VITTA

2018-19

Annual Finance Journal

VITTA

2018-19

FOREWORD

Principal

Prof. Simrit Kaur

The Finance and Investment at SRCC has been the front runners for financial research and in-depth economic analysis for the past 10 years now. As a part of their regular discourse, the society has produced its literary take on subjects from geopolitics to corporate and social finance and has also explored the research pieces with unmatched creativity. To reflect the same, the society releases its Annual Financial Journal - VITTA, which validates the objective and the purpose that the members uphold as a part of their close-knit community. I wish FIC SRCC all the best for their future endeavours.

Faculty Advisor

Ms. Pooja Dhingra

Initiating discourses ranging from varying investment techniques to the macro impact of various financial and geopolitical developments, the Finance and Investment Cell of SRCC has significantly contributed to widening the horizons of its members by undertaking diverse educational initiatives that cannot be found in the confines of classroom lectures. Vitta, with its in-depth analysis of the recent developments in the financial domain, stands witness to this decade-long spirit of the cell. I applaud the efforts and undying spirit of the members of FIC and their educational endeavours.

MESSAGES *from the* CABINET

Suhani Singhal
President

My first year in college was all about drawing inspiration from peers who made "FIC", the buzz word of SRCC, while my second was all about leading a team of the most intellectual minds of this college and ensuring that the most intelligent minds of this college pave their own unique way towards evolution and actualisation of knowledge. The entire journey was like writing a book, every page of which was a perfect blend of intellect and emotions.

Kunal Jhamb
Vice President

My two years in college can be summed up in 3 Letters - FIC. From conducting research sessions to hosting EPISTEME, from handling last second crisis to dancing at the after party, from making friends to making uncountable memories, it was indeed an unforgettable year. I have just one message for the upcoming team, "A team is not a group of people that work together. A team is a group of people that trust each other". Wishing you guys all the very best for the upcoming academic year.

Sanat Goel
Secretary

In addition to conventional and financial knowledge, FIC has helped me find the best friends to make some of the most memorable moments in college. From being an introvert in the first year to leading a team of 80 people, the journey has been a transformational one for me and none of this would've been possible without the support of the entire team. FIC is a society which every student should look forward to if he wishes to grow, not just academically, but also intellectually..

Aishwarya Bagri
Joint Secretary

This organization has been immensely responsible for who I am, what I have and who I have, today. It has equipped me with the most important tool in life: wisdom. In the past 2 years, FIC has empowered all of us to become more aware and responsible. As far as "who I have" is concerned, the F in FIC stands for Family. My college experience would have been extremely mundane had it not been for this driven, fun-loving diligent bunch of people. I don't think words are enough to sum up what this organization means to me.

Harsimar Kaur
Joint Secretary

FIC provided me the very first platform to head an event of my own in the first semester itself. Best of my friendships in college can be credited to working together for Finergy and Episteme. The kind of development I've been accustomed to here is incomparable to anything else. I'm pretty sure, even if ten years down the lane someone asks me what the best part of my college life was, I wouldn't take even a second to say FIC.

Ghazal Abdullah
Chief Coordinator

Be it research, creative, marketing, sponsorship or technical work, there was always something for someone at FIC. I am grateful, that I took the chance in my first year, despite lack of any prior financial knowledge and, lucky, to have been part of something so special that helped me grow as a person. FIC also introduced me to the most amazing people- seniors, peers and juniors. A textbook education could never compare to what we call the "FIC magnet" and a team we call family!

Aditya Jain
Research Head

I can proudly say one thing: my most valuable learning from two years of college has come from FIC. I don't know but this place has a certain spark in itself and I think I knew that from the very first day: the orientation. I think the mere motivation to never let the juniors look down upon me was the reason that I grew the most. When going to my third year, I think that the two years of joy that I had, the memories that I cherish are concentrated around these sets of people who I feel consist of the FIC family.

Rubina Boparai
Research and Organizing Head

In the years to come, when I'll look back at my college life, FIC would always remain close to my heart. The plethora of opportunities this society has given me in order to grow as an individual and broaden my perspective, is incomparable. The fact that I was able to contribute towards expanding the knowledge of my juniors and bring out their creative side has been an enriching and fulfilling experience in itself. My tenure with FIC may have officially ended but the memories will stay with me forever.

Mannat Luthra
Editor in Chief

People often ask me, ‘If you had to do one thing differently in your college life, what would it be?’ Instead, I tell them that one thing I wouldn’t have done differently would definitely be FIC. Having invested two years of college and working closely with the Research and Editorial Team, FIC defines who I am today. We’ve cried, laughed, fought and bonded together over topics like 2019 elections and left no stone unturned. With some beautiful milestones achieved over the 10 years, may the cell never stop growing and impacting the lives of all its stakeholders.

Jaskaran Singh
Public Relations, Marketing and Organising Head

Complimenting learning with fun, FIC has given me a plethora of opportunities to develop and grow as an individual. It has been a part of my life for the past two years and it’s very difficult to come to terms with the fact that there wouldn't be any FIC related work in college any longer. Like all good things, my journey with FIC has come to an end but FIC and the wonderful friends it has given me will remain a part of my heart forever.

Sakshi Kumari
Creative Head

FIC is one of the societies in college which helps you develop perspective of global affairs, covering almost everything from finance to geopolitics and economics I feel very lucky to have been a part of FIC for the past two years. You don’t just get to experience the best research sessions, but also get an opportunity to form close bonds with co-members and create some of the sweetest memories of your college life. I hope FIC continues its legacy for many more years.

Sanjivani Kumar
Public Relations and Technical Head

Emerging as one of the best societies and then staying at the top is surely not an easy task, but I’ve experienced it over the past two years. I truly believe that this society serves as the best nurturing ground for all interested in fostering deep knowledge. I am glad to have been a part of this amazing family and hope that everyone’s contribution in the cell brings about a positive impact. Hope the cell reaches greater heights.

Neel Mathur
Organizing and Corporate Communications Head

At the start of college, I was a little lost and overwhelmed, but FIC gave me sense of belonging, and purpose. The society connected me with people who helped me break out of my shell. Society work never seemed like work for me. From creating pitches & learning how to communicate with sponsors from our seniors, to teaching the same to our juniors, there was hardly a dull moment in FIC! The past two years of college have been synonymous with FIC, and I can never forget them.

Sargam Gupta
Fest Coordinator

When I joined college, one of my very first society interviews was with FIC. Even though the main focus of the cell is to impart financial and economic, it's a lot more than that. By eliminating the gap between the theoretical and practical knowledge, the cell has helped me grow as an individual. It will be rather difficult to accept the fact that I will not be working for the cell anymore. I wish all the best to the new cabinet and hope they continue the legacy.

Mridul Panwar
Fest Coordinator

Finance and Investment cell is not just a society, but a family of brilliant minds. When I was in my first year our seniors became our first family. Starting year two with transferred authority felt like starting a new year and a whole generation has passed. Now it's our time to pass on the legacy to our juniors. As a part of this family, I owe 2 years of my college life to FIC that gave me immense knowledge not only in finance but also in real life.

TESTIMONIALS *by* MEMBERS

Riya Kaul

I would not be exaggerating if I say that the past year's journey at FIC has been life changing. From making great friends to getting the opportunity to organise one of the most coveted events of DU, FIC offers it all. The informative research sessions have reshaped my approach to finance and economics, and encouraged me to explore my full potential.

Ria Aggarwal

Being in FIC has introduced me to a community of researchers and innovators working towards exploring various financial concepts. It has been a unique journey and a privilege to contribute towards the best articles and events in DU. Vitta aims to capture that year-long essence and deliver readers from all backgrounds that opportunity.

Kushagra Agarwal

The priceless research sessions have completely changed my outlook towards even the most ordinary looking piece of news concerning not just Finance and Investment but all aspects of life. Vitta is an extension of the same. As Team FIC 2019-20 publishes Vitta 2019, we have just one wish - Vitta adds to the intellect of its readers and a lot of meaningful knowledge is imparted in the simplest of terms.

Adarsh Raj

Being a part of the FIC team was one of the greatest thing which happened to me in the first year , it helped me become financially sound through regular research sessions and also taught me how to work in a team responsibly. From the best seniors to the most wonderful team , it was great working with everyone. Hoping to achieve new heights in second year.

Pragun Aggarwal

FIC has been an indispensable part of my 1st year in college. It has allowed me to explore as well as improve myself in terms of knowledge acquisition. FIC was a perfect amalgamation for socializing, learning and having fun. It offered respite from the monotony of college with interactive sessions, research hours and on site visits to various institutional organizations.

Tatsum Kharbanda

FIC has been an inseparable part of my first year in college. It was a great learning experience while attending visits, research sessions and working with the team. It has given me the best memories and lessons of my life. Hope it continues to impart financial knowledge in coming years and creating mature investments with high yields.

Sakshi Agarwal

Getting into FIC was perhaps one of the major milestones in the first year of college, since the orientation was indeed too intimidating for a fresher who was oblivious to the fantastic world of finance and economics. Since then, there is no looking back. FIC has not just been about learning, but learning with fun, expanding the parenthesis of my thoughts and giving memories for life.

Prathyussha Chandar

I've learnt a lot in my first year at SRCC, and I owe a great deal of my growth to FIC. It's the perfect combination of getting impassioned about learning more, imparting knowledge and having fun that makes FIC a wonderful experience. Vitta is a representation of all of our thoughts, ideas and this Cell as a whole.


FIC


FIC
EPISTEME'19
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Investment in financial knowledge yields the best returns


MONEY TALKS

NPAs: The Death Spell Against Indian Economy

BY TEJAS R. SINGH AND ANVESH AGRAWAL

H*arry Potter and the sorcerer's stone* top the charts of our all-time favourites. The flying brooms, magic potions, the unimaginable creatures and the death threatening spells chill the spine to the core throughout the movie. But, one idea that fascinated us the most was that of a wizard bank (Gringotts Wizarding Bank). The idea followed us to the real world, making us believe that the banks are invincible. However, it took us few newspaper articles and a reality check with the Indian banking system to realize how wrong we were. The banks are, certainly, not invincible.

This mysterious spell that's making the public banks susceptible to huge losses is termed as Non Performing Assets (NPAs). Non Performing Assets are a bank's liability. RBI defines NPAs as loans on which interest or instalment of principal remains overdue for a period of more than 90 days from the end of a particular quarter. This means that if a customer has borrowed a loan and is, somehow, unable to pay either the interest or a part of principal (or both), the borrowed loan becomes a Non Performing Asset or a bad loan. These bad loans become assets of banks that do not generate any return and are, therefore, reduced to the bank's liability.

NPAs have been broadly classified into 3 categories:

<u>Substandard assets</u>: Assets which are deemed as "non-performing" for a period of 12 months or less.

<u>Doubtful assets</u>: Assets which have remained NPAs for a period exceeding 12 months.

<u>Loss assets</u>: In this case, the loss is identified by the bank, but the amount isn't written off wholly or partially.

"Avada Kedavra"

The NPA problem in India was realized in 2017 when TransUnion CIBIL reported over 1 lakh crore rupees that the Indian defaulters owe to banks. The top spot among the defaulters was grabbed by Winsome Diamonds and Jewellery Ltd., Forever Precious Jewellery & diamonds Ltd. (Rs. 5466 cr), followed by Kingfisher Airlines Ltd. (Rs. 3097 cr.). The RBI's Financial Stability Report blames the basic metals and cement industries as the most indebted, with 45.8% and 34.6% stressed assets respectively.

The problem doesn't end there. Among Indian banks, IDBI Bank, which has 24.11% gross NPAs tops the list for lending institutions with the highest exposure to liabilities. Indian Overseas Bank has 23.6% NPAs while fellow private lenders like Kotak Mahindra Bank and HDFC fare better with only 2.58% and 1.24% gross NPAs. State Bank of India, which is saddled with most stressed assets in absolute terms, has a gross NPA ratio of 9.97%. Despite the clear domination of PIIGS (Portugal, Ireland, Italy, Greece and Spain) countries in the list of highest NPA holders – with an exception of Spain – India hasn't lagged back in the rankings. According to recent report published by Credit Analysis and Research Limited (CARE) ratings, India reserves the spot as the sixth country with most NPAs worldwide, with 9.98% NPA.

The reasons as to why NPAs pose a threat to the Indian economy are more implicit than perceived. Suppose a bank suffers a huge profit lowering margins due to bad loans. Owing to unavailability of allotted financial assets, it would be forced to impose higher interest rates. There would be fewer amounts that could be made available to fund viable projects that would also lead to a decline in the entrepreneurial sector. The rise in NPAs also leads to a bank decreasing its deposit rates in order to recover bank loss. The continuous erosion of bank capital to provide for NPAs has made it increasingly difficult for the banks to make new advances. Due to non-repayment of loans by current borrowers, the banks are prevented from lending to new borrowers. As a result, corporate credit has been stagnating over the past few years. If it's a public bank, the bad health of the bank would equal to a bad return for a shareholder which means that government of India gets less money as a dividend. Therefore it may impact easy deployment of money for social and infrastructural development and would result in detrimental outcomes for the national economy.

The History behind the Spell

The rise of NPAs in India was triggered during the 2000-2008 period when the Indian economy was under a boom but marked a stark slowdown in the global economy. The public banks which had lent huge amounts to large conglomerates suffered staggering blows on their profit margins. These banks account to 80% of the credit to industries, which forms a huge part of NPAs. Bad loans written off by the public sector banks doubled in the last 4 years, as informed by the data from the parliament papers released in August earlier this year. Another reason why bad loans occur, in the first place, is the absence of concrete lending norms in India. This leads to poor analysis of a financial corporation. On the other hand, the banks, in order to tackle competition, sell unsecured loans which contribute to NPAs in high amounts.

> The problem that triggers the rise in NPAs in India, owing to banks' restructuring policies, is their inability to manage restructuring without resulting into a non-performing asset.

As opposed to popular opinion, priority sector lending isn't the only factor that leads to bad loans. NPAs in the corporate sector are far higher than those in the priority or agriculture sector. The corporate and industry loans account for almost 73% of the NPA in public sector banks. The reasons behind these adverse numbers lie with the banks' inadequate risk management policies, business failures, frauds and inefficient credit rating analysis of the Indian banks. Even the PSL sector has contributed substantially to the NPAs. As per the latest estimates by the SBI, education loans constitute 20% of its NPAs.

In order to reduce loss margins through NPAs, the banks come up with restructuring policies. When a bad loan arises, the banks, on consultation with the borrower, come up with restructuring models which make it easier for the borrower to return the sum borrowed. These models are usually directed towards decreasing the interest rate on the borrowed sum, or increasing the time of repayment or converting the loan partly into equity. However, restructuring usually hurts the banks as the only profitable consumer in this case is the borrower. The problem that triggers the rise in NPAs in India, owing to banks' restructuring policies, is their inability to manage restructuring without resulting into a non-performing asset.

Defence Against the Dark Arts

The government, saddened by the current state of affairs with the persisting economic plague, often came out with different measures to keep the NPA-struck economy in check. In order to achieve the said goal, the government proposed the following at different stages of the NPA timeline:

<u>The Financial Resolution and Deposit Insurance (FRDI) Bill:</u> The need for the FRDI bill rose after the great depression of 2008 which witnessed mass bankruptcy of major conglomerates and corporations in India as well as abroad. What the Financial Resolution and Deposit Insurance bill aims to do is provide a mechanism to corporations – which are on the verge to fail – to help them save themselves from going bankrupt. The objective behind doing so was to prevent huge economic imbalance that followed after the mass bankruptcies of 2008 of major business giants that influenced the financial markets.

The FRDI bill directs a provision for setting up of a resolution corporation which monitors financial firms, anticipates their risk of failure, takes corrective action and resolves them in case of failure. It also classifies the respective financial firms as low, moderate, material, imminent, or critical based on their risk of failure. One eye-catching factor of the bill was its ability to bail-in a bank, which allowed the bank to use the deposited amount to save it from failure. This created a huge storm amongst the masses who opposed the unacceptable use of their deposited amount. After a huge disarray of displeased bank customers, the government dropped the bill in August earlier this year.

Insolvency and Bankruptcy Code (IBC): The Insolvency and Bankruptcy Code was introduced in 2016 in India in order to consolidate the framework for bankruptcy and insolvency. It helped improving the NPA problems in India by reassuring stern corrective measures to the banks or the corporate parties even in case of the very first default and by increasing certainty and clarity in the overall process to achieve a speedy recovery. Despite the great anticipated expectations of IBC's fast track recovery policies, the government came up Project Sashakt which counter a number of policies laid down by the Code.

Project Sashakt: This resolution mechanism is the most recent advancement of Ministry of Finance in India in its war against NPAs. It divides the bad loans based on the amounts defaulted and tackles them accordingly. Small loans up to 50 crore rupees can be handled at the individual bank level and the subsequent category of default amount up to 500 crore rupees would be dealt with by authorizing the lead bank – through interbank agreements – to execute a resolution plan within 180 days, else it would be directed to the National Company Law Tribunal. The defaults exceeding 500 crore rupees would go through a 3-step mechanism procedure – Asset Reconstruction Company (ARC), Alternative Investment Fund (AIF) and Asset Management Company (AMC) – through which an AMC will collaborate with AIF to buy stressed assets from banks through an ARC.

Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act: The SARFAESI act, 2002 was released as a canon in favour of banks against their arch nemesis – NPAs. The act emerged as a saviour that allowed the banks to enforce securities held as collateral to loans disbursed by them – in case these loans turn out to be a liability for the subject – without the interference from the courts. The prerequisite for a bank to be eligible to enforce the collateral is the defaulter's declaration as a 'wilful defaulter' – as defined by the RBI.

However, banks never shy away from turning a safe-mechanism into a profit-building resource for personal good. It often happens that the creditors secured from the SARFAESI act misuse the power they're entrusted with, by ignoring the norms laid down by RBI and classify all MSME NPAs as 'wilful defaulters' and holding them liable under the act. For example, in a number of cases, the banks have gone overboard and filed against the defaulter before even 15 days of default and declaration of NPA.

