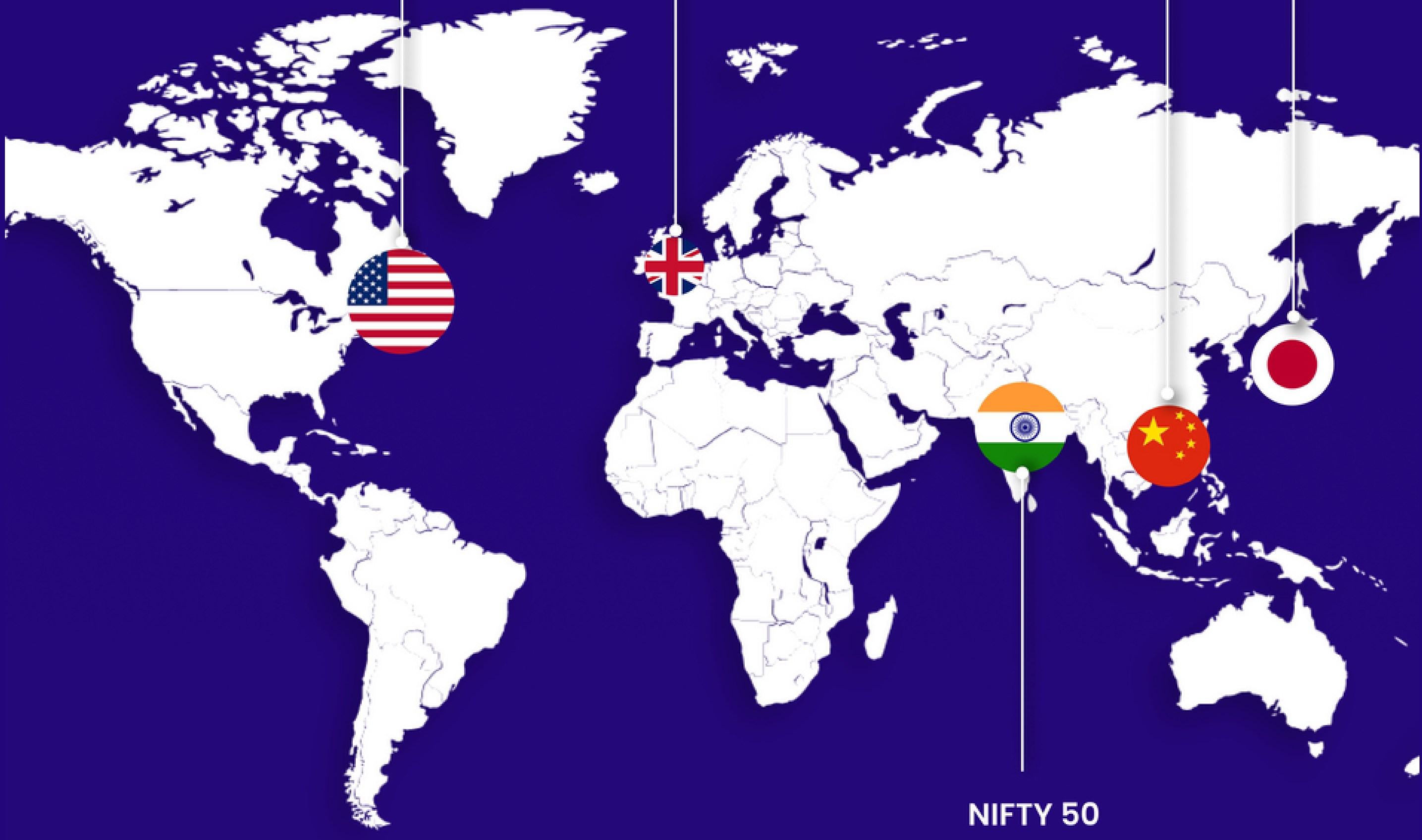
The data of average return of NASDAQ 100, Hang Seng Index, FTSE 100, NIFTY 50, NIKKEI 225

NIKKEI 225
Average Return (2010-22): 9.06%
- 57.22% (2013)
- -14.32% (2018)

NASDAQ 100
Average Return (2010-22): 16.76%
- 43.63% (2020)
- -28.22% (2022)

FTSE 100
Average Return (2010-22): 6.25%
- 14.97% (2020)
- -12.49% (2018)

HANG SENG
Average Return (2010-22): 9.18%
- 33.19% (2017)
- -24.94% (2012)



NIFTY 50
Average Return (2010-22): 13.31%
- 30.65% (2012)
- -4.16% (2022)

- Highest Return in the Time Frame
- Lowest Return in the Time Frame

$35B

Jim Simons
Novo-Nordisk: 2.19%
Meta Platforms: 1.87%
Apple: 1.38%
Nvidia: 1.13%
Others: 93.43%

$28.1B

Warren Buffet
Apple: 51%
Bank of America: 8.51%
American Exp: 8%
Coca-Cola: 7%
Others: 25.49%

$106B

Ken Griffin
Microsoft: 1.29%
Invesco Qqq Tr: 1.29%
T-mobile US: 0.95%
Boston Scientific Corp: 0.93%
Others: 95.54%

$19.1B

Ray Dalio
Ishares TR: 5.54%
Ishares Inc: 5.46%
P&G: 4.33%
Johnson & Johnson: 3.18%
Others: 81.49%

Top 10 Investors and their Holdings

$18B

Steven Cohen
Nvidia: 2.40%
Microsoft: 2.15%
Amazon: 1.37%
Adobe: 1.28%
Others: 92.80%

Carl Icahn
Icahn Enterprises: 54.52%
CVR Energies: 15%
Southwest Gas: 4.39%
Firstenergy corp: 3.54%
Others: 21.94%

