DAULAT RAM COLLEGE,
UNIVERSITY OF DELHI

OPTIMA

TOWARDS EXCELLENCE

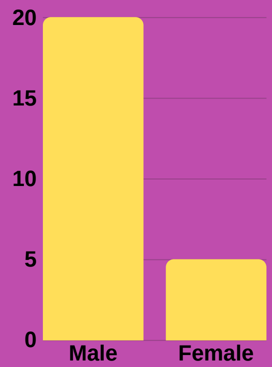
2019-20

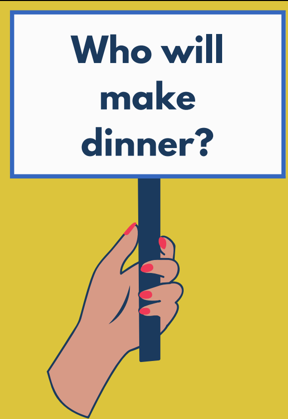
FEMINIST ECONOMICS

Occupational Segregation, Gender pay gap

Care Work: Are you motivated enough?

Gender Disaggregation





HOMO ECONOMICUS: COMPLEX THAN YOU THINK

Interview with Mrs. Devaki Jain- an Indian economist and a Padma Bhushan holder

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FEMINIST ECONOMICS

Cover page by- Muskaan Bhagat, Editor-in-Chief

Feminist Economics focuses on gender inclusive or rather gender neutral economics, and the formation of such economic policy analysis. Much of feminist economic research focuses on areas that have historically been neglected, and still continue to be undervalued, such as care work. It also includes economic theories that focus on gendered effects and interactions, such as between the paid and unpaid sectors of economies. The argument that production and reproduction of domestic labour by women constitutes the foundation of all economic transactions, and survival remains unremunerated and not included in the GDP forms the crux of this economic sphere.

Feminist economics call attention to the importance of non-market activities, which stands in sharp contrast to neoclassical economics where those forms of labour are unaccounted for as "non-economic" phenomena. Including such labour in economic accounts removes substantial gender bias since women disproportionately perform those tasks. When that labour is unaccounted for in economic models, much of the work done by women is ignored, literally devaluing their efforts.

As in other disciplines, the initial emphasis of feminist economists was to critique the established theory, methodology, and policy approaches. The critique began in microeconomics of the household and labour market, moving on to macroeconomics and international trade, eventually covering all areas of traditional economic analysis. Feminist economics shares many of its perspectives with ecological economics and the more applied field of green economy, including the focus on sustainability, nature, justice and care values.

OPTIMA

Towards Excellence

Annual Economic Outlook
2019-20

Department of Economics
Daulat Ram College
University of Delhi

ACKNOWLEDGEMENTS

The success of Optima 2019-2020 has its foundation in the determination and industrious efforts of many individuals; thus, we take this opportunity to duly recognise and acknowledge their consistent efforts.

To begin with, we extend profound gratitude to our mentor, Dr. Savita Roy, Principal, Daulat Ram College for her constant motivation and assistance at every stage. At the same time, we are also immensely grateful to our faculty advisor, Ms. Shikha Singh for her insightful comments, constructive criticism, and valuable guidance. Most importantly, our sincere thanks to the contributing authors and caricaturists for their diligence and hard work in terms of the time they dedicated and the research they undertook to articulate all articles and caricatures published.

We would like to extend our appreciation to all sponsors for their financial assistance provided. Moreover, we would also like to thank Sepia, our college photography society and the creative team of Éclat, the “Economics Association” of Daulat Ram College. Lastly, we express our deepest sense of gratitude to everyone who lent their hand in bringing OPTIMA to this echelon.

FROM THE PRINCIPAL'S DESK

I am extremely happy to pen down lines for the seventh edition of The Annual Economic Outlook, OPTIMA of The Economics Department, Daulat Ram College.

Growth comes only through continuous effort and struggle. The pages that follow in the latest edition of 'Optima' follow this testimony of growth. The efforts put in by students and teachers to bring in the best in this magazine are appreciable.

Education is the gateway to the future and the future belongs to those who prepare for it today. The economics department is the powerhouse of young budding economists of our nation. Children are eager to learn new things. I hope that they may grow to contribute, to share what is best in them to their fellow human beings.

At last I wish a great success ahead to all these young minds. Congratulations to the department and Editorial Board. May your magazine reach great heights in the years to come.

Best Wishes

Dr. Savita Roy

Principal, Daulat Ram College

FACULTY ADVISOR'S NOTE

Optima is the epitome of the Department of Economics students' passion for their chosen field of study. It is part of a glorious tradition, which is carried on with a tremendous sense of responsibility by the current editorial team. Their relentless hard work over the past several months in putting together this annual magazine is reflecting well in every article in this volume.

Optima is a platform for the exchange of ideas as well as a medium for learning how to articulate one's own opinions in a disciplined, orderly, and conducive manner. I am sure not only students who actively contributed to this effort but also those who will simply peruse it will benefit immensely from this bundle of ideas. I congratulate the team of OPTIMA and the student body of Economics Department.

Best Wishes

Shikha Singh

Faculty Advisor

FROM THE PEN OF EDITORS

Coming together is beginning, staying together is progress, and working together is success.

-Henry Ford

So was our journey to bring out this seventh edition of The Annual Economic Outlook of The Economics Department, Daulat Ram College. Writing is one of the most valuable literary expressions. Optima is a wonderful platform for young budding economists to outburst their economics oriented thoughts and opinions.

This volume of Optima seeks through various aspects of economy. We begin with the interview of a celebrated feminist economist Mrs. Devaki Jain, giving us worthwhile views on how women contribute to the development of economy. Section Zero Hour throws light on critical issues such as climate change and automobile crisis. How technological advancement accelerates the economic growth is vindicated in the Economy Automated section. Some new economic jargons are put in plain words in the subdivision Ecotionary. Next, some globally pressing questions are addressed in the section Universal Bedlam. Issues like Chinese economy slowdown, immigration, Brexit, and Amazon forest on fire are talked about. Home Front talks about the three major issues our economy is facing.

Last section is titled Sundry Box; it takes you to some unexplored thoughts such as Feminist economics, principles of Chanakya and their application in present times, and an outline of sustainable development goals.

We are thankful to a lot of people for helping us to bring out the best in this volume and setting higher standards. Above all, we would like to thank our team, for their commitment and hard work.

It was a joyful as well as a learning expedition. We encountered many challenges on the way that we solved with creativity and acumen. We supported each other on every step of the way and that we think, was our biggest strength.

Happy Reading!

Devanshi and Muskaan

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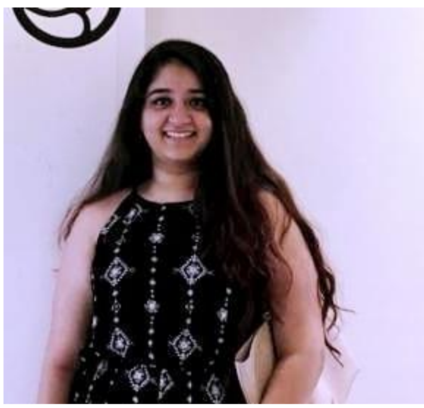

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MENTORS' VISTAS

"Celebrate what you have accomplished but raise the bar a little higher each time you succeed." -Mia Hamm. That's the challenge we should give ourselves and that's what motivates us to progress in our lives. Nevertheless, appreciation and celebration of our success give us that extra boost to continue to achieve further. With these words, I heartily congratulate you all for unveiling the new edition of the department magazine Optima and wish you the best of luck for your life.

- ***Dr. Rita Rani***
Teacher-in-Charge, Department of Economics

Éclat over the years has successfully served the objective of providing a forum for debate and discussion of various theoretical and policy-oriented issues of Economic Sciences. In this regard, Optima published by Éclat, is an amazing platform for the students and faculty members, to share their perspectives on these issues. I congratulate the Editorial team for the newest edition of Optima and wish new heights to this remarkable endeavour.

- ***Priyanka Yadav***
Economics Association In-Charge

Optima provides a useful platform for both students and teachers to articulate and exchange their knowledge. Sharing their understanding of economics as a discipline will not only enhance their perspective but also provide a wider scope for innovative ideas and thinking.

- ***Pooja Sharma***
Assistant Professor

I would like to congratulate team Optima for yet another edition. Having been closely associated with the magazine for the past few years, I am familiar with the hard work that goes into bringing out a successful magazine. I am sure it will be an enriching experience to read it. Kudos to the Department of Economics and team Optima!

- ***Sumeet Goyal***
Assistant Professor

It is a matter of pride to pen down a message for the annual magazine of the Department of Economics, Éclat. My heart is filled with immense pleasure as I perceive the progress being made by Éclat. Optima is a platform for the students to express their creative pursuit which develops in them the originality of thought and perception. The contents of the magazine reflect the wonderful creativity of thoughts and imagination of our students. I extend my warm wishes to the staff and students of the department to continue this journey on the road of excellence. –

- ***Saachi Bhutani Bhagat***
Assistant Professor

It is a moment of great joy and pride to see the zeal and hard work of the Economics society transform itself into such an important discourse in economics i.e. Critical thinking and Expression of ideas. 'Optima' provides an ideal amalgamation of all these qualities. Moreover, it has proved yet again to be an ideal platform for students to hone their skills and excel in co-curricular activities; thus, honing young talent. I congratulate the team of Optima for their hard work!

- ***Preeta Singh***
Assistant Professor

It is a matter of great pleasure that the department is bringing out its annual economic journal "Optima". The young minds devoted to the task deserve applause. I'm looking forward to learning what the young generation of budding economists have to say about the economy, state, and society. I hope this year's publication shall reflect on some of the crucial themes affecting our times. I wish them all the best.

- ***Nitish Kashyap***
Assistant Professor

A Magazine incorporates or codifies the newly produced knowledge. Subaltern school of thought does see the production of knowledge as a natural flow. However, social scientists consider research as a perfect way to add more to the existing body of knowledge. As per my understanding, Optima is a direct interaction between the source of knowledge and seekers of knowledge. That's why we have incorporated developing scientific temper in the citizens in our Constitution.

- ***Ashok Kumar***
Assistant Professor

ECOPRENEURS' DOMICILE

First of all, I would like to congratulate the entire team of Optima for the new edition. Since I entered this college, Éclat has been an important part of my life. More than a society it has been a teacher for me. From working as the Treasurer to Vice- President and now the President, I have received so much from this society that cannot be expressed in words. During these 3 years, I have made such beautiful relations (my big happy Éclat family) and memories that will stay with me for my entire life. Éclat has given me everything I ever asked for in my college life. I feel so honoured to be a part of this great society. Seeing this journey come to an end breaks my heart. But I know, Éclat is going to touch new heights every year because of all the talented young minds that are present in the society.

- Nikita Malik, President

It is my pleasure to congratulate team Optima for its seventh edition. I think this magazine is a great medium to spread knowledge that falls out of the textbooks. I appreciate the hard work of the editors and the committee members and extend my best wishes for the release of the magazine.

- Shruti Sharma, General Secretary

Éclat is one of the major parts of my college life. Being a part of it has helped me grow individually. It has taught me the meaning of responsibility and working efficiently in a team. I hope it keeps giving me new opportunities to learn and experience. Éclat, I feel, is very close to my heart and it always will.

- Aditi Srivastava, Vice-Head, Management Committee

Éclat was the first society I joined college. From being a member to having a post in it, I've come a long way! It has been an amazing journey with such beautiful people guiding me.

- Harshita Sarup, Vice-Head, Content Team

Éclat has given me the best 3 years of my college life I would have ever wished for. It has been a spectacular journey starting from being a member of the creative committee to heading it now. Éclat taught me how to handle teamwork beautifully. The memories I have made being in it will always be cherished throughout my life.

- **Niharika, Creative Head**

Éclat is one of the best societies of college with the most hard-working and dedicated members. I loved being a part of it, be it as a member in the 1st two years and now as the Management Head of the society in the final year. I hope Éclat grows beyond bounds in the upcoming years.

- **Tanya Munjal, Head, Management Committee**

I have met so many beautiful people through Éclat over the past few years. Éclat has helped me find what I am most passionate about and continue working towards it. Looking back at college life, I am sure memories made with this department will always be among my favourites.

- **Riya Jain, Head, Digital Media Committee**

Optima, the annual magazine of the economics department of Daulat Ram College is one of the best magazines that provide excellent information. The articles published are of high-quality. With all this, I am glad that I am a part of Éclat, the economics society of Daulat Ram College.

- **Tanya Sisodia, Vice-Head, Creative Committee**

Éclat has been the best part of my college life. It has helped me grow in the best way possible. I will forever be grateful to be a part of this amazing association.

- **Shreya Manocha, Head, Marketing Committee**

FRESHER’S 2019

The Mercury levels rose up to new heights on 4th September, 2019 as the Economics Department Of Daulat Ram College organised its FRESHER'S PARTY for welcoming the new lot of girls to the college, gracing the fresh multi-faceted brilliance, brimming with eternal sparks of energy.

The investiture ceremony wherein the newly appointed students’ union of Éclat was assigned the responsibility marked the beginning of the programme. The ceremony was followed by the 'Miss Fresher's' contest in which the girls set the stage on fire with their ramp walks and confident personalities. The girls adorned themselves with brevity, grace, and undying ambition. They indeed amazed the spectators with their innate artistry in varied fields miraculously. The title of Ms Fresher's was bagged by Vanshika Jaggi, Ms Talented was given away to Vasudha Upreti and Ms Best Dressed to Nishtha. Kudos to girls for their courage and splendid performances!
The excitement augmented to a joyful high as performances by the seniors graced the stage. The event concluded with the girls tapping their feet to the latest beats!

FAREWELL

"Don’t be dismayed at goodbyes. A farewell is necessary before you can meet again. And meeting again, after moments or lifetimes, is certain for those who are friends.” - Richard Bach

The Department of Economics, Daulat Ram College bid farewell to its third year students on 10th April 2019, wishing them tons of luck for their future ventures, as they step out of yet another chapter of their lives towards a plethora of new opportunities.

Students of first and second years planned an engaging and entertaining farewell party, featuring breathtaking dance and singing performances. The teachers of the Economics Department wished the batch of 2016-19 much success in all their upcoming endeavours.

ECONOMANIA

Our Annual Fest of The Economics Department has consistently been a hit. It is a two-day long fest with many exciting events. Mock Stock, Quiz, Ad-Mad, and Treasure Hunt are a few occasions that the understudies get extremely exuberant over. Economania saw an immense footfall of students from different colleges across DU and other universities in Delhi. The treasure hunt which was directed had pieces of information all over North Campus which expanded the fervor among understudies. The Paper Presentation event likewise observed some truly explored and entranced work. The Mock stock saw some astounding strategists taking control over the business sectors and the Ad-Mad members left everybody hypnotized with their abilities and innovations. The poker game was additionally a star of the occasion and left the understudies with glee.

MUTASIR

MUTASIR- The Annual Youth Conference of The Economics Association has seen some vivacious influential speakers from multiple industries, and have always been a major source of motivation for students aspiring to delve into the field of Economics, giving them a vivid insight into this particular sphere.

Last year, we saw eminent personalities like Mr. Saket Kumar Sharma (Assistant Advisor, DSIM, RBI), Dr Saurabh Bandyopadhyay (Fellow at NCAER), Dr. Ashwini Mahajan (National Co-Convener of Swadeshi Jagran Manch) and Prof. Rohini Somanathan (Professor at DSE) as our speakers for the Youth conference. With more than 10 years of experience in the field of economics, it was elating to hear each one of them share their views on the recent Economic and Political Developments in India. This engaging process of learning is something unique to Optima, and we only wish to further the platform created so far.

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DIALOGUE

Interview- Mrs. Devaki Jain

INTERVIEW WITH MRS. DEVAKI JAIN

Picture Courtesy: Sepia, the Film and Photography Society, Daulat Ram College

Devaki Jain was born in 1933. She is a distinguished Indian feminist economist. In 2006, she was awarded with third highest civilian award PADMA BHUSHAN by government of India for her contribution in the field of Social Justice and Women Empowerment. She graduated in 1953 from Mysore University in Mathematics and Economics with three gold medals. She completed her masters from St Anne’s College, Oxford University, UK. She is Honorary Doctorate in Economics from University Of Durban, Westville in 1999. She has been visiting fellow at Harvard University USA, Boston University USA and Sussex University UK.

The Editorial Board of Optima got an opportunity to meet her and know more about her views on Feminist Economics. Here are the excerpts:

Q.1 If you were to explain the term ‘Feminist Economics’ to a layman, how would you do so?

Historically, women have been playing vastly different roles in society than men. And this is the case in all walks of life. Take agriculture, women and men do absolutely segregated tasks, termed as gendering. Feminist Economics is a discipline that was started to highlight the role that women played in economies. It set out to explore how women contribute to economic product or the economic ‘cake’ through their work. Initially, it was simply establishing the presence of females in the economy.

This further led to our conclusions that the conventional statistical methods followed in economics do not take these contributions made by women, into account; that much of it goes unrepresented. There was ‘productive work’ being done by women - such as cutting grass or weeding the fields - which was not counted as an economic contribution because women were not coming under the statistics of ‘work participation’. So slowly, the discipline started to talk about ‘counting correctly’.
Feminist Economics breaks open almost all the doors of the existing economic theories and 'gender' the existing concepts to be able to reach to new knowledge.

Next, coming to the theoretical interpretations of the subject. Firstly, the data based contributions to theory were questioned. Say, there's a particular theory which says that land and capital are the major contributors to the product of a particular sector. We went ahead and highlighted that in developing countries, it's actually the labour which contributes the most to product. This includes the work done by women as well.

Secondly, it is said in Feminist Economics that's women's reproductive roles also contribute to the economic cake. Leading Feminist Economists such as Diana Elson interpreted as an 'intersection of production and reproduction'. They talk of social reproduction as possessing economic value.

Sometimes as it is also happening today, we are using the word 'feminist' without truly realising it's implications. Hence, I feel that there's a need to define and understand the term appropriately. Feminism as a concept entails many nuances such as - being interested in women's rights, fighting for them, striving towards a greater understanding of what women do - politically, economically and socially - and if one abides by this concept then that makes everyone a feminist. Then there are some of us, who might go beyond this definition and say that it's not merely gender differentiation but something deeper. That feminism must include something deeper, the fact that you must have a belief in something. My definition of feminism says that individual rights also be incorporated within it. We should fight not only for women, we should fight for justice for all. That will make us truly inclusive.

Q.2 There are still people who would criticize the need for Feminist Economics. What do you think can be the reason behind the criticism? If you were to meet one of them, how would you try to convince them for the need and importance of Feminist Economics?

It is imperative to understand what exactly it is, that irks people, about Feminist Economics. A lot of times, criticism comes from the improper understanding of the word ‘feminist’. To them, I’d say, the roles that women play in an economy are often very different than those played by men. Feminist Economics is simply trying to understand these roles better and aiming to find the proper representation of women in the discipline. We are only identifying, elaborating and showcasing difference between genders. And at the same time, also trying to not make this difference a punishment. This difference can be celebrated.

Q3. In one of your interviews you stated that I am afraid, but none of the ministers in the Indian cabinet today are feminists, what made you develop this opinion?

Absolutely. The political leadership, even in today's era, is masculine. The framework designed years ago and till today ignores the revaluation of conventional political theories in light of feminist issues. The radical and progressive ideologies remain male-dominated, though women lag behind nowhere. Contemporary essays have proposed impressive feminist platforms to fight against the defeated and inconspicuous roles of women in every sphere of economy. The political power, therefore, needs to be inherently more feminist recognising new ideals, practices and justifications within and outside the political domains. The organisation and reconstruction of, not a female-centered but a female accepting institutions remains a challenge.

Q4. You have been known to use the term 'Feminization of Poverty' in 2005. What do you mean by the term and why is the term known to controversial?

If you look at the measurement of poverty in India, the data has not been gender disaggregated. In a poor household, there is no specific demarcation of the relative poverty of the members of the household. But if we truly look at the reality, we find that there are more poor women than men - hungry, unemployed, aged and diseased. But of late, I have changed the term 'feminization of poverty' to 'poverisation of women'. When we use 'feminization', it gives the perception of being a phenomena or a process when that is not the case, it tends to be misleading. You may ask how poverty is measured; it is done by using the Nutritional Status Index. The very same is also reflected in the ills of our society, by looking at the cases of sex-selective abortions and the derogation that females have to bear in the contemporary families of our country.

Q5. Is it safe to say that feminist economics is not 'economics for women', but simply a more comprehensive and inclusive economics? Does the definition of feminist economics have any repercussions on how economic decisions are made on the micro level?

Definitely. That is truly the case. I'll give you an example that Bina Agarwal, a renowned development economist cites, she says that women are significantly more productive in the agriculture sector as compared to men. This shows how feminist analysis can be brought to existing pictures. Feminist Economics is revelatory, it reveals situations which have been hidden from plain view. It deconstructs the dynamics of the play between the genders within different sectors. Feminist Economics records all that and goes further to say what can be done with this newfound knowledge. We say that this should lead to rebuilding of economic theories to make them more inclusive. You should read Stephanie Seguino's work in this regard.

