

Article

Beyond global development and regional economic situation: The Noney Journey – From Planck length to Infinity.

Journal of Development Economics and Management Research Studies (JDMS)
03(03), 19-23, January-March, 2020
@Center for Development Economic Studies (CDES)

Reprints and permissions

<http://www.cdes.org.in/>

<http://www.cdes.org.in/journal/>

M K Srinidhee¹

ABSTRACT

Money isn't a new concept or something that was brought in use overnight. However the money being the master ruler is taking an important aspect in our lives which has evolved sky high very recently in the past few decades. Trading is not only found in humans but in animals and plants not only among themselves but also among different species. However, the use of money for trade is present only in humans instead of trade solely based on trust and mere exchange of goods as in the Noney system- Biological market functioning in other species. Water and oxygen are two basic amenities in which water has been already become a commodity to be purchased with money and the change for free oxygen to the same situation has already begun. The impact of money might lead to the prevalence of only rich humans and designing of machine based robots with artificial intelligence. Money is silently emerging as a violent exploitation of living creations existing on planet earth.

Key Words: Artificial intelligence, biological market, Noney, plank length

INTRODUCTON

Life is a transient geodesic line that is depicted by the shortest distance between two closest points. For almost all of us money is a rainbow honey in life. No doubt money is the sweetest and most colourful search for everyone in life. However like rainbow, almost all of us fail to realize that life is transient and money is also a transient part of life for which search is endless and desperate by all. The Planck length is the smallest measurement of length which is depicted by 'quantum of length' and is equal to $1.616229(38) \times 10^{-35} \text{ m}^{[1]}$ till date, the smallest measure of anything is indicated by Planck length. Everything including money started as the smallest measurement in economics, later growing enormously to the present state. Money isn't a new concept or something that was brought in use overnight. However the money being the master ruler, taking an important aspect in our lives which have evolved sky high very recently in the past few decades.

It all started with the barter system about 100,000 years ago ^[2], which was followed by the gift economy and debt. Around 3000BC came the usage of the term commodity economy ^[3]. There was also a period of brief usage of representative money followed by stamped coins which came into use by 650 BC followed by paper money in 13th century. The present Fiat currencies have been in use since the early 1970s. Currently we are progressing into the use of digital money and the emergence of crypto currency. There are systems in

¹CRI (BDS Intern), Sri Venkateshwaraa Dental College, Pondicherry, India

which money is only an adjunct or completely replaced. Few such systems in use are local exchange trading system, gift economy, community exchange systems, time based currency or time trade.

Noney System – Biological Market ^[4]

The Noney system is a part of other species which in science is denoted by biological market. Biological market is the interaction between organisms in which one can recognise different classes of traders that exchange commodities, such as goods or services. “Biological markets are all over the place,” says Ronald Noë, a Dutch biologist at the University of Strasbourg who first proposed the concept of the biological market in 1994. When Noë began his fieldwork, behavioural biologists proposed two theories for cooperation. The first, called “kin selection,” held that an organism could sometimes better propagate its genetic material by helping a close relative reproduce rather than trying to reproduce itself. “Reciprocal altruism” was the second main evolutionary theory for cooperation. Biologists argued that natural selection could favour cooperation between two organisms that interact repeatedly over their lifetimes. One individual conferred some benefit on the other, knowing that the benefit would be repaid down the line. The crux of reciprocal altruism was the idea of partner control with respect to trust without involving third party.

Biological marketing in animals

Chimpanzees are known to trade services, such as grooming for food, but the ability does not seem to extend to trading commodities. Most of the trading of services seems to occur between partners who interact a lot and most of the time, what's being traded is a relatively inexpensive commodity. One thing that may separate humans from chimpanzees is our third-party reinforcement mechanisms.

