FROM BARTER ECONOMY TO CRYPTOCURRENCIES

Prof. Dr. Elif CEPNI

WAAS

The Future of Money Rountable, 18-20,2019.

- The earliest coins date back as long as 600 BC and were found by archaeologists in the Temple of Artemis at Ephesus near Izmir in Turkey.
- These ovular Lydian coins were made of the gold-silver alloy known as electrum and bore the image of a lion’s head.
- The appearance of coinage was a revolutionary turning point in people’s lives.
- Coins made the movement of goods easier and
- made it possible to connect distant parts of the World, and
- thereby it became one of the main drivers of economic and social development.

- 5000 BC Barter. Directly exchanging items in early trade
- 4000 BC Sumerian Cuneiform tablets..scribes record transactions on clay tablets, which can also act as receipts.
- 600 BC Lydian gold coins… a mixture of gold and silver is formed into discs, or coins, stamped with inscriptions.
- 600 BC Athenian drahma (they used silver)
- 1553 Early joint stock companies in England begin to form companies in which investors buy shares (stocks) and share its rewards.
- 1999 Euro…twelve join together to replace their national currencies with the Euro. Bank notes and coins are issued three years later.
- 2000 onwards digital Money …..can now exist on computers.. Transactions can take place without any physical cash changing hands.
- 2008 Bitcoin a form of electronic Money that exists solely as encrypted data on servers is announced. The first transacion takes place in.

- **Money is worth only what someone else is willing to give you for it.**

- Credit as a word com from Latin "Credo" which means "I believe". It indicates that "trust" is the most important factor in all markets.

- The evolution of credit and debt was as important as any technological innovation in the rise of civilization, from ancient Babylon to present day Hong-Kong (Ferguson, 2009).

- *FUNCTIONS OF MONEY*
- ***Specific functions (mostly micro-economic)***
- 1. Unit of account (abstract)
- 2. Common measure of value (abstract)
- 3. Medium of exchange (concrete)
- 4. Means of payment (concrete)
- 5. Standard for deferred payments (abstract)
- 6. Store of value (concrete)
- ***General functions (mostly macro-economic and abstract)***
- 7. Liquid asset
- 8. Framework of the market allocative system (prices)
- 9. A causative factor in the economy
- 10. Controller of the economy

- There are different ideas-beliefs … whether Money is good or bad?
- Perhaps the most common claim with regard to the importance of money in our everyday life is 'money makes the world go round'.
- The biblical warning……. 'the love of money is the root of all evil',
- George Bernard Shaw….. 'it is rather the lack of money which is the root of all evil'.

- The ascent of money is taken as essential to the ascent of man.
- Thanks to financial innovation humanity moved from subsistence to today's prosperity.

- Lots of researchers try to find some plausible answers to "why some countries are more developed than other" question. There are different answers for this ranging from the quality of institutions, geography to culture. Among many there is one unanimously accepted reason.
- The countries who went far in first banking, bond markets, corporate finance and made advances in insurance, mortgage finance, consumer credits .....also went far in economic development race too.

- Today money markets and financial markets are the basic determinants of successful real economies.

- Everyone agrees that finance is indispensable to the economy.

- The financial sector directs our savings (money) to the most promising enterprises. Through this way it helps the allocation and reallocation of the available funds.
- If financial instruments are used properly definitely they will contribute to the dynamism of the economy (Tirole,2017).

- Financial revolution preceded the industrial revolution.
- The rise of money and credit, the bond market, the international finance, the rise of joint-stock (limited liability corporations), the invention of derivatives, virtual or electronic and finally cryptocurrencies have made the financial markets very complex.
- Started with the debt forgiveness of Hammurabi (1792-1750 BC), continuing with bankrupt nations, bankrupt companies, black Mondays, manias, panics, bubbles,
- we the human beings have become totally dependent on Money.

The big ten financial bubbles

1. The Dutch Tulip Bulb Bubble 1636
2. The South Sea Bubble 1720
3. The Mississippi Bubble 1720
4. The late 1920s stock price bubble 1927–29
5. The surge in bank loans to Mexico and other developing countries in the 1970s
6. The bubble in real estate and stocks in Japan 1985–89
7. The 1985–89 bubble in real estate and stocks in Finland, Norway and Sweden
8. The bubble in real estate and stocks in Thailand, Malaysia, Indonesia and several other Asian countries 1992–97
9. The surge in foreign investment in Mexico 1990–93
10. The bubble in over-the-counter stocks in the United States 1995–2000

- Since the early years of the 1970s we observed unprecedented volatility in the prices of commodities, currencies, Real estate and stocks, and the frequency and severity of financial crises.