Q6. What vision for India as a gender sensitive country you would like to share with young readers-the-to-be economists of future India?

To have faith in yourself and fight, rise and shine against the set norms and conventions of the society is the ultimate route to be a young leader of tomorrow. They must learn, relearn and unlearn the history, present scenario and the future. Life is a battlefield but the youth has youth become the warriors. They must voice their opinions and decide the right and wrong.

ZERO HOUR

CAN WE 'RUNWAY' FROM CLIMATE CHANGE?

BHAVYA PANDEY
1st year

Many contemporary Indian economists emphasise on a high-growth oriented economic policy for India. Examination of the government's expenditure, on the other hand, points to an unwarranted rise in expenses due to natural calamities. Here's delineating a link between the two.

Bill McKibben, the path-breaking American environmentalist, journalist and author, once said,

"Climate change is the single biggest thing that humans have ever done to this planet. The only thing that needs to be bigger is our movement to stop it."

The recent months have seen an explosion of initiatives that take steps in the direction of mapping the way of growth and development forward in a world facing the brunt of climate change. A resulting aspect of which is the reflection of the deteriorating health of our environment seen in the steep rise in natural calamities and disasters around the world. To put things in perspective, a 2019 report by the international think tank Germanwatch, has brought to light some particularly bad news for India. It says that between 1998 and 2017, India lost, on an average, 3,660 people every year because of extreme weather events. Moreover, during the same time, the global losses due to climate change related natural calamities were pegged at a whopping $3.47 trillion with an estimated amount lost in India to be more than a few hundred billion dollars.

Back home, we are facing a slumping economy with poor employment and growth rates. The former Deputy Governor of the Reserve Bank of India (RBI), Dr Rakesh Mohan, Senior Fellow at the Jackson Institute for Global Affairs, Yale University and Distinguished Fellow at Brookings India in his economic address regarding the current Indian growth trajectory titled 'Moving India to a New Growth Trajectory', emphasised on the need of an employment-oriented growth policy for India and a shift of attention to higher growth rates in industries that are labour-intensive and in the organised sector. *Dr. Mohan says, increasing savings and ensuring the growth of the manufacturing sector along with high exports is the key to achieving a growth rate of at least eight percent per annum and that it must be understood that effective distribution is necessary but we can't distribute unless we grow.* In order to achieve this, it is crucial to encourage domestic savings, step up tax collection and invest in building the necessary infrastructure.

On the other hand, an independent report by the Earth Security Group shows that despite a steady framework in place, India lags significantly behind countries such as the US and China in building resilience to natural hazards, which cost us $9.8 billion a year - either through the National Disaster Management Authority (NDMA), the National Disaster Relief Fund (NDRF), the State Disaster Relief Funds (SDRF) or other means.
This is also reflected in the conclusions of risk analysis company Verisk Maplecroft, whose latest hazard risk indices have ranked India's population first in a list of those most exposed to natural hazards, as reported by the Guardian.

In addition, the country's dependence on agriculture leaves it highly sensitive to extreme weather events. India derives a greater proportion of GDP (17%) from agriculture than the global average (4%) and the sector employs 47.2% of the population, compared to the global average of 30.7%.

Hence, India must find solutions to make its economy less exposed; which can be traced back to Dr Mohan's policy changes that encourage the working population to switch to manufacturing rather than pursuing an agrarian source of income.

In context, manufacturing is not immune to these effects, for as a sector it constitutes for a large proportion of direct carbon emissions, and it is indirectly responsible for additional carbon emissions through electricity use. Furthermore, for powered manufactured goods such as appliances, electronics and automobiles, carbon emissions are also created from product use, not their manufacture. Considering this greenhouse gas footprint, it is clear that manufacturing will be significantly impacted by any future climate change regulatory policy changes, and must now, as a sector, begin to confront the risks and opportunities that climate change poses. This includes factoring the darts that aim at curbing climate change into core business strategies as well as creating a solid framework for the sector as a whole.

Game-changing strategies that propel companies to jump ahead of competitors by creating new markets as well as innovating in the field of technology by means of reshaping policy are beginning to emerge.

Corporate giants such as the General Electric Company (GE) in the United States of America (USA) and BP PLC in the United Kingdom are working together to develop up to 15 clean-burning fossil-fuel based power plants that will separate and burn hydrogen while capturing and piping the resulting carbon dioxide into either deep geologic formations or existing oil wells to boost petroleum production. At the same time, BP is also partnering with DuPont in the USA to produce biobutanol, a biologically-derived, lower carbon transportation fuel that could replace ethanol for a wide-range of applications in the economy for significant market segments.

Another side to the story is the need of the hour to focus on the approach to the issue of climate change. Instead of having to resort to the 'response, rehab, rebuild' model, we should be striving to make long-term and broad-impact changes in our economy to reduce the negative impacts of growth on the environment. This is the only way to break the vicious-trap of destruction and re-development. In this context, the newly formulated Jan Shakti Mantralaya of the government, can prove to be one of the path-breaking endeavours. *India is under pressure to mitigate climate change by controlling carbon emission rise but at the same time we will also need to adapt to and be prepared to respond to increased water scarcity, droughts, floods, cyclones and other natural disasters.*

An approach that is water-tight in economical, ecological and social sense is the way forward.

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WHEELS IN TROUBLE: THE AUTOMOBILE CRISIS

SHRUTI CHOPRA
1st year

The government needs to mollify this unprecedented crisis lest a vital pillar would continue to stagger the growth of the economy.

The regressive phase of the automobile sector has managed to captivate everyone's attention amidst the headlines of heinous crimes and haywire times. The automobile industry has hit a rough patch with its sales recording the worst in the past 19 years. Falling sales and piling inventory are major causes of concern.

Before plunging into the gamut of this crisis it is imperative to highlight the key facts which will help gain a deeper insight into the same. According to the data from the industry body, SIAM, Society of Indian Automobile Manufacturers, car sales are down for the tenth consecutive month since July 2018. Overall, the auto industry sold 2,001,096 units during April. In the same period last year, it had sold 2,380,294 units.

Banks have been rigid in offering loans which has affected the sector directly. Customers with low CIBIL scores have been denied loans, which restricted them to purchase high-value assets such as cars. The inflexibility of banks in lending money to the dealers for capitalizing inventory has forced them to order lesser units, eventually discouraging sales.

Cab services like Ola, Uber are ubiquitous. With their readily available cabs and auto-rickshaws and bikes have made travel easier than owning a car with its cumbersome maintenance. Congested traffic and lack of parking space have also escalated the need for these app-based cab services.

In order to curtail the pollution, the government is constantly accentuating on the up-gradation of BS-IV (BS4) to BS-VI (BS6) -Bharat Stage Six compliant engines. Not all manufacturers have clarified its impact on their product lineup that is offered to consumers. This ambiguity has forced consumers to delay their purchase. Several auto companies feel that low consumer sentiment

coupled with a GST rate of 28 percent plus cess is hurting sales. Flood in some of the key states has also added fuel to the fire.

Cumulatively, the $119 billion automobile industry in India supports 37 million people directly or indirectly and accounts for 7.1 percent of the country's GDP and 49 percent of its manufacturing GDP. In a nutshell, the automobile industry plays a vital role in India's GDP and its regressive phase implies slackening GDP.

Fearing excess inventory, major players like Tata Motors, Ashok Leyland have shut their factories ephemerally. Tata Motors Ltd, India’s largest commercial vehicle maker, closed its Jamshedpur and Pune plants for up to 12 days. Ashok Leyland Ltd, the third-largest commercial vehicle maker by volume, closed its Pantnagar facility for nine days in the month of July due to weak demand. Maruti Suzuki announced no production days on September 7 and September 9. The slowdown has put lakhs of jobs in jeopardy, especially contract and casual jobs.

The growth in the automobile industry is crucial for the overall economic growth in the country as auto production influences the demand of various intermediary materials like steel, rubber, plastic, paint, glass and automotive parts.

Thus, a slowdown in automobile sector creates unpropitious conditions for several other industries.

Owing to such adverse effects on the economy, Finance Minister met big players in the auto world, to discuss the challenges faced by them and then the government decided to announce various measures to revive the sector on August 23. Finance Minister Nirmala Sitharaman announced that the government is lifting a ban

on the purchase of new vehicles by the government departments and they will be told to replace the old vehicles with the new ones actively. The hike in the rate of depreciation (from15% to 30%)on all kinds of vehicles was announced acquired from now till March 2020. This was done to encourage fleet or corporate buyers to prepone their purchase, as an aid to boost the demand. The finance minister assured buyers and manufacturers that vehicles compliant with BS-IV emission norms registered before 31 March 2020 would be allowed to run for the entire registration period. Finance Minister also urged banks to make auto loans cheaper, and increase credit availability to non-bank lenders, to boost demand. Also, the government postponed the hike in one-time vehicle registration fee until June 2020.

Battling the protracted slowdown, these measures were welcomed by the industry. Leading industrialists hoped to see a much-needed boost in the demand and anticipated to get the industry "back on track". These slew of measures left some of their demands unaddressed. They demanded GST cut-rate from 28% to 18% which will lead to an immediate price reduction and they could make the most out of the approaching festive season. Also, their yearning for the introduction of scrappage policy, which is replacing the decades-old vehicle with new vehicle, to stir the demand for new vehicles in the economy, was put on hold due to lack of necessary infrastructure.

The government needs to mollify this unprecedented crisis lest a vital pillar would continue to stagger the growth of the economy.

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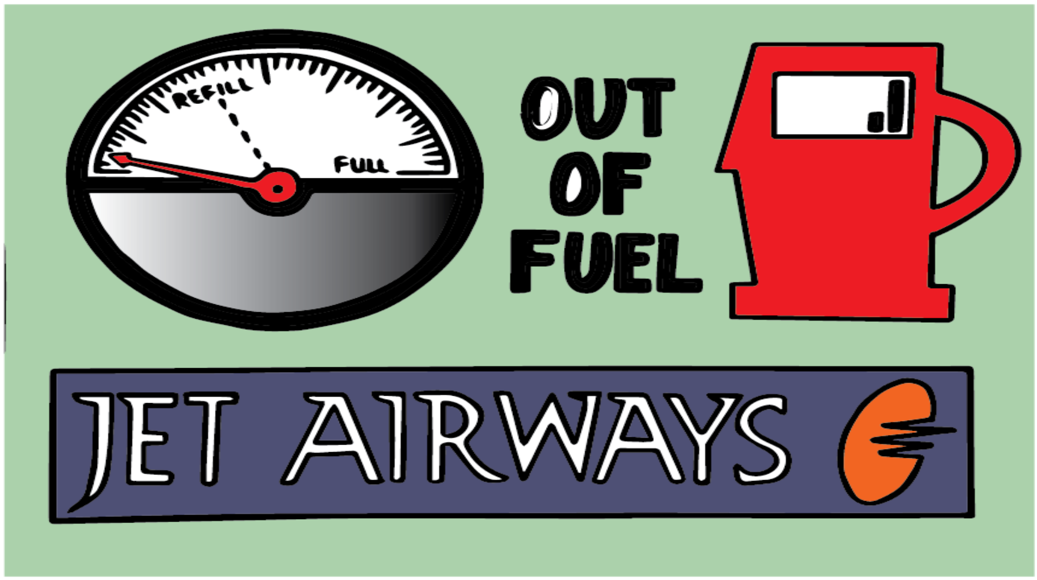
OUT OF FUEL: THE JET AIRWAYS

VAISHNAVI PRIYA
1st year

"Running an airline is like having a baby: fun to conceive, but hell to deliver"
-Collett & Woolman



The above quote can in some ways be related to the case of the now defunct airlines. Jet Airways began its journey on May 5, 1993 with Naresh Goyal as its Captain.

Tracing Back

Post its 'down' period from 2008 to 2010, the company formulated some innovative methods to save cash and fight the recession. Firstly, they observed passengers' consumption habits and reduce the number of amenities carried on board which reduced the flight weight and helped the airlines save a lot of money on fuel alone. Secondly, they converted their subsidiary JetLite into a low-cost carrier. This helped the company fight the competition face from other low-cost carriers like IndiGo and SpiceJet. Thirdly, it launched JetKonnect which operated under the same low-cost model. This move left the aviation industry bewildered as it was the only airline that owned two subsidiaries.
The steps taken by Jet Airways appeared to workout smoothly in the short term. With the financial crisis fading away by the end of 2010 Jet Airways started gaining traction and the airlines enjoyed a glorious period for a short time. It operated more than 20% of the flights in India.

2012

Alas! the moves did not turn out to be in the best interest in the long run. However, there was a ray of hope in 2012 when the Indian government allowed foreign airlines to take up a share package in Indian carriers. Etihad Airways, a UAE airline took up 24% of Jet's stake. The move made the people believe that Jet was destined for something big.

2013-14

Due to the slump in passenger numbers since 2010, the company decided to combat it in an unusual way. In 2013, the airlines decided to enter into a price war with 2 of it's biggest domestic competitors- SpiceJet and IndiGo, for one thing, these airlines were already offering cheap flights. In contrast, Jet Airways was not and it only increased its running costs.

For this reason, the year 2013-14 proved to be a disastrous year for Jet as it posted a net loss of £4 million. The airline's financial situation was appalling. Eventually, Jet Airways ended the JetKonnect brand and the carrier made the commitment to only offer full-service flights domestically in 2014.

2015

However in 2015, Jet managed to reduce its losses significantly. Things were looking good for the privately owned airline as it seemed that it could influence the Indian airline market again. But there was only a shroud of success for the airlines, as IndiGo was starting to dominate the aviation market through its low-cost model. Facing losses in the domestic market, the international skies too did not provide any hope for Jet. It simply could not compete with airlines like Emirates and Singapore Airlines.
Essentially they put themselves in the corner.

Their domestic demand crumbled and they had no chance to squeeze themselves in between the big players in aviation. As time went on, the company yet again, started bleeding money, massively.

2018-19

As of November 2018, Jet Airways has been reported to have a negative financial outlook due to increasing losses. In March 2019, it was reported that nearly a fourth of Jet's aircraft were grounded due to unpaid base rates. Buying out Jet Airways was a lucrative idea for a lot of investors. Many were indeed ready but had one demand- the chairman Naresh Goyal had to step down for the deals to go forward. He gambled a perfectly fine - albeit unprofitable- airline by not injecting equity himself into the cash strapped business or stepping aside in time and allowing someone else to do so. But due to his stubbornly holding on to the chair many deals were not able to go through.

As of now, the situation of Jet is known to all. After consistently missing payments, lessors began withdrawing their aircraft from Jet Airways's fleet. The Indian Oil Corporation refused to provide any fuel to the airline.

Digging Deeper- The Main Reason

The main reasons for the crisis are, firstly, the purchase of Air Sahara to which the financial troubles of the company can be traced back to. Naresh Goyal had reportedly ignored the advice of professional associates who said that he was paying way too much for it.

Secondly, the fluctuating global crude price. All Indian carriers are particularly sensitive to fluctuations in global crude prices because Asia is a major importer of oil. Jet's books were already saddled with debts which made it difficult for it to face the prices.
Thirdly, it was Naresh Goyal's management style. His decision to have a single management team, headed by himself, running all Jet's operations was a crucial mistake. Analysts believe that there should have been two teams; one for the full-service carrier and the other for the budget flyer.
Fourthly, it was the inability to attract strategic investors to pump money into the airline.

The company suspended all its activities on 18th April 2019. The closure of Jet has reduced the supply, skyrocketing airfares. As Jet operated most of its flights from metros, the fare prices have risen for yielding metro routes. Jet's closure has proved to be a boon for other airlines as the slots allocated to it have been given to other airlines by the Ministry of Civil Aviation. The shutdown also made a huge impact on the employment situations of those who worked for this tragic airline.

The future of the airline looks bleak as all *revival plans hit rough weather. The airline is undergoing insolvency proceedings in the court. There were talks about Etihad Airways or the Tata Group buying the airlines, buy all these deals went down the drain for some reason or the other. The aviation sector should take a lesson from Jet's case and try not to repeat the mistakes - poor management, inadequate funds - again.*

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INTEREST: NEGATIVE

POOJA SINGH
1st year

The tree once grown may protect you from heat but it doesn't need to produce fruit.

Who does not want to keep their money in safe hands? But what if you have to pay the cost for it which in spitefully may do you no good? All this defines a single term known as negative interest rates. It defines a scenario where depositors have to pay to store their money in the bank rather than receiving interest income.

Negative interest rates might be seen during the deflationary period when financial institutions are inclined to hoard money, rather than lending or spending on any business. The deflationary period refers to that period when there is a decrease in the general price level of an economy and people start hoarding money because they expect goods to become more expensive in the future.

Now the question that arises is, how do negative interest rates affect the economy? Real interest rates can be negative if inflation exceeds the nominal interest rate. During the deflationary period, the negative interest rates always come into the picture as a boon for the economy since these rates are imposed basically to boost the declining economic growth.

They comprise the last step taken after considering all the policies which intended raising the economic growth but failed to do so. Japan has primarily adopted this policy of negative interest rates because it has low economic growth and unwelcome yen spike. After which, the market expectations for inflation rose immediately. This reaction stresses the effectiveness of negative policy rates as expansionary tools when inflation expectations are anchored at low levels. Japan's experience also illustrates the desirability of taking preemptive steps to avoid the zero interest rate bound.

Moreover, due to negative rates, the long term issue of low inflation which directly impacted the Japanese economy and slowed down the economic growth was combated by an expansionary measure in the form of negative rates. Although, negative policy rates have been rare until recently, the European Central Bank has had a negative policy rate since 2015 and recently announced a 0.1% cut that would bring it to -0.5%. The Bank of Japan has a negative policy rate since 2016. Former Federal Reserve Chair Alan Greenspan has said, "It was only a matter of time before the interest rate would fall below zero in the United States."

The European Central Bank doubled down on its negative rate policy recently, meaning banks will now have to pay 0.5% interest simply for depositing much of their spare cash with it - an attempt to make them lend more to kick start the economy.

Imagine you are going to buy a car. The dealer gives you two options to pay for the new vehicle: cash or credit. When rates are above zero, buying a car on credit will cost you more because you will have to pay interest on the loan. When the interest rates are negative, it will be cheaper to buy a car on credit than with cash. People who already own bonds will benefit, says Edelman, an American marketing consultancy firm, because currently, the existing bonds rise in value when negative interest rates exist. Banks are facing a multitude of problems following the increase in negative interest rates to -0.75% on Swiss National Bank sight depositing and further appreciation of the franc. They are also facing a huge burden due to negative interest rates amounting to over a billion Swiss franc. Many banks do not subject themselves to negative interest rates just because of the exemption threshold.

The danger behind negative interest rates is a decline in interest margins and therefore decrease in profitability.
It is quoted that "...banks have to accept high-interest rate risks."
Due to negative interest rates, the costs for interest rate hedging, in particular, have risen. In some cases, this has resulted in an interest rate increase for mortgages and loans. As a result of cost savings, on hedging transactions (these are those transactions that investors take with the intent of reducing the risk of losing money while executing their investment strategy), banks have to accept high-interest risks.

One more consequence of a negative interest rate on risk-free investment is creating uncertainty markets. It becomes a challenge to create risk-based pricing.
It is believed that a *"switch from sweet poison (unlimited central bank liquidity) to the bitter pill (negative interest rate) is also causing a sudden change in the political arena".*

According to the Economics Times, "...to battle the global financial crisis triggered by the collapse of Lehman Brothers in 2008, many central banks cut interest rates near zero. A decade later, interest rates remain low in most countries due to subdued economic growth".

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The Euro area, Switzerland, Denmark, Sweden, and Japan have allowed rates to fall slightly below zero. Experts say, "negative interest rates help weaken a country's currency by making it a less attractive investment than other currencies. A weaker currency makes a country's exports competitively advantageous and boosts inflation by pushing up import costs."

Recently, the Dutch parliament, ignoring the convention that central banks should be free from political pressures, wrote to ECB (European Central Bank) President Mario Draghi to tell him it opposed a "tiered rate system" (a tiered rate system means where banks are allowed to hold excess cash of up to six times their mandatory reserves without having to pay the penalty charges), because it could harm Dutch pinion funds.
Negative interest rates lower the borrowing costs to lend cheap loans to businesses and households. But yes, they also decline the margin that financial institutions earn from lending.

If you happen to be the only one with negative interest rates, you also weaken your currency, which means you make your exports more competitive.
- Mohammad El-Erian, CEO, Allianz

ECONOMY AUTOMATED

1. The Technology Of Blockchain In The Agricultural Sector

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THE TECHNOLOGY OF BLOCKCHAIN IN THE AGRICULTURAL SECTOR

GAURI VIG
2nd year

"Blockchain technology has evolved from industries and real estate, now have reached farms."

What Is Blockchain?

