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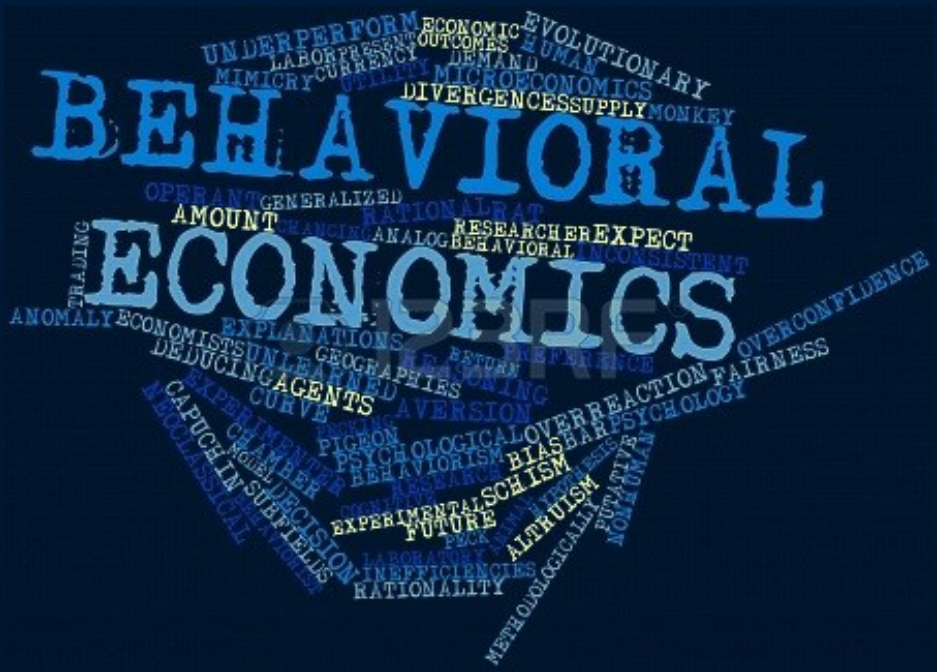
Behavior-nomics: Rationality and Human decision making in the real world



EDITOR'S NOTE

Human behaviour is one of the less focused avenue in Economics and it is believed that the factor of 'rationality' primarily governs our thinking processes and our decision making. With new frontiers of Economics being explored and the conventional foundation of rationality being broken, this edition of Ephemeris celebrates the inclusion of these new frontiers that make up the latter half of the subject matter of Economics. Through this release, the edition aims to throw light on the perspective of 'behaviour' and the way we lead our lives through examples, anecdotes and instances that break the norm of Classical Economic thought.

We aim for this release to facilitate a good degree of reasoning and awareness on the ideas and tendencies behind human cognition and decision-making in everyday life. For us to get a perspective of such practicalities would open our awareness to the way the world works a little better.

We are grateful to all the writers who contributed with their articles and ideas to make this publication possible. We extend our thanks to Tanvi Shukla, from I M.A. Economics for the theme suggestion and Santosh Bezalel Jose for his help on the design. We are thankful to the faculty members of the Department of Economics for their support and encouragement. We hope to keep up the spirit of writing with this edition and aim to reach new learning avenues with every release.

FROM THE HOD's DESK

This edition of Ephemeris, the third one of the current academic year, seeks to keep up the spirit of student participation in sharing their knowledge on a variety of themes in Economics through their writing. The theme 'Behaviour-nomics', linked to the subject area of Behavioural Economics, aims at facilitating the collaboration of ideas on the very nature of human decisions in practical situations. Although this is an upcoming area among the economics fraternity in India, it has already attained much recognition and momentum on the global academic platform. Hence, this is a special occasion for students to share their perspectives on the topic to broaden their learning horizons.

The release of this edition at the National Conference organized by the Department of Economics offers a unique opportunity for the student community to put in place their thoughts in the context of a relevant theme- '*Big Debates, New Methods, and Old Lessons in India's Development*'. Through this they can connect to the sweeping changes in the policy realm in India in modern times. One such instance can be the very recent demonetization move of the Government. Students can also draw attention to different global phenomena including the impact of change in government in one country on other economies and explain how the sentiments associated with such change influence the markets around.

For instance, the result of the Presidential Election in the United States of America can be taken to see how it has affected the stock markets across the world. The conference is a platform wherein the students can interact with some of the most highly accomplished economists, policy makers and academicians of our country. It is a good opportunity to re-learn and unlearn many things deep-rooted in our minds.

I would say that through the efficient leadership of faculty members and the integrated network of students of Bachelors and Masters programmes, we could strengthen the academic community here at Christ University. I take this opportunity to express the sincere gratitude of the Economics Department to each one of you, especially Prof.Godwin, Mr.Alan, Ms.Melita, Ms.Kasturi, Ms.Gopalika, Ms.Ann Mary and all others who have worked wholeheartedly for 'DAKSH', the career guidance event. My special appreciation also goes out to this year's National Conference team comprising Prof.Mahesh, Prof.Sheetal Bharat, Prof.Gerard Rassendren and the student leaders across the Academic Programmes, for their meticulous planning and organization. Also our sincere thanks to the Ephemeris team for diligently working with the right spirit and a high level of motivation. I hope this spirit of academic entrepreneurship will take us to a higher point on the learning curve, enabling us to contribute to society more fruitfully.