Asset Reconstruction Companies (ARCs): Asset Reconstruction Companies are financial powerhouses which help banks clear their balance sheets by buying their NPAs and allowing them breathing space to focus on other projects. Use of asset reconstruction in India is not very common. A surge of foreign capital inflow into the distressed markets would incentivize ARCs o take more risks and bid bigger assets. The establishment of the IBC, inception of new FDI route and likely industry consolidation are all factors influencing the transcendence of ARCs into actual turnaround specialists.

The Patronus Charm

The NPA debate in India has stretched far too long and has been gaining heat year by year. Despite the rising plight of the economic welfare, the solutions proposed for the same are invariably ambiguous to be held true or false in the status quo. One of such proposed solutions is privatization of public banks in the market. The proponents argue in favour of its feasibility owing to the statistical difference represented in the surging amount of NPAs in public banks as compared to their private counterparts. Privatization, in return, would improve the efficiency, decrease the political corruption associated with the sector and would thereby, increase the social welfare.

However, the conventional market is far more intricate to define than perceived by the arguments in favour of privatization. Privatization isn't the answer to better functioning of the banking system, rather tackling the problems faced while functioning is. For example, consider the recent Punjab National Bank and (alleged) Nirav Modi scam. The incident perfectly characterizes all that is wrong with the current banking practices, owing to which the alleged officials were successfully able to channel their profits. The ultimate key for reducing NPAs in India is the self-regulation of banks. What banks need right now is a mechanism to recover the huge amount of NPAs, which has been proven as problem pertaining to both private and public sector banks.

The key to tackle this economic evil spell under which the Indian economy has been taking a dip gradually, lies with a couple of factors within the banking system. With a number PSBs lending out huge amounts without a proper analysis of the debtors credit rating, the need for a reformed lending mechanism seems to be more appropriate than ever. On the corollary, the banks often overlook a proper diagnosis of a 'wilful defaulter', in order to strike personal gains. This two-fold challenge can be easily achieved with a more efficient lending mechanism with proper risk projections.

NPAs have long left the banking sector of India stupefied at the hands of the national economy and their treacherous baits have been on the rise ever since their inception. Despite the constant increase in the influence of NPAs in the Indian financial markets, the future seems to be bright with the government innovating on different levels to join the war against NPAs. With the recent positives arising out of a number of government introduced projects like the IBC, the opponents of the stressed assets have started recognizing it as their silver lining in the time of an impending economic storm that leaves the fate of the local as well as the global economy in ambiguity.

Exotic Options

BY ANVESH AGRAWAL

The phrase 'exotic option' was disseminated by Mark Rubinstein's 1990 working paper Exotic Options, with the term based either on exotic wagers in horse racing, or due to the use of international terms like 'Asian option', implying the 'Exotic Orient.' In 2010 a journalist fortunately earned an amount of $101,284.60 by placing a $1 bet on the outcome of a race in which the first four finishers had to be predicted in the correct order. This is one in a thousand instances of the vulnerability and high-payout related to the exotic options.

Exotic options, unlike what they sound like, are option contracts that cover additional complex attributes compared to the ordinary traded vanilla options. In fact, these complex features encourage the holders to earn substantial yields. The structure is typically designed by a financial engineer, and the pricing model is reckoned by multiple elements. The payoff decided by the underlying asset is distinct from a simple put or call option, owing to the fact that exercised option can vary upon various factors. For instance, a change in climate or happening of an uncertain incident could trigger the value of the underlying asset. Inclusions of non-classic instruments for the customization of certain markets or clients is special about these options; due to the involvement of complications in the pricing, exotic options are traded over-the-counter (OTC).

Owing to such variable options revolving the sphere of these exotic options, there are various types of Exotic options available. Some examples of which are given below:

Chooser Option: Chooser option allows a holder with the right to decide upon the nature of the purchased option to be either a put or call option, the decision can be made prior to the expiry of the option at a specified period.

Asian Option: Such options have payoff contracts based on the average price of the underlying security over few predetermined dates. The option will expire if the average price is lower than the exercise price.

Barrier Option: These options behave naturally as vanilla options; they activate when the price of the underlying asset reaches a determined price level.

Basket Option: The sole difference from a plain vanilla option; the contract is based upon several underlying securities.

Compound Option: In simple terms, compound options are options of an option, the value of one option would be determined by the value of another. Therefore, it has more than one strike price and expiry date.

Despite the high-payout and prudent diversification, these options still tend to lose out on their prioritization as compared to investments like gold, debt, equity, real estate, mainly because of the variable reliability of these. However, the practicality and profitability derived from exotic options still remains a viable source of economic reserve.

Bollinger Bands

BY PRATHYUSSHA CHANDAR

Bollinger bands form a part of technical analysis and are useful to make decisions related to buying or selling. A set of lines when plotted two **standard deviations** of price – both positively and negatively – away from the simple moving average of a 20 day period, forms the Bollinger bands. The bands expand and contract frequently, as seen in the graph below and hence, the gap is not equal to the measure of two standard deviations from the SMA. These bands react to the volatility of the stock: when the volatility is high, the bands widen and vice-versa.

These bands are a useful tool in technical analysis since, 95% of the price fluctuations fall inside the range of the bands and helps traders to evaluate future prices. When the prices move very close to the upper band, it is usually a sign that it is overbought and prices may fall; when they move closer to the lower band, the market is oversold. Although there is a high probability that the outcome is similar, there are times when a downward trend continues or an upward trend continues. That is one of the limitations of this concept: it helps in evaluating the trends but does not provide answers as to *when the change might take place.*

Here is an example where the ratio EUR/USD remains closer to the upper band for a long period of time.

The **squeeze** is a very useful analysis. When the stock is going through a period of low volatility, there is a high chance that the volatility will shoot up and provide trading opportunities. The converse is also true. When the bands are very wide apart, there is a high chance of decrease in volatility. The limitation in this case remains the same as well: these bands give no indication about the time period of the impending change.

A simple method to calculate the bands is given as follows:

Middle band = 20-day simple moving average (measured by calculating the sum of closing prices of the asset during the days under consideration and dividing by the number of days under consideration)

Upper band = 20-day simple moving average + 20-day standard deviation*2

Reimagining Policy: Taxless India

BY PRATIK SARAF

On a daily basis, we accuse the Indian government of being inefficient for not making proper use of the taxpayers' money. This concern or accusation stems from the enormous amount of tax that the government should receive from the citizens. But is it so? The government, for a fact, collects only 1% - 5% of the total amount of the income tax. Does that mean that the government continues to be blamed for misusing funds that never reached them in the first place? The government is, in most cases, challenged for making improper use of the funds they receive; however, the former is still an issue, and a tax-less economic system could be used to do away with it.

A tax-less economy, in our paradigm, is one wherein we do away with the personal income tax, but we let the corporate tax structure to remain as it is. The problem of the Indian economy is fairly simple. The apprehension towards paying taxes and the lack of incentive - something that we learnt in high school as disadvantages of direct tax - is in operation on the ground as well. Nevertheless, the consumers remain somewhat indifferent towards the indirect tax. How would the revenue go down for the State itself, under this program? We shall answer it in a two-fold approach, evaluating the gains earned and the losses incurred by the government. The marginal loss of the government would be low, given the magnitude of revenue it brings in. We shall also find out how lifting the tax burden from individuals would bring more money to the government and help the economy grow at a faster rate, which is the primary aim of the government.

People, in general, have resorted to hiding their black money in tax havens because they do not want to pay taxes. The money circulation in the economy is insufficient, and since the leakage in the system is more than the injection, problems arise. A tax-less structure would mean that the households are the primary beneficiaries. Once they have to pay taxes on neither their income nor their wealth, they would have no reason to divert their money to tax-haven countries. The leakages would be covered, and capital formation in the economy shall increase.

During such economic expansion, various macroeconomic factors come into play, the most important one being the investment multiplier; meaning that every rupee spent has a more than proportionate positive impact on the economy (italicise this). When people have more money to spend, their purchasing power increases and hence, the aggregate expenditure increases as well. People now have more incentive to demand and consume additional commodities - a positive impetus to the society. Increase in demand starts to gradually push the manufacturing and service sectors to increase the supply, especially the ones which were previously dormant and on the verge of winding up because of a shortage in sales. Increase in business would bring about economies of scale in various companies and industries. Ultimately, the marginal revenue of the companies starts increasing, and so do their profits. With the corporate tax structure still in place, the amount of tax revenue that these business houses have to pay shoots up, which may probably make up for the losses owing to the removal of the indirect tax structure. There is also a good chance that the tax received after the change in tax structure exceeds the magnitude of tax earned previously. Better performance and better returns to shareholders by these companies and industries would attract investors, both foreign and domestic leading to more inflows from overseas and the diversion of money into organised channels.

The model, though extremely realistic, is not deprived of its fair share of shortcomings. Primarily, there are three problems. More money in people's hands and a sudden increase in purchasing power are harbingers of inflation. This inflationary pressure could come and bring the economy back to square one, rendering all the expected benefits null.

It is not very difficult to deduce that such a move would make India the next tax haven across the globe. With limited accountability of personal income and no tax to be paid on it, India would become the hotspot for most illegal activities and the centre of all controversies. There is a much greater risk of terror funding and national security as a result.

The corporate houses could use the lack of income tax to their benefit and evade taxes by transferring massive portions of their profits to shareholders every year as dividends, and since the board members are the majority shareholders, this move is directly benefitting themselves.

In the end, it is imperative to understand what the primary goal of a welfare state is. States like India work for the benefit of the people by providing access to proper infrastructure, healthcare system, etc. and a safe environment with equity in the society. The model that we talk of does cater to the benefits quite directly. However, the harms are evident too. The success of the model is based on the assumption that the macroeconomic system would work efficiently. Until and unless the government finds a way to counter the issues associated with the model, India can not become a tax-less economy!

Butterfly Effect of Financial Markets

BY RIYA KAUL

Prediction is the primary task of an efficient trader. And since speculation runs through the veins of the stock market, accurately forecasting the future value of an asset through rigorous application of technical and fundamental analysis is an essential condition for profitable sustenance in the markets. Yet, we know that even the perfect combination of accurate analysis and personal intuit tends to fail at points, which are usually dismissed by investors as major as Warren Buffett. However, it is this inexplicable nature of the markets that can be explained through the theory of the butterfly effect.

The term Butterfly Effect was coined by meteorologist Ed Lorenz, who noticed that slight changes in his weather model (4th-6th decimal place) had a profound effect on the resultant forecast. The term butterfly effect meant the power that a butterfly possesses. If a butterfly flaps its wings at the right place and at the right time, it might cause a hurricane in another part of the world. In finance, it means that even a small action or reaction in the financial markets can lead to the rattling of world stocks.

We can also relate the butterfly effect to our investment decisions in a way that every rupee invested in the stock market has the power to bring about a significant change in the market prices of shares, i.e. everything has an impact. His hypothesis, though greatly simplified, helped Eugene Fama devise the economic theories of non-prediction and existence of efficient markets. His belief is also substantiated by the Chaos theory, which primarily states the notion of minor events significantly impacting the seemingly unrelated outcomes.
The Efficient Market Hypothesis (EMH) characterises an efficient market by the existence of these rational profit maximisers competing to predict future values of securities in a marketplace where all necessary information is freely available to them. By necessary information, we mean the inside and publicly available information. As a result, there is competition among rational participants, which will bring the asset price to its intrinsic value. Prices tend to reach their equilibrium level because the supply is generally equal to demand. Any deviation from this value will cause the investors to move accordingly, thus reverting the prices to their correct level. There are three phases of EMH: -
1. **Weak form efficiency:** Prices incorporate information about past prices of stocks.

2. **Semi-Strong Form:** Incorporate all publicly available information.

3. **Strong Form:** Incorporates all information, including the inside information.

In a Strong Efficient Market, this free flow of information makes the technical and fundamental analysis redundant, because the prices absorb and reflect all the fluctuations in the data. All market information is impounded in the price, resulting in the Net Present Value of any security to be zero. Hence there might be short term gains, but there is no way to beat the market consistently.

Moving Average Convergence Divergence

BY PRATHYUSSHA CHANDAR

Moving Average Convergence Divergence, MACD, is a widely used indicator in technical analysis. It is a trend, following momentum indicator, which also identifies aspects like trend direction and duration. It basically represents the relationship between two moving averages of a security's price.

Before introducing MACD, it is imperative to discuss the moving averages. Basically, moving averages smooth the price data to form a trend following indicator. They don't predict the price direction but rather define the current direction. The two widely used moving averages are Simple Moving Averages (SMA) and Exponential Moving Averages (EMA). While SMAs consider the average price of security over a specific number of periods, EMAs apply more weight to recent prices.

MACD is calculated as the short term, i.e. 12 periods EMA less long term, i.e. 26 period EMA, which are based on the closing prices. When the shorter-term 12-period EMA crosses above the longer-term 26-period EMA, the MACD line crosses above the Zero line, and a buy signal is generated. When the 12-period EMA crosses below the 26-period EMA, the MACD line crosses below the Zero line, and a sell signal is generated.

MACD Line: (12-day EMA - 26-day EMA)

A 9 day EMA of the MACD line, known as Signal Line, is plotted, which acts as a trigger for buy and sell signals. Buying signals are triggered when MACD crosses above the Signal line, and sell signals are triggered when it crosses below its Signal line.

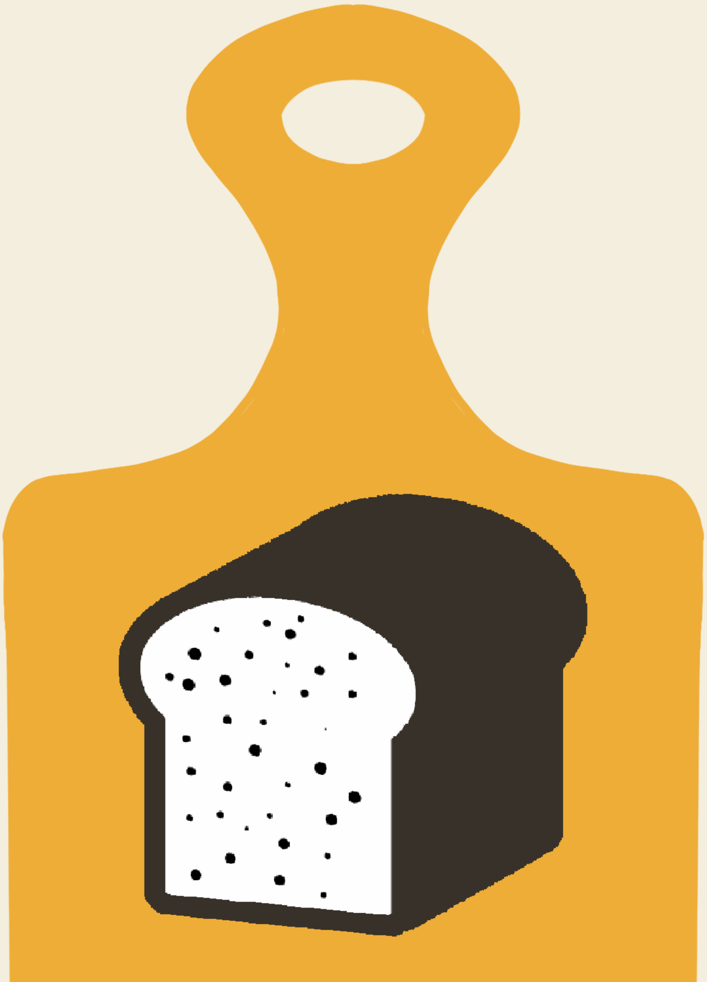
Signal Line: 9-day EMA of MACD Line

The MACD is often accompanied with a histogram, MACD Histogram, which represents the difference between MACD and its 9-day EMA (signal line). The obtained histogram is positive when the MACD line is above its signal line and negative when the MACD line is below its signal line.

MACD Histogram: MACD Line - Signal Line

Here, in the price chart, the blue line represents the 12 period EMA and the yellow line represents the 26 period EMA. In the following chart, it can be noticed how the two EMAs applied to the price chart correspond to the MACD (blue) crossing above or below its zero line in the indicator below the price chart.

Look everywhere and you will find a constant: economics



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Universal Basic Income & Indian Households

BY PRATHYUSSHA CHANDAR

In this article, we shall be focusing more on what shall be the most likely outcomes of a concept of UBI in India and less on the debate whether it is the right time to implement such a policy or if it is the right policy to be implemented.

What is UBI?

Universal Basic Income, as the name suggests, is a system which involves a universal, unconditional and direct transfer of a sum of money to every citizen periodically. It is being proposed all over the world as an addition or an alternative to the existing welfare schemes and programs. One of the main reasons of the birth of the idea of UBI is that every individual is free and equal, that any government cannot deliver to every citizen what he/she needs and wants through welfare programs. Hence, in theory, UBI is said to promote efficiency and reduce inequality. Although initially attracting the left-of-centre political groups who see this as a way to redistribute wealth, the idea of UBI has recently drawn in the right-wing thinkers throughout the world, because this alternative could decrease government spending on welfare services through a simple mechanism of letting individuals decide for themselves.

Another set of proponents includes entrepreneurs like Richard Branson and Elon Musk, though their primary concern is the onslaught of artificial intelligence. Innovations and technology may reduce the number of jobs. Cash hand-outs are a cushion for people to try out new things. Mark Zuckerburg - another supporter - claims he would not have had the courage to drop out to launch Facebook if his parents hadn't supported him financially.

> Although financial inclusion has increased to a little above two-thirds, India still has a long way to go, and the success of this policy depends upon the banking sector and people's ease in accessing said facilities.

What will happen if it is applied to India?

In this section, we shall be focusing on the implications of a UBI without considering how it will be implemented, and questions such as whether the state or the centre shall be responsible are ignored. We also will be assuming that the cash transfer is unconditional and is equal for people across all genders, regions and economic backgrounds.

The rich and the upper-middle class group will remain mostly unaffected by the change in the policy. A significant impact will be on the lower-middle income groups, the poor sections of the society and the people directly involved in the agricultural sector.