Blockchain are records that are linked using cryptography wherein each block contains a cryptographic hash of the previous block, timestamp and transaction data. This technology is used to record transactions between two parties which are stored in the blocks in a permanent and verifiable way; blockchains are resistant to modification of data. Today, blockchain is not only taking over industries, hospitals and real estate, but also the agricultural sector. 40% of the global workforce works in agricultural and represents 6.4% of the entire world's economic production. Blockchain helps to make the process of growing and supplying food easier with a single truth for all parties participating in the food chain. Blockchain is transforming agricultural sector in the following ways:

Crop and Food Production

The process of monitoring soil and crop production has always been a difficult task for farmers. With new technology of IoT sensors, used to fetch important information like temperature of soil, water level, fertilizer details, and pests, it is sent to the blockchain which provides quick and easy access to the growers who need this information to perform various farm operations. It helps in enhancing the quality of the crop and farming process.

Weather Crisis Control

Farmers face the issue of unpredictable weather throughout the agricultural process. For better growth and survival of the crop, it is essential for farmers to predict such crises like excessive rain which makes it difficult for grown crops to tolerate flooding, or no rain at all which leads to crop failure. Consumers are also not aware why markets face high pricing and whether the crop suffered bad weather conditions.

With the blockchain solution, it has now become easier for farmers and consumers to trace weather conditions.

Farmers can now request and receive rapid insurance claims through smart contracts.

Procurement Tracking

One of the challenges faced by the agricultural sector is tracking and paying for delivery of food. The process of food delivery products depends on the third party; the seller has agents who conduct trade between the producer and the buyer, who is responsible for the safe delivery of the product. Buyers on the other hand also have agents for recommending payment and auditing delivery. This involvement of multiple agents adds high costs and the entire process becomes time-consuming. But with the introduction of Blockchain, the entire process can be simplified to a single distributed ledger. Buyers will be able to directly contact suppliers of agricultural products which not only speeds up the process but also reduces time to settle payments. Companies, farmers and consumers can also save the additional agent fees. Farmers can receive a larger share of sales with a blockchain solution. With the help of blockchain, farmers can sell their produce directly to the consumers and restaurants without participation of intermediaries.

Managing Agriculture Finance

Lack of transparency in credit history and agreements are some of the problems faced by smallholders and financial inclusions. Due to the involvement of a number of intermediaries, the process of buying crops from farmers and selling it to the end consumer has become fraudulent. It not only affects farmers as they receive less pay for their crops but also affects consumers as they are charged with higher prices due to addition of a fees at every stage. As a result, it became difficult for buyers to pay farmers and challenging for the farmers to accept such low prices for their produce. With blockchain, the agriculture finance process has become more transparent and fair. Now the consumers can get directly in contact with the producers and producers don't lose out on money to intermediaries.

Logistics

Logistics is a big challenge in the agricultural sector. There are a lot of perishable goods, and a lot of money at stake. By implementing Blockchain, logistics can go a long way into simplifying deliveries. Farmers can now be free from a long chain of intermediaries and get information on the products delivered and its condition, while tracking the whole delivery process.

Promoting Sustainable Practice

There are several practices in farming that are unsustainable, yet they persist. The global market of pesticides is worth more $35 billion per year, the chemicals of which end up being discharged into water bodies. The most common chemical found in groundwater is nitrate- a major component of crop fertilizer. Agriculture projects major harms to the environment which is now changing due to blockchain-enabled platforms that incentivize more sustainable practices.

IoT sensors help estimate the level of fertilizers that would be required by the crop, hence maintaining the optimum level of fertilizers and pesticides in the crop, resulting in sustainable practice.

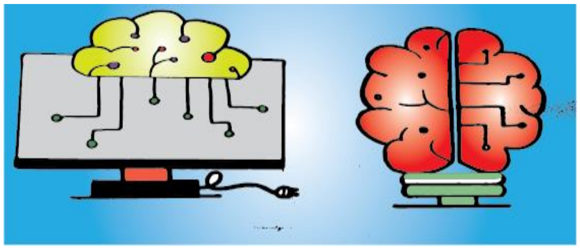
Disbursement of Subsidies

Across the globe, farmers are largely dependent on government subsidies. Like in India 2017-2018 budget, 32 crores were allocated to agriculture- related subsidies to farmers. But the real question is whether these subsidies are reaching farmers or not? However with Blockchain technology, distribution of government subsidies to farmers has become a transparent and easy way, one can now track the funds distributed by the government and know whether it has resulted in target disbursement of subsidies.

Conclusion

Blockchain technology has evolved from industries and real estate, now have reached farms. This technology is bringing positive changes to agricultural sectors as it helps in estimating the level of pesticides that would be required by the farmers. Moreover, by the help of blockchain technology, one can monitor the process from harvest to storage to delivery of the crops. This platform reduces fraudulent transactions and

consumers can directly contact the farmers for the produce, making transactions easier and more transparent. The farmers can now track their produce and keep a check on the quality and weather conditions that can affect the crops. Consumers can now be sure of the quality of product that they are being served on their plates. In nutshell, blockchain technology can be a game changer in today's modern agricultural practices.



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ADOPTION OF ADHAAR CARD IN INDIA

SUNIDHI SHARMA
1st year

Countries such as Tanzania, Afghanistan and Bangladesh have visited India to talk about the system; it would be interesting to see how they replicate this idea.

Overview And Important Uses Of Aadhaar Card

Aadhaar is a 12-digit unique number issued by the Unique Identification Authority of India. The UIDAI generates a unique number for the applicant and the applicant's demographic and biometric information is linked to the number.

The UIDAI was established on 28 January, 2009. Nandan Nilekani was then appointed as the chairman of UIDAI. History of Aadhaar dates back to 2000 when Rangarajan Commission was set up to improve the statistical system in India. Under the para 9.2.26 and 9.2.27 given in the analysis of the commission, it was written that it would be very helpful for the administration if every citizen of India has a unique ID.

Similar ideas given by great minds finally led to the establishment of UIDAI which presently holds the records of about 90% of the population of India.

New initiatives like *Aadhaar Pay* will bring an ease of bank payments, merely through thumb impressions.

The Aadhaar card is extensively used as a proof of identity, address, and age while applying for any government service under the sun. The Aadhaar can be directly linked to the bank account and LPG connection so that individuals can receive their LPG subsidy directly into their bank accounts. This scheme is also known as DBT (Direct Benefit Transfer) scheme.

Individuals can link their Aadhaar card to their pension accounts can have their provident fund disbursed directly in their accounts through their PF organization.

Budget and Economics Of Aadhaar Card

When the 2014 budget came out, around Rs. 20.39 billion was given for the project carried out by UIDAI. In July 2014, it was reported that UIDAI would spend about Rs. 300 million on advertising campaign.

When phase V of the UIDAI project was approved, the Union Cabinet gave Rs. 12 billion to the project to reach the target of 1 billion enrollments by the end of 2015. The project was just starting the enrollment process in northern states.

The Economic Survey 2015-16 claimed that DBT led to a reduction of LPG subsidy by close to 25%. The amount saved was approximately Rs. 127 billion after the launch of the DBT scheme. It came out as the government was saving up to 15% in the direct benefit transfers of subsidies on LPG to the beneficiaries through Aadhaar.

The Survey said in the pre-Aadhaar period, the average amount disbursed to bank accounts more than doubled from Rs. 1.82 crore per block per year to Rs. 3.98 crore per block per year.

Raghuram Rajan also supported the scheme saying that it will help in financial inclusion drive and providing easy access to loans.

Controversies and Concerns Related To Aadhaar Card

In 2012, Justice K.S. Puttaswamy filed a written petition in the Supreme Court of India in which he challenged the policy of the government to make Aadhaar mandatory for every individual and its plan to link the biometric ID of the person to it. According to him, Aadhaar violates the right to privacy which is granted under the constitution.

In early 2018, Aadhaar petitioners concluded their case about the constitutional validity of Aadhaar in the Supreme Court after which Attorney General K.K. Venugopal began arguments for the Centre in the constitutional validity of Aadhaar case.

The final verdict came on 26 September, 2018 in which the SC upheld the constitutional validity of Aadhaar scheme saying that it does not violate a person's right to privacy when he/she agrees to share his/her biometric data and further ruled out that Aadhaar is compulsory for filing of ITR and allotment of PAN.

But there are still a few concerns related to Aadhaar card. The Aadhaar card in itself is not secure as there is currently no practical way to validate the card (e.g. by police at airport entry locations). Hence, it is quite questionable to use it as an identity card.

Several mobile apps claim to verify an Aadhaar card with a QR code scanner which is absurd as it can be easily copied and edited.

Government departments and various other agencies that collect this information such as banks cannot be trusted to maintain the secrecy of all this collected information. A case came out wherein data collected by Reliance Jio was leaked online and the data may now be available to hackers.

Bhudhaar

Bhudhaar is a similar project to Aadhaar project carried out by the Andhra Pradesh government. The only difference is that it is an 11-digit unique ID code assigned to each landholding. It has brought transparency of land records and has lead to more land security as before. The land transaction records are maintained in a single source. *Bhudhaar is considered to be an innovative and successful project similar to Aadhaar.*

Conclusion

The Aadhaar Act has helped the nation to become more digitized. It has also helped in ruling out of fake citizens and has helped the poorer section of our society to benefit from various government services at a subsidized rate. Our nation has been economically benefited from this scheme.

Other governments are already in the potential of Aadhaar. Countries such as Tanzania, Afghanistan and Bangladesh have visited India to talk about the system, it would be interesting to see how they replicate this idea. Russia, Morocco, Algeria and Tunisia have also shown interest in Aadhaar.

Nobel winner Paul Romer, the American economist said, "It's the basis for all kinds of connections that involve things like financial transactions. It could be good for the world if this became widely adopted."

Regarding security concerns Romer said,"It should be part of the policy of the government to give individuals some control over the data that the private firms collect and some control over how that data is used."

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THE GROWTH TRAJECTORY OF ARTIFICIAL INTELLIGENCE

ADITI AGGARWAL
1st year

AI is not slowly but quite rapidly creeping in our homes in the form of smartphones, smart home devices, etc and will soon creep in our workplaces too.

AI is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to developing systems with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. In simple words, it is intelligence created artificially and not natural intelligence.

AI is not slowly but quite rapidly creeping in our homes in the form of smartphones, smart home devices, etc and will soon creep in our workplaces too. This is because businesses are realising that AI can provide them with high efficiency and effectiveness and can provide them with a competitive advantage over other businesses. For instance, AI can help in improvement in customer interaction as businesses can automate customer interactions by analysing data from previous communications and programming computers to accurately respond to customers. It can also predict outcomes based on data analysis. It detects patterns in customer data to conclude future sales of products to help the company purchase the right stock in the right amounts. Even in banking, AI can be used to predict currency and stock price fluctuations.

According to the market research firm Tractica, the global artificial intelligence market is expected to grow massively, with revenues increasing from around 9.5 billion U.S. dollars in 2018 to an expected 118.6 billion by 2025. The overall AI market includes a wide array of applications such as natural language processing, robotic process automation, and machine learning. Many companies in the tech industry such as Microsoft, IBM, Google, and Samsung have submitted thousands of AI patent applications, and AI-related start-ups are raking in billions of dollars in investment funds.

India ranks third in the total number of artificial intelligence start-ups after the US and China among the G20 countries. Artificial intelligence has the capacity to generate $957 billion for the Indian economy by the year 2035. However, the question actually is that is India ready to face the repercussions of AI introduction in India. The answer is no. Incidentally, the Indian economy is currently ill-equipped to face the advent of automation and AI. Though India is one of the fastest-growing economies, higher growth is not converting into more jobs. An Ernst & Young study states that there are 17 million new entrants into the Indian workforce every year, but only 5.5 million jobs created. To add to this, Indians will face massive unemployment thanks to automation and AI in major service industries like IT and banking which are leading employers in the economy and in the manufacturing sector as well.

As far as the impact of AI on the world economy is concerned, Artificial intelligence has the potential to add around $13 trillion by 2030 to current global economic output, according to a report by the McKinsey Global Institute. The major contributors to this are the automation of labour and innovations in products and services. However, it is not all a bright picture. AI adoption could widen gaps between countries, companies, and workers. China and the US could be at the top as they are responsible for most AI-related activities followed by developed economies, such as Germany, Japan and Canada, and smaller economies like Sweden, Singapore and Finland. Economies like India, Italy, and Malaysia with moderate foundations will follow thereafter as they may be able to build their AI capabilities. However, developing economies which are comparatively underdeveloped will be at risk of falling behind. Additionally, AI will lead to large shifts in the demand for skills, widening the gaps between skilled and unskilled workers and they may need to change occupations and to adapt to work alongside machines.

Sectors that are soon going to be revolutionized by AI and automation are manufacturing, healthcare, construction and many more. AI will enable more efficient work in the field of manufacturing that is less prone to error and has higher quality. In the healthcare sector, AI promises to find patterns within a population regarding prevalent diseases in an area and pinpoint diseases, etc. AI and machine learning in the construction industry will make the construction process faster, safer and more cost-effective by reducing human error and better utilizing big data. AI will also be able to provide businesses with business intelligence. Spreadsheets and dashboards will be replaced by AI-powered tools that explore data, find insights and make recommendations automatically. It is believed that other sectors like cybersecurity, cloud hosting, retail, education, fashion, supply chain management will also be affected by the arrival of Artificial Intelligence.

Although, the introduction of artificial intelligence might have a catastrophic effect on the workforce and future job seekers of the country. However, that is not at all true. It entirely depends on the way the country adopts the technology and adapts to the changes AI will bring with itself. To enjoy the fruits of artificial intelligence, the government could undertake some steps in that direction. It could collect data on the kind of workforce the country has and plan accordingly. It can also undertake efforts to prepare the young workforce by exposing them to a tech-enabled work environment through AI-related online training programs and education curriculum at school and college level. To give this a head start, the Central Board of Secondary Education (CBSE) has already signed partnerships with Microsoft India and IBM to focus on tech reskilling for students.

Moreover, the government could provide incentives and the required employment boost in the areas that are less vulnerable to job loss like healthcare, tourism, fine arts, entertainment, and sports. *Start-ups and entrepreneurship among the youth could be instrumental in the promotion of start-up culture in the country which in turn, could generate employment.*

The overall success of AI in India will depend upon the policy measures the government takes to guarantee itself a smooth transition to what is called by Stephen Hawking as something which could either be the best or the worst thing to happen to humanity- Artificial Intelligence.

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THE MEITY AND GOOGLE COLLABORATION: A STEPPING STONE TO BUILD DIGITAL INDIA

RADHIKA KHANDELWAL
1ST year

"All one needs is a computer, network connection and a bright spark of initiative and creativity to join the economy" – Don Tapscott

The MEITY and Google signed a statement to transit the global economy into a digital empowered one on 31 August,2019. It is an initiative that aims to provide engineering students a market ready platform for the evolution of the real time world. It aims to address the social problems, triggering in our developing nation.

Engaging engineering students in a technology driven platform is likely to expose them to the current scenarios and the prevailing downfalls in the economy. Online and offline learning opportunities on key technologies and machine learning like Cloud and Android. Google's Developer Student Club network and Google Developer networks are the key components for the strategic advancements in the upcoming economic models. It encompasses the mentorship sessions in product design, strategy and mechanisation. Being a platform for the engineering students, it would innovate and produce the skilled labour force. From nothing to 300 million monthly digital transactions and 80 million UPI users, India poses to be one of the imminent digital economies across the globe. It has great potential to offer the manifestos, leading it to the established electronic country. A multi hued umbrella of schemes has been an impetus to e-wallet services. The evolution of the telecom ecosystem with a sudden boost in the data and call rate incentives is conspicuous, thereby vocalising the growth of all the digital initiatives.

The transition from 90% cash based economy to an electronic driven one presents some serious challenges. In a cash obsessed economy, where more than 90% of the Indian labour market is informal and paid in wages, introducing the automated payment system is strenuous. Moreover, with the onset of online payments and value added services, there can be seen a sudden increase in the security issues and customer grievances.

The massive emergence of e-commerce has led to the infrastructural development and knowledge empowered economy. The collaboration of MEITY and GOOGLE would enhance the human resources, the truest assets of any economy, flourishing our nation with the contemporary manpower. Ranging from healthcare, agriculture, education, smart cities, infrastructure, women's safety, smart mobility, transportation, accessibility to digital literacy, it has the vision of transforming ideas and skills into real world solutions.

It is a development oriented vision that would be carried out to bridge the digital divide, empower our economy digitally and boost its image at a global level. Focussing on the latent talents of the blossoming educated young minds, it dares to encourage and aspire them out of their comfort levels and work towards the inclusive growth. Exposing the young ignited minds to the real world problems equip any economy with the technical and practical analysis which is the ultimate aim of the collaboration. Human resources are to be taken care of in order to propel the challenges India has been facing since independence. Be it unemployment, stagnant agricultural growth, women's safety and other economic indicators, the core solution to eliminate them is Human Resource Development. This collaboration, being the merger of two tech giants would establish a digital payment and electronically empowered framework. It is one of the greatest modified and extended versions of the e-governance plans of Digital India. The ambitious plan of Modi government would increase mobile interface and large scale understanding of the technicalities associated with the electronic manufacturing. It is the ninth pillar of our growth focussed economy.

The flagship programme that focuses on the three key vision areas- digital infrastructure as a core utility to every citizen and government and services on demand is set to smoothen the e-commerce schemes by the government. The various domains covered emphasise the successful implementation of e-governance projects. Electronic manufacturing, which plays an integral role in the digital success in any nation, would be strengthened.

MEITY has promoted inclusive growth, electronic services and job opportunities. It has optimised the technologies and has ensured the digital inclusion of all the segments. From providing digital identity to 122.9 crore residents of the country with 99% coverage of the adult population. An exponential percentage of population has been provided with unique and authenticated ID card to facilitate various forms of online transactions. Running multiple government offices, India has seen an impressive extension of digital ecosystem. Not only the bulk of the masses are being offered the digital space to securely store and share the voluminous documents electronically. Analysing its past track records and working model, its step to merge with Google would broaden the horizons for India to explore the Digi world in a great manner.

The transformation from the cash obsessed citizens to the digitalised ones is not an overnight process. It takes the proper execution and implementation of all the UPI service providers. The architects of the DIGITAL INDIA have done enough justice to the nation building. Eliminating corruption and mismanagement at the grass root level remains a challenge to be overcome. Lack of creativity and infrastructural roadblocks are the integral issues that have to be resolved. Proper policy making in FDI has to be dealt with to execute the schemes and collaborations. It is high time to analyse the dangers and setbacks to take advantage of the upcoming economic plans and strategies.

Google along with MEITY is going to make India a stronger version of digitisation. They together can lead to drastic metamorphosis in the world's telecom history. It is the result of the global trends and advancements that has led to an escalation of the digitisation phenomenon.

Hence, more pronounced training and development sessions should be conducted at the grass root levels to execute all what has been planned, discussed and debated. The collaboration must bridge the gap between the ignorance of the unprivileged sections of the society and the increasing rate of beneficiaries of such initiatives.

Proceeding and revamping Digital India Mission requires the learning packages such as this collaboration intertwined with erudition, well-researched and analysed economic models in order to inspire and educate the young Indian minds to make India a true and successful digital empowered economy, embellishing itself equipped technical and entrepreneurial skilled youth.

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ECOTIONARY

GRAVITY v/s GRATUITY: ECONOPHYSICS

SNEHANJAL
2nd year

By now, it has become quite evident that traditional methods of analysis were always insufficient, while many of the more interesting depended on heterogeneous agents and far-from-equilibrium situation

Introduction

The past consequential financial crisis and economic slowdown has exposed several limitations of traditional economic theories and models. It has become quite clear that making trivial modifications to standard assumptions or models thereof may not be adequate; the entire framework needs to be systematically redesigned, leading to the emergence of an interdisciplinary research field termed as "econophysics".

Econophysics is the domain where theories and instruments of physics, originally developed by physicists are applied to understand, comprehend and solve problems of economics. These problems usually include uncertainties or stochastic processes and non-linear dynamics, relatively similar to social physics. The term "econophysics" was first coined by H. Eugene Stanley at a conference in Calcutta on statistical physics in 1995, initiated by the Indian physicist, Bikas Chakrabarti. This conference was held alongside his students and first appeared as a publication in "Physics A 196". The inaugural meeting on econophysics was organized later in 1998 in Budapest by János Kertész and Imre Kondor; the extensive research in the field of economics by physicists is not new as econophysics started in the mid 1990s by several physicists working in the subfield of statistical mechanics. Daniel Bernoulli, who developed utility-based preferences, was a physicist. Similarly, Irving Fisher, one of the founders of neo-classical economic theory, was a student of statistical physicist Josiah Willard Gibbs. Jan Tinbergen, the first person to win Nobel Prize in economics, did his Ph.D. in statistical physics. There were numerous physicists who contributed significantly in the development of economics. Interestingly, these physicists eventually left physics and migrated to economics. Of late, a vast amount of market data has become available, now allowing empirical studies of market behavior to be enacted.