Regards

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IN THIS ISSUE:

How Markets Function: The Incentive Paradigm

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Despite the immense importance of markets in the real-life validation of economic and business theory, economic theorists have never successfully established a market mechanism which is not characterized in a partial-equilibrium or general-equilibrium orientation. Over the years, economists and theorists have assumed model markets to be rational, wherein each consumer strictly views the market to procure a good or service that he perceives to be rationally sound for him. The behaviour of firms is also rational, but this behaviour is more asymmetrical because firms are also involved in a constant tussle of competition with other firms for profits and market share. Thus, it is safe to say that each firm resembles a strategic player in a n-person game.

Every agent in a market can have their behavioural patterns attributed to two psychological asymmetries. These are manifested in the form of private motives and market functions which occur at the advent of any economic activity. For example, the market function of a firm is production, and its private motive is to derive profit from sale and production. Similarly, the market function of a consumer is to buy a good or service, and his private motive is to extract utility from the exchange of money in return for this good or service. Agents in a market – whether individual consumers or

producing firms – proceed towards achieving their private motives with an efficient use of resources or money through limited actions for which marginal return exceeds marginal cost. By defining these axioms, the central hypothesis suggests that firms under circumstances of competition formulate pricing strategies strictly as a means of maximizing profit. They do not seek to maximize this profit to serve consumers; rather they serve consumers to maximize profits. Thus, their market function which is to carry out productive activities is accomplished as a corollary of their private motive – which is to maximize profit, market share and build prestige.

This hypothesis implies the same principle on the other end of the market spectrum. The consumer acts to maximize utility whose value he psychologically establishes by quoting a particular price that he assumes fit for the commodity's utility. Each consumer estimates the utility income that he could derive from every similar product in the market. That is, he first estimated the utility income that product A would provide him, then the utility income from Product B, and so on. The consumer buys the product which he believes would provide him with the highest utility given his economic conditions and his psychological bent about" what is rational". The primary factor that influences any consumer's choice of buying is not solely the promotional advertisements and branding promises of firms, but the performance of the product in the history of its existence. Thus, a consumer's buying decision is based on the comparison of the actual utility of the product he wishes to buy, and that of similar products of other firms i.e. the

expected utility. Any individual's buying decision is hence, Indeed based on facts, and not just conjectures.

In effect, this description can also be made in terms of a political analogy: It is a firm selling products for money the way a political party sells policies for votes. Political parties compete for votes and oligopolies compete for profit in a market. It is the competitive struggle for power that influences any form of coercive behaviour. We cannot assume *a priori* that this behaviour is market optimal any more than we can assume *a priori* that a given firm produces output which is market optimal.

This leads us to a general equilibrium model which is defined by the market forces of supply and demand. The forces, although imperative to understand the market dynamics of pricing, are not enough to clearly depict the real-world validation of pricing. That is to say, there exist various other variables over and above those depicting market forces that contribute to commodity pricing. If commodity pricing in monopolistic scenarios was solely based on these market forces, then there wouldn't exist a difference between the dynamics of a monopolistic market and that of a perfectly competitive market. This counter-intuitive consideration leads us to rethink the classical modes of economic analysis.

- The actions of a firm are a function of the way it expects consumers to buy and the strategies of other competing firms in the same market segment.
- The firm expects consumers to buy according to (1) changes in their level of utility from market activity and (2) the strategies

of competing firms.

- Consumers actually buy according to (1) changes in their utility levels from market activity and (2) an analysis of alternative products in the market offered by other competing firms.
- Consumers' utility levels from market activity depend on the actions of the firm during the production process.
- The strategies of competing firms depend on their views of the consumer's utility levels from market activity and on the actions of every other competing firm.

We can form a total of five equations having five unknowns namely: expected price, actual price, competition strategies, individual firm's production actions and individual utility levels from market activity. Therefore, we can say that the skeleton of any economic market can be viewed as simultaneous equations. However, these equations are of not much interest to us as the mathematics behind them are not intrinsic to the observed human behavioural patterns. It is the ideas behind the mathematics that are integral to market patterns. The commodity itself is not a cause of economic activity. It is the value which is attached to the commodity that causes all economic activity. In a market, which creates the base of the producer-consumer spectrum, this value is represented in the form of profit for firms and utility for consumers.

REFERENCES:

Hotelling, H. (1990). Stability in competition. In The Collected Economics Articles of Harold Hotelling (pp. 50-63). Springer New York.

Arrow, K. J. (1991). Economic theory and the hypothesis of rationality. In The World of Economics (pp. 198-210). Palgrave Macmillan UK.

Downs, A. (1957). An economic theory of political action in a democracy. The journal of political economy, 135-150.

To Be or Not to Be? - The Question of Rationality

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"All economic agents are rational" – a sentence every student of Economics is familiar with, a sentence that we encounter when introduced to the subject. I heard it first in high school, and as individuals of that age are habituated to do, I accepted it at face value. As my understanding of the subject progressed, I was to find out that this statement was one of the core assumptions that the discipline was based on, and I came across several more theories based on economic decision-making and market activities.