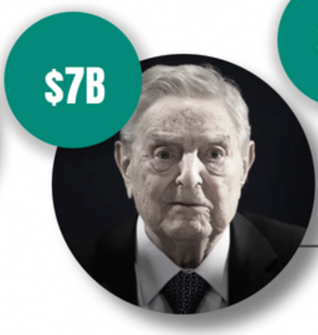
$10B

$6.2B

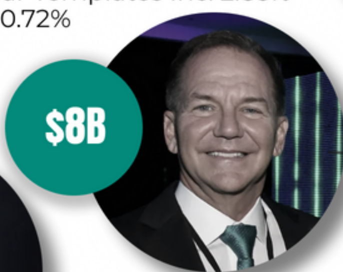
Stanley Druckenmiller
Nvidia: 13.97%
Coupang: 12.65%
Microsoft: 9.82%
Lilly Eli & Co: 8.75%
Others: 54.81%

Bruce Kovner
Savara: 46.11%
Xeris Holdings Inc: 42.76%
Rezolute Inc: 7.56%
Molecular Templates Inc: 2.85%
Others: 0.72%

$6.2B



$7B



$8B

Paul Tudor Jones
Horizon Pub: 2.12%
Microsoft: 1.35%
Spdr S&P 500: 1.34%
Nvidia: 1.23%
Others: 93.96%

George Soros
Ishares TR: 7.46%
Horizon Pub: 7.36%
Alphabet: 3.71%
Liberty Broadband Corp: 2.42%
Others: 79.05%

Debt to GDP ratios of top 10 Economies (2011-2021)

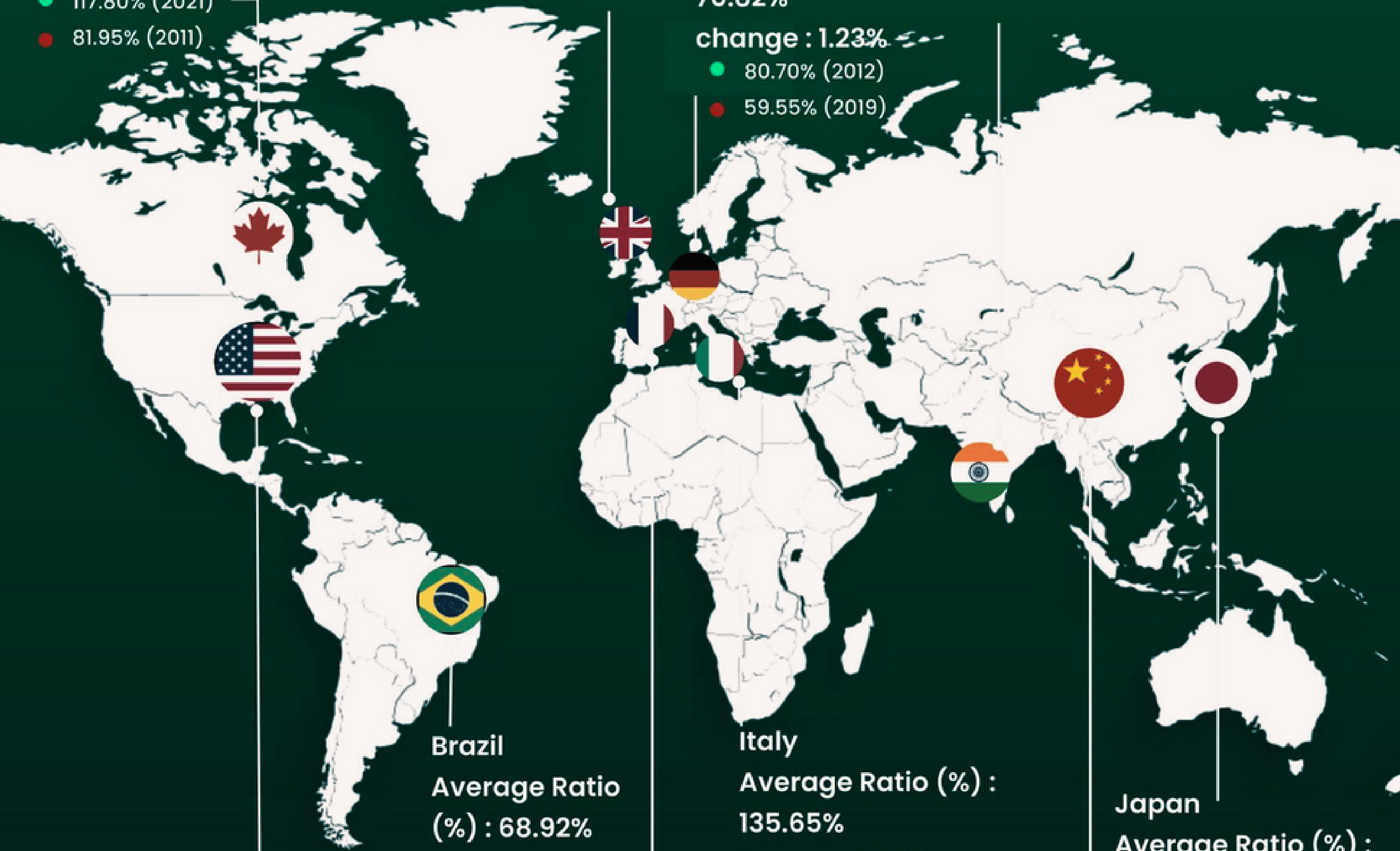
- Highest Return in the Time Frame
- Lowest Return in the Time Frame

Canada
Average Ratio (%) : 90.63%
change : 3.26%
- 117.80% (2021)
- 81.95% (2011)

UK
Average Ratio (%) : 101.05%
change : 2.83%
- 126.23% (2020)
- 89.55% (2011)