Basic Tools:

- Probability- The origin of probability theory lies in physical observations associated with the game of chance and provides the foundation for implementing statistics. It is the mathematical framework for discussing experiments with an outcome that is uncertain.
- Statistics- It is used while trading with large populations and approximations, due to which it solves physical problems. It can illustrate a wide variety of fields with an inherently speculative nature. Additionally, statistics also correlates to microscopic and macroscopic phenomena.
- Econometrics- It is the quantitative application of statistical and mathematical models using data to formulate theories or test existing hypotheses in economics and to forecast future trends from historical data. It subjects real-world data to statistical trials.

Theories Involved:

- Income and Wealth Distributions: Kinetic Exchange Models

According to this model, the collective behavior of atoms can be apprehended by the equation of state: pV = RT, where R is the gas constant; even though each individual particle is moving at random, one can predict with extraordinary accuracy how many of them will do so.

Similarly, the belief of physicists is that an individual person is neither the economy, nor has characteristics of the entire economy. However, a million such people acting individually create the economy, characterized by some rules that allow for an economy to be anticipated.

On a parallel, the equation of state mathematically describes pressure and temperature, predicting the aggregate behavior of atoms. Viewing the economy singularly as "thermodynamic" system, one can identify the income distribution with distribution of energy among particles in gas. It has provided a simple mechanism for understanding the unequal accumulation of assets.

- Inter-firms and banks-firms network structures: Empirical studies

The credit-debit relationships at different layers comprise as an entire large-scale network of the economic system, at both national and global scales. One layer, namely supplier-customer links among firms works as a node. The firms' activities are financed by financial institutions as well as directly from financial markets. The layer of supplier-customer network is thus linked to another layer of financial network between firms and banks. Furthermore, the banks are also creditors and debtors themselves, comprising another layer of inter- bank networks. Associated with this is the systematic risk that a network effect caused by failures or financial deterioration of creditors and debtors through the credit-debt links to other nodes even in a remote part of the networks. The systemic risk often has considerable consequences at a nation-wide scale, and sometimes to a world-wide extent, as we partake in repeated financial crises.

- Financial Time-Series analyses: Wiener processes

In economic science, Bachelier dealt with the time-series in financial markets using random walk concepts, five years prior to Einstein's seminal paper on Brownian motion to determine the Avogardo number, aiming to describe the up-down movement of price changing by the means of the Chapman-Kolmogorov equation and found the now-called Weiner process as the solution of the equation.

- Market Mechanism: Agent-Based Models

It is evident that our society bases a majority of decisions on inductive reasoning rather than deductive rationality by measuring utilization fractions. Since the inductive reasoning gives good sense as an intellectual process, it is relatively simple to prototype the market functions on the mechanism of Game Theory. It attempts to determine mathematically and logically the actions that "players" should put up with to secure the best outcomes for themselves in a wide array of "games" i.e., the outcome for each participant depends on the choices (strategies) of all.

Research On Econophysics In India

Indian scholars have always been keen to research on new emerging interdisciplinary subjects. The Indian Statistical Institute, Kolkata (founded in 1931) is one of the oldest institutions in India to foster interactions of natural and social sciences. Many research papers, books, reviews, etc. have been written by various Indian scientists. These books and initiatives have made a good impact and some are even being used in econophysics and sociophysics courses in multiple well reputed universities. *The first text book on econophysics entitled "Econophysics: An Introduction", has been written by Indian scientists namely Anirban*

Chakraborti, Arnab Chatterjee, Bikas Chakrabarti and Sitabhra Sinha. Many institutions are involved now with numerous conferences being organized since then. Moreover, the 'Policy Planning & Evaluation Committee' of the Indian Statistical Institute, on June 22, 2011 held a meeting regarding a proposal for building a Center for Econophysics and Quantitative Finance Research.

Conclusion:

By now, it has become quite evident that traditional methods of analysis were always insufficient– standard economic methods dealt with homogeneous agents and equilibrium, while many of the more interesting phenomena in financial markets fundamentally depend on heterogeneous agents and far-from-equilibrium situations. However, Econophysics is marked by a desire to accurately describe real economic phenomena through careful observation and reproducing the empirical features with models inspired by statistical physics. However, this has both its drawbacks and criticisms. The mainstream economists have criticized it for the lack of the trivial structure behind it. On the contrary, it has a big impact on the applied field of quantitative finance. Papers on econophysics have been published primarily in journals devoted to physics and statistical methods rather than in leading economics journals. Despite that, it has constantly and successfully expanded over time from just financial markets to other branches of economics. Thus, econophysics continues to strive towards a theory for the entire spectrum of human social behavior. Till now, we have seen only the tip of an enormous iceberg!

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ECONOMIC FORECASTING: WHY IT MATTERS?

ANWESHA RAY
1st year

An economist is an expert who will know tomorrow why the things he predicted yesterday didn't happen today.

Introduction

Economic forecasting, as the name suggests is the process to foresee about the economy using a combination of economic indicators. Forecasts are generally carried out at a high level of aggregation like inflation rate, GDP, fiscal deficit, rate of unemployment.

Institutions like banks, government, public and private sector undertakings, international organizations like the World Bank, IMF, OECD engage themselves in economic forecasting. Forecasts can be made in general or in great detail. For economic forecasting, one needs to build statistical models with inputs of several key variables, or indicators of the past and the present so as to come up with an expected value of an economic variable.

Various economic forecasting techniques are available, ranging from simple and relatively inexpensive procedures to methods that are quite complex, highly sophisticated and very expensive. Some of the techniques are quantitative while others are qualitative. Each of the technique is best in its own way depending upon its characteristics and usage.

Survey Of Consumers' Intention

Survey Of Consumers' intention is used to judge the level of confidence the consumer feels concerning the desirability. If consumers are hesitant about continuing their purchases of consumer durables like T.V. sets or semi-durables like clothing in future due to pessimistic expectations about the state of the economy (and indirectly the likelihood of their incomes remaining at high levels), it can be forecasted a fall in the demand for these products in future. For non-durable goods such as food, the consumer's purchases may be expected to continue at a relatively constant level regardless of the level of aggregate economic activity. Econometric methods, which are used for quantitative forecasts, depend on underlying stability of the relation between the major demand determinants and the quantity demanded.

Similarly, investor's intentions are highly dependent upon their expectations of aggregate activity in the future. Investors will feel more confident about investing if they expect total economic activity to remain high or increase from its present level since this has implications for the degree of idle capacity in the future.

Barometric Forecasting

Economic forecasters, especially in the U.S.A., have always tried to identify certain indicators of change in economic activity. Barometric forecasting is the prediction of turning points in one economic time series through the use of observations on other time series called barometers or indicators. As a general rule, barometric forecasting is largely based on composite and diffusion indexes. Not much reliance is placed on individual indicators, except when a firm needs information about expected changes in the market for certain specific goods and services.

Index Numbers

Composite indexes (indicators) are those that measure several aspects of business activity by covering a wide range of economic activity. The most outstanding of the indexes are industrial production, gross national product, and capacity utilization rate. They are weighted averages of several leading indicators. Large weights are given to those indicators which do the job of forecasting better than others.

Digging Deep

Predictability builds confidence and certainty in an economy. Individuals feel more optimistic. Their decisions become more efficient. Inaccurate forecasts, whether they underestimate or overestimate, incur additional costs. They lead the economy in a state of dilemma. Looking into the future involves uncertainty and risk and the fact that forecasts may be inaccurate creates a serious dilemma for policymakers.

Studies reveal the inability of forecasters to predict outcomes correctly and timely. Based on a sample of 63 industrial and developing countries, a study by Prakash Loungani at the *International Monetary Fund shows that private-sector forecasters were only able to predict two of the 60 recessions that occurred over the sample while the majority remained undetected.* A fundamental component of the global environment is uncertainty. Despite their poor track record, forecasters still play a vital role in the economy hence practice of forecasting can therefore not be relegated.

The World Economic Forecasting Model (WEFM) was developed for the UN Development Policy Analysis Division to analyze and forecast the global economy. It delivers predictable figures for the worldwide economy. World Economic Situation and Prospects (WESP) evolved from the original Project LINK program, which started in the 1960s and was linked together to individual country's macro-models from up to 80 prominent countries in order to create a joint global conjecture. The WEFM also makes alternative scenarios around the central forecast. For Examples the impact of the resurgence in the euro debt crisis; an acute change in global vitality costs; a stimulus in the finance coordinated among the largest economies; reallocation of European schemes; conventional and unconventional monetary policy shocks; and a slowdown in productivity. The adaptable model stage can be adjusted to address a wide range of policy questions and future predictions of the economy.

Conclusion

Economic forecasting is an essential tool for the proper functioning of the economy as a whole. The study of different economic indicators for economic forecasting include statistical data, both quantitative and qualitative analysis by the economic analyst. These studies help in the budget formation and furthermore plans for the year in case of government. Also, Forecasting helps the economy to prepare for any economic turmoil that can occur in the future. Hence it is important to foresee for effective decision making.

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SEEKING A CLEAR DAY: CARBON PRICING

SAMRIDHI SHARMA
1st year

For the greater good of humanity, an immediate step has to be taken to reverse the effect that humankind is having on Mother Earth.

Introduction

Carbon Pricing is an instrument that measures the external costs of greenhouse gas emissions. It's the cost that the public pays, like damage to the crops or rising sea levels, and brings them down to their source in the form of price on Carbon Dioxide emitted.

A price on Carbon helps in shifting the burden of damage from the GHGs (Greenhouse Gases) to the source - to the industries and households causing the emission and which can avoid it. The pricing, thus, signals the emitters to lower their emissions, or keep on emitting the same along while paying a price for it.

Putting up an apt price on these emissions plays a significant role in internalizing the external cost of climate change all around the globe to make better economic decisions and to set economic incentives for clean development.

Hence, the environmental goal is achieved in the most flexible and cost-saving manner.

Carbon Pricing Act 2018, Singapore

The Carbon Pricing Act, 2018 (Singapore) was executed from 1 January 2019. The act requires the reporting of, and the payment of tax concerns, greenhouse gas emissions, and to make consequential amendments to the Energy Conservation Act. This act is only applicable to the industrial sector and binds the Government too. The act in other forms has been prevalent in other nations (especially Europe) for a long time.

Following this, a few new terms were coined. These come under types of Carbon Pricing, and most widely used ones are aforementioned.

1) Carbon Tax, which is a form of pollution tax. It places a fee on the selling and buying of fossil fuels based on the quantity of Carbon produced by their combustion. It came into being for the sole purpose of slowly reducing and finally eliminating the use of fossil fuels that are destroying our planet. The gases it is currently levied on are namely- Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF_6).

2) Emissions Trading System (ETS), is a system where the emitters can trade emission units to meet their respective emission targets. Entities can either implement internal abatement measures or purchase emission units, choosing either one of them to achieve the end goal at least cost.

Economic Interpretation

Carbon pricing has been considered the most effective way to reduce carbon emissions by economists. The reason behind it is that it reduces emissions at the least cost, where these costs include the cost of efficiency measures, inconvenience, so on and so forth.

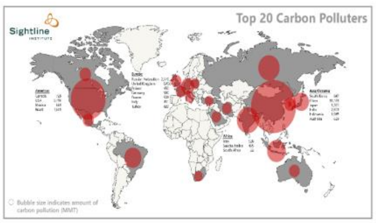
After extensively researching and analyzing data, economists have drawn three important conclusions.

First, same people end up paying under a tax or otherwise the cap will push the prices equally high.

Second, the emitters with the highest values are the only ones left emitting.

Third, the total value of emitters amounts to be greater than those under any other distribution of permits.

Countries With Carbon Pricing



Source: www.ideasforindia.in

We can see in the picture above, the number of countries affecting the pollution level all over the world and to curb the same a lot of measures are being taken but at a very slow rate per se. Carbon pricing has been a very effective method and so a lot of countries from 1997 to 2017 have brought in the concept.

The European Union Emissions Trading System has continued to price carbon for almost over a decade now, followed by US and Canada that have also been in the business for years. Since China joined the league in 2016, almost a quarter of the emissions worldwide now have a price tag leading to the boost of clean energy production.

Mechanism of Carbon Pricing

1) How high is the pricing?

It ranges from 1$ per ton to 168$ per ton, varying country to country. Sweden charges the maximum; this has resulted in a 13% drop in carbon emissions in the past decade.

2) What purpose does the revenue gain serve?

Most of the RGGI (Regional Greenhouse Gas Initiative) states spend money on local cost-effective carbon reduction. Nine of these RGGI states are set to add $8 billion to their economies by indulging in spending money on energy efficiencies.

Costa Rica, on the other hand, uses this money to pay landowners to plant more trees, thus, cutting out on more emission.

Thus, everyone has their own ideology behind spending this money.

India's Participation

India had introduced a Carbon Tax on coal in 2010. In the current scenario, it is INR 400/ton applied to coal. In the words of the then Finance minister, this money will help finance the National Clean Energy Fund (NCEF). Industries feared that such a heavy levy might lead to inflation, which has been looked after in the present day.

But the problem is that it was only levied on coal. In 2014, the emission of carbon was three times the emission in 1990, solely because most of the industries in India are dependent on fossil fuels.

To solve this problem, a few citizens have proposed the idea of introducing 'Right to Energy' programme, which till date is to be discussed.

Way Forward

In the words of the IPCC, "renewable energy subsidies are less efficient alternatives to carbon taxes and emissions trading for inducing mitigation".

For the greater good of humanity, an immediate step has to be taken to reverse the effect that humankind is having on Mother Earth.

Carbon Pricing has turned out to be an effective policy in the same manner. Countries that have executed it and are working towards saving the environment are flourishing more as they get revenue out of saving the planet and those that are yet to take steps, the only question that remains is, what are you waiting for?

Deciles	Per Capita						Household			Share of Expenses		
	Expenses (in USD)	Carbon Charge (in USD)	Electricity & Cooking (in USD)	Transport (in USD)	Energy Benefit (in USD)	Net Benefit (in USD)	Size	Energy Benefit (in USD)	Net Benefit (in USD)	Carbon Charge (in %)	Energy Benefit (in %)	Net Benefit (in %)
Potential												
1	137.1	20.3	34.9	17.9	52.8	32.5	6.5	343.2	211.2	14.8	38.5	23.7
2	182.8	24.7	36.0	17.9	53.9	29.2	6.3	339.6	184.0	13.5	29.5	16.0
3	215.8	28.6	37.8	17.9	55.7	27.1	6.0	334.2	162.5	13.3	25.8	12.5
4	246.7	31.5	38.4	17.9	56.3	24.9	5.9	332.4	146.9	12.7	22.8	10.1
5	282.2	35.2	39.1	17.9	57.0	21.8	5.8	330.6	126.3	12.5	20.2	7.7
6	324.1	40.0	41.2	17.9	59.1	19.2	5.5	325.3	105.4	12.3	18.2	5.9
7	378.1	45.6	42.8	17.9	60.7	15.1	5.3	321.7	80.0	12.1	16.1	4.0
8	456.1	53.5	0.0	17.9	17.9	-35.6	5.1	91.3	-181.6	11.7	3.9	-7.8
9	594.2	67.6	0.0	17.9	17.9	-49.7	4.8	85.9	-238.4	11.4	3.0	-8.4
10	1294.6	143.1	0.0	17.9	17.9	-125.2	4.2	75.2	-525.9	11.1	1.4	-9.7

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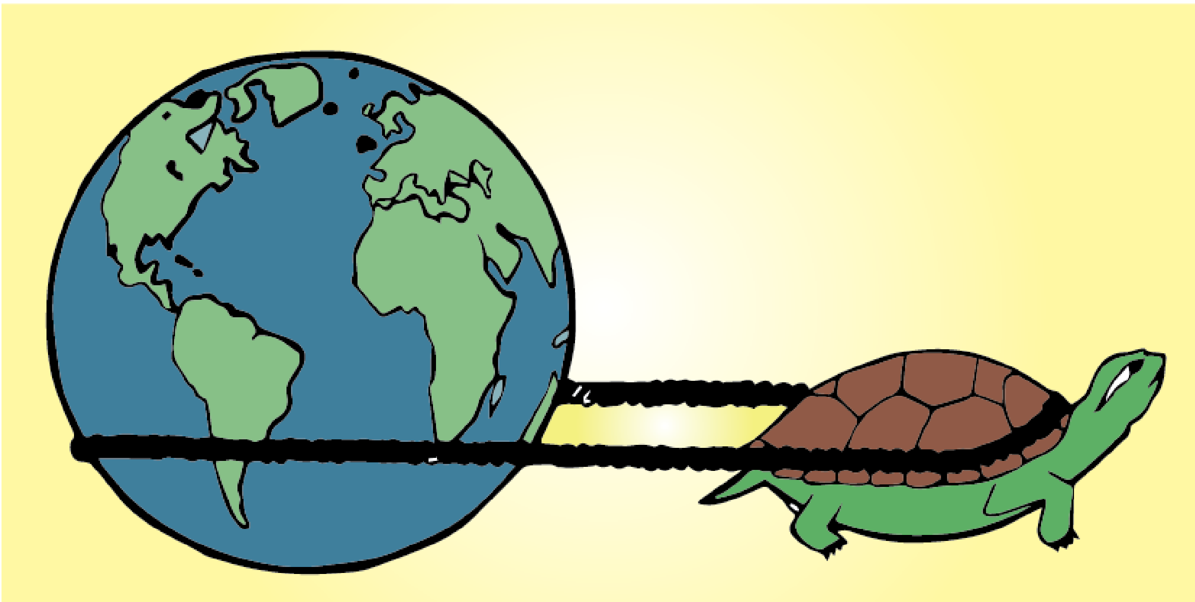
SLOWBALISATION: A REVERSE TO THE TRUDGE

SHREYA CHAURASIYA
2nd year

Are these actions simply 'golden-handshakes' for the nations' rich trade giants; or whether the trickle-down effect of these measures will actually positively impact the economy?



Introduction

"Slowbalisation" is a modern term coined since 2015 by a dutch trendwatcher Adjiedj Bakas. He describes it as a reaction against, or as a consequence of globalisation.

Aptly coined the term slowbalisation refers to a new pattern of world trade that is characterised by snail pace growth, a marked reduction in foreign direct investment abroad, unresolved trade disputes, geopolitical tensions, shrinking bank loans and a retreat, to protectionist policies.

It can be discerned in the examples of the United States and Britain, developed nations, that have been facing the brunt of globalisation in their economies.

Key Indicators of Slowbalisation

Shrinking cross-border investment, trade, bank loans, and supply chains, dropping shares of global profits of Multinational Companies (MNCs) - all these can be considered as indicators of Slowbalisation.

Also, Morgan Stanley says "Meanwhile, a growing reliance on leaner manufacturing approaches, changes in consumer preferences and increased purchasing power in emerging markets are emphasising regional trade over global trade, this all adds up to what some economists are calling 'slowbalization'."

Reasons

The US-China trade war is considered as the main root cause for Slowbalisation. Keeping the current tussle between the two nations in mind, it also seems as if history is retracing its steps. According to a Bloomberg Economics report, uncertainty over trade could lower world gross domestic product by 0.6 per cent in 2021 compared to a no-trade-war scenario, which translates to $585 billion shaved off the IMF's estimated world GDP of $97 trillion for that year. This economic effect is astronomical. It really is. But is it the only factor? Obviously not.

Records tell us that it was June 15, 2018, when Trump declared that the United States would impose a 25% tariff on $50 billion of Chinese exports. And we know of slowbalisation since 2015, so there must have been some other reasons too. Reports say that Foreign Direct Investment (FDI) tumbled from 3.5 percent of global GDP in 2007 to 1.3 percent in 2018. So maybe the global recession of 2008 can also be a reason for this phenomena of slowbalisation characterised by economic slowdown.

Analysing Slowdown in Economy

India’s real or inflation-adjusted gross domestic product (GDP) grew at 5 per cent in the June 2019 quarter of the financial year 2019-20 (Q1FY20), the slowest growth in six years (25 quarters). In nominal terms, the growth stood at 7.99 per cent, the lowest since December 2002.

There were visible signs of the economy decelerating in the first half of 2019. The crisis is seen as a deep structural issue rather than merely a short-run one.

Now, the government has to play a key role and understand the economic realities and avoid adventurism in policy making and implementation.

Further, the question arises whether India should be worried as the fear of a global recession spreads?

Multiple datasets released recently show that the Indian economy is facing a multi-year slowdown. Some indicators like nominal GDP (NGDP) are worse than 2008-09 levels when a US-triggered recession ultimately wiped out more than $2 trillion in terms of global economic growth potential. While India was well-cushioned to tackle recession in 2008, with strong foreign reserves and lower borrowings among corporates, the scenario has changed drastically in 2019 as several top companies are presently exposed to major crisis.

Loan default at Infrastructure Leasing and Financial Services (IL&FS) last year was the biggest jolt to the Non Banking Financial Institution Companies (NBFCs) sector, triggering an acute liquidity crunch.

Foreign investments, considered as a stabilising force that worked in India's favour during the 2008-09 recession, has also shrunk significantly in 2019.

What can be done is like 2008, the central government should focus on implementing a combination of stimulus packages and policy boosters, to stop growth paralysis.