A female paper wasp will recruit “helper” wasps to her nest to raise her offspring, and these helpers can usually choose from several different nests in a given area. The wasps are essentially making a trade: The top female offers helpers membership in her nest in exchange for childcare, and she can replace a helper who doesn't pull its weight. When the number of nests in the area increased they found that females were willing to tolerate smaller contributions from their helpers. The paper wasps behaved like any rent-seeking landlord, just as an economist would predict. A greater overall supply of wasp nests lowers the price of entry into any single nest. “In order to predict the level of help provided by a subordinate, it is necessary to take into account the state of the surrounding market,”

In each example, the “exchange rate” is not fixed but rather contingent on the supply of available partners. “It is essentially a supply-demand theory,” says Frans de Waal, the eminent primatologist from Emory University and a former mentor of Noë. A plant has no brain, but the engine of most biological exchanges isn't intelligence—it's natural selection. “It's like enormous mathematical machinery,” says Hammerstein. Each new generation produces variants of behaviour. Some variants prove beneficial and lead to higher reproductive output. The concept of biological marketing among plants is conceptually understood by the following fact pertaining to underground fungi, which exchange phosphorous for carbon with the roots of plants and are able to adjust the amount of phosphorous they provide to the amount of carbon they receive. “Whatever we eat depends on these exchanges,” Noë says

Planck Length to Infinity: Noney Vs Money

To understand the significance of impact of money in the essential part of life, water is an interesting example. Water is a natural resource which was available for free and was used in its natural form since the beginning. Although use of vessels to transport water were part of the earliest human civilizations, bottling water began in the United Kingdom with the first water bottling at the Holy Well in 1621. Early drinkers of bottled spa waters believed that the water at these mineral springs had therapeutic properties and that bathing in or drinking the water could help treat many common ailments. As technological innovation in nineteenth century lowered the cost of making glass and improved production speed for bottling, bottled water was able to be produced on a larger scale. Bottled water was seen by many as a safer alternative to 19th century municipal water supplies that could be contaminated with pathogens. Today, bottled water is the second most popular commercial beverage in the United States.

Money, existence of life and the Future

The face of money in the existence of life in the future is alarming which is portrayed by the hard core impact of money on oxygen availability for every life. Relating water in the current scenario to oxygen is the future. What if the same state happens to our basic amenity Oxygen? Chinese economy is one of the strongest of today's world. It is also a major contributor to global Green House Gas (GHG) emission. A number of city of Chinese territories are now facing the severe smog pollution. This poses serious threat to the health of its citizen. The severity of this issue leads to the creation of new business scheme of selling oxygen by the outsiders. A growing number of companies are compressing and bottling fresh countryside air and selling it online. One such company is Vitality, based in Edmonton, Alberta, which collects air from the Canadian Rockies and compresses it into containers. He now sells 10,000 bottles a month in China and hopes to grow that number to 40,000. They have just started operating in India, where they hope to sell 10,000 bottles a month.

In an effort to prove that cutting even a single tree is a costly affair, the NGO has come out with a report on economic valuation of oxygen supplying ecosystem service of healthy trees 'Their claim is based on fact that an average adult at rest inhales 7-8 litres of air per minute which means about 11,000 litres of air per day. Litres of air per day. Of this, about 20 percent is oxygen and nearly 15 percent is exhaled. "Therefore, a human consumes about 550 litres of pure oxygen per day. Based on a market survey, we found that the average cost of a 2.75 litre portable oxygen cylinder in Rs.6500. At this rate a human consumes oxygen worth about Rs. 13 lakh per day ", The Times of India report said.

Money Vs Infinite Money: Human Vs Artificial Intelligence

Will the impact of money lead to the prevalence of only rich humans and designing of machine based robots with artificial intelligence. Artificial intelligence (AI), sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals.^[6] In December 2014, Stephen Hawking told the BBC that "the development of full artificial intelligence could spell the end of the human race. It would take off on its own, and redesign itself at an ever increasing rate. Humans, who are limited by slow biological evolution, couldn't compete, and would be superseded. Success in creating AI would be the biggest event in human history and

it is either the best or worst thing ever to happen to humanity. Unfortunately, it might also be the last, unless we learn how to avoid the risks, retaining only the benefits."