Germany
Average Ratio (%) : 70.82%
change : 1.23%
- 80.70% (2012)
- 59.55% (2019)

India
Average Ratio (%) : 72.68%
change : 2.94%
- 89.41% (2020)
- 66.56% (2014)



Brazil
Average Ratio (%) : 68.92%
change : 3.90%
- 86.94% (2019)
- 51.27% (2011)

Italy
Average Ratio (%) : 135.65%
change : 2.36%
- 154.90% (2020)
- 119.70% (2011)

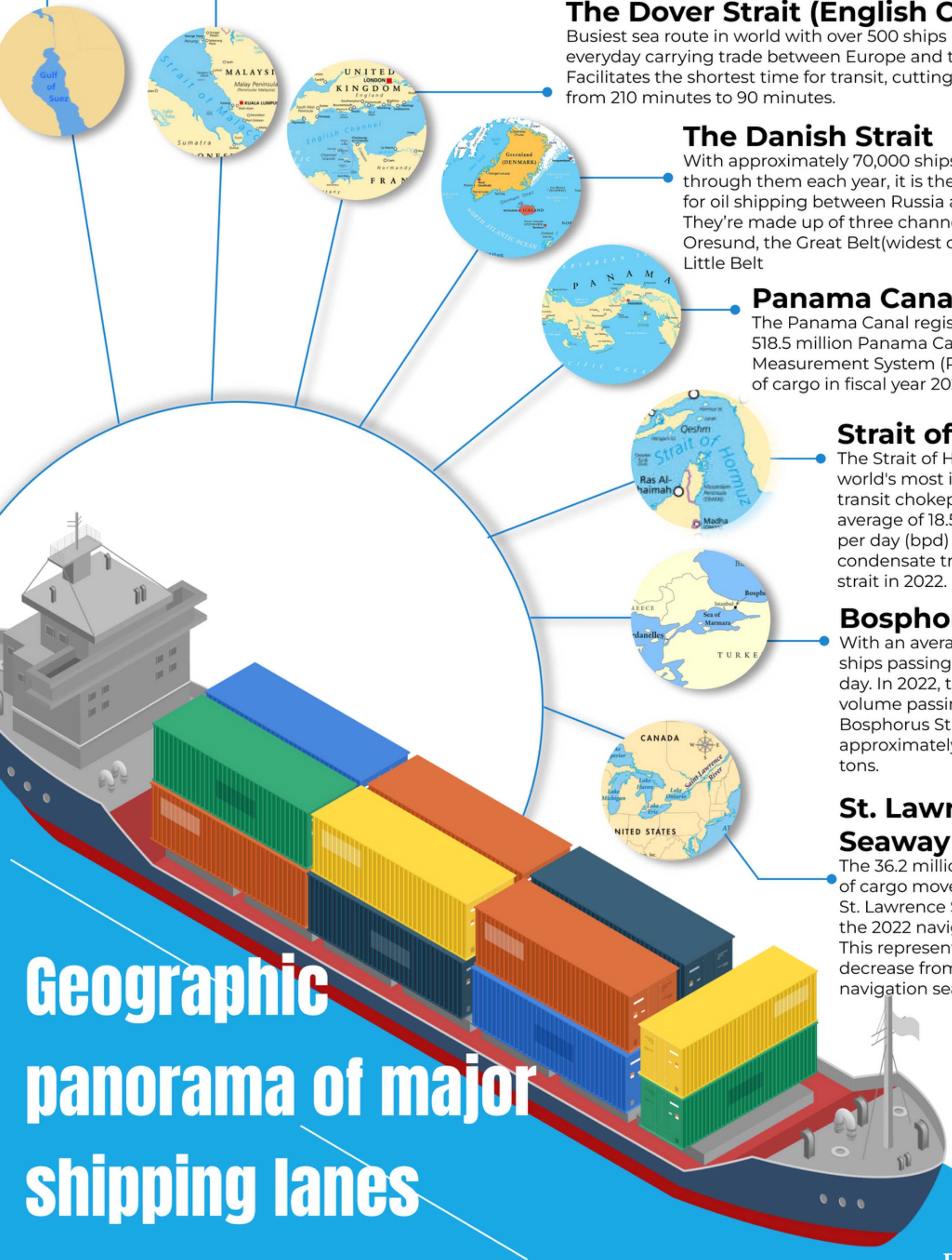
Japan
Average Ratio (%) : 195.32%
change : 2.27%
- 217.91% (2021)
- 175.57% (2011)

USA
Average Ratio (%) : 101.05%
change : 3.26%
- 126.23% (2020)
- 89.55% (2011)

France
Average Ratio (%) : 98.28%
change : 2.67%
- 114.60% (2020)
- 87.80% (2011)

China
Average Ratio (%) : 50.02%
change : 8.01%
- 71.10% (2021)
- 33.45% (2011)

Geographic panorama of major shipping lanes



Suez Canal

Fastest and shortest trade-link between Asia and Europe. Passage of 12% of the world trade. Over 22,000 ships transited in 2022 recording revenue of $7.9 billions

Strait of Malacca

It connects three of Asia's biggest economies: India, China, and Japan to each other and other important Asian economies. In 2022 ship traffic increased by 5.7%, accounting for 25% of all traded goods and 1/3rd of all seaborne oil

The Dover Strait (English Channel)

Busiest sea route in world with over 500 ships passing everyday carrying trade between Europe and the UK. Facilitates the shortest time for transit, cutting transport time from 210 minutes to 90 minutes.

The Danish Strait

With approximately 70,000 ships moving through them each year, it is the key pathway for oil shipping between Russia and Europe. They're made up of three channels — the Oresund, the Great Belt(widest channl) and the Little Belt

Panama Canal

The Panama Canal registered a total of 518.5 million Panama Canal Universal Measurement System (PC/UMS) tons of cargo in fiscal year 2022.