In my first Economics class in college, I heard much of the same. The first assumption we were told to make was that individuals make rational, utility-maximizing decisions. This time around, however, I did not accept the statement as blindly and began to question it more and more. For the first time in my life, living away from home, I was making a large chunk of the economic decisions that would affect me alone. As an economic agent myself, I knew from experience that decisions were not always rational, the way economists said they were. There were always a set of factors beyond mere rationality that led us to think and decide in a certain way.

I then found myself thinking, "How many times have I walked into the mall, gone into a shop and bought something that I didn't even need in the first place, simply because there was a "SALE!" sticker

on the front of the shop?". For all I knew, the price of that shirt supposedly on a 40% discount might not even have been changed, and yet I could not resist the allure of getting something of a greater value at a lower price. Were these the actions of a completely rational mind? It certainly didn't help matters that I was studying Psychology simultaneously, and the subjective and emotional nature of human beings was a reality that I could not ignore. Each time my textbook said, "and as the actor is a rational individual, he…", I would have to stop myself from blurting out "But he isn't!".

We are constantly made to internalize the idea of "Homo Economicus", but we often ignore the former aspect of reality being in stark contradiction to it. Man was not born rational. People are emotional beings that make different decisions in different states of mind. Homo sapiens are biologically programmed to 'feel', as has been proven by various studies in Neuroscience. Basic Psychology, or even common sense, some would say, informs us that different individuals perceive the same world, the same situation, the same market differently. This perception, whether conscious or not, is bound to influence the decision-making process. Our textbooks would lead us to believe that every economic decision is preceded by a careful weighing of the various costs and benefits associated with the said decision, but this is not always true. Sometimes you buy a pizza just because you want a pizza, regardless of whether your rational mind tells you that it's terribly unhealthy, you have a perfectly good dinner at home or that Domino's is going to add a load of extra taxes.

This is not to say that people are completely irrational. They are rational, but only to a limited extent – the notion of bounded rationality. An economic actor's decision in a situation might not be purely rational; it is often limited by factors such as his cognitive capabilities (limited in nature as well) and the duration of time provided to make this decision. This is where Behavioural Economics comes into the picture. It helps us better understand the human decision-making process – the kind of reasoning we use, the multitude of different factors we take into account, the kind of emotional state we are in, what we are biologically programmed to do, the kind of social norms we follow, how willing we are to take risks, the kind of biases we hold, in what context is the decision to be made, among other things, by applying insights from the fields of Psychology and Neuroscience in areas of Economics and FinanceThis also includes aspects such as age, gender, occupation, and socio-cultural context. In collectivistic societies like India, this becomes doubly important.

Individuals rarely take decisions that are only in their own rational self-interest. Then how is it that when the same information is presented in different ways, individuals are more likely to choose one alternative over the other? Behavioural Economics aims to answer this in many ways. Several theories, such as the 'Nudge Theory', have arisen to suggest how the findings of behavioural research could be used to encourage people to make better decisions.

Many have questioned the field on the grounds of its non-generalisability, as well as the ethical implications to be considered

when applying concepts like the Nudge Theory in the real world. While these are ongoing debates, it is still an unquestionable fact that the study of human behaviour will improve our understanding of the human decision-making process, possibly leading to a set of more realistic and informed theories. How accepted will these theories be in the field of Economics is a matter of how economists perceive the importance of understanding human behaviour in everyday decisions. I think it is quite important and so do the scores of people who base their actions on their past and present traits, likes and dislikes. It is only a matter of time for the staunch economist to acknowledge this fact and look at the human mind beyond the bounds of rationality and optimal allocation.

REFERNCES:

Camerer, C.F. & Loewenstein, G. (2002). Behavioral Economics: Past, Present, Future. In *Advances in Behavioral Economics.* Princeton University Press.

Samson, A. (2014). *An Introduction to Behavioral Economics.* Retrieved from https://www.behavioraleconomics.com/introduction-to-be/

The Demonetization Panic - A Behavioural Perspetive

Ekta Sawant
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The recent demonetization program carried out by the Indian Government aims to curb corruption at various levels. Even though a few weeks have passed by, people are still ranting about the unfairness of this sudden move. The citizens and media have said so much about it that it is impossible to say this news has not reached the most remote villages across the length and breadth of the country. Needless to say it is the *Aam Admi* running around and standing in long queues to get valid currency in hand. A couple of days ago, I visited a bank to deposit the Rs.500 and Rs.1000 notes I had because it undoubtedly held no value any longer. There I saw dozens of people lined up to deposit and withdraw their savings, almost all of them in a state of confusion and trepidation. At the corner of the bank I saw a handful of men in suits waiting patiently to meet the branch manager. These well-groomed men were walking out with a smile and heavy bags with what I assume to be cash.

What I understood from the faces of the people standing in the long queues and the ranting social media was that, this move by the government had disturbed the mental accounts of the people. The behavioral concept of the 'nudge' propounded by the economist Richard Thaler, indicates the presence of different "mental

accounts" in our everyday decisions. We assign different characteristics and purposes to different portions of our money (Hammond) . Hence, the purpose of this article is to analyze the demonetization programme from the perspective of the traditional Indian household, particularly women and the "mental accounts" they create.