- If the financial system is not used properly it may also cause severe damages. The global money supply rose from $25 trillion to $70 trillion in the seven years before the crash of 2008 incomparably faster than the growth of the real economy (Mason,2016).

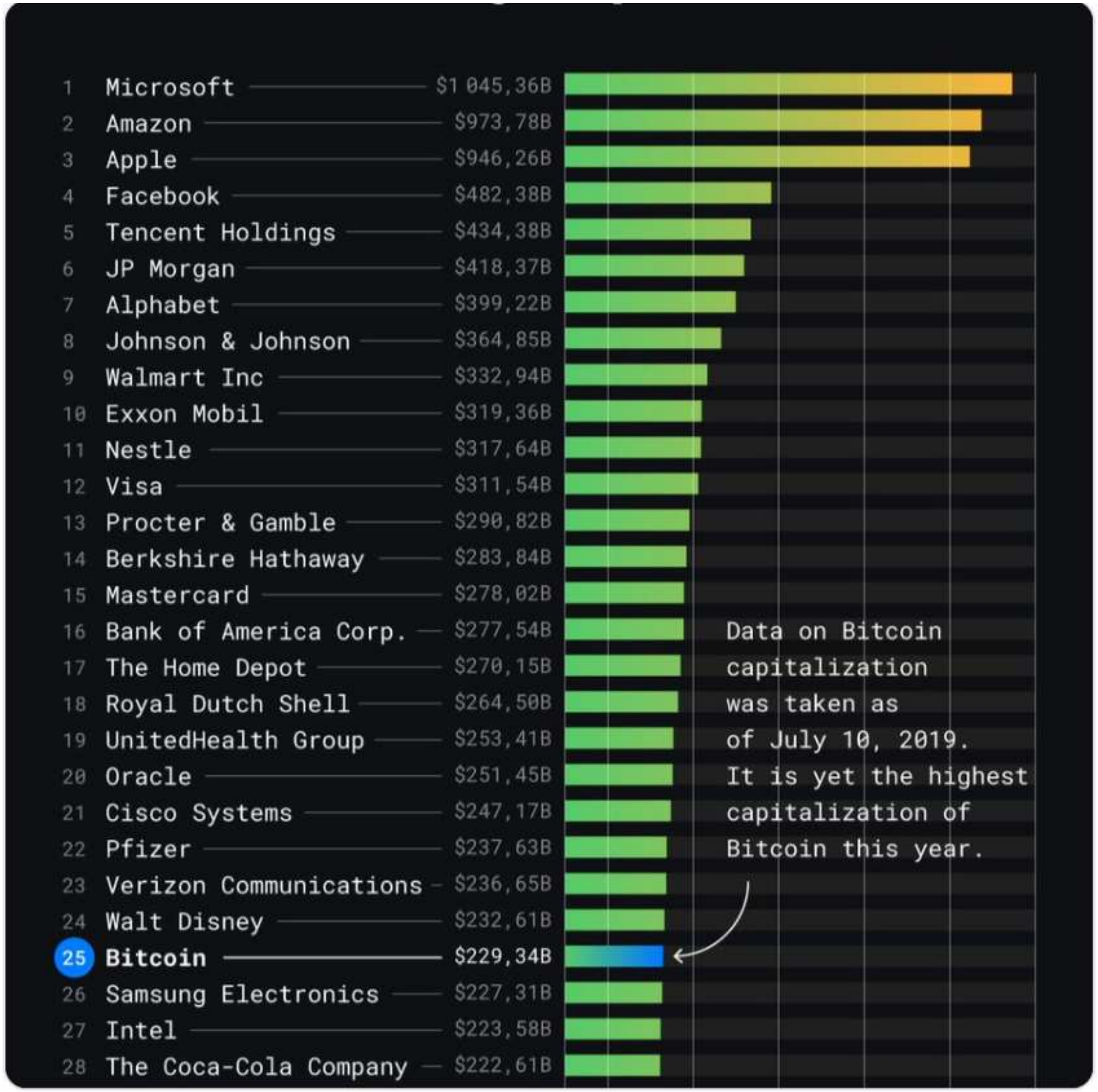
- Then we experienced the 2008 crises which is named as «great recession».
- Goldman's flagship Global Alpha fund, which uses quantitative strategies across a range of asset classes, has lost 27 per cent of its value in this year.
- "We were seeing things that were 25-standard deviation moves, several days in a row," said David Viniar, Goldman's chief financial officer. "There have been issues in some of the other quantitative spaces. But nothing like what we saw last week."
- It was a pure black swan event.
- Even the Queen Elizabeth said 'It is awful-why nobody see it coming'.