Strait of Hormuz

The Strait of Hormuz is the world's most important oil transit chokepoint, with an average of 18.5 million barrels per day (bpd) of crude oil and condensate transiting the strait in 2022.

Bosphorus Strait

With an average of over 50 ships passing through each day. In 2022, the total cargo volume passing through the Bosphorus Strait was approximately 525 million tons.

St. Lawrence Seaway

The 36.2 million metric tons of cargo moved through the St. Lawrence Seaway during the 2022 navigation season. This represents a 3.6% decrease from the 2021 navigation season.

The Experts Speak

SHANKAR PRASAD SARMA

IRS
Director, Economic Advisory Council to the Prime Minister

NAVIGATING INDIA'S ECONOMIC GROWTH AND SUSTAINABILITY

Mr Shankar Prasad Sarma is a distinguished professional hailing from the Indian Revenue Service, having joined the 2009 batch. He currently serves as a Director within the esteemed Economic Advisory Council to the Prime Minister, where his expertise and contributions are instrumental in shaping critical economic policies and strategies.

Throughout his career, Mr Sarma has held several pivotal roles, showcasing his extensive experience and profound insights in the field of taxation and public finance. Notably, he has made significant contributions as part of GST Intelligence.

His dedication and acumen also led to his tenure as an Under Secretary in the Ministry of Finance. Mr Sarma's diverse experience extends to his positions as Deputy Commissioner of Central Excise and Service Tax in Jodhpur and Deputy Commissioner of Customs at Jaipur International Airport and Cargo Complex. Prior to his distinguished government service, Mr Sarma's career path encompassed roles at institutions such as Korea Exchange Bank, Genpact, and the National Council of Applied Economic Research, providing him with a comprehensive understanding of various economic domains.
With a strong academic foundation, Mr Sarma holds a Master's degree in Economics from the esteemed Delhi School of Economics. He has further honed his expertise through a short-term course in Public Policy and Management at the prestigious Lee Kuan Yew School of Public Policy, National University of Singapore. Beyond his professional achievements, Mr. Sarma is a multifaceted individual, being an accomplished author and painter, exemplifying his creativity and intellectual prowess. His diverse skill set and profound contributions make him a noteworthy figure in the realm of economic and policy development.

Q1. Which sectors or areas of the economy present the greatest opportunities for India in its quest for a USD 5 trillion economy?
The Indian economy has displayed appreciable resilience in the wake of exogenous shocks and black swan events in recent years. It has grown at a healthy rate of growth in the range of 6-7 per cent in recent times which is substantially higher than most countries. At the current rate

of growth of GDP of 6-7 per cent, the following milestones in the size of the economy are projected: USD 5 trillion by 2025-26, USD 7 trillion by 2030, and USD 20 trillion by 2047, the hundredth year of India's independence. By 2047 the per capita income has the potential to be on the right side of $10,000, a five-time jump from present levels to completely transform the present society. Naturally, a higher rate of growth with a stable exchange rate would hasten the milestones.

But the pursuit or quest should not be for maintaining the status quo but to increase the rate of growth of GDP and also to make the growth of GDP more inclusive by addressing inequalities in income, opportunities, benefits, etc. To make this possible all the organs of the economy must function at their optimum. Some of the often-forgotten areas need to be highlighted first.

Firstly, there is an urgent need to optimise revenue and formalise the economy by bringing all elements into the organised economy. To understand the importance of revenue collected by the Government, it's important to appreciate the important role played by the resources at the disposal of the Government to help facilitate sustaining a higher growth rate through its fiscal policies and also insulating the economy as far as possible from external shocks. Optimising revenue, is therefore, pertinent in the wake of the dynamically changing world economic outlook ravaged by the ongoing Ukraine-Russia war, supply constraints, rising prices, and international political uncertainty. This has dented the efforts of the international economies to shrug off the pandemic-impacted sluggish demand. These exogenous factors have also contributed adversely on various fronts internally like increasing inflationary pressures, debt crisis, and hastening a reversal of easy money policy by letting rates rise in the short term which would inter alia have an adverse effect on demand and GDP. However, it's heartening to note that some of the ill effects like high inflation etc are easing in recent times.

The Government's both "allocative" and "nudging" way of fiscal policy facilitates achieving inclusive growth broadly defined under the Sustainable Development Goals. A recent working paper of the Economic Advisory Council to the Prime Minister states that *"Even if just a small amount—say, 5% of India's annual, additional public resources (₹10,000 crores)—were to be spent on identified policies, benefits could be generated worth possibly ₹5 lakh crore that is equivalent to more than two per cent of India's GDP."*

Against this backdrop, it appears imperative to focus on and enhance resource mobilisation by identifying problems in the tax structures, expanding the narrow tax base, reducing disputes, making India an attractive investment destination, and rolling out a simple, easily compilable taxation regime so that revenue collection is optimised. To this end, therefore, it may be prudent to focus on having a GST system that is simplified.

The second broad area of focus is to create a robust manufacturing base in the country based on the sustainability of resources and comparative advantage. There is a never-ending debate on India missing the manufacturing bus and also how it may not be realistic or prudent to superimpose manufacturing on a largely service-driven economy. But that logic has been assailed time and again by the evidence of development, provided by the developed countries. There is also a need for diversifying the export basket and catering to the huge internal demand by creating goods by Indians for Indians as well as for the world based on comparative advantage. In terms of numbers, this goal must revolve around creating a manufacturing ecosystem that can move from the current levels of 17-18% of the GDP to 28-30% over the next decade or so. Critical to this will be to address supply chain constraints. Some of the industries which have the potential for growth are the semiconductors industry, automobiles, solar platforms, batteries, construction (critical infrastructure for generating multipliers), insurance, FMCG, electronics consumables, real estate etc.