According to Economic Survey 2016-17, UBI might most likely be the "fastest way of reducing poverty". It is particularly appealing to many academicians because, in a country like India, it can be pegged at relatively low levels of income but still yield immense welfare gains.

Will UBI trump the incentive to work or produce more addicts? UBI is only a minimal guarantee at best, which cannot, by any means, have a detrimental effect over and above welfare schemes and freebies currently provided. And if this is not convincing, the same kind of argument can be made against high wages, wherein, wages going above a certain limit should make people choose leisure over work which, in practicality, does not happen in most places. Some people even argue that UBI increases labour supply and gives the unemployed people incentive. Although the second part of the question looks tricky, the answer is simple. A renewed sense of purpose gives people a chance to offer more for the economy. With an increase in income, the expenditure on unproductive activities decreases. Emotional well-being can have a wide-ranging impact on the welfare of the economy, and that answers another question: what happens to the agricultural sector? World Development Report in 2015 stated that people in poverty have very low self-esteem, and are preoccupied with their struggles to survive, which depletes their cognitive resources required for making sound and important decisions. In Tamil Nadu, a group of sugarcane farmers performed better in a series of IQ questions after the harvest than before. The impact of UBI on this sector is, hence, to me, positive.

The UBI scheme shall also give equal importance to the women in the household, the sector which makes immense contributions to the society but is not recognised. UBI for women can produce a multiplier effect by increasing their bargaining power in society and providing them with independence and fallback option. UBI will also cover children; a recent study has shown that UBI will have a positive impact on education and may very well increase the school -going population.

Economist.com

One major disadvantage that this system could bring in is an increase in population. The poor households are most likely to view this system as a source of income. Another is the fiscal burden on the government. There is no way that the government can add UBI to the list of existing schemes, and as an alternative to the existing ones, India might not be ready for such a monumental change. Although financial inclu-

sion has increased to a little above two-thirds, India still has a long way to go, and the success of this policy depends upon the banking sector and people's ease in accessing said facilities.

Although the long-term impacts cannot be accurately determined, UBI is a "powerful idea, whose time is ripe for a serious discussion".

The Subtle Economics Behind Delhi Metro

BY SAKSHI AGRAWAL

It is a well established fact that the Delhi Metro Rail Corporation (DMRC) has changed the face of Delhi and the way Delhi-ites travel. Ferrying lakhs of passengers every day, Delhi metro has become an integral part of the daily lives of urban routine. With travel time being reduced, long distance travels getting cheaper and increased environmental benefits, metro services seem to be a goodie package for all. However, all that glitters is not always gold. A closer look at the factual intricacies might put forth another dimension of the economics of Delhi metro.

One of the most widely recognized lie about Delhi Metro is that it's one of the most affordable means of transportation, when the reports suggesting otherwise are up for public discretion. As opposed to popular opinion, Delhi Metro is ranked number two amongst most unaffordable metro systems in the world, which costs even less than half a dollar for a 10 kilometer ride. An average commuter in Delhi spends 19% of household income on metro travels, which is a significant fraction, considering the demography and consumption pattern of the country. According to a report by Centre for Science and Environment (CSE), unskilled daily wage labourers, earning Rs.534 daily, have to spend 22 percent on Delhi Metro. The additional cost of interchanges drives up the cost of the journey even further. Hence, the Delhi Metro might be relatively cheaper when compared to Uber or Ola, but the entity in itself is quite expensive.

> Since its inception, Delhi Metro has become a name to reckon with, connecting the far ends of the Capital, adding the pace to the city.

Even after being the second most unaffordable – or in other words "relatively expensive" – Delhi Metro runs at a loss of around 93.1366 crores (as per the Annual Report of 2017-18). Even after the hike in fares, the Delhi Metro failed to revive, mainly because of high operational costs and high debt service costs. This presents that the economic story of Delhi Metro is indeed not faring well. However, economics is not just restricted to the analysis of cost, it also accounts for benefits. The average fare incurred by a passenger is a little over Rs.17, which is significantly lesser than other forms of public transport. With greater degree of comfort and speed, Delhi Metro presents a luring alternative to the tightly packed DTC buses. The average time saved for a DMRC commuter is around 23.09 minutes, a variable significant enough to influence the decision of the mode of transport. The consequent reduction in the number of accidents and related costs is one of the most remarkable benefits of Delhi Metro.

One of the least recognized implications of Delhi Metro is the impact on the cycle rickshaw rental market. The recent boom in the pedal-rickshaw market, owing to the last mile connectivity services they provide to the metro commuters, has given birth to plethora of opportunities for a large number of unskilled and poor labor.

Since its inception, Delhi Metro has become a name to reckon with, connecting the far ends of the Capital, adding the pace to the city. It has been the most consistent employee of the Capital, working a 6-11 shift day through night, running through the veins of the city, ensuring safe and comfortable travels. With 236 stations present in every corner, the economics of Delhi Metro is a mixed bag of economies and diseconomies.

Implications of Ageing Population

BY SAKSHI AGRAWAL AND PRAGUN AGGARWAL

The world is growing older every minute. With the world's population ageing at such a rate that people over 60s, who currently make up 10% of the population, are expected to increase to about 20% of the whole population by 2025. Ageing population refers to an increase in the median age of the population, primarily due to declining fertility rate and/or rising life expectancy. Increase in life expectancy is considered one of the pillars of economic development; however, the consequent ageing population is something which requires immediate notice. Some researches show that having an ageing population is often advantageous in terms of lower health care costs in later years of life and other beneficial contributions to the community. However, it has an even wider impact on the economy, which invites serious analysis.

One of the most significant arguments against an ageing population is that it leads to a low participation rate. The supply of labour tends to decrease as population ages. The decline in working population is directly proportional to the total output and production. This has a significant impact on the GDP growth rate as the production of an economy decreases. The dearth in labour supply may over-time push wages up causing wage inflation. On the contrary, many economists argue that labour force is constantly replaced by the increased participation of women in labour force. They also suggest that it promotes productivity as only technically skilled labour force is employed.

An ageing population results in an increased dependency ratio. Dependency ratio is the number of dependants in a population divided by the number of working age people. Elders are less likely to work if they are unhealthy and can be an economic burden on families and society. Like everyone else, older people need both physical and economic security. However, the onus of providing these securities would fall upon the other – smaller – fraction of the population. This parasitic relationship of one fraction feeding off of another would prove to disincentive people to work and invest their efforts productively.

With a huge chunk of the demography ageing, it is evident that the government spending on health, aged health care and pension would rise significantly. This leads to reallocation of budget from areas like education and infrastructure and an overall insufficiency of funds. It must be noted that an ageing population necessarily implies lower number of working population and hence a lower number of taxpayers. The tax revenue being limited will lead to increasing fiscal deficit as the collected revenue will remain insufficient to cover social expenditures. A larger fiscal deficit means either an increase in tax rates or an increased burden of debt, both proving equally fatal to the economy. A higher tax rate poses disincentive to work and invest, while a higher debt may lead to inflation.

An insight into the psychological make-up of the aged population highlights that old people are more likely to take risks, owing to their presumption that they have little to lose. Hence, they often resort to riskier investments in pursuit of higher gains. This implies that an ageing population may create huge demand in stock markets, while the demand for stable investments likes real estate may significantly decline.

There has to be a global **mission of** human **progress**

GLOBAL STATEMANSHIP

Hong Kong: A Chinese Democracy

BY RIA AGGARWAL

The ownership and government systems of Hong Kong has changed hands quite a few times since 1842 when Imperial China **ceded Hong Kong Island to the British Empire**, under the Treaty of Nanking to mark an end to the infamous Opium War. It has been ruled by the Qing dynasty, governed by the British officials, occupied briefly by Japanese forces during World War II, and handed back to socialist China in 1997 by Britain. Hong Kong's return came with its own set of rules. Britain bargained for the safety of the city's way of life, the capitalist economic structure and democratic government for the next 50 years, i.e. till 2047. This intricate deal has shaped and changed the identity of this city and its inhabitants over the years, putting it in an indescribable position in the world. Before diving in and understanding the overarching British and Chinese principals in the different, yet somehow derivative city of Hong Kong, its history needs some revision.

The Making of British Hong Kong

In the 17th and 18th centuries, the demand for Chinese goods, particularly silk, porcelain, and tea, in Europe against European silver created a trade imbalance between Qing Imperial China and Great Britain. To counter this imbalance, the British East India Company began to grow opium in India and smuggled them into China illegally. The influx of narcotics reversed the Chinese trade surplus, infuriating the Chinese officials who seized all the opium and disposed of it. That led to the First Opium War. In 1842, the Qing dynasty was forced to sign the Treaty of Nanking, later called an 'unequal treaty' by the Chinese, which granted an indemnity and extraterritoriality to Britain, opened five treaty ports to foreign merchants, and ceded Hong Kong Island to the British Empire.

As the latest addition to the long list of British colonies, Hong Kong began its evolution into a global financial centre and shipping hub by the 1990s. Its population grew as skilled Chinese migrants fled from the Chinese Civil War, and more refugees crossed the border when the Communist Party took control of mainland China in 1949. Soon, Hong Kong became the first of the Four Asian Tiger economies to industrialise during the 1950s.

The Chinese Handover and British Exit

British Hong Kong was mainly composed of New Territories and Hong Kong Island. While the island was ceded to Britain till perpetuity, the lease on New Territories was to expire in 1997. As it seemed impractical to divide the quite integrated city into two parts, it was concluded that the entirety of Hong Kong will be handed over to the People's Republic of China. *Hong Kong was transferred to China on 1 July 1997, after 156 years of British rule.* But there were conditions, in accordance with the "one country, two systems" principle agreed.

China had to accept the drafting and adoption of Hong Kong's mini-constitution, stipulated in the Sino-British Joint Declaration of 1984. As a special administrative region (SAR) of China under the Basic Law, Hong Kong has its own Hong Kong Dollar, not Renminbi; democracy, not a one-party system as the political system; a capitalist and not a socialist economy; and Cantonese, not Mandarin as the mother tongue. These are not where the differences between Hong Kong and China die. Hong Kong having its own Olympic team in the 2008 Beijing Olympics, certainly did not help with the confusion too. These form the highlighting economic, political and cultural clashes between the two. Although Hong Kong's system of government is separate from that of mainland China, its people also overwhelmingly identify as Hongkongers rather than Chinese. And this poses the next big question: Who is Hong Kong?

Hong Kong's Identity Crisis

Hong Kong is a brewing culturally diverse pot of international cultural influence from its past as a British colony and many traditional Chinese cultural values, putting it in stark contrast to the culture of the mainland, which has been isolated from Western influence altogether. This has led to the development of this city in a different light. Hong Kongers are afraid that their identity, which they link to Hong Kong more than China, is set to expire in 2047 along with the Basic Law. And this fear began spreading like the plague when the Chinese government started blurring the lines of state intervention.

The territory's Gross Domestic Product, relative to mainland China's, used to peak at 27 per cent in 1993 when Hong Kong was an economic powerhouse, serving as a gateway to the West. When the figures fell to less than three per cent in 2017, as China developed and liberalised its economy, things changed. They lost their incentive to respect Hong Kong's autonomy, just that easily. This started a slideshow of political propaganda by Chinese officials, using their power to dominate the social and cultural landscape of Hong Kong.

As the time nears for the deal to be globally dissolved, the Hong Kongers have limited choice and freedom, especially when it concerns pro-independence activists.

Now, the evening news broadcast in Hong Kong begins with the Chinese national anthem, followed by news in Mandarin. The latest batch of textbooks points out that multi-party systems are flawed, and refer to Mandarin as the supreme language. This blunt neglect of Cantonese and Hong Kong's core values, through Chinese nationalist moves, is dividing the nation into factions. And they did not stop there.

Hong Kong-Mainland Conflict

It all began on 10 June 2014. Beijing released a report asserting its authority over Hong Kong, claiming "comprehensive jurisdiction" over the territory. This ignited criticism from many people in Hong Kong, who said that the Communist leadership was reneging on its pledges to abide by the "one country, two systems" policy which is the backbone for a democratic, autonomous Hong Kong under the Chinese rule.

To add to the fire, on 31 August 2014, the National People's Congress set limits for the 2017 election of Chief Executive, the head of Hong Kong government. While notionally allowing for universal suffrage, the decision imposes the Chief executive-elect "will have to be appointed by the Central People's Government." It seemed as if the Communist Party of China would allow Hong Kong's citizens free and open elections, but only from the group of Party's pre-screened candidates. Soon people were on the streets demanding true universal suffrage because "Hong Kong is not China".

Then came the *Causeway Bay Books disappearances.* Between October and December 2015, five staff of Causeway Bay Books in Hong Kong went missing. This book store was known to sell books which were banned in the mainland, as they covered the scandals of high-ranking Chinese officials. At least two of them disappeared in China, one in Thailand. It was widely believed that the booksellers were detained in mainland China. One of them wound up on a Chinese news channel, stating he voluntarily came to China to apologise for his actions. The bookstore since then is closed down.

In December 2014, the British Foreign Affairs Select Committee was denied entry into Hong Kong by China on their planned visit as part of their inquiry into the progress of the implementation of the Sino–British Joint Declaration. Richard Ottaway, the Chairman of the committee, revealed that Chinese officials consider the Joint Declaration "now void and only covered the period from the signing in 1984 until the handover in 1997."

Infrastructural Propaganda

The Hong Kong–Zhuhai–Macau Bridge, a 55 km long and $20 billion investment, connects Hong Kong to Macau and Mainland China. It acts as an umbilical cord giving tangible proof that the city belongs to China. Another $11 billion evidence is a bullet train, which links Beijing and Hong Kong. And last is the creation of so-called Greater Bay Area, aiming to transform the coastal regions of the city to a high-tech megapolis, rivalling California's Silicon Valley, strengthening Hong Kong's role as an international centre of finance.

These plans to build Hong Kong into an economic hub and restore its former glory is a smoke screen. The real intention is clear: ensure the inhabitants of the city know and accept that they belong to China now, by establishing communication channels between the two in more ways than one. This seems in preparation for 2047 when the deal officially and globally expires.

China Acts Up, Hong Kong Retaliates

From 26 September to 15 December 2014, Hong Kong experienced the Umbrella Movement, a manifestation of the growing Hong Kong identity and the resistance to Chinese domination. The number of protesters peaked at more than 100,000 at any given time, introducing police tactics, such as tear gas which was used around 87 times! The protests precipitated a rift in Hong Kong society and galvanised the youth – a previously apolitical section of society – into political activism and heightened awareness of their civil rights and responsibilities. Censors rapidly deleted messages and internet posts with words such as "Hong Kong," "barricades", and "umbrella".

The public did not revert back with their voice only on the streets, but also in the Legislative Council.

The twenty-two political parties in Hong Kong aligned themselves into three ideological groups: the pro-Beijing camp (the current government), the pro-democracy camp, and the local groups. Similarly, the Hong Kong society has divided itself into a pro-government group, which supports Hong Kong's integration with China under "one country", and a pro-independence side, whose focus is on the "two systems" approach, where more democratic institutions need to be developed to preserve human rights while cooperating with China.

2047

The Joint Declaration guarantees the Basic Law for 50 years after the transfer of sovereignty. It does not specify how Hong Kong will be governed after 2047, and the central government's role in determining the territory's future system of everything is basically subject to political debate and speculation. Hong Kong fears complete political and economic reintegration with China, as there is little hope the city continues to be administered separately after recent events. If the pro-Beijing candidates chosen by the Chinese authorities become Hong Kong's chief executives for the next decade, China's intervention would worsen even further and the city could be fully controlled by China well before 2047. As a democracy under China's rule, this capitalist city was always expected to succumb to socialism. As the time nears for the deal to be globally dissolved, the Hong Kongers have limited choice and freedom, especially when it concerns pro-independence activists. With restricted international support, limited political representation, and increasing Chinese cultural influence, Hong Kong's identity is at stake now.

The Nordic Model

BY ABHISHEK SANCHETI AND KSHITIJ MAHESHWARI

Alan Turing once said, “Sometimes it is the people no one imagines anything of who do the things that no one can imagine.” However, in Europe, it took only a few countries in the northern region to prove the viability of the given quote. Often discarded in the political arena of the world, Northern Europe shot into the limelight after the Subprime Mortgage Crisis of 2008 where one country managed a GDP growth of a stellar 6% even though other developed economies of the world had come to a standstill. On further investigation, it was found out that this group of countries was more socially well-off than its counterparts.

In a world plagued with economic disparities, geopolitical tensions, poverty, trade wars and what not, this select group of countries – Denmark, Finland, Norway, Iceland, and Sweden – has emerged as the “materialistic paradise” of similar economic and social policies attributing to the infamous Nordic Model. Thanks to its unique economic and social model, the Nordic Model has been able to make its subsidiaries almost free of pollution and slums; neither unemployment nor does old age pose any financial hardships to the citizens of these countries.

So, what exactly is the Nordic Model?

The Nordic Model is a comprehensive welfare state with collective bargaining at the national level and a high percentage of the workforce unionized, based on the economic foundations of free market capitalism. Despite the demographic, political and economic differences of the Nordic Countries, they share some common traits. These traits include a vision for a “utopian” welfare state which aims specifically at promoting social mobility and enhancing individual autonomy, along with a corporatist system of tripartite arrangement which includes employers, unions and the government. They aim to provide free trade and free markets along with a commitment to widespread private ownership of resources and manpower.

This unique model focuses on:

- Top class health and education facilities;
- The ease of doing business along with strong contract enforcement and property rights;
- Post-retirement and unemployment benefits;
- Decreasing the barriers to trade and market regulation;
- Minimizing levels of corruption and heavy public spending;
- Unionization and collective risk sharing.

How does it actually work?

The backbone of Nordic Model is trust – the trust between the government and the people. The government trusts that the public pays the requisite amount of taxes without any scope of black money circulation. In return, people trust that the government is transparent and it would efficiently utilize the taxes for the benefit of the public at large. What do we get? One of the most transparent and efficient governments in the world. According to the Transparency International’s 2015 Corruption Perceptions Index, Denmark, Finland, Sweden and Norway were ranked among the least corrupt countries of the world, owing to their citizens’ belief that both public institutions and private companies have their best interests in mind through a general social contract among them which emphasizes on fairness and transparency.