India’s Finance Minister, Nirmala Sitharaman’s new policies of slashing corporate taxes, making credit favorable for big players and Prime Minister Modi’s urge to international companies to invest in India are the current moves that the government has taken forward, to combat the issues of an acute economic slowdown. Further, it remains to be seen whether these actions simply turn out to be ‘golden-handshakes’ with the nations’ rich trade giants; or whether the trickle-down effect of these measures actually positively impacts the economy by increasing employment and making manufacturing stable again.

What Global Commentators Say?

Global commentators are saying, again and again, that central bankers should be beware of the debt on their balance sheet; that they do not have the ability to come out with too many policy changes if global growth slows down to an extent that reviving it becomes a mountain-task.

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ECOCULATION: PLUMMETING CROPS

RIYA BANSAL
2nd year

Farmer's income has declined in real terms and real wages are stagnant to date.

India's agricultural sector accounts for 14% of the economy's GDP, providing a livelihood to 58% of people of the total population of 1.27 Billion people. Still, this sector remains the most neglected sector under the eyes of our Government.

Over the past few decades, manufacturing and service sectors are in the limelight and the contribution of the agri-sector to the GDP has declined 'by' almost an astonishing figure that is 50 per cent. Although the figures show that the total food grain production in India is in million tons but the fact is, India still accounts for a quarter of poor people of the whole world and around 190 million people who are still undernourished Almost 55% of the Indian arable land is still dependent upon the monsoons which is the biggest backdrop of the Indian agricultural sector.

The Crisis Are Decades Old- Causes

The crisis in the agricultural sector is deep-rooted and which is because of the accumulated ignored depression since the last decade. The plight of agricultural slow-down is widespread, wherein 2019 almost all the farming states are being affected including all segments of it too. Middlemen may have encountered the severe conditions of the agricultural sector on the night of November'30, 2018, but the condition continues to be like this for ages. Stating the facts, the growth rate decline is not because of the weather fluctuations but because of the ignorance of the sector by the Government.
Farmer's income has declined in real terms and real wages are stagnant to date. The cause lies in the hands of declining demand, an increase in inflationary pressures, and the collapse of agricultural prices, which leads to Trade Shifting from agriculture to the non- agricultural sector. For the first time in recent history, even rich farmers were on the streets protesting for having their prices increased.
The agitation has led to suicide amongst debt-ridden farmers and the rate of so has been increasing since the past five years.
The petroleum price increase in 2017 led to an increase in irrigation costs and fertilizer prices. All this together contributed to the squeeze in farmer's income since 2017 due to which growth is stagnant to date. As most of the trade-in agriculture is cash-based reform of demonetization came out to be a barbaric reform for farmers, who were already debt-ridden. *Along with demonetization the GST Bill worsened the situation and added to the woes of the non- farming sector, because of which the livestock economy witnessed a steep decline in the growth rate.*

Government's response

If we exclude the component of interest subsidy, the budget allocation to the agriculture sector under the Modi Government has declined to 8.7% per annum from 26% during UPA years.

Although the government has tried to put in efforts by the means of launching new programs like AGRI-UDAAN- The means to link agriculture with start-ups and investment objectives along with allowing 100 per cent FDI investment in marketing of food products and in food product e-commerce under the automatic route, but our Agri sector still lags behind due to poor implementation and lack evenly spread technologies.

What The Government Should Do?

The current crisis is a serious one. The precarious situation is an outcome of the neglect of the agrarian economy by successive governments. The origin of the crisis lies in the broader political economy paradigm which India has been following since the 1990s. Unfortunately, the solutions which were offered year after year are ambiguous and inadequate and have actually aggravated the problems, since then.

The latest whim of cash transfers is also a part of this broader political economy architecture that sees them as a panacea for all the complications in agriculture. Also, the situation worsened due to the sudden shocks of demonetization and the expeditious implementation of GST, which affected the rural economy adversely. Cash transfers are not a solution to any of these developments and it does not guarantee protection against unforeseen events, whether natural or policy-induced. They are certainly not a substitute for the structural reforms needed in agriculture, which the government is ignoring. The current crisis may have worsened due to the sharp fall in crop prices but it is ultimately a result of multiple failures of the government's policies. Further, it is a crisis that is as much agricultural as it is caused by the failure of the non-farm sector in creating enough jobs as is evident from the deceleration in real wages in rural areas. *What is needed- are larger investments in improving access to better technology, an extension of programs to enable farmers to take advantage of new technology, market infrastructure, storage, and warehousing infrastructure, and easy and assured supply of credit.* What the committees and experts recommend is that the Government should bring in the agricultural land leasing laws, should shift it to micro-irrigation techniques to improve efficiency of water use, improving access to quality seeds by engaging with the private sector, and along with it introduce a national agricultural market which would allow the trading of agricultural produce and products online.

Cash transfers absolve the government from all such obligations. Rather, by taking away precious fiscal resources, they make the farmers more vulnerable to both market- as well as non-market induced risks by reducing investments in basic infrastructure and other support gauges necessary to support agriculture. *Cash transfers and loan waivers may not be the solution to the agrarian crisis, but will surely create agriculture which is far more vulnerable and crisis-prone than even what it is currently.*

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TAXONOMY: ECONOMICS OF TAXATION IN INDIA

RIDHI JAIN
1st year

Taxes rarely stay the same, policymakers change rate of tax to balance the revenue.

Introduction

India features a well developed and an unceasingly evolving tax structure drawn from the Constitution that permits the Central and State Governments to levy taxes. The Central Board of Direct Taxes is the key player giving recommendation on policy and coming up with taxes and their assortment.

Taxes rarely stay the same, policymakers change rate of tax to balance the revenue. *Laffer curve states* that if tax rates are inflated on top of a minimum level, then tax revenues shall fall as higher tax rates make folks less willing to work. *It begins from the idea that if tax rates are terribly low – then the govt. gets zero revenue. Equally, if tax rates are terribly high – then the government would additionally get zero revenue – since there's no purpose in operating.* Thus the idea provides economic justification for the policy of cutting tax rates. However, economists disagree on the extent at that higher tax rates really cause disincentives to operate.

Types Of Taxes

There are two types of taxes that prevail; progressive tax and regressive tax.

The *progressive tax* imposes the next share rate of taxation on those with higher incomes. Progressive tax uses a marginal charge per unit such as when financial gain goes up the quantity of income paid as taxes rises. In countries like the U.S, a tax system is enforced, moneyed people pay tax at a higher rate than less rich people. That's why wealthy Americans are taxed over lower-middle-class Americans and that they are taxed over the working class of Americans.

On the other hand, a *regressive tax* is one where the tax is applied uniformly. It puts greater burden on low-income groups than on the higher-income folks.

Types Of Taxes In Indian Economy

There are various types of taxes imposed on the Indian economy such as income tax, service tax, corporate tax, GST etc.

Income Tax

It is the tax directly levied on personal income of an individual, firms, etc. Health and education cess of 4% of income are also added to the tax from 2018-19 onwards which was previously called education cess (3%). In the current fiscal year, the Central Board of Direct Taxes has been given the target to collect Rs 5.69 trillion in personal income tax that is 19.2 percent more than the Rs 4.77-crore collection in the previous year. As per budget estimates of 2019-20, out of the Rs,13.80 lakh crore direct taxes collected, the government aims to collect Rs.6.20 lakh crore from income tax.

GST

Considered to be the best tax reform that India has undergone since its independence, the Goods and Services Tax or *GST is termed as the 'one nation, one tax'*. This taxation is intended to supply uniformity to taxes levied on merchandise and services across India. GST replaces all alternative taxes levied by the state and central governments. products and services are taxed consistent with specific rates of 5%, 12%, 18% or 28%, whereas some are classified as exempt. GST collection has dropped from the Rs 1 lakh crore mark to Rs. 91916 crore in September 2019. Reports show 2.67% decline in revenue as compared to September 2018,

Corporate Tax

It is a tax levied on Companies under the Income Tax Act, 1961. This tax is solely levied on the profit earned in India. A surcharge is additionally levied on firms looking on their profits and revenues. As per budget estimates is 2019-20, the government aims to collect Rs. 7.60 lakh crore from corporate tax. However, *the government has made a bold attempt to cut tax rates to 22% from 30% and even lower (about 15%) for the new manufacturing companies.* It is expected that a lower rate shall make large Indian companies much more competitive and they will be left with extra cash for investments. Lower capital gains shall attract individuals to invest in the stock market, to balance the outflow. With the controversy raging over structural reform in the Indian economy, a tax rate cut would help corporates improve their valuations in the medium term.

The agricultural income in India is exempted from taxes as per section 10(1) of the Income Tax Act,1961. agriculture, being a state subject, the central government cannot impose any tax, however, the state government can impose agriculture income tax on farmers having net agricultural income greater than Rs 5000 during the year.

Service sector tax revenue has inflated considerably from Rs 410 crores in 1994-95, to over Rs 97509 crores in 2017-18 that shows quantum jump within the range of services taxed and tax assesses. However, it's found that “business and land services” has replaced “communication and insurance services” as major government revenue earners in recent years.

Revenue Authorities

1. CBDT: Central Board of Direct Taxes provides inputs for policy and planning of direct taxation in India. It is also responsible for administration of direct tax laws through the Income Tax Department.

2. CBEC: Central Board of Excise and Custom duty is the nodal agency responsible for implementing customs, central excise duty and service tax in India.

3. CBIC: Under the GST regime CBEC has been renamed as CBIC (Central Board of Indirect Taxes and Customs). This body would supervise the work of its field and would assist the government in policy formation regarding GST, customs and central excise levis.

Conclusion

Indian taxation has undergone various changes and transformations over the years. There has been a consistent effort to standardize tax rates with simple governing laws enabling common people to understand the same.

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1. Yuan Pay Now or Later? : Chinese Slowdown
2. How Economist see Brexit?
3. Bur(n)dened by Fire: Economic Impacts of Amazon Fire
4. On Fence with Immigration

YUAN PAY NOW OR LATER?: CHINESE SLOWDOWN

MITALI MALANI
2nd year

Though China is such a major economic power, the economy seems to have developed cracks with signs of weakening growth amidst a background of intense trade wars with the United States, particularly in the past few months.

China, officially known as the People's Republic of China, is the most populous country and fourth largest country by total area. China's economy has grown steadily since the introduction of economic reforms in 1978 after they sustained a shift from centrally planned economy to a socialist market economy. The journey from rise of a poor developing country to a major economic power is worth taking note of. According to the report by the International Monetary Fund, China is the world's second largest economy by nominal GDP and the world's largest economy by purchasing power parity. China tops the list of world's exporters while it is also the second largest importer of goods. The share of GDP from service sector is highest followed by industrial and agricultural sector respectively.

Though China is such a major economic power, the economy seems to have developed cracks with signs of weakening growth amidst a background of intense trade wars with the United States, particularly in the past few months. China's economic growth has slumped to its lowest level; gross domestic product dropped to 6.2% in the second quarter. China's industrial production is growing at its lowest rate since February 2002. The Purchasing Managers Index (PMI) has fallen below 50- for some firms, capacity utilisation is at 40-50%. The total exports have fallen to US $221.25 billion.

China's imports have declined in an unprecedented trend in a country that used to enjoy huge trade growth.

The retail sales have shrunk as well with a much lower consumer spending than before. This implies that demand is weak by both producers as well as individual consumers. According to a report by the National Bureau of Statistics (NBS), the fixed asset investment was down by 5.8% in the January-June period. China has been struggling for years to rein in high levels of debt worth $40 trillion, as of March 2019. China's overall debt now accounts for about 15% of the global total debt. The consumer's inflation has risen. The stock markets are under pressure and performing poorly affecting the earnings of companies. The downward pressure on the economy has also made the employment situation is particularly grim. Huge recruiting companies like Alibaba is scaling back its recruitment programs and organisations like Tencent will lay about 6000 of its staff.

The slowdown in China's production and trade exchange coincided with the breakout of the US-China tariff wars into H2 2018. The US had progressively implemented tariffs on $250 billion worth of Chinese imports by the end of 2018. Across the globe, new orders from euro area, U.K. and Japan had evidently been on a downtrend, affecting production further. The high debt to gross domestic product ratio is another reason that has invoked a slowdown in China. *China's continuous efforts to shift its economy from one focused on manufacturing to one being driven by technology and services have also contributed to the slowdown;* Beijing has been cutting excess capacity in heavy industries such as steel, cement, and shipbuilding, while encouraging domestic firms to shift to higher value-added areas. A rapidly ageing population and a falling birth rate has reduced the working age population in China. The decline in growth rates owes in part to this demographic winnowing. Another reason is rising wages in China that now match or exceed those of most of the other emerging economies making it a less attractive option for foreign companies. China was once dependent on a trade surplus to boost its growth, but today the country's account is effectively balanced. Investment in fixed assets, such as machinery, factories, offices, and buildings, was once a major source of growth. But this investment fell as a share of GDP from 82% in 2016 to 71% in 2018, and a further drop is expected in the years to come, as one in every four apartments in China are not occupied and auto manufacturers are operating at just over half of their capacity.

The government and Central Bank of China are taking steps to give the country's slowing economy a jolt. China's Central Bank injected $126 billion into the financial system. The People's Bank of China would cut its reserve requirement ratio by 0.5-1 percentage points. Beijing has been trying to reduce the dependence of China on debt for growth, spur consumption and improve the ability of private companies to obtain finance. China is committed to take measures to accelerate American's imports and investments to meet US' demand of bringing down USD 375 billion trade deficit between the two countries. Additionally, China has reduced some import duties. In addition, policymakers have also fast-tracked construction projects and cut taxes to spur demand instantly. Moreover, China has devaluated yuan to make Chinese products more competitive in the global market.

The effect of the slowdown of the Chinese economy is not only limited to China, but rather across the globe. The IMF has projected the global growth at 3.5% in 2019 and 3.6% in 2020 but argues that a cyclical slowdown in China will act as a drag for much of the global economy. China is the dominant buyer of various commodities, so a noteworthy drop in demand is likely to cause lower prices for commodities such as copper and oil which in turn could lead to reduction of cost-push inflationary pressures in several countries.

In countries dependent on commodity exports like, Brazil, Australia, Indonesia and Canada the economic slowdown in China could have a negative impact on GDP growth of these countries as and when the demand slows.

However, the inevitable fall in commodity prices could be beneficial for other countries that consume their commodities, such as the United States and countries across Europe. This decline is clearly visible in global share markets as slower growth and demand continuously hurts corporate profits of various companies.

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HOW ECONOMISTS SEE BREXIT

ANUSHKA SHARMA
2nd year

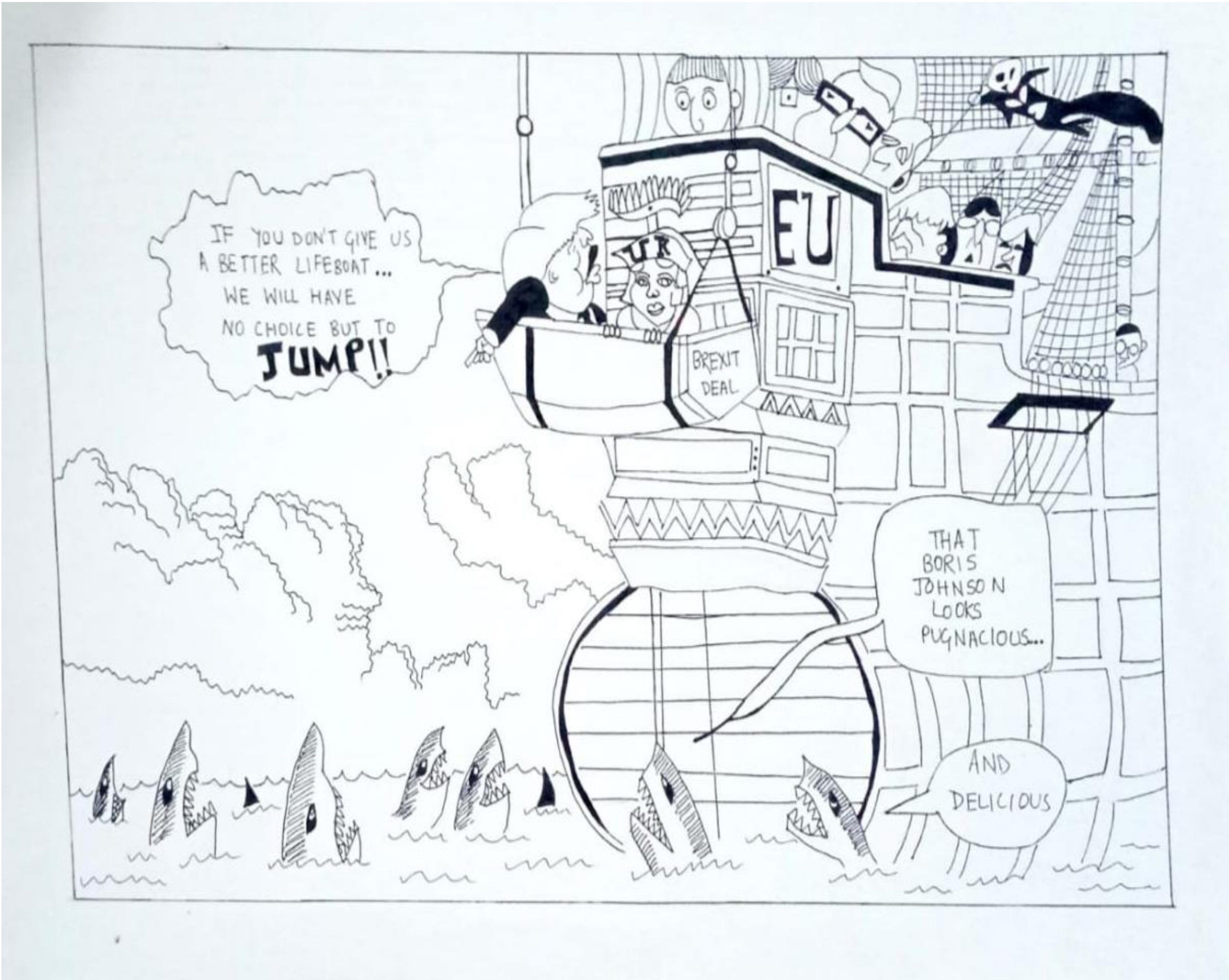
None of the estimates given by any economist will be precise. But they do allow us to see what's important, enabling us to ask ourselves difficult questions regarding the true nature of the Brexit that we actually want.

From the past 3 years, we've seen the word "BREXIT" multiple times, highlighted in newspapers, magazines and TVs. One can only imagine the number of times it's mentioned on a daily basis. It's like the new stirring topic of late, and one can't help but ponder on what it means and what impact it can have to have become so hyped!

On June 23rd, 2016, the U.K. voted on a referendum to leave the European Union (EU). Britain's exit from the EU is coined as Brexit, picked up from the term "Grexit" (Greece's Exit). The EU is a political and economic union of 28-member states that are located primarily in Europe. U.K. joined the union on 1st January in 1973 along with Denmark and The Republic of Ireland. Leaving the EU started out as a campaign in 2015 by a faction of British politics- VOTE LEAVE. But these are plain statements; what really concerns the U.K. is the impact of this exit on their economy. It's a safe assumption to make that a majority of economists consider that it will make the U.K. poorer. Remaining argue that leaving the EU will impoverish the nation, while supporters of Brexit find the reports hysterical. As Paul Krugman, the Nobel Prize-winning economist observed- "Productivity isn't everything but in the long run, it is almost everything. A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker." Productivity in the UK has been sluggish since the financial crisis, and the most recent data shows that it decreased by 0.2 per cent between January and March compared with the same quarter in the previous year.

Immediate Effects:

The effects after the referendum is a clear reason for the pessimism economists hold towards Brexit. According to one study, the referendum result had pushed up the U.K. inflation by 1.7 percentage points in 2017, leading to an annual cost of £404 for an average British household. Studies published in 2018 estimate that economic costs of the Brexit vote were 2% to 2.5% of GDP. According to a December 2017 Financial Times' analysis, the Brexit referendum result conclusively reduced national British income by 0.6% to 1.3%. A 2018 analysis by Stanford University and Nottingham University economists estimated that uncertainty around Brexit reduced investment by businesses by approximately 6 percentage points and caused an employment reduction by 1.5 percentage points. A number of studies found that Brexit induced uncertainty about the UK's future trade policy reduced British international trade from June 2016 onwards. A 2019 analysis found that British firms substantially increased offshoring to the European Union after the Brexit referendum, whereas European firms reduced new investments in the UK. *Last year, the Bank of England predicted that there will be a recession immediately after the exit.* However, the immediate effects are not considered of much value in economics, it's usually assumed that the economy will recover in the long run. The question that arises as a phoenix here is, "will it?".



Indian Economy:

UK has been India's most significant trading partner on account of U.K. being a part of the EU. With Britain exiting the European Union, it is likely that many Indian companies with a base in the UK may not enjoy the same free access to Europe as it did until now. This means they may face higher logistic costs and customs duties and other regulations. The so-called "No Deal" scenario, wherein Britain trades with the world on the basis of WTO is where the controversy in located. It is likely to cause disruption in the operations and may also cost several jobs. Jaguar Land Rover plc, owned by Tata Motors ltd. plans to eliminate 4,500 jobs in response to the sales slowdown caused by Brexit. Indian companies would need to recalibrate European operations. There would also be a need to negotiate a free trade deal with the UK as it proposes to retain the same goods and services schedules post Brexit.