Personally, I believe the reason why India is always quick to recover from an economic crisis is because of the culture and habit of savings inculcated especially in its women. Women may not constitute the major work force in the country but they surely hold the money of the house under safe custody. Women are generally confined to looking after the household which also includes providing basic necessities and meeting everyday requirements of the family. Women essentially have several mental accounts pertaining to daily necessities, small luxuries, culture and education, personal fortune, personal security, clothes and makeup, pocket money and raising their standard of living and that of their family (Hammond) . They make decisions by comparing the mental accounts in this money bag and not with what they wish to buy. We usually allocate different attributes to the different mental accounts of our money. That is why the "spending money" is different from the "savings money". The money you win in gamble is different from the money you would normally earn. The Rs.500 note sent by your grandmother with Diwali sweets is more exciting than the Rs.2000 note you've just collected from an ATM machine. You would pay and choose a movie over attending a seminar in the university which is free of cost. This brings out one very common notion,

especially among the student community, that what is available for free is not always the best available option because the best things come at a price. In an economy like India, however, which is mostly stable, the money bag and the mental accounts don't change, particularly for the women.

What the demonetization move did was that it left the money bag dry which means that the mental accounts went dry. Physically there was enough to provide to every mental account but in reality, it was just paper with no value hidden in the rice jar, inside the locker, under the mattress or behind the cupboard. The women panicked and tension built up; how were they supposed to pay the milkman, buy their vegetables, recharge their phones and pay the electricity bills? Undoubtedly, facilities like e-commerce exist, but here we are talking about the women whose homes are lit for 10 hours a day, water flows from the taps for two hours in the morning and some of them are yet to learn the use of an electronic device or know how to operate a smart phone or a computer.

Behavioral economics aims to understand why people make certain decisions and react to economic changes in a particular way. Here, the issue of the dramatic economic change was on how to make our economy more transparent in its dealings. There were other ways but we chose demonetization with all the setbacks it specifically has in the short run. Considering how important money dealings are in the unorganized markets and the extent of money laundering that it encourages, it surely was a bold move to curb black money hoardings. Demonetization was not new to the

economy; we've tried it several times before. It essentially was a way for the government to declare the status of the current currency units invalid as a legal tender and generally replace the old notes with new notes. Since, the devious will find a way to hoard their money anyway commonly in form of gold, temple donations or charity, the aim should be on the incentives that prohibit it. Having modest tax rates is a very effective tool to discourage black money hoarding but there is a greater need for a better and efficient tax administration for that purpose. Another way to achieve the same can be through linking the future purchases of individuals and firms to the Aadhar Card and keeping a continuous check on these actions. The way our economy stands today, technologically and intellectually well-equipped, the hiding of black money should be made all the more difficult.

The women of our country are still finding a way to fill in their money bags but the constant needs of their mental accounts keep the tension high. Here, we see how behavioral economics acts as a tool to promote behavioral change. This change is in the dealings of the people in the economy, in the culture of saving and a reason why income based on the exploitation of others should not be taken for granted. Some of the most exploitative industries that offer low wage rates, impose poor working conditions, exploit their labor or hire child labor fall under the category of industries that produce garments and textiles and that engage in lead-mining, coal mining, stone quarrying, fireworks manufacturing, etc.

That being said, if people understand the importance and the need of a just economy in which income equality, gender equality,

judicial use and distribution of resources and adhering to the laws are given topmost priority, the matter of socio-economic upliftment wouldn't be the challenge it is today in many countries across the world. Once the right policies are also successfully implemented, financial inclusion as another target would be a matter of a relatively shorter time period. After this move by the Government, women will still continue saving, but now more cautiously because the mental accounts pertaining to their daily necessities will always be there. Empowering women would also mean empowering the generations to come, which would ultimately guarantee economic sustainability in the future.

REFERENCES:

Hammond, C. (n.d.). World Economic Forum. Retrieved from https://www.weforum.org/agenda/2016/11/this-classic-thought-experiment-explains-the-strange-decisions-you-make-with-money?/

Govindarajan, P. (2016). The Trouble With India's Demonetization Gamble. Retrieved December 02, 2016, from http://thediplomat.com/2016/11/the-trouble-with-indias-demonetization-gamble/

Raj and His Neighbours - The Practice of the Endowment Effect in Everyday Contracts

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There is a wide acceptance of the assertion of the Coase theorem that the 'Allocation of resources will be independent of the assignment of property rights when costless trades are possible'. This relies on an important assumption: an individual will value a right or an asset the same regardless of whether one considers its acquisition or its loss. Behavioral economics came up with a rhetoric to this principle through the understanding of the endowment effect – an individual who is assigned a property right is likely to value it much more than another individual who is contesting to buy that right. This was proposed by psychologist Kahneman and his colleagues as an extension to the idea of loss aversion. However, new research claims that ownership and not loss aversion is the key to such a phenomenon. We see how.