To maintain economic growth while providing social welfare services, the Nordic countries are required to emphasize workforce participation. The Nordic economies have to incentivize their citizens to continue to work despite having generous wealth benefits. There is a steady economic growth in the Nordic economies along with strong finances which help them to work in the best of their citizens’ interests. There is a high public expenditure by the government which leads to the Nordic Countries having the world’s best public education, health and social overhead system. They also try incentivizing the private sector by allowing them contracts of building and maintaining this system, which is funded and paid for by the public sector. The entire system is funded by the tax revenues collected by the government, which answers the question as to why the Nordic Economies are also some of the most heavily taxed economies with individual income taxes and payroll taxes forming 26.4% of the GDP of Denmark, 19.7% of the GDP of Norway, 22.1% of the GDP of Sweden. The marginal effective income tax rate in Denmark is 60.4%, Sweden's 56.4% and Norway's 39%. In these economies, the individual flat tax structure is followed where the rich, as well as the poor, are heavily taxed.

The model is reinforced by a capitalist economy that encourages creative destruction. Their business-friendly laws make it easy for them to shed non-productive workers and implement transformative business models, whereas the employees are supported by the model's generous social welfare programmes. This results in a system which treats all its citizens equally and improves workforce participation by both the genders. Moreover, in these countries, the concept of heritage companies is not present and a company is allowed to fail and go bankrupt despite its rich history and glorified past. Furthermore, these economies maintain a budgetary surplus – of 3% like in Norway and Sweden – or a very less deficit (3% in Finland) which gives them a cushion to fall back on and act and react accordingly to the various economic shocks and financial crises which try to disrupt their economies.

Thus, they have created a model which not only reduces the gap between the rich and the poor and has a vibrant public sector, but also, at the same time, retains the benefits of capitalism. In fact, at the turn of the Financial Crisis of 2008, experts thought that the model would falter due to heavy welfare consumption, but what ensued was quite the opposite; the countries maintained sustainable growth levels and had minimal effects of the economic downturn which showed the ability of the model to tackle problems and come up with effective solutions.

If I am a citizen of one of these Nordic countries, paying such a huge proportion of my income as taxes to the government, what incentives do I actually get?

World class educational and medical facilities with a sound social overhead structure of such a quality that the private sector has no room to improve it, form only the crust of the incentives of such a model. Pensions and survivor benefits (continued pensions for spouse and children), old age benefits, sickness and maternity benefits, workers medical benefits, dependent's medical benefits, temporary disability benefits, permanent disability benefits, unemployment benefits and family allowances – all paid for, by the government and employers with the employee contributing by paying taxes.

Seems too good to be true? Is It Even Real?

Even though it has its roots back in the pre-industrial era, the system has survived the transition of the Nordic economies from semi-feudal agrarian economies to power affluent welfare states. This system is based on an egalitarian society with a vision to embrace globalization along with the existing welfare state. Despite having bits similar to both Socialism and Capitalism, it is distinct. Indeed, this Third Model can be clearly justified in the performance for the Nordic countries. The Nordics have consistently ranked highest on GDP per capita, healthy life expectancy, perceived freedom to make life choices, and generosity.

(Refer the Chart showing Nordic Regions' Position in different benchmarks on next page)

The Other Side of the Coin

Like every aspect of life and economics, this model isn't perfect. Due to rapid globalization and the generous social benefits provided by the state in the past few years, these countries have caused Wagner's Law to kick-start, which essentially means that the demand for these social services provided is increasing at a faster rather than the income of the people which could soon create a bubble in the economy.

The main crux of this problem is that countries have attracted a swarm of immigrants, who – unlike the natives – don't share the vision of working hard and being an active part of the workforce for the collective development of the society. This brings us to the question of moral hazard, where the taxpayers' hard-earned money is being enjoyed by those who don't deserve it.

Another serious challenge at hand is that the demographics of these countries have been quickly shifting and the average age has been steadily increasing in recent times. Now, this not only leads to the increase in cost to the state in

BENCHMARK	1ST	2ND	3RD	4TH	5TH
World Happiness Index	Nordic Region	USA	Continental Europe	UK	Southern Europe
Legatum Prosperity Index	Nordic Region	UK	Continental Europe	USA	Southern Europe
Human Development Index	USA	Nordic Region	Continental Europe	UK	Southern Europe
Corruption Perceptions Index	Nordic Region	UK	Continental Europe	USA	Southern Europe
World Press Freedom Index	Nordic Region	Continental Europe	UK	Southern Europe	USA
Gender Inequality Index	Nordic Region	Continental Europe	Southern Europe	UK	USA
Global Gender Gap Index	Nordic Region	Continental Europe	UK	Southern Europe	USA
Global Competitiveness Index	USA	UK	Nordic Region	Continental Europe	Southern Europe
Ease of Doing Business Ranking	UK	Nordic Region	USA	Continental Europe	Southern Europe
European Innovation Scoreboard	Nordic Region	UK	Continental Europe	Southern Europe	
Global Innovation Index	UK	USA	Nordic Region	Continental Europe	Southern Europe
Environmental Performance Index	Nordic Region	UK	Southern Europe	Continental Europe	USA

terms of additional pension plans, health benefits and other services required by the senior citizens, but also keeps on adding to the burden on the currently working taxpayers of the country and this is where cracks start to appear.

A model for other nations?

The Nordic Model has gathered a significant amount of attention from other economies. It is often looked upon as a template, a rough draft, for smaller communist countries where citizens are more homogeneous in terms of their opinions and experiences, but still are poor and oppressed due to the draconian policies of their Marxist governments.

The westerners believe it provides a draft for reforming the free-flowing, unchecked capitalism that has created high income inequality and drastic differences between the quality of life of the rich and the poor. Many people living and operating under “the American Model” of Capitalism see the model as an attractive alternative as it provides affordable quality health care and education, a strong social safety net with retirement security, massive public expenditure for the benefit of its citizens and low income disparity.

Opponents of the Model criticize the high level of taxes, a high degree of intervention by the government, and relatively low GDP and productivity as factors limiting economic growth. They show that the economies of the Nordic Model redistribute assets, decrease disposable income and encourage reliance on government subsidized programmes.

PERSONAL INCOME TAX RATE – NORDIC REGION

COUNTRY	PERSONAL INCOME TAX RATE
NORWAY	38.52%
SWEDEN	61.85%
DENMARK	60.20%
FINLAND	51.60%
ICELAND	46.30%

The redundancy of the communist governments to make changes and the unwillingness of the Capitalists to change their free markets mean that the discussions about the possibility of adopting and implementing the Nordic Model will remain as it is: in discussions. The inability of the geographically and ethnically diverse nations that lack a culture of shared experiences to move beyond common political rhetoric will further cripple the possibility of the introduction of the Model in these countries.

Therefore, lying between the controls of the Communists and free run of the Capitalists, the Nordic Model is often referred to as "the third way".

A model for India?

In an ideal world, Yes! The model could serve as a messiah to India since the country has a very young and a massive workforce, is full of emerging markets and has high rates of growth of GDP. But unfortunately, with the current state of India, a skewed distribution of wealth and soaring corruption run rampant throughout the country, it comes with a big threat to the sustainability of this model in the Indian economic and social environment. Also, a large percentage of the workforce in the informal sector raises further challenges. And the final nail in the coffin to India's dream of adopting such a model is the existence of black money in the economy on an unfathomable scale, poor education, and healthcare facilities provided by the state which are still incomparable to those provided by the Nordics. Just to give an idea about how massive this problem is, India ranks 81 in the transparency index out of 180 countries and for India it almost seems a distant dream to even come close to the top ranking Nordic countries.

The Bottom Line

The Model has continuously gone through massive changes as it has tried to adapt itself with the ever-changing economic conditions of the world and needless to say, it has to continue to change and adapt itself if it wants to survive the future. But the thing which will not change is the basic structure of the model such as the welfare state, universalism and social cohesion and free markets. Some may say that the model only works in principle, isn't practical and would collapse soon, but time and again it has proved them wrong. Although these countries are not immune to economic downturns, they have been able to bounce back more quickly than any other First World Countries. With the backing of the citizens as well as the political parties, the model has shared a sense of economic and social equality throughout its 60+ years of history.

In any case, while the world argues furiously in support of this social democracy or against these so-called "welfare economies", the Scandinavians make no efforts at all to coerce or coax other nations into adopting their model. Rather, they are content in working and solving their problems together while continuously upgrading themselves which results in them being placed consistently at the pinnacle of the global surveys of the happiest people in the world.

Digital Dictatorship: China's Social Credit System

BY PRATIGYA SINGHAL

For generations, Indians have believed in the concept of 'Punya' and 'Paap'. We believe that one pays for his/her bad deeds of past life in the current life. But the communist Government of China has gone a step ahead by punishing its citizen for all their bad deeds (as surmised by the authorities) in this life itself through a system called "Social Credit system". According to China's Communist Party, the system will allow the good ones to roam freely while making it hard for the discredited ones to take a single step. This system is often referred to as Gamification of trust where each of 1.4 billion citizens is awarded points as per their actions and then given the rights to enjoy the facilities that an average citizen is usually entitled to by installing cameras to monitor every move of every citizen and leaving no dark corner. It's like adding your Facebook data to your credit score only with far more serious consequences.

The concept of a system of social credit first appeared in 1999 out of the need to strengthen trust in the country's emerging market economy. However, the aim shifted from evaluating financial creditworthiness to persecuting citizens, administrative officials and executives on moral grounds. In 2010, a place called Suining County in China's Jiangsu Province started experimenting with a system to rate its citizens. With the aim of quantifying individuals' behaviour, points could be deducted for breaking laws, for deviating from social norms and political positioning. Residents were initially given 1,000 points. There was a 50-point deduction for acts like skipping traffic light, caught drinking and driving or bribing any official or even when one fails to support elderly members of the family. Then on the basis of the total so obtained after due deductions they were assigned an A to D rating. NPR reported the ranking as follows: an A for 960 to 1,000; 850 to 955 points is a B; C is for 840 to 600, and any score below that is a D. Lower-rated citizen had a harder time accessing social welfare schemes and benefits that any normal citizen gets. More than half of an individual's points were related to his/her social conduct. And from there started the system of digital dictatorship.

> In 2014, the permission to develop their own digital rating systems was given by CPC to eight private providers. Their systems use algorithms and artificial intelligence (AI) to calculate points or scores in a well coded automated process.

The SCSs (Social Credit System) have access to many databases which may be privately owned or state-owned. In 2014, the permission to develop their own digital rating systems was given by CPC to eight private providers. Their systems use algorithms and artificial intelligence (AI) to calculate points or scores in a well coded automated process. At the same time, the CPC started installing its own state scoring systems in selected areas which were called 'Special Zones'. The Government plans to make this system mandatory within 2 years so that companies, as well as citizens, can have access to their centrally recorded credit scores.

How does the system work? The system basically uses face recognition software to constantly scan and record data using China's 200 million closed-circuit cameras connected over a single grid. The facial recognition technology is implemented through CCTV devices installed at security check gates that may seem like normal security scan but they are capable of clicking and saving the image of any passer-by. Then this information is paired with online habits, from what you buy, which sites you visit to what you write on social media. All this information is then wrapped together to generate a number which they call social credit score. So praise communist government over social media and your score gets higher, dare not to criticize because journalist Liu Hu tried blaming the government for corruption along with proofs and Chinese government acted prudently enough to ensure that this doesn't happen again, not corruption but the blaming part! Hu, who was arrested on the charge of fabricating and spreading rumours in 2013, was required to pay a fee as part of his punishment. He afterward found out that he was subjected to state-imposed restrictions placed on his ability to buy property, take out a loan or travel on the country's top-tier trains and was told that he is on the list of untrustworthy people. All because of his tweets which were too politically outspoken. Even his friends and family have lost credit scores. He is the first digital prisoner of world's largest **Digital Dictatorship**. There are provisions for punishment in form of throttling your internet speed, not allowing your kids to study in best schools etc. A prototype blacklist already exists which contains the name of citizens who may be subjected to these punishments in the future.

Let's know what makes Chinese people untrustworthy in eyes of the government. Activities like Jaywalking, smoking in non-smoking areas, buying too many video games all these make you lose your points and getting a community reward or doing a heroic act boosts your score. So now Chinese can go on committing their own heroic deeds maybe like setting an orphanage on fire and then saving it! A pilot version of the scheme, run around June in this year in Hangzhou City reportedly saw citizens getting the benefits of government desirable conduct and high social credit ratings in form of free access to gym facilities and shorter waiting time in a public hospital. They don't only blacklist citizen but also publicly praise good citizens. They even get discounts on their bills and easy loans and this is how government reward citizens for letting go of their private life public.

The Chinese Government has several reasons to develop this system like it punishes and publicly shames wrongdoers, crack down on fraud, corruption, reduces the risk of credit default and also purifies citizens, although they should ideally start by purifying their air! It is in the pilot phase in many cities of China and will be rolled out in the whole of China by 2020.

China's social credit system, a big-data system for monitoring behaviour is influencing foreign companies. Moreover, the rulers have no plan to stop here but the Chinese government is selling this technology to other countries much like exporting digital Dystopia.

According to a new report, the system was used to threaten dozens of foreign airlines into adopting the political stance of the Chinese Communist Party on Taiwan. The carriers were told if they did not comply then the violation would be listed on their credit records. Every foreign company was required to get an 18-digit 'unified social credit code' which will help in recording credit violations and imposing sanctions. Social credit regulations are already being used to force businesses to change their language in a way to comply with the political demands of the Chinese Communist Party (CCP). This corporate social credit list is not limited to just airlines. Last year, Japanese retailer Muji was fined around $30,000 for describing Taiwan as the "country of origin" on 119 hangars. Even after making the firm to pay fine and destroying its items, it was subjected to public defamation by recording its violation on National Enterprise Credit Information Publicity System. So we should not be surprised if after 2020 china claims this system was built as a precaution against intellectual property theft which was one of the many reasons for US sanctions on Chinese goods but this will be hard to believe because this system is just an attempt to make MNCs less anti-Chinese.

> Moreover, the rulers have no plan to stop here but the Chinese government is selling this technology to other countries much like exporting digital Dystopia.

This system can be the largest application of big data ever. But many challenges and obstacles hinder the implementation of a full-fledged national system, which includes inadequate technology since many a time the CCTVs are not working and there are still numerous places that are out of its coverage. These places not only require early installation but also the integration of these cameras with other face recognition software and artificial intelligence. Another obstacle is the parochial mindset of government officials in ministries that jealously guard their data and a growing awareness of the importance of privacy among China's educated urban class. But the Chinese government is still sure about implementing this by 2020.

If we try to get it straight, the Chinese government is very particular about integrity and honesty of their citizens but things like devaluing yuan, dumping low-quality Chinese goods and involving in intellectual property theft don't make the government less reliable or untrustworthy!

So if you can imagine yourself living with your “Big Brother” around you 24x7 then you know exactly what Chinese citizens feel like. They can actually relate to the protagonist of George Orwell's 1984 who realizes that he is a “thought criminal” and will be caught one day. Despite this despotic rule a Chinese citizen on being asked how he feels about this system says that “it has made us better and more disciplined citizens.” Clearly, this statement stands testimony to the success of Social credit system because no one cares to lose their credit scores for something as insignificant as expressing true views!

Dubai's Dirty Little Lies

BY SHRUTIKA RUIA

In this article, we will explore the shift from the creek area of Dubai's mercantile days to the "New Dubai" in the post-oil landscape and its impact on the migrant labour force.

History of Dubai

How did Dubai become a global hub besides the fourth most travelled city in the world? The city is famous for its iconic, ultramodern architecture, man-made islands, and its futuristic atmosphere. Until about 50 years ago, sands covered Dubai's entire land area. Neither it had any staple crop like the other Agrarian countries to export nor any mineral or gold. It all changed because of the prosperous maritime activities. The city, once a modest fishing town, became an important trading port by the 20th century. With increased trade routes, coastal industries such as pearl diving and fishing began to prosper in the region. Gains from pearl diving started to plunge in the 20th century due to a lack of international demand owing to the two world wars, which ultimately had drastic effects on trade routes and global economics. No longer a scrabble of fishing villages, Dubai is home to countless modern wonders today.

The trading activities in Dubai dates back to the days in 1901 when Al Maktoum established Dubai as a free port with no taxation on imports or exports and also gave merchants parcels of land and guarantees of protection and tolerance. Its strategic location and proximity to Iran contributed somewhat to the city's commercial and business projects.

Today, Dubai's main cargo port, Jebel Ali is the busiest port in the Middle East and arguably the UAE's most valuable commercial asset. Coincidently, in 1966, oil was discovered in Dubai, which led this emirate of UAE to become the modern, business centred city. However, the discovery of oil was good as well as bad news. The black gold was found, but the reserves were limited. The driving force behind Dubai's incredible growth was (italicise was) oil, not anymore. The oil boom in the 1950s and 60s in the Arabian Gulfs parked rapid development, which created demand for labour. Due to relatively small population sizes in the Gulf, GCC countries relied on imported labour to balance out the local labour deficits, which has primarily been sourced from the Indian subcontinent and South Asia.

Accomplishments and Achievements

All the Gulf countries in the Middle East are not (italicise not) surviving either on oil or gas. Dubai is an epitome in this regard: Dubai's revenue from oil now is even less than 1%. Rather, the remaining 99% of revenue comes from the tourism and finance sectors. The Prime Minister of UAE had believed in 'Diversification of Revenue sources'. Dubai owes this development to its Emir, Sheikh Mohammed Bin Rashid Al Maktoum. "In the race for excellence, there is no finish line," he said, and Dubai has grown exponentially into the desert, the sky and the sea.