Long Term Situation:

Will the economy be rejuvenated following the eventual certainty of Brexit? The answer of an overwhelming number of economists is negative. It has achieved the “nigh-on-impossible” of uniting economists, a group that, according to the Irish playwright George Bernard Shaw, quotes if they “were laid end to end, they’d never reach a conclusion."

The major area hindered by Brexit will remain trade situation of the U.K. With Britain's biggest trading partner being EU, any changes raise huge trade barriers.

The second area of distress will result to be labour markets since they hugely discourage immigration which subsequently lead to a series of depressed tax revenues, hampered innovations and so on. Moreover, the international markets would really want to be inside the single European markets which will be followed by a reduced FDI in Britain. Some substantial, and other superficial changes have been signaled by the Johnson Govt. The latter includes "free ports"; the substantial element to Johnson's policy is masqueraded as "boosterism" but it is a Keynesian fiscal boost intended to counteract the negative shock of Brexit. But in order to be effective, an expansionary policy needs to be carefully and strategically implemented; it is not simply about *shaking the "magic money tree".* The closest result to the government policy is that U.K. will be 4% worse off than today in the next 15 years following Brexit. As it stands at a 4% loss, it roughly misses out on 3 years of normal growth over 15 years.

Concluding, should one trust and believe all these numbers and models? Trust- yes. Since, these haven't been modified to give certain answers. But believe- no. None of the estimates given by any economist will be precise. But they do allow us to see what's important, enabling us to ask ourselves difficult questions regarding the true nature of Brexit that we actually want, with the biggest over looming question being: IS BREXIT REALLY WORTH THE PAIN?

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ECONOMICS OF AMAZON RAINFOREST FIRE

DISHA
2nd year

Irrespective of the cause, we really have no time to sit back, relax and let nature take its course. We as an individual can do a lot to save this devastation and to prevent further deforestation.

Overview

Record breaking fires are ripping through Amazon -an ecosystem on which the whole world depends. There has been an unprecedented number of fires raged in Brazil (2019) intensifying in August. Amazon forest covers 2.1 million square miles. More than half of those fires are taking place in the amazon. Some 20% of the planet's oxygen is generated by Amazon rainforest. The ecological and economic devastation is imminent. Studies show that 2.2 million square mile rainforest in the amazon is nearly a tipping point, at which large fragmented portion of the rainforest could transform into an entirely different, drier ecosystem, leading to the acceleration of climate change, loss of countless species and disaster for indigenous populations that call the tropical rainforest home. According to reports around 40,000 blazes were recently burning and already a quarter of the rainforest the size of Texas-is gone. French President Emmanuel Macron called it an "*international crisis"*. Apart from environmental losses this fire also affected the economy of various countries. Let us see how:

US-China Trade War

The number of fires increased to more than 80% this year as the US trade war with China peaked. The day when the fire was caught China declared that it would no longer buy US agricultural products. China imposed 25% tariffs on the US soy and corn import which eventually led to the fall of soy imports from the US. This is part of a long term development that has seen China invest in production capacity in central and south America to shift it's soy dependence away from US. As a result, Brazil has become the top exporter of soybeans to China, which in turn is fuelling deforestation in Brazil. The soybean farming industry is moving out of the US and into Brazil. It would be prudent to start considering moving their investment away from

any company in the US involved with soy. The reason is that the manufacturing and consumption markets are no longer anywhere near the US. Unless these companies end up expanding to Brazil, they are not going to be seeing any profit from the markets.

Change In Preference

Another aspect with the Amazon fire is that beyond farming issues, the attitude of people towardS climate change. While the indigenous people burning the forest to free up land for farming, the international community is ramping up their speech. They are showing further support for renewable technologies which is a good initiative for a world facing such environmental crises.

Demand For Companies Dealing With Renewable Technologies

Another thing that took place in the market is the growth of the shared values of companies that are involved with industries for renewable technologies. The forest fires have underlined the importance of action. People are going to view this action as purchasing goods that are related to renewable technologies. This means looking at companies that deal with solar and wind energy.

Experts estimate 25% of the pharmaceutical drugs sold in the US are derived from 40 Amazon plants while 40% of all drugs sold are extracted from flora in the forests (particularly drugs like aspirin, heart medication and cancer treatment).

Overall Economic Cost And Cost Of Saving

A study by the science journal Nature suggests the economic benefit of leaving the Amazon rainforest in its current state (in the state of no deforestation and no fire) would be $8.2 bn a year. Deforestation of the Amazon would lead to a fall in rainwater and agricultural losses of $422 m and other social and economic losses that could result in a loss as much as $3.5 trillion over a 30-year period. The cost of saving the Amazon would be $64 bn and that could help restore the landscape and change agricultural practices.

The other side of the theory is that studies suggest that the area that has already been cleared in the Amazon. The vast majority of the land is not currently under any economically viable, productive use. In fact the majority of it is in very extensive of low productivity cattle pasture often making a loss economically and also a huge area of it has been abandoned.
As Amazon fires become global crises Brazil's president took several measures :

- He took the step of mobilizing the armed forces to help contain blazes of a scale not seen in nearly a decade.
- He also said that the government would take a “zero tolerance” approach to environmental crimes.
- He also assures that Brazilians in the Amazon regions must be provided with broader opportunities to make a decent living.
- He address Amazon rainforest as his profound love and respect.

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IMPACT OF IMMIGRATION ON ECONOMY

LIPI CHAWLA
2nd year

"But while an immigrant may "take" one job from an American worker directly, they also "create" one job for American workers

The impact of immigration on the economy is quite the opposite of the counter-intuitive mindset many politicians try to seep into the public today. The impact of immigration on economies is positive not only in terms of employment and job creation but also in terms of GDP and a larger supply of jobs across the country people immigrate into.

In economic terms, allowing outsiders to work for you or be employed by you is identical to removing trade barriers within your country. It allows greater specialization—the principle of comparative advantage—and hence greater overall efficiency. So what is the impact if a country reduces barriers to trade or migration? While the impact is more often than not positive, there will be consequences in terms of distribution. GDP per capita will increase, but some individuals and households will suffer a loss, at least in the short run. In particular, it will hurt those working in sectors where the country does not have a comparative advantage against others, while hurting those working in direct competition with immigrant workers. The obvious positives of immigration are likely to be for immigrants—since they are taking advantage of the opportunity to move believing that they will be better off (economically or otherwise) in a more developed country.

Economists often try to justify immigration for developed countries by the "lump of labour fallacy"—the proposition that exist only a certain number of jobs, so if an immigrant to the United States takes one, then an American must lose out. But while an immigrant may "take" one job from an American worker directly, they also "create" one job for American workers and this is what this article will focus on. Wages for American workers in this scenario may rise or fall. Hence, the only way to concretise what immigration does to jobs and wages is to look at the statistics.

A famous case study on this in the developed world comes from David Card's 1990 study of the Mariel boatlift. The 1980 movement of Cuban refugees to the United States represented a huge "supply shock" of mostly low-skilled immigrants into Florida's labour market. Card surprisingly found that the impact on native wages was minimal. This result was so controversial that economists are still arguing about it, almost 30 years after it was established. More broadly, a large segment of further research, both in the United States and otherwise, largely supports Card's conclusions (reviewed, for example, in a 2011 NBER working paper by economists Sari Pekkala Kerr and William R. Kerr). The consensus is that negative impacts of migration for native workers in developed countries are, if at all, relatively small and short-lived- the logical corollary being, if you're worried about jobs and wages of low-skilled workers, restricting immigration isn't the place to start. In 1965, the United States abruptly ended the "bracero" program, which allowed Mexican workers to come into the country for seasonal agricultural work; the reasoning being cutting off access to cheap foreign workers would improve employment prospects and push up wages for Americans. But that didn't happen—instead farmers simply reduced the number of workers they employed by switching crops or investing in new, more expensive technology.

Newer studies have led to considerable evidence showing immigration is linked with increased innovation i.e., immigrants are more likely to register patents leading to an increase in patent *activity on the part of natives; there are several mechanisms by which migration could increase productivity.*

Immigrants' skills may complement those of natives, improving the functioning of the economy across the board. For example, it appears that low-skilled migration increased the labour force participation of highly skilled native women, presumably because the migrants performed services (childcare, domestic labour etc.) that allowed women who would otherwise have stayed at home.

RA 2016 analysis by researchers at the International Monetary Fund found that a 1% increase in the migrant share of the adult population results in an increase in GDP per capita and productivity of approximately 2%.

It is, however, given that immigrants are not homogeneous—who they are, where they are from, and what skills they have matter. Often unnoticed, empirical evidence shows circumstances wherein unskilled immigration is also positive—because it fills specific gaps in the labour market enabling the economy overall to function more efficiently. The reasons for these divergences are complex and varied, ranging from the cultural and religious backgrounds of immigrants, to racial and religious discrimination and exclusion, to the different labour market institutions of different countries. To fully optimise this, policies must ensure that they integrate successfully, both economically and socially.

There are legitimate concerns about the impact on developing countries if a significant proportion of the highly skilled or highly educated segments leaves—the so-called "brain drain". Losing qualified individuals, particularly if they've been educated at state expense, isn't likely to be helpful for developing countries. But there are also opposing impacts that may be more positive. Remittances from family members who have emigrated are an important source of income in many countries. Emigration, sometimes combined with return migration, can over time lead to networks that show increases in trade. The current idea is that while there may be specific concerns, overall the evidence doesn't suggest that emigration is bad for development (as seen in Clemens' 2015 Journal of Economic Perspectives paper).

Focusing on India, as of 2015 about 5.2 million immigrants reside in India, making it the 12th-largest immigrant population worldwide. The overwhelming majority of India's immigrants are from neighbouring countries such as Bangladesh, Pakistan, Nepal and Sri Lanka. Around $69 billion was sent by Indian migrants to family and friends in India in 2015, amounting to approximately 3% of the country's gross domestic product, as stated by the World Bank estimates. Most money comes from Indians living in Persian Gulf countries as well as the U.S., the UK and Canada. India has been the world's top recipient of migrant remittances since 2008, when it overtook China on this measure.

In 2005, the United Nations reported that there were almost 191 million international immigrants worldwide, which accounted for about 3% of the world population. This showed an increase in the number of immigrants by about 26 million since 1990. It is estimated that 60% of the immigrants moved to developed countries.

Moreover, it is predicted that immigration rates will continue to increase over time. Primarily, immigrants choose to leave their home country in order to improve quality of life. Economic reasons include finding higher wage rates, better employment opportunities, a higher standard of living, and educational opportunities. It is also common for immigrants to leave their home country to escape poverty, religious persecution, oppression, ethnic cleansing, wars, or a political structure such as repressive dictatorships.

No matter the reasoning, success in a new country is never guaranteed, but many immigrants are willing to take risks for the possibility of a better future for themselves.

One of the initial challenges faced by immigrants is the cost of immigrating. Many immigrants are seeking better economic conditions in a new country, so the cost of moving can be substantial. It is common for immigrants to liquidate their assets, often at a substantial loss, to be able to afford to move. During immigration, many individuals are without work and must find work once they get settled.

The majority of challenges associated with immigration deal with assimilating into life in the host country. Many immigrants take low wage jobs until they can adjust to society, gain housing, and obtain an education. Immigrants must learn a new way of life and become familiar with the language and laws of the host country. While many immigrants leave their home country to escape persecution, it is possible that they could face discrimination or racism in the host country, making it harder to find employment at higher levels, or more prestigious professions.

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HOME FRONT

1. Did You Check Your Post Box
2. A Law That Make Cents: The Fugitive Economic Offenders 2018
3. RBI’s Windfall: Tracing the 1.76 Lakh Crores

DID YOU CHECK YOUR POST BOX?

SHREYA NAUTIYAL
2nd year

Acts like the ultimate access for the masses serves with door-to-door connectivity and carries the faith of millions of people

Retrenchment. Ultimate Access. Last Mile Connectivity. These words describe the Indian Postal System in a nutshell.
Millennials today find it hard to realize the importance of Postal Services Indians enjoyed over the past few decades. *The Indian Postal Service has to contend with the fact that the focus today is shifting more towards the notion of Digital India.* People are confining themselves more towards the growing technology and keeping pace with the tech-savvy world. They fail to understand the importance of a postmaster who is entrusted with the task of delivering the posts and is well aware of the local landscape of every nook and cranny of his allotted area.
India Post is considered to have the largest network in the world consisting of around 1,54,965 Post Offices across the nation. The network has registered a seven-fold growth since Independence, with the focus of this expansion primarily in rural areas. Nonetheless, we cannot overlook the fact that the Indian Post is a non-profitable industry, covering only 15% of its costs establishing the fact that its expenses grow as its revenues grow.

Challenges Faced As A Result Of Barriers To Efficiency

With the growth of post offices throughout the country, the postal services tend to lack the mechanized handling of mails, especially in rural and backward areas. Tackling the masses is not an easy task for the India Post, especially when it comes to tracking the courier. With the growth of private courier companies, people have resorted to other means of direct mails rather than sticking to the traditional means of posts. With no proofs available at the time of delivery, people have lost their faith in the Indian Postal System. Majority of people rely more on the private courier services, where there are fewer chances of pilferages. The obstinate bureaucracy and inefficiency of the government make it inexorable for the Postal Services to function effectively. Moreover, people have now started to rebel against the anachronistic approach of the Indian Post with the growth of private foreign companies.

Role In The Indian Economy

No matter how many problems the Government face, still it has made some much impactful efforts in the Postal Industry. With the commencement of Speed Post, the Indian Post is trying to restrict its competition and trying to create its own space which had been steadily eroded by the local and foreign courier services. Precisely, in its juggernaut fashion, India Post tried to use the law to enforce a monopoly on items weighing below 300 grams. However, with the failure of this idea, the Government instead tried to enforce a minimum selling price up to certain package weight. It has also made efforts to limit foreign direct investment in the express industry to 49%.
In the present scenario, India Post acts as a “commercial” department of the Indian Government acting as its integral part with a significant revenue portfolio. As a result of incurring deficits year after year, it has to look up to other financial institutions for the sanction of its funds with no financial autonomy of its own. You might think that even after being a loss statement for the government, why does it still exist? Here, the answer lies in the fact that India Post is still categorized as “commercial”. Moreover, the pension liabilities of the employees is also added to its impending costs.
However, the fact that the IP has been overly

successful in the Financial Service Sector cannot be ignored. The Post Office Savings Bank is trying its hand to improve its consumer satisfaction level and upgrade its low lying standards.

Nonetheless, our honorable Prime Minister Narendra Modi launched the India Post Payments Bank (IPBP), a financial service provider which operates under the country's age-old postal department. The primary motive behind this rationale is to help in raising the Government's standard and help achieve its goal of financial inclusion with the provision of savings, remittance, and payment services to the rural and unorganized sectors of the Indian Economy. This will not only reinvigorate the Indian Postal System but will also help in the sustainable development of India.

Role Of India Post In Financial Inclusion

With a great deal of illiteracy among the masses and the vast span of the country with its growing population, it is important for people to be financially literate and independent. People need to be well aware of the Government's policies and the financial products in the market in order to understand the pros and cons of investing their hard-earned money into these products. Multiple initiatives have been undertaken in order to tackle the problem of giving the unbanked people access to financial services. Thus the existing extensive network of post offices is targeted by utilizing it as an alternative banking solution for the unbanked people.

However, with the rise of the inefficiency of Government employees, lack of coordination among them, slow progress in innovation and whatnot, the Government is still trying its best to raise living standards of people in collaboration with the Indian Post.

Way Forward

Indian Post needs to accelerate its pace of change if and only if it wishes to become one of the world's leading posts. To put the 165-year-old postal service on more solid footing, the Indian Postal Service is reforming as in the case of developing countries and doing its bit. No doubt IP is a vast infrastructure of the government which cannot be abandoned in any case. After all, it acts like the "ultimate access" for the masses, serves with door-to-door connectivity and carries the faith of millions of people, looking forward to its upliftment.

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A LAW THAT MAKES CENTS: THE FUGITIVE ECONOMIC OFFENDERS BILL 2018

SHREYA AHUJA
2nd year

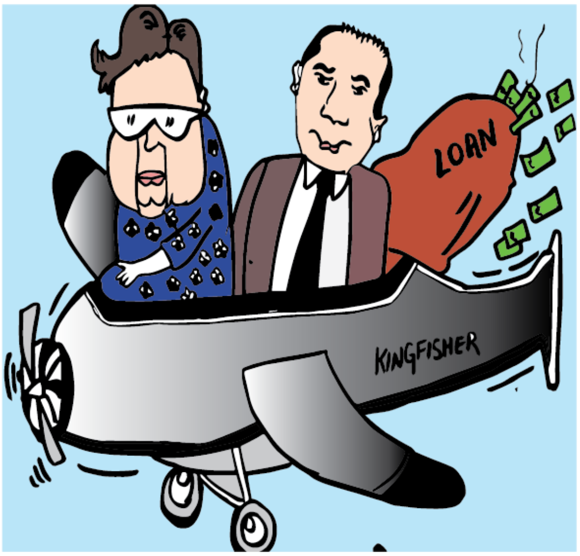
The question that arises is that why the public-sector banks gave mammoth amounts of funds in the absence of sound financial position in spite of KFA incurring losses since day 1 of its operations.

"Failures are finger posts on the road to achievement"– it is hard to believe in these illuminating words of C.S. Lewis when it comes to the failure regarding execution of Indian Laws. The government of India passed THE FUGITIVE ECONOMIC OFFENDERS ACT 2018 on 25th July 2018, enabling the government to confiscate and in turn auction the property and other assets of those economic offenders who cheated the country of more than INR 100 crores and above all evade prosecution by avoiding the jurisdiction of Indian courts. This act is supplementary to THE PREVENTION OF MONEY LAUNDERING ACT 2002 which seeks to confiscate the property derived from money laundering.

The ground level reality however highlights the inefficiency of these laws. India has an extradition treaty with a mere 39 countries and extradition arrangement with 10, leading to 146 countries providing hotspots to these fugitives. They abscond to these countries and wait for time-consuming cumbersome formalities, negotiations and deliberations to take place for their trials.

The 2 most flamboyant cases which stand at the apostle of crime are- the ex-chairman of United Breweries and Chief Executing Officer of Kingfisher Airlines –Vijay Malaya and the jewelry designer, merchant and promoter of companies Firestar Diamond Inc., A. Jaffe Inc. A conglomerate of seventeen banks approached the apex court in March 2016 in order to prevent "The King of Good Times" from fleeing the country but the extremely shrewd fugitive had already absconded to the U.K. on grounds of wishing to live with his children. The Indian banks including SBI, PNB, IDBI, BOI, Axis Bank along with 12 others had granted Malaya a loan of INR 9,000 crores (US$1.3 billion) inclusive of taxes. It has been alleged that he had used these funds for acquisition and for possessing stake in 40 companies around the globe. His escape was followed by ED filing a money laundering case against him in the wake of the fact that he had used funds for equity investment that had been imparted to him for his airlines. This was followed by the issue of non – bailable warrant for issuing dishonored cheque of INR 50 Lakh. Taking every incident into account, on 13th June 2016, Malaya had been declared a "proclaimed offender" under PMLA. However, his trail of sins did not end in India. On 3rd October 2017, Malaya was arrested in London for a money laundering case and later released on bail. Prior to that, in April 2017, he had been arrested by UK metropolitan police on behalf of Indian Authorities. Despite that, he failed to appear in Indian court after being summoned several times; the apex court charged him for contempt of court. On December 10, 2018, he was placed in The Westminster Court, London, where his lawyer emphasized upon the fact that the condition in Arthur Jail, Bombay where he was supposed to be jailed, were inhuman and unfit for the extravagant entrepreneur.

He himself rubbished and ridiculed all the allegations while addressing the media and told that he had himself requested the Hyderabad Court to auction his INR 14000 crore worth assets and repay all the liabilities. He later tweeted "The Prime Minister's last speech in the Parliament was brought to my attention. He certainly is a very eloquent speaker. I noticed



that he referred to an unnamed person who "ran away" with 9000 crores. Given the media narrative I can only infer that reference is to me." The GOI has only recovered INR 963 crores till date.

The question that arises is that why the public-sector banks gave mammoth amounts of funds in the absence of sound financial position in spite of KFA incurring losses since day 1 of its operations. Why did banks help private airlines to recapitalize without any credibility? The self-proclaimed "King of Good Times" was a member of the Rajya Sabha- the Upper House of The Indian Parliament from Janata Dal that was a constituent of UPA (United Progressive Alliance). Was there any political pressure being imposed upon on the banks and why Malaya's escape was so well timed are questions that remain till date.