Considering either of these explanations, the existence of endowment effects reduces the gains from trade. This is not to say that Pareto-optimal trades will not take place. Rather, there are simply fewer mutually advantageous exchanges possible, and so the volume of trade is lower than it otherwise would have been. (Kahneman, Knetch and Thaler, 1990)

Where am I headed with this? Hear I narrate Raj's story:

Raj lives in H.S.R Layout in the city of Bangalore, India facing the Agara Lake. XYZ Builders decide to fill this lake to build a residential plot. Naturally, Raj is disheartened by this news, but he knows that the decision lies with the BBMP to grant the permission and XYZ to pay for it. Reflecting on the Coase theorem and the Endowment Effect, assume that Raj and his neighbors are now given property rights over the Agara Lake. There is a third party now involved in the initial arrangement between the builder and BBMP. Raj and his neighbors now find the lake dearer than before, valuing it at a higher price than the previously set market equilibrium. They negotiate and the builder finds the price higher than before as his value estimation is lower than Raj's. It cannot be assumed that Raj crusades for the environment and the lake remains as before; there is a pecuniary interest even to Raj and his neighbors which may sway them, but since the volume of trade is lower, due to the assignment of property rights, the area of the lake lost to construction would be much smaller, say one-fourth. This is Pareto – optimal; anything more implies a greater loss to Raj and his neighbors and anything lesser would be unprofitable for construction. There are a few deficiencies implicit here, of course, which may find the following solutions as well:

- The externality with constructing the residential plot in terms of sewage release, waste, etc., into the lake is still persistent.
- The builder may find it inefficient and unprofitable to use even one-fourth of the lake, as the rest being entitled to Raj and his neighbors is of a larger proportion than what is allotted

to the builders.

- The presence of pecuniary interests may imply that the entire lake is traded off, however, we must remember that the endowment effect will almost certainly occur when the good being traded does not have a perfect substitute, available at a lower price in this scenario. (Bishop and Heberlein, 1979)
- Continuing the above argument, we must not forget the effect of social and moral norms on transactions. Raj and his neighbors have a moral obligation to protect the environment and this moral obligation is exaggerated in a setting where social cooperation is imperative to foster interaction between individuals outside of the contract.

The social cost that is largely ignored in environmental trade-offs manifests itself through the participation of Raj and his neighbors. In crude normative terms, this seems viable. However, the intricacies are obviously to be worked out and I leave it to you to ponder over them.

REFERENCES

Kahneman, Daniel; Knetsch, Jack L.; Thaler, Richard H; Experimental Tests of the Endowment Effect and the Coase Theorem, Journal of Political Economy, Vol. 98, No. 6 (Dec., 1990), pp. 1325 – 1348 University of Chicago Press

The Punctuality Issue - A Behavioural Game Theory Approach

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I MA ECO

It was just a week back that my close friend Aditya and I were talking about our first day as postgraduate students at Christ University. He was telling me how even though the inauguration function was supposed to start at 9:30 AM, he came to College only around 9:45 assuming that events like these never start on time and we being Indians have a habit of being late. However, to his utter dismay when he went inside the auditorium, it wasn't just completely packed but the event had also started well on time. The question here to ponder is – why exactly was Aditya not punctual or rather, how are the students of Christ University always on time for the 9 am class but never on time for social gatherings with their peer group (notwithstanding the compulsory attendance factors).

We Indians have always blamed our lack of punctuality on us being 'Indian' and on the idea that it is a part of our culture and so on. But is that the reality? This article would look into the Game Theory of Punctuality based on a research paper titled 'Punctuality: A cultural trait as equilibrium' by Basu and Weibul (2002).

Although, Basu and Weibul argue in their paper that punctuality

over time has attempted to be explained by deep-rooted cultural and religious causes, none of them touched upon the explanations of it, which have little to do with the aforementioned reasons of culture and habit and more to do with the behaviour of reaching a state of equilibrium.

We would try to find the reasons behind a Christ University student always coming to class on time or the reason behind my friend being late for the inauguration on the basis of the explanations given by Basu and Weibul.

Let us consider the hypothetical example of Aditya and his interaction with Christ University. For simplicity, let us assume that Christ University, treated as a single entity is represented as 'A' and Aditya is represented as 'B'. A is considered to be primarily driven by punctuality, while B on the other hand derives more utility in doing something else at the given point of time and would rather finish the job at hand than be on time.

Let X be the gain or benefit to each individual if the event starts on time and Y be the cost when it does not start on time. We shall assume that the unpunctual entity B always has the option of being punctual and being punctual always has a cost as the individual has to give up some other activity in order to be on time; that cost has been represented by Y.

Now let us assume that X>Y which implies that both individuals are better off if they are on time and they get what is termed as the net benefit which is X-Y>0; if both are late they get zero net benefit and if one is late and the other is on time, the punctual person will have a net benefit of –Y and the late-comer has zero

net benefit.

This interaction can be represented by the form of a pay off matrix given as follows:

	ON TIME	LATE
ON TIME	X-Y,X-Y	-Y,0
LATE	0,-Y	0,0

The first entry in each box being the payoff, here net benefit, to the row player, and the second entry is the payoff to the column player. From this Game Theory Matrix, we can clearly figure out that there are two Nash equilibria which arise when both decide to come on time and both decide to come late. The decision where by both come on time is in strict equilibrium if entity A expects entity B to always be on time. This strategy is also the 'Pareto' dominant strategy as each individual has the highest possible pay off of X-Y.