The third area of focus would be education and skilling. This will help bridge the supply gap in human resources which would help in capitalising on the demographic dividend. The New Education policy has tried to fill the gaps by focusing on providing a holistic education that includes solid foundational training along with a strong focus on vocational training.

The health sector also presents a unique opportunity of finding or expanding by leaps and bounds providing quality and affordable health care to the citizens. The strategic location of India with a strong medical base provides a robust opportunity for India to become a centre for medical tourism. The Covid vaccination drive has helped in improving R & D as well as building capacity in medical research and production. The insurance sector can also get a boost in universalizing coverage.

Further, India has emerged as a world leader in pivoting the transition towards green energy. The diversified and extensive natural gas pipelines would help leapfrog from predominantly fossil fuel to hydrogen fuel by the intermediate route of natural gas as the same pipelines offer interoperability for the use of hydrogen-based energy.

These are some of the areas which would be at the centre of India's progress in the coming years which would touch holistically upon improvement in the quality of life, optimise revenue, formalise the unorganised sectors, capitalise our demographic dividend, and create a foundation of sustainable economic growth.

Q2. What are the possible headwinds and tailwinds the Indian economy might face in FY 2023- 24 which might hinder India's ability to achieve the projected real GDP growth?

Export-led growth is going to be tricky in the short run and in the long run too. There is a need to move towards building an economy that is driven by domestic consumption. The goal must be to increase per capita consumption in real terms.

Tailwinds: robust demand, growing consumer aspirations, a readily available market across states, a preferred destination for FIIs and FDIs, and macroeconomic stability.

Headwinds: supply chain shocks, over-dependence on other countries for critical intermediate goods in certain industries (solar etc.), lack of robust R & D ecosystem except in a few sectors, high current account deficit (not always bad but needs addressing), crowding in of private investments, not on the expected levels, high transaction costs (infrastructure investments can help bring them down but needs addressing across stakeholders), absence of regional production networks which creates and exacerbates supply chain constraints.

Q3. What is the rationale for the robust credit off-take to the industry and services sector in India despite monetary policy tightening and risks of subdued global GDP growth rate?

The India story is intact. I do believe that India is going to be an outlier in terms of real economic growth over the next decade simply because of the position it is in and the global conditions. India must use this to its advantage to set it up as a manufacturing behemoth. The robust credit take-off is a validation of the India story. Even though export projections and growth in global trade volumes are going to be subdued, projections for enhanced domestic consumption are the rationale behind robust credit numbers. Global conditions are going to create a drag but not enough to compromise the ability of the Indian economy to grow, given appropriate policy measures are put in place to tap into this credit growth.

In numbers, the pace of credit offtake continued to be robust with sectors clocking year-on-year (YoY) growth between 9.5 per cent and 18.1 per cent. Reserve Bank of India (RBI) data showed that credit to industry grew 9.5 per cent in June 2022 (against a contraction of 0.6 per cent in June 2021).
Size-wise, credit to medium industries grew 47.6 per cent YoY in June 2022 against 59 per cent in the same month last year. The credit growth to micro and small industries rose to 29.6 per cent from 11.6 percent a year ago.
The large industries segment saw a credit growth of 3.3 per cent in June 2022 against a contraction of 4.8 per cent in June 2021.

There is no doubt that the rise in credit offtake now is partly driven by expansion in economic activity. Also, higher working capital limits due to rising input costs and some shifts to bank loans from costly market borrowing have led to an uptick in credit demand from industry. This logic is aptly reflected by the increasing trend in GST collection and Direct tax revenue.

Q4. How can India facilitate sustainable financing through Sovereign Green Bond issuances and build trust in SGBs in light of greenwashing concerns?
Green bonds are bonds issued by any sovereign entity, inter-governmental groups or alliances and corporations with the aim that the proceeds of the bonds are utilised for projects classified as environmentally sustainable. The framework for the sovereign green bond was issued by the government on November 9, 2022.

Green Bonds offer investors a platform to engage in good practices, influencing the business strategy of bond issuers. They provide a means to hedge against climate change risks while achieving at least similar, if not better, returns on their investment. In this way, the growth in Green Bonds and green finance also indirectly works to disincentivize high carbon-emitting projects, as per the IFC.

Greenwashing is a very real concern. A lot of firms are resorting to it just to keep their own value intact. This is where the need for a robust regulatory mechanism and disclosure norms comes into place. SGBs are a great way to finance projects which take into account the challenges being thrown up due to climate change. India must be at the forefront of attracting financing as part of the SGBs. The only way to do this successfully is to ensure that projects have strict environmental impact assessment norms and that the institutional set-up which regulates these projects functions in a way that prioritises climate goals and at the same time seeks to achieve the growth aspirations of the economy.

In this regard, Sebi has issued a circular that an issuer of green bonds shall not use misleading labels, hide trade-offs, or cherry-pick data from research to highlight green practices while obscuring others that are unfavourable. It also asked issuers to ensure that they continuously monitor the transition to a more sustainable form of operation. The circular further said that issuers of green debt securities must ensure that funds raised through green bonds are not used for purposes that would not fall under the definition of ‘green debt security’ under the non-convertible securities (NCS) regulations.

I believe the proactive and dynamic regulatory framework would go a long way in restoring investor confidence in Green bonds and in the future would also leverage concepts like blended finance.