Now, let's talk about the Infrastructural accomplishments of Dubai. The Dubai Mall is the World's biggest mall in terms of land coverage. Some of the most exciting attractions in Dubai include World's tallest tower – Burj Khalifa, Palm Jumeirah - defined as the world's first man-made island - Underwater Tunnel, World's most expensive seven-star hotel Burj-Al-Arab, and the first underwater tennis court is under construction as well. It seems that when it comes to 'the biggest, tallest or largest', Dubai competes with itself.

Dubai also built the biggest garden in the World – The Dubai Miracle Garden. With more than 40 skyscrapers, this country has the title of the World's highest Five-Star Hotel – JW Marriott. Besides that, the World's biggest Gold Market – The Gold Souk will be found in Dubai. One after another, innovation-led initiatives are undertaken in this city. Ever heard of buildings made out of 3d Printing? Yes, you read it right. Dubai has already launched World's First functional 3d Printed Office Building and is determined to get 25% of buildings constructed in Dubai through 3d Printing by 2030. Another thrilling idea of a Passenger drone was recently tested in Dubai itself, turning impossible into possibilities.

Abu Dhabi, the capital of UAE, grew because of its vast oil reserves without which Dubai had almost nothing. The Sheikh knows how to bring Global Talent and Global Traffic. To invite talent, he created a tax-free economy where whatever one earns is entirely owned by him.

Sheikh understands the ease of communication system, thereby enabling him to create the World's most connected smart city. Dubai believes that investing in Police will be an asset and not an expense thus making the Dubai police one of the wealthiest police force in the world. This force possesses or handles the world's most expensive supercars like Ferraris and Lamborghinis. Dubai went on to differentiate its islands from the rest of the world as well. The usual shape of a man-made archipelago that would come to our minds is circular. However, think about an island in the shape of a palm tree. The purpose of building Palm-Jumeirah was to maximise the construction of beach-front properties, which adds to the revenue of the Dubai Government because of its unique design of leaves and a huge trunk. Due to the design, the beach-facing villas are substantially 5 times the number/cost of the villas that would have been built if the archipelago was circular. Genius, isn't it?

The welfare state that has developed in the UAE has created a consumer culture among Emirati nationals, which has produced and perpetuated a status quo where locals act as consumers and migrants as producers.

Well, now you might wonder where Dubai gets all the money from, to finance its investments. Although I mentioned it's a tax-free economy, it is not entirely tax-less. The UAE does not impose any income tax on wages and salaries of individuals, but the oil companies are subject to a 55% tax in addition to payment of royalties and are, therefore, charged one of the highest tax rates in Dubai. Foreign banks are also subject to a 20% corporate tax on profits that are earned in Dubai. Hotels and entertainment venues pay a 5% municipality tax for rooms, food and other services. Import taxes on luxury items, including those shipped through the free zones is 10%, while all other imports are taxed at 4%. Many government-related entities also pay the government royalties. Alcohol imports are heavily taxed – one has to pay 50% to bring alcohol into the country and a further 30% on the purchase of alcohol (legally with a liquor license) for home consumption, which is why many people choose to purchase alcohol illegally.

Recently, the UAE has also introduced Value Added Tax Scheme on goods and services starting at a rate of 5%. Business licenses here are expensive and can easily cost one up to thousands of dollars. These business licenses have to be renewed yearly, which further adds to the government funds. In addition, the system of fines in the Emirates is very efficient. There are traffic radar cameras everywhere in the UAE, which are among the smartest systems in the world. The penalties for violations of traffic laws are costly, and since people here love to drive fast, traffic fines contribute a significant amount to the government revenue.

Disclosing the Undisclosed

There is a flip side to this story too. Now let me ask the question: from where does the labour to erect such massive structures come? For much of known history, Indian merchants travelled across the Indian Ocean to participate in the trade of rice, cloth, food, spices etc. These merchants often returned to the subcontinent, though some remained and established themselves as bankers and financiers. This phase set the framework for future trade and migration conduits. The booming oil industry in the Gulf was also one of the primary reasons for the influx of labour in this iconic city. According to Government statistics from 2011, foreigners make up more than 88.5% of the population in the Emirates and more than 90% in the Emirate of Dubai.

The welfare state that has developed in the UAE has created a consumer culture among Emirati nationals, which has produced and perpetuated a status quo where locals act as consumers and migrants as producers. The welfare state has fostered a superior mindset among nationals, which ultimately causes locals to rely on migrants to supply the workforce for menial jobs, which they view as inferior. Because these jobs, such as those in the construction sector, are necessary to support the consumer culture in Dubai, Emirates remain reliant on imported labour supply.

This is a city built from nothing in just a few wild decades on credit and ecocide, suppression and slavery. There is the foreign underclass who built the city and are trapped here. We only see the rich side and not the poor half, owing to the modern skyscrapers and artificial islands, but poverty is as real here as it gets. The development of these Gulf cities has come at the expense of the rights and liberties of the migrant labour population. As the wealthy urbanised, and moved to newer areas of the city, that part of the population that could not keep up remained on the periphery of the city. This divide is not only physical but as Gulf cities became more developed and modern, boundaries between nationals and non-nationals became more defined both socially and institutionally.

Indians have made up the largest national group in Dubai since the beginning of the development era. Though Indians were present in Dubai as merchants before the 20th century, Dubai's demand for labour significantly increased the density of the India-UAE migration conduit. By the 1970s, Indians accounted for the third largest group in the UAE, with a population of 102,000 of a total 656,000. About 85% of Dubai's population consists of foreign migrants, a majority of whom are from India. Development efforts and the demand for imported labour created a massive construction boom in Dubai. During the early 2000s, the construction sector was a leading contributor to the economic growth of the country. Between 2000 and 2004, the contribution of the construction sector to GDP grew by 23%, with an annual growth rate of 5%. Today, construction workers account for one-fourth of the population of Dubai and are burdened with innumerable injustices. Their wages are extremely low, often withheld, passports are confiscated, and they arrive in the country with pre-existing debt payable to recruitment agencies. They are also forced to live in unsanitary labour camps located on the boundaries. Labour unions are prohibited, and the workers suffer financial and health ramifications due to the cyclical nature of labour migration that the kafala system inculcates.

GCC countries employ a system known as kafala, meaning sponsorship, that allows the government to monitor migrant labourers through national sponsors. The system ties each labourer to a kafeel (sponsor) in the destination country, who is responsible for arranging his or her visa and employment contract. The kafeel is usually the migrant's employer. The system requires all labour migrants to operate through contracts, which typically last for two to three years. Through locating the responsibility of migrants at the level of the sponsor, the state evades any legal accountability for the migrant labour population. This controversial system allows Gulf governments to avoid recognising migrant workers as residents, meaning that they are not obliged to uphold their rights or to administer benefits in the way that they do for nationals.

On average, a construction worker in the UAE makes a mere $175 per month. Not only are the wages consistently low for the service sector in GCC countries, but there is also a wage disparity based on nationality and ethnicity. Inconsistent values are placed on the work done by certain nationalities, placing South and East Asians on the bottom rung of the ladder.

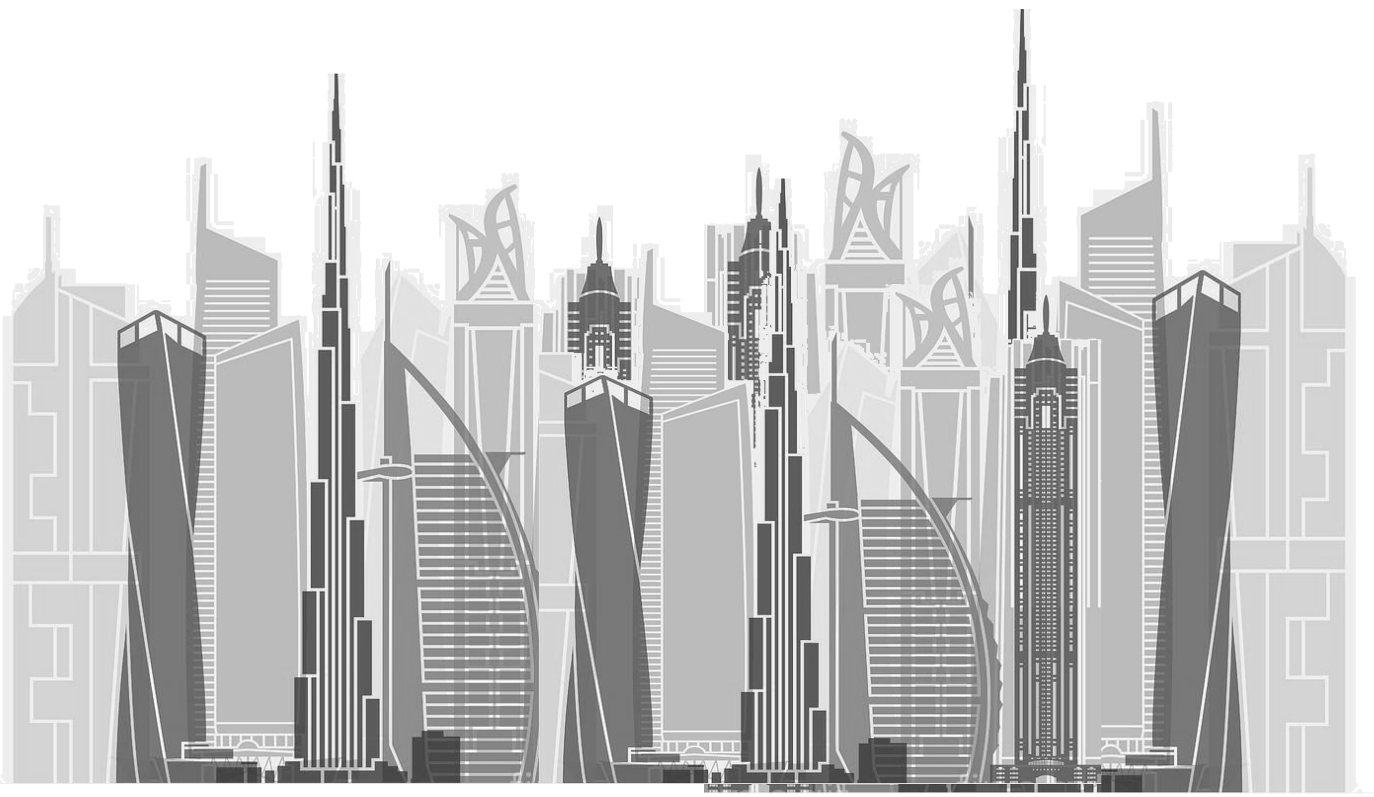
The kafala systems' bans on labour unions and strikes among migrant labours allow Gulf governments to treat the workers as temporary guests who are privileged to be working in the Gulf.

Behind the façade of the symbolic presence of the Burj Khalifa, exists the lives of an overlooked sub-population. The story of its construction represents capitalism at its finest, exploitation of an imported labour population, and the deep-seated racist mindset that is ever present in Dubai. In the process, migrant labourers fall into the trap of the kafala system, which keeps them in a perpetual state of debt, marginalisation, and inferiority in Emirati society. The kafala system promotes the rapid influx of migrants to meet the labour demand while simultaneously subjugating this imported population through exclusion from the legal framework in the Gulf States. As a result, the Gulf has witnessed an emergence of multi-tiered societies where locals are situated in the top tier, and migrant populations consistently occupy the lowest standing in society. This procedure has produced structural inequalities in the Gulf States and has resulted in grave human rights abuses against migrant labourers.

When examining the emigration policy, India is an excellent example for many reasons. Since Indians make up the most significant foreign population group in many GCC countries, and is one of the largest contributors to the global stock of migrants, supporting a surplus labour population, India is more reliant on remittance inflows than ever, which indirectly contributes to the abuse of migrant workers abroad. Money flowing from workers in the Gulf make up a large part of the GDP in some Indian states such as Kerala and Andhra Pradesh. Because of this reliance, India has crafted emigration policies that make the process of travelling abroad and remitting money back to India much easier.

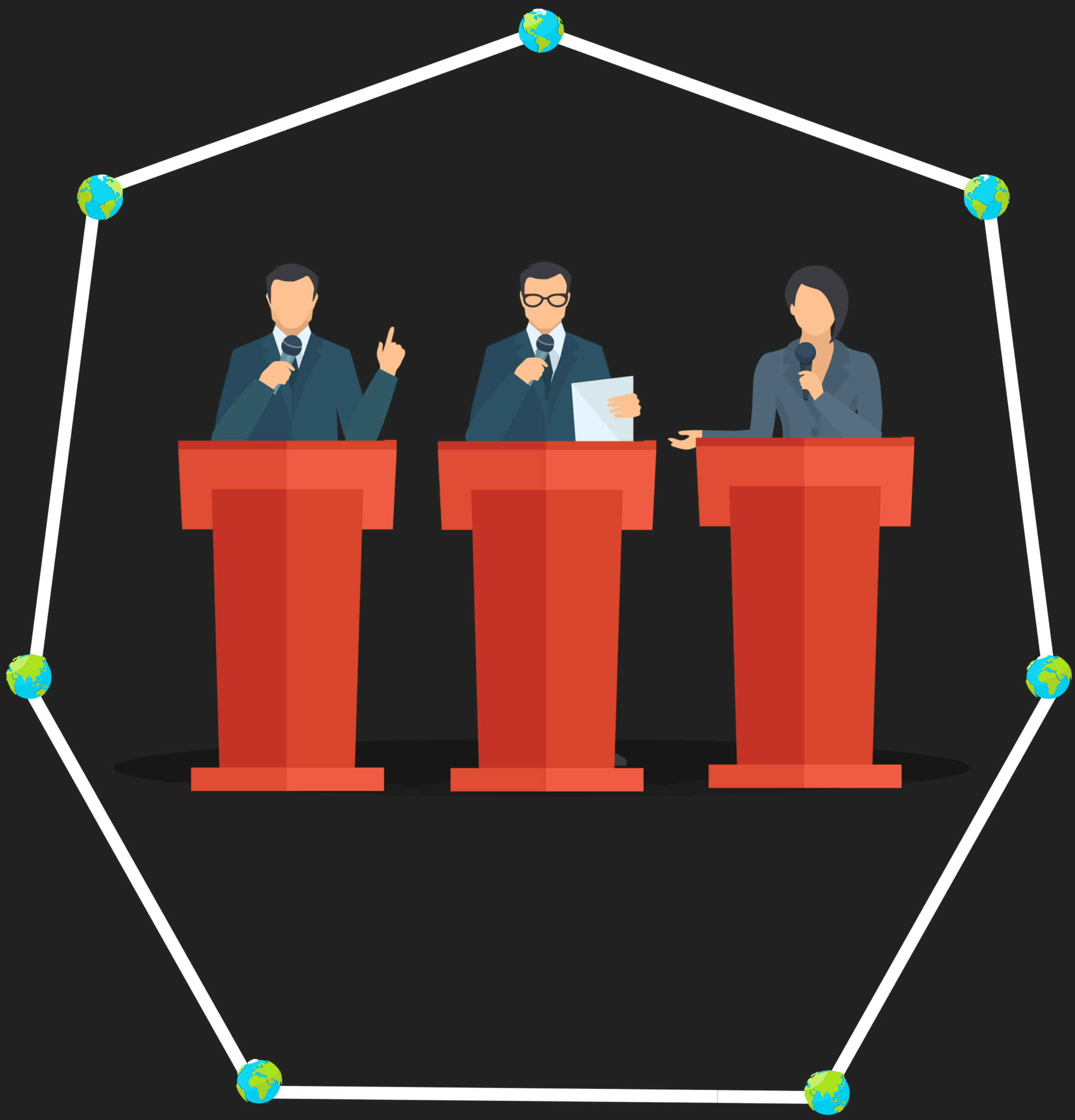
Conclusion

The Arabian Gulf has come a long way in the matter of a few decades. Hosting large and diverse foreign populations, the Gulf has experienced the dilution of local culture. States fear that the enormous migrant population presents a threat to local culture. The government actively takes efforts to preserve and promote local culture in an attempt to 'purify the nationals from foreign influence' and to distinguish themselves from the migrant population. Sprawling stretches of desert areas have been replaced with cosmopolitan cities, and the Gulf has transformed from a regional trading centre into a global economic zone. These transformations have come with a price, and we must take into account all aspects of the modernisation story. The kafala is the obvious culprit of the complications: not only are they physically marginalised from Gulf cities, but they are also socially and politically excluded from society. GCC governments should work to reform this method of regulation, provide forms of inclusion, and improve the appalling conditions under which migrant labourers are living. Further, countries exporting labour to these countries need to play a more dominant role in ensuring the rights of their citizens are upheld in the destination countries.



Reality
is a
question
of
perspective

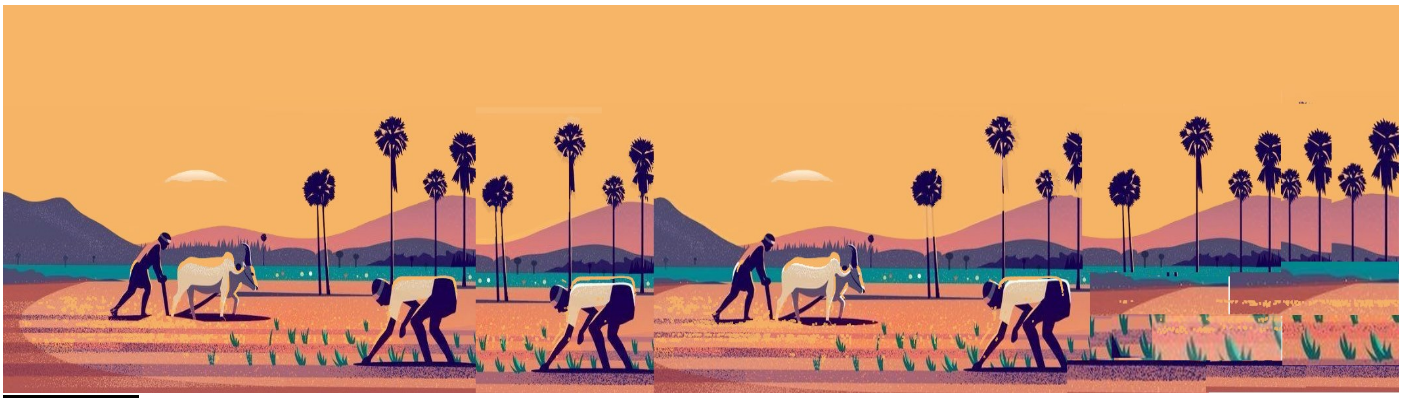
The RATIONAL Economist



PM Kisan Scheme: A Populist Propaganda?