However, we should also keep in mind that the decision in which both the individuals come late also has an equilibrium point, if the other person decides to come late. This option is however not Pareto dominant as the option of being on time for both the individuals has greater utility.

Now what exactly would make the individual chose between the options of coming on time and coming late? The reason behind this can be the influence of recently played games.

For instance, we can conclude that the reason Aditya chose to be

late was the influence of his past plays and actions. He assumed that events like the inauguration ceremony never start on time and hence, it would make more sense for him to arrive late and minimise his cost than to arrive on time and give up what he would have been doing otherwise.
Similarly, if we look at the entire scenario of Christ University in which most of the students are always on time, one can attribute the Game Theory behaviour to such an instance too. Students here are always on time for their classes because of their past plays or interactions. They know that the professor engaging the class will always be on time and they can only achieve the equilibrium state by being on time; otherwise they would have to bear the cost of missing out on their attendance.
To elucidate further, these very students would come late on the occasion of a social gathering as they would assume, based on their past plays or interactions with their peer groups, that most peers do not arrive on time.

Attributing the cause of punctuality or tardiness on the other hand to cultural roots and habits is often erroneous as a plethora of other factors and their combinations can have effect, like in the case of the above game theory interactions. The next time you see a friend late, either you or he might have failed to judge the equilibrium position. Taking account of the variety of other causes that cause an extra use of time is necessary in making the right evaluations and judgements on people and their behavioural tendencies. All we have to do is notice their traits and the way work from one situation to another.

REFERENCES:

Basu, K., & Weibull, J. W. (2002). Punctuality: A cultural trait as equilibrium.

Behavioural Economics and the Concept of Heuristics

Tanvi Shukla
I MA ECO

To broadly begin with, the idea of Economics or the crux of it lies in one of the most important aspects of human behaviour – decision making. The whole concept of "man, a rational animal or being" is what defines Economics. This assumption is derived from the understanding that a consumer "decides" or makes crucial economic decisions on the basis of what maximises his or her self-interest. Decision making, a renowned subset under the subject of Psychology has always been related to human beings and their activities. This vital aspect of decision making is also extended to Economics due to its link with human behaviour. Inevitably the subject matter of Economics delves into decision making through various ways- be it through consumer behaviour in finance, common market behaviour and so on. In any area of economics, some amount of substantiation and moreover, simplification is necessary to make suitable justifications and to create strong arguments. The heuristics device of Behavioural Economics helps achieve this. We see how.

Heuristics are general decision making strategies people use that are based on little information, yet very often, correct facts. Heuristics are mental shortcuts that reduce the cognitive burden associated with decision making (Shah & Oppenheimer, 2008). Taking

into account a few heuristics, each of these relate to the art of decision making in Economics in some way or the other. The representative heuristic which is mainly economic in nature states that in the event of one of two options being recognizable, people will tend to choose the recognizable one; arriving at a decision with the least amount of effort or information, since the element of recognition helps one cognitively connect to his or her choice. For example, the selection of stocks by a investor in certain cases would be decided by advice from an acquaintance rather than advice from a mutual funds expert. The latter may often be considered the wiser option in buying the right stocks, however the former simply provides more convenience and consumes less time. (Goldstein & Gigerenzer, 2002; Hilbig & Pohl, 2008). Another very important heuristic which defines and moulds consumer decision making is anchoring and adjustment. An individual first uses an anchor, or some ball park estimate that surfaces initially, and then adjusts his estimates until a satisfactory answer is reached. (Epley, & Gilovich, 2006). An example of this can be seen in consumer market behaviour in the purchase of goods and services through which people choose a product at first based on the advertisements or initial discounts provided. Later, there would be an adjustment on the basis of delayed or last-minute information sought regarding the product. Thus a few heuristics like these, point at the nature of human behaviour and the decision-making process which also guides human action in the market. It is evident that the widely accepted idea of decision making is related to how rational the human is after a consideration of all other

factors. Yet, universally, it is accepted that a human is not exactly always rational and takes various routes other than rationality that can also influence his decision making, one of them being heuristics.

Shedding light on a few research works done in this area, it can be noted that there exists a relationship between personality traits of humans and the decisions they take. Members of academic societies have conducted studies on personality traits of humans such as the level of one's openness- to- experience and its relationship to decision making. There has been some evidence on the anchor-and- adjustment effect despite there being a large gap between the theory and actual practice in large scale analyses. Research has not been empirically supported in terms of the usage of the anchor effect by humans under all circumstances; rather the anchoring behaviour is adaptable to different situations in terms of a mix of various heuristics that are applied on the basis of information received by consumers in the case of Economics. Consumer behaviour is one of the aspects under which heuristics play a very important role, especially in the selection of goods and services. Another area where heuristics play a significant role is in finance and decision making under uncertainty and risk. The concept of heuristics can be connected and studied in various fields under economics despite its apparent divergence from rationality.