SANKARSHAN BASU

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EMERGING TRENDS AND CHALLENGES IN INDIAN FINANCIAL MARKETS

Sankarshan Basu is currently a Professor in the Finance and Accounting Area at the Indian Institute of Management Bangalore (IIMB). Sankarshan has a B.Sc. with honours in Statistics from Presidency College, Calcutta, M.Sc. in Statistics from the Indian Institute of Technology, Kanpur, and a Ph.D. from the London School of Economics and Political Science, UK. His primary research and teaching interests are in financial markets and quantitative finance, particularly derivatives and fixed income securities and insurance and pension issues. Prior to joining IIMB, Sankarshan has also worked with ICICI Ltd. (now ICICI Bank Ltd.), as well as academic institutions like the London School of Economics and Political Science; Heriot Watt University, Edinburgh, U.K.; University of Twente, Netherlands; Gothenburg University, Sweden; ESCP, Paris; CFVG, Vietnam; and Asian Institute of Technology, Bangkok. He has also served as the Dean, Amrut Mody School of Management, Ahmedabad University. Sankarshan is active in teaching, consulting as well as research. He has published a number of papers, book chapters and two books. He is very well-travelled and has presented his works at a number of international conferences.

Q1. Do you see the Indian markets adopting over-the-counter derivatives like they have been adopted by the markets of developed countries like the US & and the UK in the near future?

OTC derivatives are the future and Indian markets will adopt them sooner than later. In fact, many players have already adopted the same – just that due to regulatory constraints, the deals are not booked in India but in places like Singapore /Hong Kong / London / Zurich. This is also necessary from the perspective of increasing complexity in the Indian corporate sector and widening of the corporate base, thus needing innovative products to better serve their interests.

Q2. What is your opinion on environmental, social and governance(ESG) factors influencing risk management and derivative pricing in the Indian markets?

The primary ESG issues in India are based on two points – one the definition of the kind of business and the other corporate governance. Unfortunately, the international agencies are still to completely take on board the inherent differences between their markets and the Indian markets as well as the specific needs that the Indian economy needs. Thi sis leading to certain important aspects not being environmentally or socially acceptable in the international context – RBI and the other regulators are already seized of the issues and they are in negotiations with the respective international bodies to resolve the same.

The other issue is corporate governance. While the standard of corporate governance has improved significantly in India, there are still a number of issues; particularly in family-owned enterprises. Further, the advances in corporate governance have not yet been as widely publicized as they should have been, thus the lingering perception of misgovernance exists. These two issues need to be addressed simultaneously to transform the scenario.

Q3. Do you feel Indian financial markets will still be susceptible to external shocks over the next 20-30 years with the increasing inflow of funds from the Indian public?

With the increased globalization of the economies around the world, and India is no exception to the same, any global/external shock will always impact India as well. However, the size of the domestic market will definitely act as a cushion for such shocks and thus the impact will be far less than what it would be elsewhere and also would have been in India if the domestic market was not large and growing.

Q4. Do you expect the Indian bonds market to benefit from the inclusion of Indian bonds in globally traded bond indexes?

Absolutely yes – the inclusion of Indian bonds in the MSCI Bond Index will increase the visibility of Indian bonds in the global marketplace. Further, given the relatively good credit history of the government as well as the top-rated Indian corporates, these bonds will easily become another investment opportunity for global investors looking to diversify their portfolios as well as having allowed risk exposure into emerging markets, especially the Indian market.

Q5. What are some of the strategies that you would suggest to financial institutions to mitigate short-term and long-term liquidity risks in the derivatives market?

This is a difficult one as the strategies will all depend on the exact nature of the exposure that these financial institutions would have to start with. However, I would strongly suggest that these institutions create a portfolio which is a judicious mix of all available derivative products as well as a mix of the exposure duration. So, while institutions can enter into simple Futures / Forwards / Options / Swaps to more complicated Structured Products / Credit Default Swaps / Total Return Swaps / Basket Options / Basket Swaps / etc.

Q6. Do you expect an increasing role of credit rating agencies in the future as we expect Indian markets to delve deeper into fixed-income securities and currency derivatives markets?

The role of the Credit Rating Agencies (CRAs) will necessarily increase. Just that most of the CRAs will need to earn the trust of the market and establish themselves as a serious trustworthy partner – this is very relevant to the battering that most of the CRAs took in the wake of the ILFS / Indian Bulls fiasco. However, the need for CRAs will only increase and thus it is in their best interests to pull their act together and not cede the space to other non–organized entities who could potentially be even more damaging for the markets, particularly in the long run.

HARSH AGRAWAL

Co-Founder, NEERX
Forbes 30 Under 30

RETHINKING AGRITECH

Agricultural innovation spans centuries evolving agriculture from primitive practices to highly efficient systems. The journey of innovation in agriculture can be mapped through a timeline, starting with the early introduction of fertilizers and farm equipment, and progressing to more advanced technologies. In the early 19th century, scientists like Justus von Liebig made significant breakthroughs in understanding the role of essential nutrients in plant growth. This led to the development of synthetic fertilizers, such as ammonium nitrate and superphosphate, which greatly improved crop yields.

The late 19th and early 20th centuries saw the emergence of steam-powered and gasoline-fueled tractors, which enabled large-scale farming. The mid-20th century witnessed the transformative "Green Revolution," which significantly boosted crop production to enhance food security. It's essential to recognize that the initial breakthroughs primarily targeted the task of augmenting crop yields and accelerating production. However, as we enter the 21st century, we must acknowledge that we can no longer afford to address the same issues concurrently.

In the past 50 years, the global population more than doubled, leading to a reduction in available land per person for agriculture. How did we manage to feed this rapidly growing population with diminishing land resources? There were only 2 ways: expansion of land under cultivation and intensification i.e. boosting crop yield per unit of land. This intensification was achieved through the use of chemical inputs, irrigation tech, tractors and farm implements, and the utilization of higher-yielding crop varieties. As a result, in recent years global agricultural land use has peaked and has decoupled from agricultural production. To understand this assume that if we needed 2 acres of land to grow 1 MT of a crop in the year 1960 we are now able to do it in 0.5 acre.