BY ADARSH, KUSHAGRA AND NIKUNJ

The Pradhan Mantri Kisan Samman Nidhi scheme, which was announced in the Interim Budget of 2019, aims to give 6000 rupees annually as assured income support to small and marginal farmers. The amount will be payable in three equal installments to farmers holding cultivable land up to 2 hectares. According to the then Honorable Interim Finance Minister Mr. Piyush Goyal, around 12 crores small and marginal farmer families are expected to benefit from this, for which the government has earmarked a total expenditure of Rs.75000 crores in



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PM Kisan scheme was a populist move in light of the 2019 general elections, painting the party as a pro-farmer activist, by providing additional support to the 12 crore rural families. But there were certain issues that could not be ignored. One of the problems that arose with this scheme was regarding the land records, or lack thereof. Land records are updated only upon the sale of land and only if the transaction is legally registered. This would create problems for the community farmers, who inherited the land without the proper documentation, leaving them outside the purview of this scheme altogether. Moreover, tenant farmers and landless laborers were not included in this scheme as they do not own the land they cultivate. On the other hand, the absentee landlords would receive benefits under this policy. This would lead to internal resentment in some parts of the country where tenancy rate is high, and would further alleviate income gap among them. Mere transfer of 2000 rupees does not solve the current agrarian crisis. The genesis of this crisis lies in the faulty ad- hoc export and import policies, lack of infrastructure, cartelization and collusion in agricultural market, which have prevented farmers from realizing the market prices for agricultural produce. It is no substitute for lack of investment in agriculture which has declined at 2.3% per annum in real terms.

Cash transfer is neither a substitute for the structural reforms needed in agriculture, nor does it adequately compensate all the farmers equitably. Be it the Rhythu Bandhu Scheme of Telangana or KALIA of the Odisha government, none has been a major success. The success of PM KISAN was contingent on the existence of reliable digital land records and rural banking infrastructure, both of which are questionable at best and will create disparity for genuine beneficiaries.

This farmer distress-alleviation program, despite critique, can serve as a pre-cursor to additional monetary support to more sects. The All India Rural Financial Inclusion Survey 2016-17, conducted by NABARD, concludes that 87% of the total farming households in the country have landholdings up to 2 hectares, proving to be the beneficiary of this scheme. The survey mentions that farmers who own less than 0.01 hectare of land earn a monthly income of about Rs.8,136, while their consumption expenditure was Rs.6,594, giving a surplus of Rs,1,542 per month. An additional Rs.6,000 p.a. would, therefore, amount to around 4 months of surplus. Furthermore, the survey mentions that the average savings in a year for agricultural households was Rs.9,657, so Rs.6,000 a year would, without a shadow of doubt, increase their savings and consequently their purchasing power. Even if farmers decide to save most of this amount, there will be more consumption in the economy, leading to economic growth at a macroeconomic level.

This scheme is a part of the government's efforts to address farm sector distress caused by lower sales realization on bumper production of food grains, oilseeds, sugarcane, cotton and horticultural crops. In addition to this, the Government's decision to follow the policy of Direct Benefit Transfer to the beneficiary's bank account through State Notional Accounts would go a long way to minimize leakages that take place in the process. Some farmers might also be induced to open Bank Accounts which would introduce them to the formal lending system which would, in turn, reduce their dependency on rich landlords and moneylenders.

PM-KISAN is one of present government's most ambitious projects that carry within itself the potential to deliver significant welfare outcomes. A Bottom-Up Strategy as compared to the current Top-Down Strategy and a well-planned, steady implementation would allow the shortcomings to be rectified at the grass-root level and give farmers a chance to earn and live on a respectable earning.

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In the precocious times of general election campaigning, PM KISAN scheme in the Interim Budget was a shocker for sure, but as a form of QUBI (Quasi Universal Basic Income), the focus needs to shift from its political purpose to the economic benefit it has the potential to accrue to the farmers. The average earning of farming household in India is only 8000 rupees per month and hence an additional 500 rupees would bring about great cheer among the farming community. This transfer payment would help in elevating the livelihood of the population at the bottom of the pyramid. It is true that this will come as a great cost to the Indian taxpayers, and that it should have included other marginalized farming communities such as landless and tenant farmers. But, these steps take time, and this move should be taken as only the first step towards building a more inclusive policy.

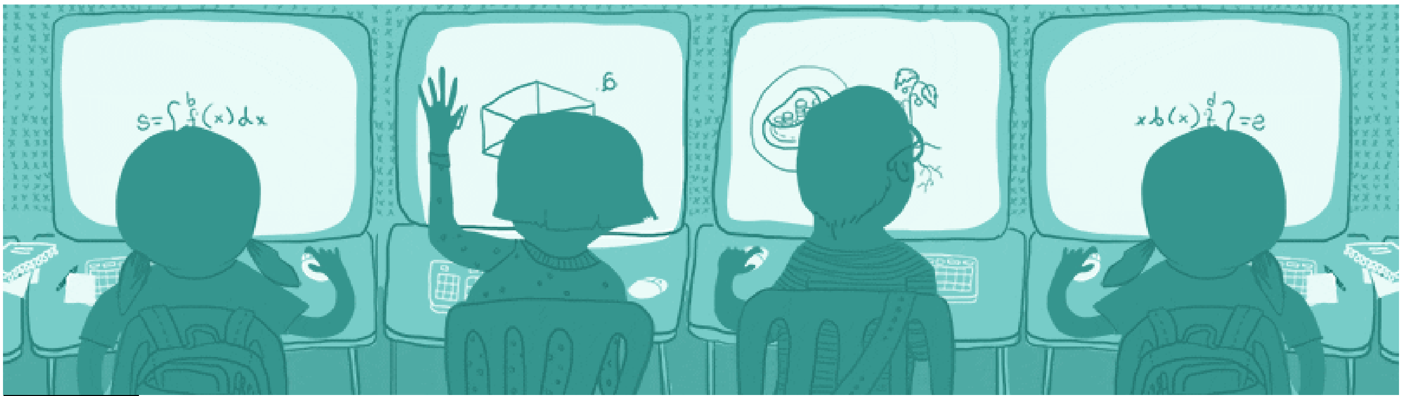
With declining inflation and lacking growth and productivity, this move would help in uplifting the overall level of the economy. An increase in income will lead to a rise in consumption and demand, which would then trigger a rise in GDP. So, the initiative aims at achieving an economic balance at both the micro and macro levels. But, there are several more avenues the Center needs to look into to alleviate agrarian woes. According to a recent study, in about 41% of markets, the farmers are not paid Minimum Support Price for their produce and there is excessive supply of food stock. The government should look at taking measures to improve the efficiency of the MSP system and then implement such policies nationwide.

The PM-KISAN scheme might look like nothing short of election freebies and a short-run scheme, but this monetary support will go a long way for a farmer who wanted to invest in the latest technology, pay his dues or save money to meet future contingencies. There are several ways to solve the crisis, but this move might help a lot of farmers, when looked in absolute terms, and that should be the aim of any government.

Privatisation of Education: Better for Public?

BY PRATHYUSSHA, TATSUM AND NIHARIKA

Indian education sector is considered to be one of the largest in the world, next only to countries like the USA and China. Privatisation of education is the transfer of assets and responsibility of educational institutions from the government to the private sector – the transfer of control and management of educational institutions. The idea of privatisation emerged as a result of the new economic reforms which were carried out in 1991.



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Public Interest has been one of the major concerns regarding privatization of education. Most of the children in rural areas and from lower-income families are able to afford the “luxury” of education owing to the affordable rates. In case of privatization, cost of education will go up, which in turn, will decrease the total number of school-going children, thereby reducing literacy levels. This affects the entire economy in the way that now education will now be treated as a commodity that only the elite few will possess. The disparity between the different economic sections will prove to be even more ingrained.

Next, let’s introduce the concern around the issue of Externalities. Although the government can exercise control over private institutes after privatization to produce optimum levels of output, government regulations and controls on externalities are well above par in the government education facilities as compared to their private counterparts. In case of privatization, large number of externalities will accrue, since the main motive is profit-making.

Size allows a firm to take advantage of economies of scale. This is particularly true in the case of education sector- breaking up into smaller entities, which may result in diseconomies for the institutions. Loss of jobs is another impediment that hinders the practicality of privatization. Although this might not be a huge problem, it has the potential to become one in the future. Private education institutes strive to increase profits and hence, these organizations might resort to cutting down unnecessary labor. Even if jobs are not lost, decreased salaries, loss of job security and lesser innovations in teaching methods are major problems with human resource.

In the field of higher of Higher Education, government owned universities and other educational institutes are better performers and provide quality education. This is a very important aspect to be considered while making a choice.

RIGHT

Private schooling can be the bedrock of India's education system. According to EY-FICCI report, there is increase in enrolment in private schools in rural areas from 18.7% in 2006 to 25.6% in 2011. Private institutions have increased the opportunities and choices available for students to take admissions in schools, colleges and universities. India has suffered from lack of schools and educational institutions to impart quality education since independence.

Privatization provides scope for competition thus improving efficiency and quality. As per a report by NCAER, 65% of private school students are able to meet class-II level reading criteria as opposed to 45% of government schools. It provides innovation in teaching methodologies as each institution would seek to reflect academic excellence in their results. It also encourages development of other life skills by providing opportunities to students to showcase their inherent talents. In April 2017, about 25% of schools in India were private but they enrolled over 40% students.

Privatization helps government to redirect its funds to other projects in areas like defense, health and housing, which it couldn't earlier owing to shortage of funds. Private institutions possess latest teaching technologies, equipment etc. It also reduces political interference in management of institutions. It is practically impossible for government to fulfill all demands of education in India.

Moreover, if government intends to open more schools and colleges, it will require additional funds which will put even more tax pressure on already burdened population. Moreover, the most esteemed institutions across the globe like MIT and Harvard are privately administered, which validates the efficiency of this policy

We can have different forms of privatization with respect to education as it consists of a very wide spectrum of possibilities. Among those, one is of the former US President, Mr. Barack Obama. Obama found credible ground in privatizing education and thus came up with a model of funding education institutes with public money, but allowing the managerial operations to be privately operated. This is a perfect hybrid of government support and satisfies the aim of ultimate profit earning as well along with improving the quality of education. According to the recent studies, the fraction of private institutions has increased from 42.6% to 65.2% in 15 years. The student enrolment has also augmented from 32.9% to 68.3%. This shows the tremendous growth of private institutes.

However, for 33.5% of people, it has led to a rise in cost. This is where the problem of inequalities of income steps whereby people deprived of enough funds are deprived of quality education. We can focus on re-publication, not privatization wherein the institutes set up will complement public ones instead of competing with them. This, in turn, will lead to a healthy education-compatible environment offering quality services that is of relevance to individual students, industry and the country. The government can form a distinctive board with the sole objective to control and regulate the fee structure of all private education providers to prevent solely profit orientated businesses.

Trade Unions: Cry for Job Security?

BY PRATIK, VARTIKA, TANISHA AND ANKITA

Trade union is an organized group of workers, who belong to a particular industry or a company which aims to promote and protect their interests and welfare through collective voluntary action. The Trade union movement began in India in the early 1900s when workers began forming associations to improve their conditions. The Indian Trade Unions Act, 1926 governs the registration and regulation of trade unions.

LEFT

Trade Unions are formed to ensure the satisfaction and the interests of a group of people. They demand satisfaction in terms of higher wages and better working conditions. This, in turn, puts pressure on the business which leads to increased costs and decreased profits.

One action commonly done by trade unions is collective bargaining. Owing to members' participation in industrial action as a group, it gives them greater bargaining power. The cessation of production leads to unsatisfied demand and thus, loss of reputation. This might lead to management problems as well. For instance, there can be a problem of miscommunication when the members seek to follow their informal leader of the Trade Union instead of the actual manager.

There can, almost, be a line of distinction drawn between those who are in a Union and those who are not. Therefore, if some workers are satisfied and the others want a raise in their wages, then there must be a change in wages of those that are satisfied as well else it might lead to discrimination and a sense of disparity among the workers.

The law states that a worker being a member of the trade union cannot be the reason for not recruiting them. The main problem, therefore, is in the belief of the workers and their strength as a group and the fact that they can affect the operations of the business.

RIGHT

Trade Unions, as conglomerates, have been subjected to a lot of criticism over time. However, such criticism has blatantly undermined the unparalleled advantages they bring to the table when seen at the bigger picture.

As a community these trade unions are present in almost every profession, which is one of the benefits of their existence. The omnipresence of trade unions ensures that individuals, irrespective of profession, trade or position get adequate representation at appropriate forums apart from allowing them with a bargaining power.

This representation helps the workers channel their mutual – and usually exhaustive – grievances in the proper direction. Such a mechanism is important for maintaining an environment of peace and satisfaction. This is particularly essential amongst workers as they suffer from unprecedented problems at the work place – and otherwise – which discourages them to work efficiently. Besides, individual dissemination of grievances is not a feasible option either.

Not only does the model help the workers per se, but it also helps the economy, society and the employer by ensuring the human capital is justified in its labour. Furthermore, trade unions give the employer a definite party to talk to in the event of fallout with the worker or employees. The benefits of trade unions help in increasing the efficiency of the workforce by countering the vices of individuality and recognising the strength of a collective.

Conventionally, Trade Unions sought to bring unity among workers in order to protect and promote their common interests. The trade unions were originally formed in order to protect the working class from the clutches of the vested powers, bankers and a certain type of capitalism. The idea was to ensure security of workers and obtain better economic returns. However, amidst this constantly changing business environment, trade unions are undoubtedly going through a stark metamorphosis.

While trade unions might socially sound a fancy way to represent solidarity, but in reality, it also has a few drawbacks associated with it. If labour markets are competitive, and trade unions are successful in pushing for higher wages, it can cause disequilibrium unemployment. Union members can benefit from higher wages, but outside the union, there will be higher unemployment. Moreover, if unions are very powerful and disruptive, it can discourage firms from investing and creating employment in the trade. If firms fear frequent strikes and a non-cooperative union, they may prefer to invest in another country with better labour relations. If unions go on strike and work inefficiently, it can lead to lost sales and output. Thus, the company may go out of business and be unable to employ workers at all.

If the job environment is congenial and constructive, the union can be a partner with the firm in maintaining a prosperous business, which helps protect jobs and higher wages. However, if relationship between trade unions and the management become confrontational, it can escalate into destructive partnerships which cause a decline in profitability and puts the long-term security of jobs at risk.

Behavioral Economics

A New Perspective

AUTHORED BY: RUBINA, SAKSHI, KANAK, KUSHAGRA, GURLEEN, PRATHYUSSHA

Introduction

'One of the flawed assumptions about traditional economics is that players in the market are rational. Human beings instead act against logic and by impulse.'

From the 18th century to the first half of the 20th century, the leading economists of the day – figures such as Adam Smith, John Maynard Keynes, and Irving Fisher – were known to bring aspects of human psychology into their analysis of the economy. By the middle of the 20th century, however, this practice was less common, and with the advent of the rational expectations revolution in the 1960s, economists began to focus almost exclusively on models with the same, tightly-specified assumptions about individual psychology: that people have rational beliefs, and that they make decisions according to expected utility.

In the early 1980s, a small group of economists began to argue that the rational expectations revolution had gone too far, and that to understand many important economic phenomena, it was critical to develop new models that made assumptions about human behavior which were psychologically more realistic, and allowed for less than fully rational thinking. Today, "behavioral economics" – the effort to improve our understanding of the economy through psychologically-realistic models – is firmly established. Hundreds of papers in this tradition, many of them highly cited, have appeared in the top economics and finance journals, dozens of specialists in the area have been hired and tenured at leading universities, and conferences on the topic attract large and growing crowds. Moreover, this approach to economics has generated significant interest beyond academia, among non-academic economists, policy makers, and the public at large.

Relevance in Today's World

The very essence of conventional economics is the underlying assumption of preferences being well defined and rational. However, there do exist a wide range of anomalies in human behavior that are not addressed by the standard economic theory, thereby making behavioral economics more relevant than ever. Consumerism is a term used in common parlance to refer to a social and economic order that encourages the acquisition of goods and services in ever-increasing amounts leading to the role of Behavioral Economics growing manifold. The producers are required to judge the sentiments of their customers and offer goods accordingly. Apparently, among all goods and services available, brands that make things easy are more trusted. With time, economies have become more integrated and globalised, leading to inherent diversity amongst consumers, thereby inducing producers to keep a large variety of similar items on the display shelf. An item which was relevant two decades, two years, two months or even two weeks ago (consider the case of Fidget Spinners) might be completely irrelevant today. Producers are regularly in the hunt to seize any business opportunity and satisfy diverse consumer needs to the best of their abilities, making it ever more imperative on their part to closely monitor the behavior of the targeted consumers.

Standard economics suggests that more choice is better, but there can be problems with excessive choice. Huge range of choices hinder the ability to make a decision, eventually leading to choosing the default option or not making the decision at all. We may also be less satisfied with our choice and unsure that we made the right choice. 'Paradox of choice', as it is called is a thing overlooked by conventional economics. A famous study by psychologists Sheena Iyengar and Mark Lepper found that consumers were a mind boggling 10 times more likely to purchase a jar of gourmet jam when the number of jams on display was reduced from 24 to just 6.

Behavioral economics frameworks are in rampant use in the field of marketing. Strategies like deferred payments, customer feedback, placing of products and many others involve several takeaways from behavioral economics. Insights from behavioral economics help marketers nurture positive consumer relationships and drive company growth. The popular trend of following a market-oriented approach by many top firms has necessitated the study of economic behavior of people.