The next absconder on the list is Nirav Modi. He is at the epitome in this scenario, surpassing the king of fraud Vijay Malaya himself. He has been accused of embezzling INR 11,000 crores in accomplice with his maternal uncle Mehul Choski, promoter of Gitanjali Jewels. With the assistance of two Junior Level bank officials of The Punjab National Bank, Nirav Modi obtained a LOU (Letter of Undertaking) amounting to INR 11,300 crores for his conglomerate of 6 companies including Gitanjali Jewels, promoted by Mehul Choski. A sum total of 150 undertakings were given over a period of 6 years. It should not be taken as an act of lethargy or recklessness owing to the charisma enjoyed by the extravagant merchant. The fraudulent LOU's were not channeled through CBS (core banking system). The CBS ensures that the customer of the home branch of a bank becomes a customer of the bank. It updates a customer's transactions in real-time in the central database of the bank. Not using the CBS route allowed these LOU's to be issued without the knowledge of the supreme bank authorities. This scam came into light when one of the LOU matured making Punjab National Bank liable to pay the principal amount. Following the footsteps of Vijay Malaya, Nirav Modi has also been booked by foreign courts.

Los Angeles' based entrepreneur Paul Alfonse filed a lawsuit in the Los Angeles Court against two companies, namely Firestar Diamond Inc. and Jaffe Inc., for duping him of US$ 4.2 million by selling him lab-made diamond rings for an order for customized engagement rings. He is currently being looked for by investigation agencies like CBI, INTERPOL and ED in charges related to cheating, money laundering, embezzlement, breach of contract etc.

Amongst the most prominent economic swindlers are Jaitin Mehta, Chetan Jayantilal Sandesara, Nitin Jayantilal Sandesara, Ashish Jobanputra, Ami Modi, Neeshal Modi, Lalit Modi besides 27 others . They collectively owe a summation of INR 40.000 crores.

What is most heinous to observe is that most of these offenders could not have duped the country if they were not backed by some public institution. These offences cause detrimental pressure on the exchequer. The interim finance minister Mr. Piyush Goyal on one hand talked about 'Regulation, Recognition, Resolution, Recapitalisation' of the public sector banks, while on the other the government lays an outlay to infuse 211 crores in public sector banks, merging Vijaya Bank, Bank of Baroda and Dena Bank to pool their financial resources to establish a sound financial base; but the truth of the matter is that these measures could have been prevented by strict vigilance. The banks retaliated to these severe economic offences by

increased interest rates, the burden of which lies on the common man while these swindlers enjoy extravagant lifestyle after seeking economic asylum in countries with no extradition treaty with India.

The Indian government portrays a testimonial to the phrase- preaching is worse than parson.

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RBI'S WINDFALL: TRACING THE 1.76 LAKH CRORES.

VIDUSHI PANWAR
1st year

Package from RBI can help government arrest economic slowdown.

Amongst the unwarranted and uncalled-for situation of increasing unemployment rate due to demonetization and highest recorded domestic stagflation, an untoward action of the Central Bank left many economists and aware citizens perturbed.

On Monday, August 2, RBI approved a record Rs. 1.76 lakh crores payout to the government, which is more than double of Rs. 68000 crores which were provided the previous year. So far, the opposition is putting up questions to the autonomy of the apex monetary institution and it has sparked a fierce debate among many economists. The All India Bank Employees Association accused the government of "dismantling one more autonomous institution." It is very much evident that not only RBI but the Government will also have a tough time justifying the transfer of such a huge amount from RBI's coffers.

The Premises

Knowing about this record transaction, one might not resist wondering; where did this money come from?

A significant part comes from RBIs operations in financial markets when it intervenes in activities like buying or selling foreign exchange, open market operations when it attempts to prevent rupee from appreciating, Incomes from government securities and investment from Central Banks of other countries.

Whereas it's expenditure is mainly on printing currency notes.

The Reserve Bank after making provisions under 3 funds namely Currency and Gold Revaluation Account (CGRA), Contingency Fund and Asset Development Fund (ADF) transfer the surplus to the government every

fiscal year. As per statistics, the government had budgeted 90,000 crores in payments from RBI in this year's budget as presented by the Finance Minister Nirmala Sitharaman this July. In 2017-18 RBI transferred 50,000 crores of surplus to the government including the interim dividend. In 2016-17 the amount was approximately 30,659 crores.

Rs. 52,637 crores of excess provisions were identified under revised Economic Capital Framework as per which the CRB (Contingency Reserve Buffer) was maintained at 5.5% (the lower limit of what the committee headed by former governor Bimal Jalan had recommended on the transfer of excess capital) allowed maximum fund transfer to the government

Economic Perspectives

RBI is the apex monetary institution which has faith reposed on it by the Central Government. At the time of adversities, the idle cash retained by RBI as reserves could be utilized productively to give the economy a kick start during the slowdown. This year the same has happened which is appreciated by many.

But the silver lining on the cloud is, if the economy faces a crisis, the RBI may not have adequate money to protect it. Somewhere down the line, it is also an invasion of the government in the autonomy of the Central Bank as seen by some economists.

Just when this huge payout was announced, the social media was flooded with various opinions; *Prashant Bhushan, a public interest lawyer, and activist, in his bitter words accused the current government of bankrupting PSU's and banks and targeting RBI with the same intent.*

Meanwhile, on the other hand, many saw it as a progressive move.

Soumya Kanti Ghosh, the Chief economic advisor of SBI, in an interview with NDTV said," The money which has been given to the government will act as an injection of cash into the economy which will benefit the street man in the form of increased purchasing power. This will help curb the domestic stagflation to some extent."

Many economists see it as a financial incentive to the government which will help the government maintain fiscal deficit target for the current fiscal.

How Can This Money Be Utilized?

Noting the huge amount transferred, there is a definite responsibility upon the government to utilize it in the best possible way. There are numerous ventures wherein the government can invest the money at a high rate of return.

NR Bhanumurthy in an interview suggested that the money could be used to jumpstart the economy by giving stimulus packages to industries that have been asking for it, which will, in turn, lead to an increase in tax collection.

Other than that, the government in this year's budget had announced that it will recapitalize the public sector banks to the estimated amount of Rs.7000 crores. It can also utilize some money in order to improve the fiscal policy framework. Moreover, there is a major shortfall in government revenue as per this year's budget, especially in the form of GST, hence one more area where the money can be utilized is meeting the revenue shortfalls.

Implications

After the government takes up the above steps, let us analyze how the economy might change its shape.

Just as a result of the recapitalization of Public sector banks, there will be an injection of money into the economy. Since now there will be increased liquidity in banks, the lending rates will subsequently decline and as a result, there will be an increase in loan granting.

On the other hand, there will be cut down in the open market operations by the RBI as now it will have limited funds to invest in securities on behalf of the government.

There is an expected increase in the capital expenditure which will further lead to sustainable development.

Conclusion

Recalling from the opening lines, not only RBI but the government will also have a tough time justifying the transfer of such a huge amount from RBI's coffers. Our country is not heading towards recession but there is an economic slowdown rather. We can observe a persistent slowdown which we need to come out of as soon as possible. This windfall from the RBI is expected to bridge the revenue shortfall in a slowing economy and provide fiscal stimulus to the underperforming sectors.

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THE UNDER-EXPLORED AREA OF FEMINIST ECONOMICS

MUSKAAN BHAGAT
2nd year

Feminist Economics is an unconventional area of study which includes (but is not limited to) inquiries on the incorporation of all the genders in areas of study.

All women are married, or if not yet, they will be and all women will have children.
All women are economically dependent on a male relative.

These are two of the five assumptions that conventional economics is based upon, as stated by Michele Pujol (a French feminist, Economist, scholar, and human rights activist). Shocking, right?

Feminist Economics is an unconventional area of study which includes (but is not limited to) inquiries on the incorporation of all the genders in areas of study. It also includes research on areas that still lie untouched and could give a push to inclusive studies in economics. The study of feminist economics challenges the objectivity of the field of economics at a wide level. This article will focus on some critiques of conservative economics and how they affect gender equality in the global economy.

Why do we need Feminist Economics?

The question of why do we need another whole area to study and focus on comes up often. Why do we need to get out of our cozy blanket woven of solid assumptions being passed on from generations and analyse them again?

Because it's high time; high time we make it up to the oppressed, ignored and undervalued. An entire stratum of our population's labour goes unaccounted for, their share of resources manipulated, and their needs unnoticed. How do we make it up to them? By making an effort to notice, study, analyse, and incorporate.
Many issues need to be looked into; a couple of which are mentioned in this article.

Exclusion of Non-Market Activity

Marilyn Waring (a New Zealand feminist and activist) in her book *If Women Counted* called out the unjust nature of calculating GDP by the United Nation's system of National Accounts back in 1988. We have come decades ahead and witnessed manifold growth in the field of economics but do we see economies incorporating non-market activities mostly rendered by women in the form of taking care of household and children? I don't think so.

Care work is a term used for such activities that are done in the service of others. According to a report by the International Labour Organisation (ILO), globally, women perform more than 75% of total hours of unpaid care work which is more than three times as much as men. The data points out the obvious unfairness in the valuation of work done by both genders. When a country completely ignores long hours of labour put in by mostly a specific gender, it brings down their spirit while breeding the disparity for generations coming ahead.

It should be seen this way. Loads of resources go into human resource development each year. Rather, for each human resource bucket loads of money (for education), time (for character development), and other uncountable tangible or intangible resources are used. When we pay the school that educates their child then why do we let the hours and labour put into general upkeep of the child go unpaid?

Even accounting measures that are intended to bring out gender inequalities such as the Gender-related Development Index (GDI) and the

Gender Empowerment Measure (GEM) do not include unpaid care work.

Intra-household Bargaining

“Women and girls would receive less because their contributions to the household are seen as being less valuable than that of men and boys.”- Bina Agarwal, a prize-winning development economist, in her paper ‘Bargaining and Gender Relations: Within and Beyond the Household’. From the eyes of economics, a family is often perceived as an individual due to the distribution of resources among the members in any manne considered optimal whatsoever. *Intra-household bargaining refers to negotiations that occur between (and affect) the members concerning decisions about the household that may or may not be monetary.* Decisions regarding expenses or savings are one of them.

Traditional economists used to believe that money is divided equally amongst the members of a household. Coming ahead from that, it was often concluded that resources are divided optimally. While this sounds better, the term optimum here gave way to many illogical assumptions that influenced the bargaining power of some members. To give an example, assuming the role of women is only to take care of the household influences their bargaining power in the household to a large extent. These models support the traditional templates of roles assigned to the sexes.

Feminist Economists edit these assumptions to incorporate unconventional arrangements such as same-sex relationships, single parent arrangement, etc.

We have come a long way from following strict arrangements in a family. But running from reality is still not what I intend to do here. Social norms and perceptions continue to influence women’s bargaining power in a household. Assuming that the girl in a family has to be married off to another family as soon as possible declines her bargaining power in terms of equal resources such as land.

Homo Economicus

Do you think your mother and father would act in the same way when presented with the same opportunities?

There are various sides to it. Homo Economicus refers to a model of a person that says that he/she acts rationally always without being influenced by society. However, monetary considerations are not always the prime focus. The society and its norms do influence the decisions of participants in a market.

Different members of your family will have different factors to consider before taking up a job promotion. Your mother might not take it due to her possible responsibility as a caregiver to other members of the family. Your father might not take a job transfer offering higher pay to continue to live with his family.

Feminist Economists bring attention to the complexity of people than stated by this model. They call to improve upon it by the theory of Institutional Economics which emphasizes other factors like culture and relations that may be considered by the economic participants while taking decisions.

Where do we go from here?

The reality is grim but not something we cannot evolve from. The evolution may be on its way right now. We have no way of knowing unless we get neck-deep in the process, right?

While we sit here debating whether Feminist Economics is worth investing our time in, it is continuously on the path to being increasingly recognized. International Association for Feminist Economics, an international organization consisting of 600 members in 64 countries, searches and challenges masculine biases in neoclassical economics. It gained the status of a Non-Governmental Organisation (NGO) in the United States in 1997.

There is a peer-reviewed journal named ‘Feminist Economics’ that solely provides a platform to take up different perspectives and debates in the area of study.

Achieving gender equality and reducing inequalities are key goals in achieving the 2030 Agenda for Sustainable Development.

How much of this global importance turns the actual scenario towards justice and equality is something worth noticing (as well as working for, right?)

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REVISITING CHANAKYA ARTHASHASTRA IN RECENT TIMES

DEVANSHI MALHOTRA
2nd year

Arthashastra displays the epitome of intelligence and deep thinking of Indian Philosophy that the world discovered centuries later!

Introduction

Born in 4th century BC, Chanakya was also known as Vishnugupta, Kautilya and *Kingmaker*. He is a luminary person known for his great philosophies and policies. As a political thinker, he was the first person to visualize *unified India.* The whole of his work is documented in Arthashastra, which means 'scripture of wealth' but covers every topic under the sun.

We Indians tend to point out what is wrong but never take a minute to appreciate what we have. Our ancient scriptures give a full account of management strategies discovered 5000 years back! The Kingmaker gave 6000 sutras, which have been classified into 15 books, 150 chapters, and 180 topics. Here in this article I discuss three of them and seek how are they relevant in present times.

1. Take Care of Treasury in Difficult Times

Chanakya advices that: *"The (king) without a treasury should collect a treasury, when difficulties concerning money have arisen." (5.2.1)*
In the present world, difficult times are indispensable, when money doesn't come into the treasury. Even then the state needs to collect revenue to keep the economy moving at a smooth pace. Application of this principle in recent times can be observed in the form of *reserve requirements* that commercial banks are required to maintain out of primary deposits. Even during the Financial Crisis 2008, the Fed adopted a set of policies such as Term Auction Facility, Money Market Funding Facility, and Quantitative Easing to sail through the financial turmoil.

Another aspect which could be related to this topic is *networking!* "The best time to make friends is before you need them." It will be your friend circle and goodwill that will help during a financial crisis. India is a member of SAARC and many other such international organizations to hedge the risk of crisis. These memberships are not only helpful in improving political relations but also bring a lot of trade.

2. Wages

"In the happiness of the subjects' lies, the benefit of the king and in what is beneficial to the subjects is his own benefit." (1.19.34)

For Chanakya, the subjects and their welfare was always a priority. He gives importance to welfare more than the kingship. Arthashastra accounts for a wage structure, which protects workers against exploitation, or unduly low wages. It also facilitates a sound relationship between the employer and the employee. Minimum Wage Law, 1948 gives a visual of what Chanakya presaged in 4BC. It says that wages cannot be solely determined by the market forces of demand and supply. Workers are allowed to choose their work and it is desirable to enter into a contract before commencing the work. Further, he considered employees in various forms. One such form is giving an extension if an employee is sick.

"If he is incapable due to ill health or due to a calamity, he shall get an extension." (3.14.2)

Whatever salary is fixed, the employer is obliged to pay. If not, the employer shall be punished duly.

"In case of non-payment of wage, the fine is twelve panas or five times the wage." (3.13.34)

Chanakya also safeguarded the interests of the employer. According to Kautilya, a laborer shall be penalized if he doesn't work after receiving wages. He further gives liberty to employers to hire new workers in case the previous employee doesn't come back to work after receiving wages.

"A wage is for work done, not for what is not done." (3.14.8)

"An employee not doing the work after receiving the wage, the fine is twelve panas, and detention till it is done." (3.14.1)

"In case the employee misses the time (or completion) or does the work in a wrong manner, he may complete the work through another." (3.14.10-14)

Chanakya further elaborates on how fair wages need to be decided. The Report of the Committee of Fair Wages, Delhi, 1954 prescribes that wages need to meet the current industry standards and the time and effort put in by the laborer. In the words of Chanakya:

"The payment of the wages was decided on the basis of work done, time spent in doing it, at the rate prevailing at the time." (3.13.27)

3. Budgeting

Financial Management plays a crucial role in the success and growth of any organization/ economy. It deals with the estimation of revenue and expenditure in a given financial year.

"All undertakings are dependent first on the treasury. Therefore, he (the leader) should look to the treasury first." (2.8.1)

One important aspect of budgeting discussed is Taxation. Kautilya advocated that a leader should not enrage people by overburdening them with taxes. He also supported the idea of tax exemption for senior citizens and widows. He was an advocate of Progressive taxation. His ideas can be very well related to present policies.

The Laffer Curve is one of them, which establishes a relation between the tax rate and tax revenue collection. If the tax rates are exorbitantly high, it will discourage people to engage in economic activities as a major portion of their earnings is taken away by the government in the form of taxes. Thus, tax rates need to be decided appropriately.

The present tax regime in India provides various tax exemptions to senior citizens. Extra tax benefit is given on buying health covers. Premium paid towards a health insurance policy qualifies tax benefit under Section 80D of the Income Tax Act. Similarly, in Florida widows are provided with exemption. The most common form of widow's exemption refers to the deduction of $500 on the taxable value of the property. Chanakya further focuses on the timely payment of taxes.

"Those who do not pay fines and taxes take on themselves the sins of those (kings) and the kings who do not bring about well-being and security (take on themselves the sins) of the subjects." (1.13.8)

According to Chanakya, every individual must pay taxes and contribute towards a noble cause of nation-building. Kautilya also focuses on creating liability for leaders to use this amount appropriately and judiciously. He also gives provision of fines 2400 years ago! In the current scenario, we witness a parallel economy in our country. If the principles of Chanakya are followed and both public and state becomes aware of their duties and rights, corruption can be easily curbed.

Conclusion

Arthashastra displays the epitome of intelligence and deep thinking of Indian Philosophy that the world discovered centuries later! There is a shortage of words to lionize this masterpiece of Chanakya. The need of the hour is to revisit the economic principles given dated back which are still relevant in the present scenario and acknowledge the greatness of our heritage instead of simply glorifying the west!

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ANALYSIS OF CRAP: REALIZING SUSTAINABLE DEVELOPMENT GOALS 2030

SONALI KUMARI
2nd year

With a rapidly expanding population and high risk exposure to the effects of climate change, Asia and the Pacific requires a paradigm shift in infrastructure planning if it is to pursue a path of sustainable development

We live in a dangerous and unstable world of multiple interlinked challenges. These include old and new conflicts, global humanitarian crisis and human rights crisis, climate change and environmental decline pervasive, entrenched economic and social inequalities, and massive youth unemployment.

The 2030 Agenda and its 17 sustainable development (SDGs), adopted in 2015 provide a coherent, holistic framework for addressing these challenges and their interconnections.

Brief Summary Of Sustainable Development Goals

1] Poverty: As a global problem today, and in the future towards the end of 2030, this goal aims to eradicate extreme poverty, especially for the world's population in underdeveloped countries, such as those in Sub-Saharan Africa, South Asia, South East Asia, West Asia and Latin America whose population lives on less than $1.25 a day.

2] Zero Hunger: This goal implies that countries, through a joint partnership, will be committed to providing access to safe and healthy food, sustainable food production, and investing in agriculture product research, technology, and infrastructure - all in order to influence the reduction of malnutrition in the world.

3] Good Health and Well Being: This refers to ensuring a healthy life. In addition, the quality as well as professionalism of health service, which make up the health infrastructure and medical staff, which at a very low level is to be adequately improvised. By the end of 2020, the

global goal is to halve the number of deaths and injuries in traffic accidents, to ensure the availability of high quality health care services, and to reduce the number of fatalities as well as diseases caused by air, water and soil pollution.

4] Quality Education: This goal implies obligatory primary and secondary education for every child, completely free to charge as well as equal access to pre-primary education, and equal opportunity for technical, vocational, and higher education by erasing the stereotypes and discrimination against illiteracy, and ensuring a successful future.

5] Gender Equality: As a concept, gender equality is not only a fundamental human right but also a necessary foundation for a peaceful, prosperous, and sustainable world.

6] Clean Water And Sanitation: One of the big problems is the reducing level of water. This goal implies providing safe and affordable drinking water, improving water quality access to sanitation, and hygienic conditions. Among other things, it is assumed that by 2050 at least one in four people is likely to live in a country with the problem of drinking water scarcity.

7] Affordable and Clean Energy: This goal provides a mechanism for increasing the sources of renewable energy and energy efficiency.

8] Decent Work and Economic Growth: The Agenda 2030 for sustainable development is committed to the establishment and promotion of sustained economic growth.

9] Industry, Innovation, and Infrastructure

10] Reduced Inequalities

11] Sustainable Cities and Communities

12] Responsible Consumption and Production

13] Climate Action

14] Life Below Water

15] Life on Land

16] Peace, Justice and Strong Institutions

17] Partnership for the Goals

Health Of Nations Under Sustainable Development Goals

The good news is that the poverty target has been reached well before the deadline. About 700 million people have risen above the poverty line since 1990, bringing the proportion of people living in extreme poverty down from 47% in 1990 to around 22% today.

The hunger target has not yet been met but the proportion of undernourished people in the world fell from 29% in 1990-92 to 18% in 2010-12. UN officials believe there is a good chance that the additional 4% drop needed to meet the hunger target will be achieved by the 2015 deadline. Other targets have been reached including greater access to clean water, fewer people in slums and more children in schools. *The bad news, though, is that in 2012 there were still 1.2 billion people living in poverty and 868 million with chronic hunger.*

Most development observers are impressed with the poverty achievements to date but point out that the MDGs cannot take all the credit. Economic growth in African and Asian countries has played a key part. In China, for example, which accounts for much of the reduction in global poverty, the MDGs only contributed a small amount to the country's progress.