Earth Vs. Other Planets: Existence of Life – A Fresh Start from the Beginning

Money is silently emerging as a violent exploitation of living creations existing on planet earth. If the same continues, there can be a possible chance of desperate need to begin life fresh with a genuine and balanced Money predominant concept. As Earth cooled, an atmosphere formed mainly from gases spewed from volcanoes. It included hydrogen sulphide, methane, and ten to 200 times as much carbon dioxide as today's atmosphere. After about half a billion years, Earth's surface cooled and solidified enough for water to collect on it. There was no oxygen gas on Earth. Oxygen was only in compounds such as water. Complex chemical reactions in the young oceans transformed carbon-containing molecules into simple, living cells that did not need oxygen to live. 2.7 billion years ago, bluish-green microscopic organisms called cyanobacteria flourished in Earth's oceans. They made gaseous, or free, oxygen from carbon dioxide, water, and sunlight—the process called photosynthesis. Subsequent to plant evolution there was a gradual evolution of animals and man.

Analogous to origin of planet earth and life in planet earth where biological marketing was followed by current economic situation, a scientific prediction of possibility of life in other planet might again be a fresh beginning of the old beginning to make money obsolete. Jupiter's moon Europa has been subject to speculation about the existence of life due to the strong possibility of a liquid water ocean beneath its ice surface. The case for life on Jupiter's moon Europa was greatly enhanced in 2011 when it was discovered that vast lakes exist within Europa's thick, icy shell. Scientists found that ice shelves surrounding the lakes appear to be collapsing into them, thereby providing a mechanism through which life-forming chemicals created in sunlit areas on Europa's surface could be transferred to its interior.^[6]

Possible trace amounts of methane in the atmosphere of Mars were first discovered in 2003 with Earth-based telescopes and fully verified in 2004 by the ESA Mars Express spacecraft in orbit around Mars. As methane is an unstable gas, its presence indicates that there must be an active source on the planet in order to keep such levels in the atmosphere. The ExoMars Trace Gas Orbiter (TGO), launched in March 2016, began on 21 April 2018 to map the concentration and sources of methane in the atmosphere, as well as its decomposition products such as formaldehyde and methanol. As of January 2019, the TGO has not detected methane.

CONCLUSION

To conclude as mentioned in the beginning, life is a transient geodesic line that is depicted by the shortest distance between two closest points. For almost all of us money is a rainbow honey in life. No doubt money is the sweetest and most colourful search for everyone in life. However like rainbow, almost all of us fail to realize that life is transient and money is also a transient part of life for which search is endless and desperate by all. However instead of search for money, a search for goodness existing within everyone shall result in a good beginning for a good life where the fulcrum is not fundamental money but holistic humanity. To reflect the same, I would want to conclude with the following vision.

REFERENCES3

[1]"CODATA Value: Planck length", The NIST Reference on Constants, Units, and Uncertainty. US National Institute of Standards and Technology, June 2015, Retrieved 2017-06-22. 2014 CODATA recommended values.

[2] Mauss, Marcel: *The Gift: The Form and Reason for Exchange in Archaic Societies*, pp. 36–37.

[3] Mises, Ludwig von: *The Theory of Money and Credit*, (Indianapolis, IN: Liberty Fund, Inc., 1981), trans. H. E. Batson. Ch.3 Part One: The Nature of Money, Chapter 3: The Various Kinds of Money, Section 3: Commodity Money, Credit Money, and Fiat Money.

[4] Ronald Noë, Peter Hammerstein: *Behavioral Ecology and Sociobiology* July 1994, Volume 35, Issue 1, pp 1–11.

[5] Atkinson, Nancy (2009): "Europa Capable of Supporting Life, Scientist Says", *Universe Today*, Retrieved 18 August 2011.

[6] Tritt, Charles S. (2002); "Possibility of Life on Europa", Milwaukee School of Engineering. Archived from the original on 9th June 2007, Retrieved 10 August 2007.