The degree of openness and acceptance to heuristics for a conventional economist may be a matter of time. Yet, as the world continues to progress into its complexities of decision-making and optimization considerations, even the staunch rationality-driven

theorist would understand the benefits of simplification in the most crucial decision-making processes- provided by heuristics. Such forms of practical reductions are still a little far away from being applied in everyday life primarily due to the presence of pragmatic dogma in the field of the social sciences. Heuristics help capture the essence of man's behaviour in the most precise, unequivocal way possible. The economic expert being open to such a prospect would change the way the most intricate problems could be solved. For such openness to stem in, time and empiricism would have to take effect.

REFERNCES:

Shah AK, Oppenheimer DM. 2008. Heuristics made easy: an effort -reduction framework. Psychol. Bull. 137:207–22

Goldstein, D. G., & Gigerenzer, G. (2002). Models of ecological rationality: the recognition heuristic. Psychological review, 109(1), 75.

Gratitude and Economics

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It is often wondered whether people who practice gratitude have more financial stability and wealth than others. It is also often wondered whether the state of mind one is in could have effect on one's state of overall welfare. The fields of Psychology and Economics have been researched and experimented on in relation to one another to an extent almost unthinkable by economists of the past. The relevance of Positive Psychology in the realm of economic well-being has been an area of empirical analysis for economists and psychologists world over. Whether this represents divergences or new entry points of the discipline or whether it is an improvisation of already existing theories, the idea that has been under major empirical study in the recent past is the practice of gratitude and its impact on our overall state of economic well-being.

The question is, how does a practice as simple as expressing thankfulness create a sense of well-being in one's financial life? Can grateful emotions be associated with conditions of increased economic wellness? A study carried out by the Department of Psychology of North Eastern University, in a paper titled 'Gratitude: A tool for reducing Economic Impatience' concluded several cohesive findings. The study conducted experiments on a group of 75 participants to test their level of economic patience under different

emotional states of being happy, neutral and grateful. Economic patience was measured in terms of a participant's willingness to wait for a monetary reward to be given to them at the end of the experiment. A meagre monetary reward was allotted to those with higher impatience right at the end of the experiment and a higher reward was allotted to those with lesser impatience a few weeks after the experiment. Results of the experiment stated that participants in neutral and happy emotional states had higher economic impatience and hence, chose to receive monetary rewards immediately at the end of the experiment. While those in grateful states chose to wait for monetary rewards for a few weeks after. Happy, neutral and grateful states of mind were induced in the form of autobiographical recalls whereby participants were made to recall an event that put them into the three respective states. The achievements of the experiment carried implications of human ability and willingness to sacrifice monetary gains for periods of time according to the level of gratefulness one felt.

The impact of positive psychology on financial decision making is vast and its implications extend to other aspects of economics as well. The act of gratitude is said to inculcate habits of higher saving, less conspicuous consumption and reduced wastage of resources. It all stems from the idea of emotional abundance through which people cultivate the habit of valuing what they 'do have' as against what they 'don't have'. In other words, mental and emotional attention on one's possessions as against on one's inadequacies has helped in the creation of prudent economic

decisions. Studies from various self-improvement books have also stated that even those living under strained financial circumstances have helped themselves out of situations of deep debt, insolvency and even chronic impecuniousness through the practice of gratitude. Such sources often inculcate the practice through methods of a gratitude journal to keep a written account of one's possessions or through a daily mental reflection of one's strengths and capabilities that could lead to improved financial conditions or even through acts of altruism and charity that keep the flow of income circulating for the most pressing issues.

The concept of gratitude though abstract is related to a shift in one's perceptions of oneself and the circumstances one lives in. Developing a psychologically positive attitude towards one's state of living is crucial towards building a network of individuals who possess ideas of maintaining the harmony and balance in the *economically intertwined society* we live in. A study titled 'Exploring the relationship between gratitude and economic perceptions' conducted by Professors Dora E. Bock, Jacqueline K. Eastman and Benjamin P. McKay of Georgia Southern University, USA revealed positive associations between a grateful outlook and favourable economic perceptions- related to the U.S. economy, state economy, future job growth, and future income earned. Moreover, an analysis of the results indicated significant differences between grateful and ungrateful individuals in terms of their perceptions of economic performance, job growth, and anticipated future income. Results also suggested that managers aim to focus on developing strong relationships with grateful customers, given that grateful

customers may help firms survive tough economic times. Even here, the idea of 'consumer surplus' based on the difference between the price a consumer is willing to pay and the price he actually pays for a good enlarges according to his readiness to pay the higher price and accept the level he is actually charged. His mental state of being and emotional connection with the good being bought is of significance and emotions of appreciation would be likely to increase the same, in turn increasing his 'surplus'.

Can the implications of gratitude be felt on larger economic domains that include a higher number of stakeholders? The practice is said to lead to smoother and larger mutually beneficial economic exchanges. Transactional based exchanges are said to often pit options for selfish and non-cooperative behaviour between parties, centred on the goal of individual resource acquisition. However, sentiments of gratitude instilled in those engaging in such transactions is said to engender cooperative economic exchange at the expense of individual financial gains. The shaping of prosociality as a result could set ground for greater equity and fairness in financial dealings between the scores of people who engage in transactions every day.