Furthermore, in my contrarian opinion, the global population might now decline in the near future. If we closely study the macro demography, there are 2 major factors in play: the fertility rate, which is declining across the globe and the ageing population in developed countries. Based on this all the population projection statistics can be questioned, suggesting a strong possibility of a faster-than-expected peak and decline in population. But why am I explaining this? Because in recent years to feed this ever-growing population agricultural assets have faced considerable exploitation, which may have caused irreversible damage. Therefore in a declining population, there is a necessity of implementing segregation strategies to ensure the production of high-quality food while safeguarding our natural resources.. Extreme weather events have become increasingly common, disrupting normal agricultural cycles. Small and marginal farmers, who lack the resources and capacity to absorb shocks, are disproportionately affected by these factors. Climate change is now a serious concern for a majority of farmers, more than 60% of smallholder farmers have experienced greater than 30% crop loss due to climate-related issues in recent years.

Agritech, across the globe, is a very recent phenomenon and is supposedly the answer to all the above problems. But during the ZIRP period, a "growth at any cost" mentality prevailed, leading to inflated market sizes and a lack of clear paths to Product-Market Fit (PMF). In an attempt to eliminate intermediaries, some agritech startups adopted a lean approach, effectively becoming the middlemen themselves. This shift was particularly pronounced in the mid-stream category, encompassing both input and output linkages, which have now significantly consolidated. In response to this trend, traditional agricultural companies also expanded their presence throughout the agricultural value chain through methods such as acquisitions, and dedicated pilot projects. Nevertheless, now they are redirecting their focus back to their core business activities. This shift reflects the realization that these entities are, at their core, technology-enhanced businesses rather than purely technology-based ventures. While many startups in India try to draw inspiration from Western models, they face challenges in adapting these ideas to the unique dynamics of the Indian market. Moreover, it became apparent that successful execution demands a more creative and context-specific approach, which has yet to be fully harnessed in India.

What are the areas where Indian agri-tech can shine?

The upstream side primarily can be loaded with original and made-for-Bharat deep tech solutions: data-driven farming (satellite data, IoT, drones), regenerative/organic/natural agriculture and biostimulants for climate-resilient crops (India became the first of the countries to bring biostimulants under rules that govern fertilizer and other crop nutrients).

The government, for decades, has focussed on fertilizer production, MSP, subsidization and farm mechanization. But the Union Budget 2023-2024 demonstrates a shift in the wind to sustainable agriculture. Indian agriculture also awaits its UPI-like moment with the development of a Digital Public Infrastructure (DPI) for agriculture, including the Agri Stack initiative, which aims to integrate diverse agricultural data and provide real-time insights to empower informed decisions. Additionally, the government plans to capture GIS data for each farmer's land parcel, enhancing crop analysis and enabling customized services based on farm-specific needs.

In conclusion, the journey of innovation in agriculture has been a remarkable one, evolving from early practices to the current era of cutting-edge technology. As the global population continues to burgeon, the agricultural sector has risen to the challenge of providing food security while ensuring the sustainability of agricultural systems. However, the agricultural landscape faces critical challenges, such as the impacts of climate change, farmer resistance and fragmented policies. Recent developments around climate-smart agriculture, underscore the sector's adaptability and commitment to a sustainable future. As we move ahead, the key to a prosperous agricultural future lies in bridging innovation with environmental stewardship. This dual focus will not only enhance crop yields and farm income but also ensure that agriculture becomes a sustainable solution to the growing global food demand.

KETAN MERCHANT

Chief Financial Officer
Fino Payments Bank Ltd

THE FUTURE OF BANKING AND FINANCIAL SERVICES IN INDIA: FINTECH INNOVATION AND COLLABORATION

Q1. The fintech companies have certainly contributed to greater financial inclusion and accessibility in India. Do you see the fintech industry eventually take over the banking industry?
The last decade and a half has been transformational for the banking sector with technology, especially fintech playing a crucial role. The growing aspirations of the new age digitally savvy customers have led banks to either strengthen their capabilities or work in tandem with fintech players to provide a seamless experience across multi-platforms and multi-products.

At present, over 2,200 companies operate in the fintech segment in India with 67% of them established in the past 5 years. Indian customers are adopting 87% of services from fintech, whereas the global average is around 64%. This has led to India becoming the 3rd largest fintech market in the world and is estimated to reach USD 1.3 trillion by 2025, growing at a CAGR of 31%. At the crux of this growth is the increasing collaboration between banks and fintechs to improve service access and enhance customer experience.

In this context, fintechs will not only help streamline many banking functions but also enable the creation of disruptive business models. However, to assume they will take over the banking industry may not be correct. Fintechs with their agile approach have to adopt the discipline of a bank to operate at a large scale. This is possible when both co-exist by partnering and collaborating.

Q2. Do you feel certain government regulations in the fintech industry are unnecessarily restrictive and acting as a roadblock to the development of the overall financial services industry and need to be replaced or removed?
India has one of the strongest and most robust

financial systems across the world. Today, we are a beacon of light globally as far as fintech and payment systems are concerned with UPI showing the way.

For all the potential the fintech sector has been demonstrating, one needs to consider the highly regulated financial and banking ecosystem and ensure a level playing field.

Further, with technology comes risk, operating as well as business. From this perspective, customer data protection is critical, especially with digital frauds on the rise.

Fintech ecosystem needs to be supported but at the same time, its impact on other sectors needs to be understood as well. There is a need to do a balancing act.

Here, the authorities and regulator, in their learned wisdom have taken some decisions that aim to strengthen the BFSI and the fintech sector. While they may look like deterrents in a short time but will be helpful in the long run.