standard normal distribution

Range	Population in range	Expected frequency outside range	Approx. frequency for daily event
$\mu \pm 1\sigma$	0.682689492137	1 in 3	Twice a week
$\mu \pm 2\sigma$	0.954499736104	1 in 22	Every three weeks
$\mu \pm 3\sigma$	0.997300203937	1 in 370	Yearly
$\mu \pm 4\sigma$	0.999936657516	1 in 15,787	Every 43 years (twice in a lifetime)
$\mu \pm 5\sigma$	0.999999426697	1 in 1,744,278	Every 5,000 years (once in history)
$\mu \pm 6\sigma$	0.999999998027	1 in 506,842,372	Every 1.5 million years

So at 6 sigma deviations we are already talking about events that occur once every 1.5 million years. Note that the scale is not linear, and the difference between 2 and 3 sigma events is less than the difference

- **Frakenstein Finance**
- **Impatient finance;** the quest for short term returns. Short-termism
- **Consumerism and debt culture**
- **Credit Card Nations:** the economics of manic consumption
- **Pigs with wings:** debt:credit and 30:1 leverage: this means….. 30 million borrowed dollars in play for every million actually owned. The cheaper the interest rate, the better is to use high leverage.
- Deregulated financial markets increase instability.
- And now we are witnessing the increasing interest in cryptocurriencies.


1 Microsoft $1 045,36B
2 Amazon $973,78B
3 Apple $946,26B
4 Facebook $482,38B
5 Tencent Holdings $434,38B
6 JP Morgan $418,37B
7 Alphabet $399,22B
8 Johnson & Johnson $364,85B
9 Walmart Inc $332,94B
10 Exxon Mobil $319,36B
11 Nestle $317,64B
12 Visa $311,54B
13 Procter & Gamble $290,82B
14 Berkshire Hathaway $283,84B
15 Mastercard $278,02B
16 Bank of America Corp. $277,54B
17 The Home Depot $270,15B
18 Royal Dutch Shell $264,50B
19 UnitedHealth Group $253,41B
20 Oracle $251,45B
21 Cisco Systems $247,17B
22 Pfizer $237,63B
23 Verizon Communications $236,65B
24 Walt Disney $232,61B
25 Bitcoin $229,34B
26 Samsung Electronics $227,31B
27 Intel $223,58B
28 The Coca-Cola Company $222,61B
Data on Bitcoin capitalization was taken as of July 10, 2019. It is yet the highest capitalization of Bitcoin this year.

- Almost everyone feels hostility against financiers who make their living from lending money.
- There are several reasons behind this feeling.
- Unfair earnings, unethical practices, greed are some of them.
- In 2007 the Chief Executive Officer of Goldman Sachs received $ 73.7 million in salary, bonus and stock awards which was roughly two thousand times more than the average earning of an American (Ferguson, 2009).

- According to Ferguson, poverty is not the result of rapacious financiers exploiting the poor.
- The main reason of collapse is the lack of financial institutions and banks. Without these institutions borrowers cannot escape from loan sharks.

- Another reason of collapse could be 'principal agent problem'.
- Return on Investment (RoI) and Return on Equity (RoE).
- Publicy listed companies came under pressure to restore their RoI and RoEs.

- There is a need to reintroduce the concepts of ‘value’. (Mariana Mazzucato-The Value of Everyhting).
- what constitutes value, and what distinguishes its creation from its transfer, extraction, and destruction.

- Value Creation
- Value Transfer
- Value Extraction
- Value Destruction

- We need value creating productive businesses
- We need entrepreneurs who are taking risk and trying to create employment opportunities.

On Entrepreneurs & Start-Ups

To answer the question of where Taleb sits on the scales of opinion regarding entrepreneurs, I present exhibit A:

> *My dream—the solution—is that we would have a National Entrepreneur Day, with the following message: Most of you will fail, disrespected, impoverished, but we are grateful for the risks you are taking and the sacrifices you are making for the sake of the economic growth of the planet and pulling others out of poverty. You are at the source of our antifragility. Our nation thanks you.*

His impassioned view of entrepreneurs and scrappy start-ups ties very closely to his views on education. He believes in trial and error, and people who forge a path with nothing or little to lose and a lot to gain.


You're not
rich until you
have something
that money
can't buy..

TOO MANY PEOPLE SPEND MONEY THEY HAVEN'T EARNED, TO BUY THINGS THEY DON'T WANT, TO IMPRESS PEOPLE THEY DON'T LIKE.

WILL ROGERS

THANK YOU FOR YOUR

ATTANDANCE & PATIENCE

Prof.Dr.Elif CEPNI

dr.cepni@gmail.com