No matter how sophisticated and well-planned policies are, they often require cooperation and input from real humans to be successful. One of the major hindrances in implementation of any policy is the non-acceptance or non-compliance amongst the masses. An amalgam of psychology, economics, neuroscience and behavioral sciences establish that people often do not do what is asked of them, even when it is in their best interest to do so. Policymakers may employ behavioral-inspired tools to overcome these cognitive hurdles, ensuring active compliance with the policies.

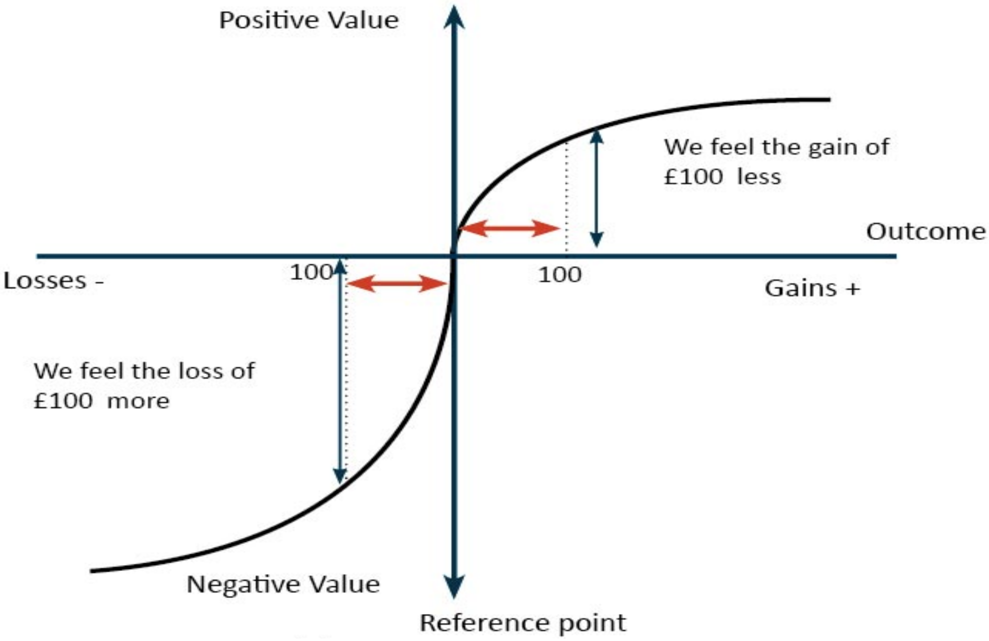
Popular Theories

Prospect Theory and Loss Aversion

Decisions are based on judgements, which involve the assessment of the external state of the world and a high degree of uncertainty. Since it's difficult to foresee the consequences of our judgement, we go through a great deal of deliberations and conflicts before reaching a decision. It becomes ever more grueling when the available choices present us with opposing values or objectives. Prospect theory, thus describes how individuals choose between the possible alternatives where the probability of different outcomes is uncertain and a considerable degree of risk is involved.

Formulated and developed by Amos Tversky and Daniel Kahneman, the theory states: "People make decisions based on the potential value of losses and gains rather than the final outcome." It evinces that people stress more on expected utility relative to a reference point rather than absolute outcomes. Often referred to as "loss-aversion" theory, it establishes individuals dislike losses more than equivalent gains, hence they are more willing to take risks to avoid a loss. In nominal terms, a dollar gain contributes less to utility than what a dollar loss takes away from utility.

Tversky and Kahneman propounded that given choices offering the same result but framed and presented differently, an individual will pick the option offering perceived gains. This establishes that losses trigger greater emotional impact on an individual than does an equivalent amount of gain, and hence people's inclination to avoid losses takes priority over obtaining a gain.

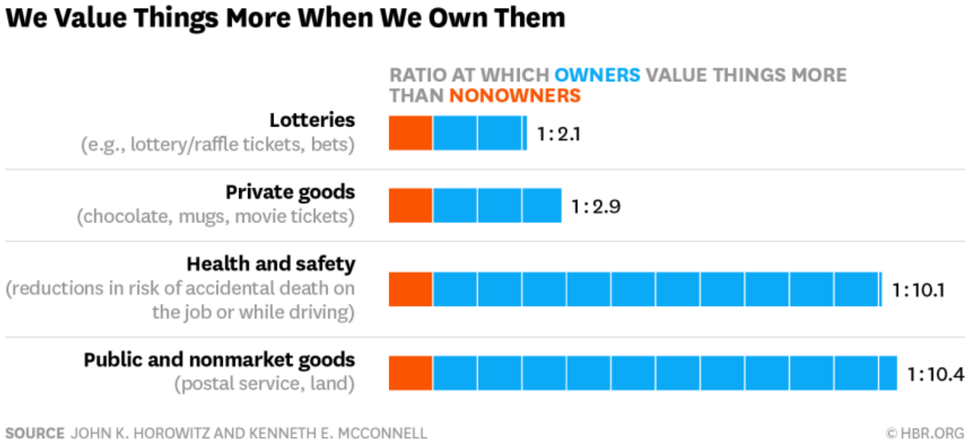


In a survey conducted on a diverse group of students demonstrated the theory quite well. They were given two investment options for putting in Rs.1000, one of which (option A) presented 50% chance of winning Rs.5000 and 50% chance of losing Rs.8000, and the other (option B) presented a 100% chance of losing Rs.1000. 83% of the respondents went with the first option. However, it is interesting to note that option A is rather an inferior choice. The expected value of option A is -1500 [50% of 5000+ 50% of (-8000)] while that of option B is -1000 [100% of (-1000)]. This event states the three important biases explained by the Prospect Theory: Certainty Effect, Loss Aversion and Isolation Effect.
According to Li & Chapman, "The certainty effect happens when people overweight outcomes that are considered certain over outcomes that are merely possible." This indeed signifies the 'risk averse' behavior of people. Psychologically, the "pain of losing something is twice as powerful as the pleasure of gaining." Hence, when positioning to avoid losses, we tend to bear greater risk and take the gamble over a sure loss, in the hope of losing nothing, as did our respondents in the survey. This brings in the third bias explained by the Prospect theory, the isolation effect, which refers to people's tendency to disregard any elements that are common to the options. It stresses that the framing of the choices lead people to a different decision, even if the choices ultimately lead to the same outcomes.

Prospect theory can explain several illogical and irrational financial behaviors. The disposition effect is a typical example of risk averse behavior, wherein investors tend to hold on to losing stocks for too long and to sell winning stocks too soon. This is because people are more ardent to cash in on the guaranteed gains and are reluctant to take a risk to earn larger gains, whereas they are willing to assume a higher risk in hope of avoiding negative utility of a potential loss.

Endowment Effect

Endowment theory simply states that people place a greater value on things once they have established ownership. It is an emotional bias that says that once we own something (or have a feeling of ownership) we irrationally overvalue, regardless of its objective value. This causes owners of a good to be more willing to fight against a challenger to retain possession. The Endowment Effect is a contradiction of the classical economic idea that people always behave rationally within an economic system. It is the surprising idea that we are prepared to pay more money to retain something that we already own than we would pay for the item if we did not own it. It is often also shown that we are unwilling to trade something that we already own in exchange for something of equal value (regardless of whether that item is more or less desirable than the item we already own).



Nudge Theory

Do we have free will or are we influenced by the environment? This question has puzzled the scientific community for millennia and we are no closer to an answer. However, a new theory called nudge theory suggests that subtle suggestions and minor changes can profoundly influence our behavior. It proposes that the designing of choices should be based on how people actually think and decide i.e. instinctively and irrationally, rather than how leaders and authorities traditionally believe people think and decide i.e. logically and rationally. It involves the concept of choice architect – a person responsible for organizing the context in which people make decisions, for example a doctor describing different treatments to a patient. The context of the decision is choice architecture and it turns out that seemingly minor aspects such as the order in which the treatment options are offered can have a major impact on the behavior of the patient. Nudge theory is radically different and is a more sophisticated approach to achieving a change in people than conventional methods of direct instruction, enforcement, punishment, etc. in other words, this theory is based on indirect enablement.

An excellent application of this theory was seen when an American grocery store 'Pay & Save' placed green arrows on the floor leading to the fruits and vegetables aisle. Shoppers followed the arrows 9 times out of 10 and the sales of the fresh produce skyrocketed. In the UK, people in arrears on their taxes were sent reminders and the message included phrases such as '9 out of 10 people in your area are up to date with their tax payments'. This made the taxpayers feel like outliers and subsequently the timely tax payments increased by 15%.

Neuroeconomics

In the past, the field of neuroeconomics did not hold much relevance owing to the complexity of the human brain and the lack of technology to observe the smallest of details. However, in the last decade, the face of neuroeconomics has changed drastically and is proving to be a game-changer in the field of economics. It blends psychology, neurosciences and economics into models of decision making, rewards, risks and uncertainties. Neuroscience, thus, aims to bridge the gaps between economic theory and its practical impact by studying the human brain, and has begun to play an increasingly prominent role in various human sciences.

Neuroscience points out the generic inadequacies of economic thought: the inability to consider the roles of automatic and emotional processing in the minds of people. The brain implements "automatic processes", which take place faster than the process of deliberation. There is a part of the brain which thinks and acts based on finely tuned affective systems. These are vital to everyday functioning of any person and when any of these systems are affected (by say, brain damage, stress, etc.), it leads to skewed decision making, even if the logical part of the brain is completely intact.

When we go deeper into the field of neuroeconomics, it is mainly concerned with three areas of study:

Intertemporal choice
Game theory
Decision making under risk and uncertainty (already mentioned).

Intertemporal Choice involves people deciding what and how much to do at various times and the choices made at one time influence the choices available at other times. These choices require trade -offs between outcomes which take place at different points of time. These involve such decision making which have long-term impact. For example- the amount of contribution one makes towards retirement contribution can create huge impacts on long-term consumption patterns.

Game theory is the study of strategic interactions among rational players to produce outcomes with respect to the preferences or utilities of those players. Behavioral game theory requires a description of the people in the game, the information each player has and the expected payoff from each strategy.

Neuroeconomics is not just the study of where things happen in brain, but it is a very important aspect of economics that is becoming more relevant day-by-day. It helps in understanding how the brain works, how localization works in the brain, and why we think the way we do and why we act the way we do.

Conclusion

Behavioral economics is definitely coming of age, and the academic field is flush with great research. However, there are still some reservations by those in the private and public sectors about the value of behavioral insights. A significant issue is how big a difference is behavioral economics actually making on society. Also, we know very little about the substitutability or complementarity of nudges with traditional pricing and regulatory mechanisms. With the increasing interest in behavioral science comes more scrutiny about the efficiency, efficacy, and external validity of the research. Some of this scrutiny has focused on the welfare effects of nudges, which are defined as things that change the architecture of the choice without changing economic incentives.

Despite the growing market for behavioral science, there will continue to be debates about how far behavioral economics can go from a policy point of view. Prices and information matter, but how these are framed and implemented also matter. It will be exciting to see where behavioral economics will end up in ten to twenty years' time, it could be either fully integrated into economics or be its own discipline with its own theory. Only time will tell.

References

https://www.academia.edu/7074509/Li_M._and_Chapman_G.B._2013_Nudge_to_Health_Harnessing_decision_research_to_promote_health_behavior._Social_and_Personality_Psychology_Compass

https://www.invespcro.com/blog/prospect-theory/

https://www.behavioraleconomics.com/

Behavioral Economics Guide 2017 and 2018

Petroyuan
The Path to China's Global Dominance?

AUTHORED BY: ADITYA, RIYA, TATSUM, AASHI, PRATIGYA

Abstract

Nearly four years ago, the financial world, in hushed tones, initiated the discourse of the end of the Petrodollar regime. The 2018 rate hikes by the Fed, and the trade war, further solidified the USA's intentions of having a current account surplus, which comes with the assistance of a depreciated currency. With the purpose of bringing reason to this discourse, the following paper attempts to examine the factors that have solidified the US Dollar's position as the major global reserve currency despite the abolishment of the Bretton Woods decree that mandated its reserve status, and identifies the rise of Petrodollars to be one of the primary causes for the same. With that observation, it is analysed whether the issue and rise of Petroyuan will effectively play a similar role for the Chinese Yuan. The paper, after critical examination of the economic and geopolitical factors of the US and China, concludes that Petroyuan, alone, is neither necessary nor sufficient to establish Yuan's global dominance, due to a stark contrast in the macroeconomic position and long term ambitions of China from that of the USA, but also states the policy measures the Chinese government must take to pursue the Reserve currency status.

Introduction

After the collapse of the Bretton Woods gold standard in the early 1970s, the United States struck a deal with Saudi Arabia to standardize oil prices in dollar terms. Through this deal, the Petrodollar system was born, along with a movement away from pegged exchange rates and gold-backed currencies to non-backed, floating rate regimes. The term petrodollar refers to the money received from the sale of oil. The petrodollar system also provides the United States' markets with a source of liquidity and foreign capital inflows through petrodollar "recycling". The petrodollar system elevated the U.S. dollar closer to the world's reserve currency status; and through this status, the United States enjoys persistent current account deficits and is a global economic hegemony.

In a bid to combat this long standing hegemony of the US dollar, China introduced a new standardized futures contract available to trade on the Shanghai International Energy Exchange. The rise of the Petro-Yuan marks the culmination of China's attempt to ride on the wave of economic globalization. The introduction of Petro Yuan is part of a plan to reshape the energy industry and use local currency to trade one of the world's most coveted commodities. It's the first time the market has seen futures contracts priced in Chinese Yuan, with analysts predicting it could pose a serious threat to the enduring dominance of the US dollar. The goal is for China to establish an Asian benchmark that will reflect Chinese consumption and more broadly Asian demand patterns.

Saudi Arabia may benefit from the introduction of the Petro –Yuan future contract in the light of the magnitude of its commercial partnership with China: the Petro-Yuan may ensure the establishment of a long-term eastern market for crude oil in the world's biggest oil-consuming economy and furnish a hedge against the surge in American oil exports triggered by the shale boom. Similarly the diffusion of the Petro-Yuan future contract will greatly benefit the Russian state politically as it allows her to further reduce its dependency on the United States (and capital denominated in US dollars) and weakens the US' ability to wage economic war and conduct currency wars.

But the biggest challenges to the Chinese Yuan's popularity and valuation are its reach and circulation. China has been a closed-door, state-controlled economy and general perceptions are that it will take a lot to achieve the internationalization of Chinese currency and establish them as an alternative benchmark in the oil market. Again, government is very cautious about any new development and treads. The central government controls exchange rates and interest rates**.** The Petro-Yuan future contract will have an insubstantial impact on the US economy in the short term; nonetheless, it could help to lower the value of the US dollar against other foreign currencies. A slightly weaker US dollar may, in turn, make US dollar denominated exports more competitive in global markets, thus allowing the US to narrow their trade deficit, particularly with China.

Literary Review:

<u>China: The Emergence of the Petro-Yuan and the Challenge to US Dollar Hegemony</u>

By: John A. Mathews & Mark Selden

John A. Mathews and Mark Selden begin by describing the major goal of China, which is to make its currency 'Yuan' an international trading currency. In 2018, the currency markets witnessed a shift from the SDR focused strategy towards Oil focused strategy- with introduction of Petroyuan in oil market, which has been constantly dominated by petrodollars for decades. Their paper summarises the fate of Petroyuan which may lead to de-dollarization of international market.

It begins by stating how China launched new oil futures contract on Shanghai International Energy Exchange on March 26, 2018. Though the trade volume is less as compared to Brent crude and WTI but its acceptance and eventual serious trading by commodity traders provide a hope to China's intentions of global dominance, despite Trump's trade war and the sanctions Iran. They analyse how Nixon broke the gold-dollar nexus and was fortunate that Saudi entered into an agreement with the

US to deal in dollars which later on extended to all OPEC countries. USA was lucky that to pay its bills in its own currency while the other nations had to maintain huge reserves of dollars to pay their bills.

Earlier, China's steps to internationalise its currency seemed to be indefinite but recognition by IMF suggests that a well-planned action has been taken to target world's largest commodity market. This is further supported by Belt and Road Initiative (BRI) and Asian Infrastructure Investment Bank. The paper concludes that the introduction of Petroyuan and furthering its use in other commodities markets poses a tough challenge to dollar. This could bring an end to exorbitant privilege that US enjoyed. Rather than viewing China's attempt to internationalise Yuan, authors view it as de-dollarization of world. The increased use of Yuan is seen as an option to dollar and a medium to evade US sanctions. While the author feels that it is premature to see Yuan displacing dollar, the serious bilateral trading accompanied with gold backing and liquid trading on Shanghai exchange gives a promising future but complicated by high US tariffs under Trump and sanctions on Iran and Russia.