The very poor generally cannot afford to buy surplus food from abroad. What's more, ensuring that all vulnerable individuals' particularly young children have access to a nutritious diet is a huge organizational and social task.

Climate Change

Climate Change, which has been creating serious instabilities in food supply in many of the poorest countries, must also take some of the blame for chronic hunger. The solution? Dependency on large scale food aid is not a practical solution, as it is very expensive, unreliable, and chronically insufficient. The long term solution must come through higher living standards of the poor and a significant rise in the productivity of smallholder farmers. The complex challenge of hunger though will have to wait for the next set of development goals before being resolved.

Making Trade Work for Everyone

Trade offers economic opportunities to consumers and producers, but also threatens to exacerbate deep inequalities. How can we ensure that trade generates equitable wealth?

Trade is a source of wealth and arguably the biggest contributor to poverty reduction. Many poor countries have benefited from trade liberalization. Mauritius, for example, used trade as an instrument for achieving MDGs.

Sustainable Infrastructure for Asia and the Pacific: The New Normal

With a rapidly expanding population and high risk exposure to the effects of climate change, Asia and the Pacific requires a paradigm shift in infrastructure planning if it is to pursue a path of sustainable development.

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AMSCO

ROCKY ROAD

A TIMELINE OF THE MAJOR INDIAN ECONOMIC EVENTS

Bhavya Pandey
1st year

1951-1990

Inward-looking strategy

The government exercised controls and regulations of the economy through industrial licences and import controls. That is to say, state intervention was essentially inevitable. Development goals of the country consisted of higher economic growth, self-reliance, poverty eradication and social justice.

1951:
First Five Year Plan launched to combat 'decade of crisis', aim was to deal with the 'teething troubles' of the economy owing to the post-Independence crises.

1960s:
A higher growth was achieved relative to the previous decade and 'pre-conditions for take off' became visible. Further, the 1960s became the decade of 'three-twos':

- (i) deaths of two prime ministers (Jawaharlal Nehru and Lalbahadur Sashtri)
- (ii) two wars with China (1962) and Pakistan (1965), and
- (iii) two droughts in 1965 and 1966.

To combat the situation of drought, India had to import food grains under a 'ship to mouth' regime.

1970s:
Titled the 'decade of change' or 'reform by stealth'. In the 1970s, Indira Gandhi found that the brand of socialism initiated by her father had resulted in some social conflicts. Measures such as abolition of princely states, bank nationalisation, and implementation of MRTP (Monopolies and Restrictive Trade Practices) provisions to curb the growth of large monopoly houses, nationalisation of coal industry, and many anti-poverty schemes were undertaken.

1980s:
As soon as Rajiv Gandhi came to power in 1985, he experimented with liberalisation on a grand scale hitherto unknown in the Indian economy. Several industries were delicensed; imports of capital goods and intermediate goods as well as technologies were liberalised. The outcomes of control-ridden economy were the emergence of inefficiencies of the economy. It is said that control and scarcity creates a vicious circle of low productivity. Foreign debt rose to a higher magnitude at that time. To reduce such burden of debt, borrowings were needed. Repayment of loans required further increased borrowing—thereby triggering a vicious cycle. All these compelled the Indian

Government to initiate dialogue with the International Monetary Fund (IMF) and the World Bank.

1990s and Onwards

Liberalisation Privatisation Globalisation

Entering into the 90s, India faced the following macroeconomic issues:

- acceleration of inflation
- unsustainable fiscal deficit
- fragile balance of payments situation

The diagnosis and the solution of the crisis could then be addressed in terms of neo-classical theory that says that a liberalised economy or more specifically, market economy, is more efficient than a controlled-regulated economy. State intervention and state planning is 'costly' now to the Indian economy, as was suggested by the IMF-World Bank.

The two important planks of the New Economic Policy (NEP) were:

- macroeconomic adjustment and balances (called structural adjustment programmes)
- reconstruction of the Indian economy through macroeconomic stabilisation.

Thus, the Indian Economy entered a phase what is euphemistically called the LPG (Liberalisation-Privatisation-Globalisation) strategy of development. Measures were also taken to reduce fiscal deficit, maintenance of BOP equilibrium and containment of inflation. For these purposes, loans from the IMF and the World Bank were sought.

Current Policy

India has seen the rollback of enhanced super-rich tax on foreign and domestic equity investors, exemption of startups from 'angel tax' as part of the efforts to boost economic growth. The target is to make India a $ 5 trillion economy by next year.

QUIZ

Bhavya Pandey
1st year

1. Feminist Economists resort to a new type of data collection method for their research. It is abbreviated as GEM, what is the full-form?

2. Marilyn Waring's 1988 book is often regarded as the "founding document" of the discipline of feminist economics. What is it titled?

3. Gender-based critiques of traditional economics appeared in the 1970s and 80s. They were supported by the establishment of which organisation in 1972?

4. The rapid growth of feminist economics was seen in 1990s by the establishment of international association for feminist economics and its affiliated journal which continues to be the foremost source of current developments in the field. what is this journal called?

5. Feminist economics argue that gender and race must be considered in economic analysis and economic models can often be improved by explicitly considering gender, race, class, and caste. True or false?

6. Feminist Economics is based on the Neoclassical approach of man - homo economicus. True or false?

7. Each country measures its economic output according to a UN sponsored system. What is this system called?

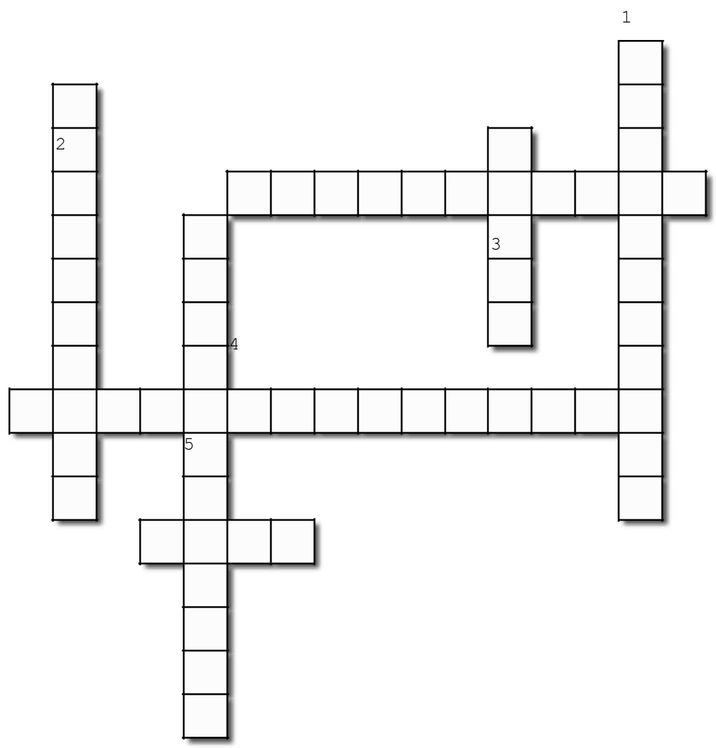
8. Name three schools of economic thought that are deeply intertwined with the discipline of feminist economics

9. Name two renowned Indian Feminist Economists?

10. Feminist economists join the UN and others in acknowledging care work, as a kind of work which includes all tasks involving caregiving, as central to economic development and human well-being. Can care me monetised?

CROSSWORD

MUSKAAN BHAGAT
2nd year
RADHIKA KHANDELWAL
1st year



Across

4. Study of mathematical models of strategic interaction among rational decision-makers
6. Fundamental critique defined as a self-sufficient and rational individual
7. In 1995, the research network working on gender and work in France.

Down

1. Nobel laureate who has written on gender, family and feminist economics.
2. Author of “ Feminism is for everybody”
3. Number of waves of feminism
5. feminist who works on the economy using a qualitative and quantitative approach, affecting the gender gap

NOTE: Space bars are included.

WORD SEARCH

GAURI VIG
2nd year
LIPI CHAWLA
2nd year

A	I	F	W	O	M	E	N	C	O	U	N	T	E	D	U	F
Y	H	W	I	Z	C	C	I	F	D	J	G	B	I	Q	N	E
M	J	B	H	O	U	W	E	L	L	B	E	I	N	G	U	M
O	D	F	A	P	O	S	M	U	A	A	N	S	K	I	N	I
N	S	I	S	K	L	U	A	H	P	I	D	Y	A	L	P	N
O	L	N	A	C	Y	C	H	N	N	D	E	N	O	H	A	I
C	S	W	M	N	A	S	M	G	U	Y	R	F	A	E	I	S
E	K	C	S	W	E	W	A	P	E	J	T	A	R	L	D	T
D	H	F	A	C	G	E	N	R	T	C	H	I	H	G	L	E
L	U	E	X	J	K	P	L	A	W	A	E	L	B	Y	A	C
O	F	M	D	I	W	A	C	S	R	N	O	L	A	Z	B	O
H	A	I	T	N	D	E	R	N	O	A	R	M	D	Q	O	N
E	R	N	E	Q	R	H	N	O	S	N	Y	U	V	E	U	O
S	Y	I	N	S	T	D	E	M	B	R	V	Z	K	C	R	M
U	H	S	A	E	W	G	A	V	J	E	R	T	V	O	N	I
O	L	A	N	A	N	C	Y	F	O	L	B	R	E	L	Y	C
H	I	F	A	M	I	L	Y	E	C	O	N	O	M	I	C	S

Words:

1. Family Economics
2. If Women Counted
3. Diane Elson
4. CSWEP
5. Gender Theory
6. Unpaid Labour
7. Nancy Folbre
8. Feminist Economics
9. Household Economy
10. Well being

BEHIND THE REELS

A picture is worth a thousand words! We see a lot of things around us on regular basis but often ignore them or never ponder upon it. Here we bring some interesting economic interpretations to daily life scenes such as the TV show F.R.I.E.N.D.S, CCD, Chinese light and slum. We hope that you find them interesting and worth mull over.

1. F.R.I.E.N.D.S

BHAVYA PANDEY
1st year

F.R.I.E.N.D.S. is widely regarded as one of the most popular TV shows of all time. Characterized by a timeline spanning 10 years and an iconic bond between six friends, the show has seen numerous reruns since it first aired in 1994.

The stunning career progression of characters such as Rachel might be unrealistic. Or perhaps it affiliates to an earlier time, in which the American dream of upward income mobility seemed to be within reach. But perhaps no amount of legal loopholes can justify the relative luxury that the Friends find themselves in. Nevertheless, each episode was quick to remind us that even if your expectations about life end up clashing with reality, your friends will be there for you.

Economic incentives drive consumer behaviour. The same is reflected in the behaviour of the Friends on the show, while Ross is always looking for love, Joey is always attracted by food. But despite their different incentives, when Joey's dancer roommate Janine invites them to spend Thanksgiving with her and her friends, Joey and Ross are both quick to accept the invitation, at the cost of giving up their usual Thanksgiving tradition of dinner at Monica's.
Here, the opportunity cost of going for the party is the dinner.

On the other hand, an example of the girls shows the implication of tradeoffs. Monica, for one is fond of hosting, and she also likes to cook. Often, she finds herself flustered under the pressure of doing both the tasks equally efficiently. When she decides to leave out holiday candy for her neighbours, they become very popular and their demand increased dramatically, Monica has to work harder to please others.

We see hardly a dull moment during an episode of Friends, and might wonder why they make the choices they do. It's not a surprise to find some economic concepts connected to the iconic group.

2. CAFÉ COFFEE DAY

DEVANSHI MALHOTRA
2nd year

Good ideas start with brainstorming, great ideas start with coffee!

Coffee is the most popular hot beverage in India alongside tea. Most of the coffee production takes place in the hills of Southern region, of which Karnataka accounts for the highest yield. Coffee production of India ranks 10th in the world. There are 320 million kgs of annual coffee production. Italy is the leading export destination. Coffee Shop industry is another beaming business in India and across the world. Coffeehouses come in a variety of forms but, traditionally they are the establishments which serve prepared coffee and other hot beverages.

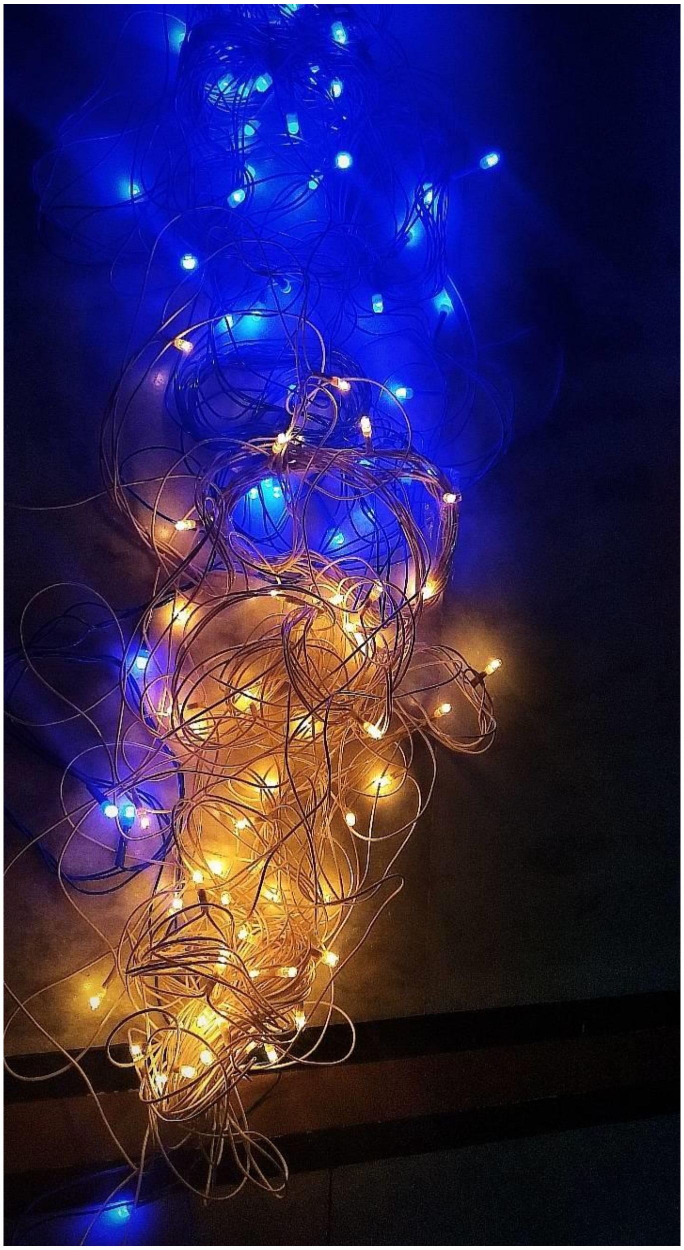
A lot more can happen at a coffee!! Café Coffee Day, initiated by Lt. VG Siddhartha brought revolution in the coffee industry of India. During a brief discussion with a German business owner of his leading coffee brand in Germany- Tchibo, Siddhartha got an outlook on his business Idea. The first outlet of Café Coffee Day with access to the internet was set up on 11th July 1996, at Brigade Road, Bangalore, Karnataka. This coffee chain expanded rapidly to other cities of India, with a count exceeding 1000 cafés across the nation. It serves 1.8 billion cups of coffee annually in six countries. But ever since the news of CCD founder committing suicide broke out, it has put the entrepreneur world and consumers in shock.

We can learn a few business doctrines from this incident. Go slow and steady. When you observe that top-line (revenue) is rising but bottom-line (profit) is falling, cut costs and make it green! Dear entrepreneurs do not expect your taxes paid to come to your rescue, while it can be used to save public companies. If you want to sail through in this competitive ocean, throw expenses overboard. Firms try to cover losses by raising funds through debt but end up trapped in the vicious cycle of interest and debt. When a business starts, earns a profit, attains stability, looks forward to growth prospects and flourishes, at this point small mistakes appear to be a blunder because of the larger dollar-cost attached to it. There comes the efficiency of a leader rather than being stressed and saying goodbye to life! Avoid stress!

Although VG sir is no more with us, he gave us a great Indian coffeehouse brand whose success story is worth appraising. It gives us the essence of hard work, dedication, and ideation. Kudos to CCD!

3. CHINESE LIGHTS

GAURI VIG
2nd year



With the world transforming into a worldwide town and rivalry getting hardened, nations like china are administering the perch in numerous markets in fluctuated circles. India is the center of various business opportunities, and gradually yet consistently Chinese items like electronics, hot water bottles, Diwali crackers, and so forth are prevailing comparable Indian items. China represents about 20% of India's total imports. Because of these determined imports from the Chinese market most cottage industries have closed down, and the eventual fate of existing ones looks extremely disheartening. The festive season is the period of business particularly filling the pockets of dealers. In any case, rather than domestic sector holding influence over the market the open door is gotten by the Chinese producers. As the festive season befall it carries lights to everybody's home except the individuals who are most influenced in this merry season, the craftsmen and Diya creators whose items are being supplanted by the cheap, new Chinese items. Since the art division is the second biggest business in provincial India after agriculture, to keep the conventional art alive, it is significant for craftsmen to see how exchange fairs work and partake in the equivalent with an inside and out comprehension of the benefit and misfortune engaged with the worldwide market.

4. LIFE IN SLUM

RADHIKA KHANDELWAL
1st year

It is said, "Every picture tells us a story." The girl with dreamy eyes is a metaphor for immaterialism and happiness. Her eyes symbolise hope, the helplessness of the deprived classes and the long lost adequate attention to their needs. Playing with tiny tools and making the best out of the available resources is what the children of the sprawling slums have been practising since ages.

The grim realities of these slums considered as a blot to civilization are highly alarming. According to the World Bank Review, one million people live in Dharavi, which spans 535 acres and has a population density of 8,69,565 people per square mile. It has been pointed out that the slum economy has emerged as the parallel economy, generating the annual economic output of 7.5% to GDP.

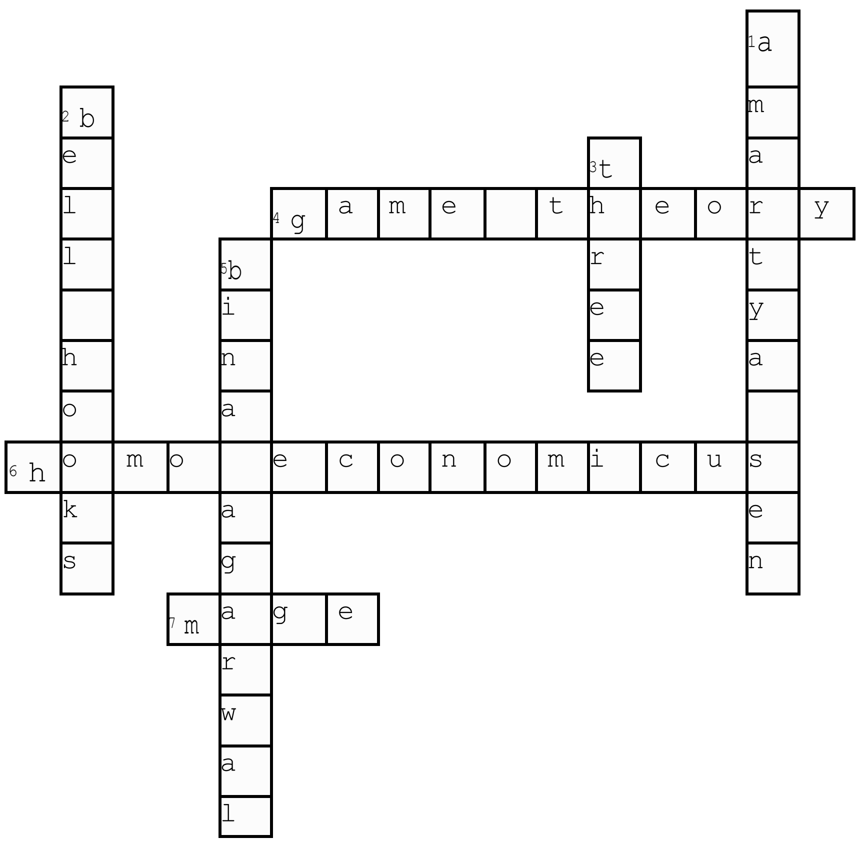
Formal documentation and recognition of slums, relocation and upgrading is the need of the hour to improve civic services, deprived socio-economic opportunities and official support. It is India's failure to address the challenges and intricacies of the perpetuating vicious circle of exploitation.

ANSWERS

QUIZ

1. gender empowerment measure
2. if women counted
3. Committee on the Status of Women in the Economics Profession
4. feminist economics
5. true
6. false
7. System of National Accounts (SNA)
8. green economics, labour economics, welfare economics, family economics
9. Devaki Jain and Amartya Sen
10. We leave this one up to your interpretation!

CROSSWORD



Nothing great can ever be achieved without great women and women are only great if they determine to do so.

- ***Anonymous***