The question that now arises is -Does gratitude and its daily practice hold scope for eliminating the issues that persist in the societies we live in? Can the impact of its practice at the individual level be generalized to the larger audiences that create the massive network of dealers and communicants and buyers and sellers we see every day? Evidence mentioned above is clear, yet the answers to those questions lie in the way we understand the connect

between our mind and its emotions and its impact on our decisions.

'Being grateful for what we have and appreciating the little things that make us happy' is something that we have often heard around from mentors, advisers and loved-ones. Yet, the extent to which we apply it in our lives depends on our recognition of our personal values and principles and the extent to which we value them. It is clearly evident that economists and researchers would advocate the same given the extent to which gratefulness can create a conducive 'emotional' state of being for the 'rational' mind to act optimally. How optimally depends on our degree of thankfulness.

REFERENCES:

Desteno, D., Li, Y., Dickens, L., & Lerner, J. S. (2014). Gratitude: A Tool for Reducing Economic Impatience. Psychological Science, 25 (6), 1262-1267.

Bock, D. E., Eastman, J. K., & Mckay, B. P. (2013). Exploring The Relationship Between Gratitude And Economic Perceptions. Journal of Business & Economics Research (JBER) JBER, 11(11), 445.

Rogers, D. L. (2011, November 24). The Economics of Gratitude. The Christian Science Monitor.

Tolle, E. (2014, November 22). Can gratitude raise your net worth. Prosperity Peaks.

Can Behavioural Economics Inform Climate Change Policies?

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Contemporary economic and environmental policies are largely driven by the assumption of *homo economicus* - a highly selfish and fully 'rational' economic agent. Behaviours are assumed to be self-regarding, preferences are stable and decision making are unaffected by social context. However, behavioural economics, a field that is predominantly concerned with the phenomenon of 'bounded rationality' of economic agents undermines the rational underpinnings of economic agents. It conveys a different story that is hopeful for cooperation and talks of human behaviour that is altruistic, other-regarding and aware of the environmental and social realities. Humans are unique amongst all species in their ability to co-operate across cultures, geographical space and also inter-temporally through generations. Tapping into this uniquely human attribute and understanding how cooperation is enforced, holds the key to limiting the potentially calamitous effects of global climate change.

Behavioural economics throws many new insights into actual human behaviour. The ultimatum game, for instance, revolutionizes the way economists think about decision making and shows that, under a variety of assumptions, other-regarding motives are a a better predictor of behaviour than those embodied in *homo*

economicus. It has been observed that humans regularly exhibit a culturally conditioned sense of fairness and are willing to enforce cultural norms even at economic costs to themselves. The possibility that self-regarding individuals can crowd out altruists by taking advantage of their generosity is not much of a *free-riding* challenge. Experimental economists argue that altruism goes hand-in-hand with punishment. Altruistic punishment or punishing others for violating social norms even at costs to oneself is one way individuals deal with free-riders and make cooperation work. It is interesting to note that experimental economists' findings- that punishing those who do not cooperate actually does stimulate similar kind of pleasure points in the brain as when one consume sweets. Climate change policies, in this context, should start by identifying the incentives for selfish behaviour and finding ways to minimize them as well as maximising those that foster cooperative solutions.

Understanding the ways humans make decisions and how they respond to incentives is much more than an interesting academic investigation. It may well prove to be the key to the quality of human existence on this planet for decades and centuries to come. A typical economist dealing with climate change may, for instance, focus on rational allocation problem, i.e. the most efficient way to allocate a given level of carbon emission, but does not have much to say about designing policies to enhance international cooperation between heads of states. A pertinent question at this juncture is, can behavioural science inform climate change policies? It may be noted here that the rational choice theory gives little guidance on say, limiting fossil fuel usage, except on the basis of preferences

revealed in the markets or preferences stated in quasi-market situations. The policy instruments are also limited in the sense that *carbon tax* or *carbon trading* to optimally allocate the rights to pollute is only a secondary problem. It should be recognised that such monetary incentive policy structures can actually crowd out feelings of civic responsibility like the need to collectively deal with global climate change. Instead of relying on monetary incentives to tackle collective choice problems like global warming, giving people a shared responsibility and appealing directly to a sense of common environmental good may prove much more effective. Also, successfully dealing with challenges of climate change may require cooperation on an unprecedented scale among people with radically different economic status, value system and needs. Designing policies that tap into our social, cultural and genetic heritage of cooperation offers the best hope for success.

It must however, be clear that cooperation and its meaningful outcomes depend on the ability to punish *free-riders*. People are willing to make sacrifices for others, for instance, in terms of cutting down on carbon emissions, when they are assured that others (*free-riders*) can be punished if they take advantage of altruistic behaviours. On this note, a stringent international trade framework may be developed to penalise countries that refuse to cooperate in the reduction of carbon emissions. Alternatively, an internationally strong sanction mechanism should be in place to ensure that all countries play in a carefully designed behavioural game set-up that could ultimately result in a win-win situation for all in the long run. In this context, we should recognise that players are generally

conditional co-operators, i.e. they are willing to cooperate provided others do so as well. It works like a positive feedback loop.

By uncovering the more realistic psychological underpinnings of human economic decision makings, behavioural economics offers many insights in designing environmental policies that might get us through an impending crisis like that of climate change.

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