The Macroeconomic Determinants of Currency Dominance

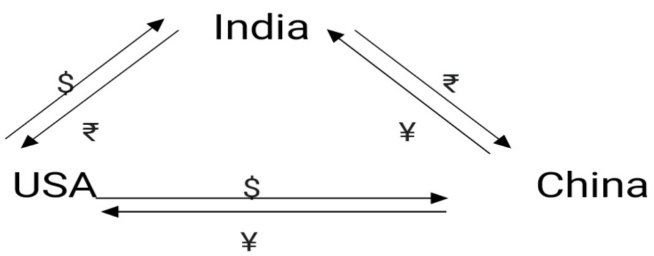
We know for a fact that the world is in a better place than it was a few centuries ago. We have managed to ameliorate all our well-being indicators, and this can primarily be attributed to the fact that fewer wars take place, and historical rivalries have evolved to take the shape of economic competitions. The prominent nations no longer wish to wipe out their enemies through violent wars, but to rule using well calculated economic schemes. A degree of industrial capitalism is necessary for sustenance of any such economy, and oil is the lifeblood of industrialisation. Through this research paper, we will attempt to examine why USD remained the global reserve currency, even after the abolishment of the Bretton Woods System in the 70s, the US Dollar became a free floating 'fiat' currency, and so did the currencies of the rest of the world. Among these nations were also the oil producing economies that had become used to accepting USD for the transactions. It was in the late 60s that many economies realised that America, with its burgeoning deficits, could not keep up with the Gold Standard, and had been extending the Special Drawing Rights (SDRs) facility to meet its expenses. Recognising this distortion, nations like France, decided to end 'America's exorbitant privilege' and convert all their USD reserves into gold. Nixon knew that this would help negative sentiments to prevail and could have proposed mild austerity to actually help the system revive. But instead, he removed the Gold Standard, and robbed all world currencies of their intrinsic value, perhaps hoping that the nations would keep up with their habit of dealing in the USD. But his reason had to be backed by something more than just hope. He recognised the potential that oil held for all the then-developing nations, and convinced these oil economies into a pact of dealing only in USD, in exchange for military prowess and equipment, thus taking advantage the turmoil faced by them. Currencies used as a unit of account to price oil in the international markets were called Petrocurrencies, and USD being the first one, was termed Petrodollars. This wasn't done only to maintain the USD as the world's reserve currency, but for the American Dream to live on. Had this not been done, the Dollar would have plummeted to a level from which recovery would have taken decades of budget cuts. Nevertheless, the dealings in oil were to be done in Dollars, and the continued demand for it, helped in its constant appreciation and world dominance. This appealed to some onlookers who realised that the oil pact advantage was unfairly skewed towards America, and in their attempt to replace it, came up with their own Petro currencies. Oil transactions took place in terms of the Euro, Rupee, even a crypto-Bolivar (Petromoneda), but none managed to stay, for none survived the Triffin paradox, which pointed out conflict between national and global monetary policy that led to fundamental imbalances in the Balance of Payments of the country. People's Bank of China, however, explicitly named the Triffin dilemma as the root cause of the 2008 economic disorder in a speech that proposed strengthening existing global currency controls, which would involve a gradual move away from the USD towards the use of IMF special drawing rights. This was one of the first indications of the Chinese Republic's intentions to have Yuan replace the USD, eventually being reflected in the Petroyuan being launched in 2017.

Triffin Dilemma

One aspect ignored by the ones who glorify USD's reserve currency status is that its exorbitant privilege comes with some exorbitant harms that need to be mitigated. We believe that the US economy has the potential to sustain the loss of an import-oriented economy. The Triffin Dilemma, as stated by Robert Triffin, describes how a nation issuing a reserve currency, must discard the ability to control its own monetary policy. It elucidates upon how the enormous demand of the reserve currency and its eventual appreciation, results in an imbalance in its current account, due to the rising prices of its commodities, thus discouraging its exports. This current account deficit must be supported by large debts and a subsequent capital account surplus. However, not every nation has either the potential to raise or the ability to sustain such huge debt on its balance sheets. The USA, despite its burgeoning debt and it's declining credibility, is still managing to attract investments, because no potential alternative yet exists in the markets.

On the other hand, China is an export-oriented nation. It faces exactly the opposite BOP situation. Its trade account surplus is counterbalanced by a deficit in the capital account. The amount it lends and invests in other countries like Africa, Pakistan and Latin America is huge. China could become a manufacturing hub because of the virtuous combination of various factors. It all started in 1978 when Xiaoping took power, visited flourishing Asian cities and decided to open up to a certain extent the earlier closed economy after learning from their efficient model of operation. He also established 4 SEZs on the eastern coast, Shenzhen being one of them. This concentrated and focused approach worked to his benefit and brought in specialization to such an extent that huge American MNCs like Apple, Microsoft all had their offices in the port city of Shenzhen which was a village years ago. Manufacturers find China cheaper because of low labor costs, devalued Yuan, almost nonexistent child labor prohibition policy, compensation insurance, environmental protection laws etc. It's proximity to Supply chain ensured timely delivery. It was hard for emerging markets to compete with Chinese goods and so dragons captured the market.

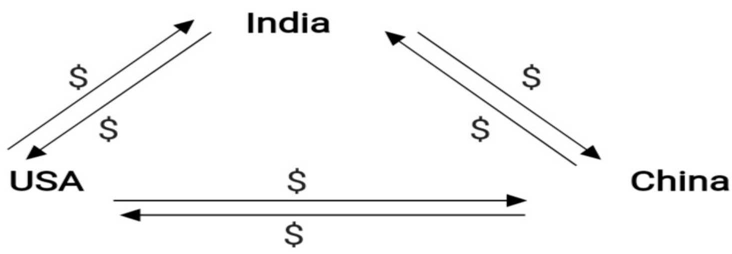
To some extent America's situation was similar in pre-World War 1 period. But then there was huge demand for defence goods and grains from the allied powers mainly Britain and France, who were rapidly losing on their resources. US came to the rescue of the then Superpower. US government was issued USD denominated bonds which were purchased by even the commoners of USA to finance their own exports, since the money lent out was creating demand in Europe for American commodities. After the wars, Marshall’s Plan was introduced to systematically revive this demand. This was the time when US had huge trade surplus, and a consequent capital deficit due to the money being lent out to these nations. However by the late 60s the tables had completely turned as the US financed two Asian wars and ran extensive domestic programmes such as the New Frontier by JFK or the Great Society by Lyndon Johnson. This resulted in a huge Fiscal deficit being created, and as per the Twin Deficit Hypothesis, incurring fiscal deficits by reducing taxes will boost consumption and reduce the saving in the economy. As a result of the reduced savings, the deficits must be financed by international borrowings which create a capital surplus and appreciation of the domestic currency. Now, when the domestic currency appreciates, it will automatically make the domestic goods more expensive for foreigners thus causing a trade deficit!



<u>**Mundell Fleming Paradigm**</u>

Triffin dilemma is inherently based on the notions of **Mundell Fleming Paradigm**. MFP assumes that goods are priced in the producer's currency, which is found deep seated in our conclusion that a weaker currency results in export expansion and import contraction. So if a country like China decides to keep its currency weaker relative to its trading partner then it simply believes that its exports will become competitive and imports will get expensive. Surprisingly Dollar invoicing share is 4.7 times its own share in world imports and 3.1 times its share in world exports.

As per MFP, 100% of a country's export must be invoiced in terms of its domestic currency. Only the US fits into this paradigm as 97% of its exports are priced in dollars. But if we go by figures, we find that many other countries such as Japan invoice 50% of their exports in USD while the US share of Japanese imports is just 22% which proves that dollars are involved even when the US isn't a trading partner. This leads to an alternative theory, that of the Dominant Currency Paradigm (DCP).



Dominant Currency Paradigm

Proposed by Gita Gopinath along with others, this theory supports that prices tend to remain sticky in one dominant currency. The world tends to coordinate trade using one currency simply because:-

a) Exporters are importers

b) Competitors price goods in dollars

As per this model, the prices are stated in a single dominant currency which is USD in the status quo. So if we take two countries, say, India and Japan trading goods then they might price them in USD because they are highly skeptical of their partner's exchange rate and neither wishes to expose their profits to the other nation's exchange rate volatility. Now if Indian rupee depreciates relative to USD then as per MFP, exports must rise and imports must fall. However, in DCP, the number of exports and imports remain unaffected, only the markup or profit falls for Indian importer and profit margin increases for an Indian exporter. These profits can be used in recapitalizing the business, innovating technology and increasing production capacity manifolds. Eventually, this might result in an increase in exports but it is an indirect and longer process.

We say that prices remain sticky because of the raw materials being priced in dollars too. The exports at times are to be made out of raw materials imported, which might be from any other nation. So the exporters prefer to value both their costs and revenue in terms of a single stable currency for greater uniformity. For example, if the price of the imported raw material of the exporters is expressed in terms of USD, the depreciation of their domestic currency will increase cost, but will simultaneously increase revenue. Any appreciation of the domestic currency would also balance out the impact of probable losses caused by the decline of revenues, because the costs of importing will also fall. Hence, the DCP Paradigm justifies the reserve currency status of the USA.

Pricing in a common currency is becoming more and more prevalent because of emerging economies being involved in international trade. These economies have the largest share of the world population and also the world resources. Their richness in human resource and natural resource make them hotspot of exports and imports. To compete with existing superpowers and manufacturing hubs, these economies too abandon their domestic currency and price in one dominant currency so that they don't lose on competitiveness just because of change in their own currency exchange rate which can be due to various reasons like political instability, financial volatility, and monetary policy changes. As per the theory of optimal currency choice, if any country exporting to the US market decides to price the goods in its domestic currency then it allows the real prices of the product to change frequently in comparison to USD, thus losing its market share so sellers themselves prefer to keep it's price sticky in terms of USD.

Discussion and Conclusion

If economic principles alone dominated global decisions, it would perhaps be a more simpler and predictable world. But since we know that is not the case, we must delve further into the geopolitical aspects which might shape the future of currency markets and the policy measures that can be taken up by the Chinese government to defy the economic forces that hold Yuan back. Besides the appropriate current and capital account requirements that USA happens to fulfill, it has always been a well planned and structured approach to global alliances that have been elementary in popularising the USD as the global reserve currency. After the collapse of the Bretton Woods system in the 1970s, the world had no reason to go ahead with using the freshly depreciated dollar for foreign trade. But US managed to retain the dollar demand due to Nixon's calculated formation of the Saudi-US alliance. USA maintained flow of cheap ammunition supply, sent forces for proxy interventions against Iran, protected the naval weak points of the region, and in exchange, the world witnessed the rise of Petrodollars and USD's global dominance.

But the tables have seemingly turned. The growing sense of diplomatic dependence on Washington (and oil!) bothers many Saudis and is perhaps the reason why the Crown Prince Mohammad Bin Salman has been aiming to strengthen alliances with Asian nations in order to tap the necessary funding required for his Vision 2030 that will take the nation away from its economic dependence on oil and thus USA. Even the latter, for that matter, is not completely doomed with this faltering friendship. It has proven shale oil reserves of at least 36 billion barrels, which were not as profitable due to the greater extraction costs, but with the increasing advent in technology US can potentially get closer to energy independence.

The Chinese President Xi Jinping's diplomatic visits to Riyadh and MBS' to Beijing suggest that the nations have forgone their Red Scare induced cold relations and for a sensible reason too. Saudi is the world's largest crude oil exporter while China is the world's largest crude oil importer and alliances are formed on the basis of profitability. China can induce Saudi to trade in terms of Yuan. The interesting fact is that China has also had good relations with Saudi's arch enemy Iran and its increasing simultaneous alliance with both the nations reflects its diplomatic abilities to potentially bring them on a common ground under the pretext of profitability. This move might even have the potential to systematically diffuse the Hormuz choke point tension that exists between the nations. Additionally One Belt One Road initiative has successfully lobbied China's Yuan denominated cheque-book diplomacy, under which the neo-silk road construction required China to loan funds to nations in terms of Yuan, thus increasing its demand. China must move closer to appreciating Yuan, so that it incentivises nations to use it for trade which can be done with the help of a capital account surplus. The nation is selectively dismantling capital controls and moving towards capital account liberalisation by introducing schemes that promote a controlled and calibrated growth by making the nation move towards financial openness. China has also gradually moved to a more flexible exchange rate regime. In August 2015, the People's Bank of China (PCB) changed the reference pricing mechanism for CNY whereby the PCB sets the opening price for trading each morning on the Shanghai China Foreign Exchange Trading System, which is not delinked from the previous day's closing price. The key point is that the RMB exchange rate with respect to USD is now subject to more market forces.

Foreign Direct Investment	2015	2016	2017
FDI Inward Flow (million USD)	135,610	133,710	136,320
FDI Stock (million USD)	1,220,903	1,354,613	1,490,933
Number of Greenfield Investments	876	798	752
FDI Inwards (in % of GFCF	2.8	2.8	n/a
FDI Stock (in % of GDP)	10.9	12.1	n/a

Source: UNCTAD, Latest available data.

Their financial system is also comparatively liberalised now that commercial banks can set their own rates. The issue however lies in the fact the reduced capital controls combined with an unstable economy that is apparently infected with a real estate bubble and a booming shadow banking market can cause a surge in the outflows of foreign investment. These capital outflows can be exacerbated if the exchange rate is allowed to move freely and adjust to speculations. But considering the fact that the nation was also ranked 46th in the 2019 Doing Business Report, making tremendous progress, it might further bring in investments and contribute to the capital surplus, which is necessary for the Reserve status. This sums up to give out a basic idea that though the world is moving towards a greater belief in Yuan not only via Petroyuan but also through the increased profitability of the Chinese markets causing investment inflows, it depends on how the Chinese government wants to deal with the process. The road is certainly smoother if the authorities are willing to loosen their tight grip on a trade surplus.

FINERGY

Finergy 2018 entailed a variety of events themed around excel simulations, risk and budget management.

TELESPECTRO

"Telespectro" was a telecom based event which encompassed the various aspects of a spectrum sale and the calculation of wireless calls

MASTERS OF MONARCHY

"Masters of Monarchy" entailed the journey through the ups and downs of pre-independent India and budget management throughout this journey. The events were highly successful and widely appreciated.

CASSER LE CAS

The annual case study competition of FIC, was held under Finergy. Case studies based on alternative investments were fully ideated and penned down by the members. The online prelims had a participation of 800+, from which 10 teams were shortlisted for the on-campus finals, judged by Ms. Pooja Dhingra. The cases got excellent reviews from the participants.

EPISTEME'19

THE ANNUAL FEST

The annual financial fest of Shri Ram College of Commerce, EPISTEME'19 presented by the Finance and Investment Cell, SRCC was successfully conducted on the 15th and 16th of January 2019. Episteme'19 provided a plethora of learning opportunities for both the organizing team and all the participants, pan India. While it offered events that are meant to assess one's familiarity with financial concepts, it also had events that sparked financial interest.

Vitt Vendetta

Vitt Vendetta gave participants a chance to use their wits and unleash their financial quest when the world economy was witnessing major ups and downs. Set in 2064, participants were allocated countries on random basis which had different initial resources, the value of which was 1000 million US Dollars for each team.

Star(t) Wars

Star(t) Wars, the startup battlefield was a perfect blend of a Business plan cum venture capital investment decision making competition. Launching a unique and feasible startup, countering grueling questions from other participants and investing wisely was the main objective of this competition. With participants being tested on influencing, communication skills and financial aptitude, this competition was a great learning experience.

Bankronicals

Bankronicals was the right place for everybody to showcase their aptitude, administrative skills, mathematical prowess, and crisis handling calibre. The event started off with a profile designing round wherein the participants were allotted a capital of 100 Cr. and were to use that capital wisely for setting up branches and granting loans, through portfolio diversification.

Moneypulate

The event was conducted among the Top 30 teams that had survived the rigorous evaluation of the preliminary round. The event attempted to evaluate the financial acumen along with the intuitive ability to predict the direction and magnitude of price and exchange rate fluctuations by putting the participants in shoes of foreign investors, with a dollar denominated budget.

Menace at Metropolis

The flagship event of FIC, Menace was a 2 day event, where the participants had to use their financial and economic knowledge to advance the value of their portfolios. They were even provided with regular news updates, having significant impacts on the stock markets, and consecutively on their portfolios as well. The event saw a participation of 80 teams of 2 members, comprising of an investor and a broker.

Bet or Debt

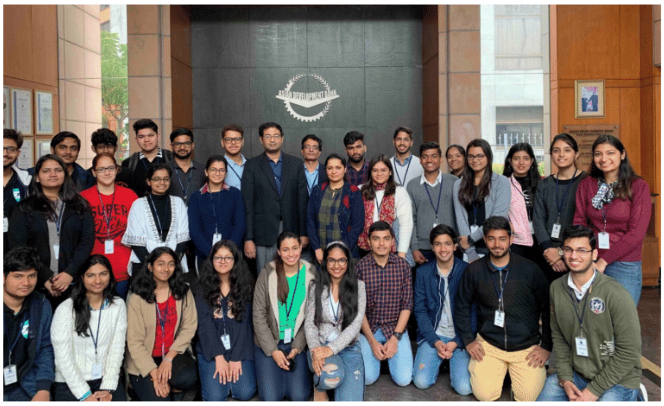
'Bet or Debt: Get, Set, Bet' is one of the flagship events of Episteme which tested the participants' intuition and investment skills from a new perspective through a game of simulated betting.The teams had to prove their mettle through their instinctual prowess and financing strategies, to get a winning rank or be burdened with debt.

Wrong' un

The event was a unique blend of serious portfolio management and light hearted cricket. On one hand, the participants were tested on their financial acumen and on the other hand, they were tested on their cricketing knowledge.

The participants were extremely optimistic in their reviews of the financial extravaganza. The FIC Team left no stone unturned in ensuring the smooth conduct and organisation of all the events. The resplendence of EPISTEME'19 has got soaring among the participants the excitement of an even grander, greater and glorious EPISTEME'20.

INSTITUTIONAL VISITS



The Asian Development Bank, New Delhi

Realizing the potential of the Asian economies to dominate the future through initiatives ranging from RCEP and OBOR to the oil-based derivatives like Petroyuan, FIC, SRCC conducted an educational visit to the Asian Development Bank, New Delhi on 20th February, 2019. The two hour long interactive session began with an in-depth explanation of the functioning of the bank and the lending criteria and mechanism. The team was addressed by a panel comprising of the country VP and the Projects Head, and the Chief Economist, who poignantly elaborated on the importance of infrastructural developments in the nation and freely interacted with the students, addressing their queries. The number of students who attended the visit were thirty five.

The World Bank Office, New Delhi

In order to acquaint the team members with the ground realities of international financial operations, FIC, SRCC conducted an educational visit to the World Bank, New Delhi on 31st October, 2018. The four-hour long interactive session by Mr. Hisham Kahin, Manager of Operations, and Ms. Sunita Malhotra, Information Specialist, World Bank, apprised the students about how to access open data, while simultaneously addressing their queries.The visit was an epiphany of the relevant minutiae of finances. The number of students who attended the visit were fifty five.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Finance & Investment Cell

2018-19

Publication Details

Periodicity	:	Annual
Place of Publication	:	Shri Ram College of Commerce, University of Delhi, Maurice Nagar, Delhi-110007
Call for Articles	:	1st December 2018
Call for Research Papers	:	1st December 2018
Last Submission Date	:	31st January 2019

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