Q3. In the near future, do you see any possibility of consolidation/mergers among the leading fintech companies to synergize and compete with Scheduled Banks having a wider customer base and bigger customer deposits?
As long as there is perceived value and benefit, mergers and consolidations or any other partnership or association between fintechs is possible. As far as competition is concerned, banks and fintechs are anyway competing. However, what is leading to increased adoption of fintech is collaboration with banks as well as between fintechs.

As per PwC report, 82% of startups believe that collaboration with banks leads to faster and more effective innovation.

The trend of digital-only banks, with no physical presence, is catching up but is limited. For a diverse country like India, both physical branches and digital platforms are required to work in tandem to create a better banking experience for customers centred on trust.

Q4. If the fintech industry were to completely replace the banking industry in the future, what would be the potential implications? What measures can be taken to ensure the stability of the financial ecosystem in such a scenario?
It's a hypothetical scenario, though not completely out of the realm of possibility. Having said that, fintechs taking over retail banking is a possibility, provided they meet certain criteria.

The first thing is to have a strong regulatory mechanism to monitor the sector. Secondly, the banking business is all about TRUST; so fintechs need to build customer trust by strengthening cyber security, facilitating secure transactions, enhancing customer experience, and providing easy to navigate process to address complaints or issues. In short, it has a digital mechanism that replaces human intervention. This is a huge challenge considering the rising digital fraud in the country.

The banking industry is a vital cog for economic growth as it facilitates investments, and international trade payments and caters to infrastructure funding. I believe that fintech will not be able to do the infrastructure lending part.

Q5. Do you see the most rural and backward regions of India adopting banking applications of fintech companies instead of traditional banks? What can be done to mitigate the challenges associated with their adoption?
Yes, provided fintech applications meet regulatory conditions. Further, they need to

engage in various activities and measures that help build trust among rural customers. And trust building happens over a period of time. Fintechs need to be patient and innovative. However rural India's first brush with digital happened thanks to the thrust on fintech-led financial inclusion initiatives.

Rural masses adopted new age platforms albeit in an assisted services format wherein a merchant/shop owner helps people do banking transactions. As per RBI, there are over 2 million business correspondent agents across villages in the country providing banking services through IT-enabled devices. Some of them use fintech platforms while others use banking platforms to facilitate transactions.

As digital adoption increases, so do the risk of frauds. This is a reality and needs to be addressed through strong cybersecurity measures and customer education programs to create awareness.

Q6. What are the major product areas in which the traditional banks are lacking and need efforts of the fintech companies to improve the offerings using their technological capabilities? Do you see any potential product category that holds a huge market scope and can attract all major fintech players?

Every bank focuses on its own product/service offerings depending on the business growth plans. To bridge the product or customer service gap, banks may collaborate or partner with fintechs as we have witnessed in recent years.

Banks are increasingly relying on digital account opening process that is convenient for customers. Here, fintech platforms provide great value. Further, there are partnerships that are focused on providing lending, prepaid cards to MSME workers, trade finance, term loans, accept and manage digital payments, buy now pay later (BNPL) etc. Product or service aside, fintechs can help banks benefit in other areas of the business as well. For instance:

- *Enhanced operational efficiency at optimal cost*
- *Embracing technology for product and service innovation and competitiveness*
- *Access to new-age underwriting models and efficient workflows*
- *Increasing loan volume and loan productivity*
- *Increasing deposit account opening productivity*
- *Cyber security: Algorithms and ML help detect fraudulent activity and prevent losses*
- *Better customer category acquisition, engagement and service with the latest apps*
- *Better access to banking functionalities by leveraging BaaS platforms*
- *Enhance revenue streams and differentiate themselves from other banks*

Insurance is still under-penetrated in India, especially in rural areas. Banks and fintechs can collaborate to develop suitable products for this segment and scale up to increase reach.

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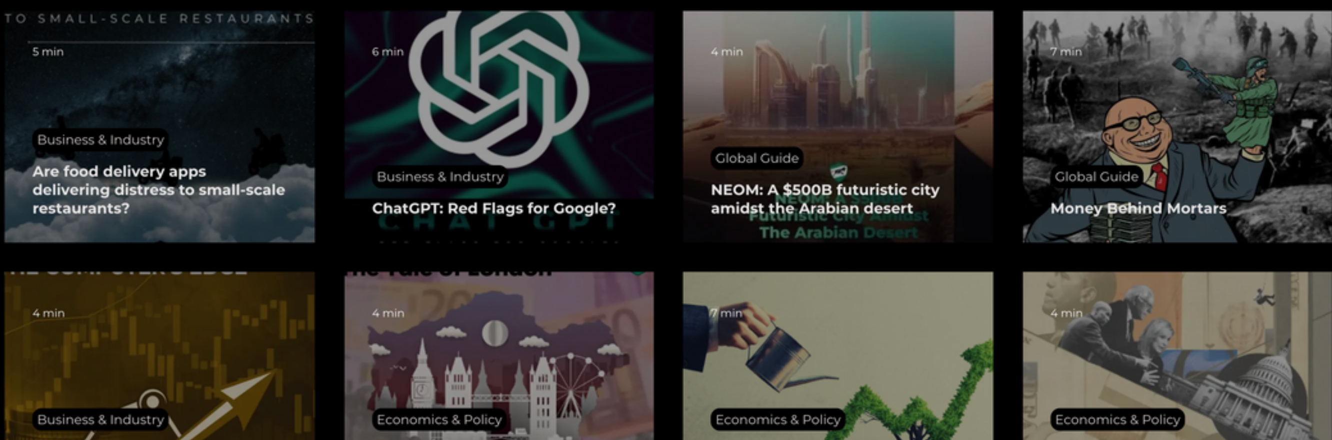

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