Finances and Human History

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Around 12,000 years ago (about the time 10,000 BC), when the last ice age was about to finish its course, and when the humans were still living the lives of hunter-gatherers, their population was then estimated to be 4 million. Today the human population is approximately 8000 million. Hunter-gatherer's lifestyle was extremely hazardous, but it was simple: all they were busy the whole day with were building houses, hunting for food, protecting families from predators, and procreation. This lifestyle -- from a very high level -- was not much different from that of many other species that we see today. It is after all the tremendous success story of the human gene which was able to grow its population from a meagre 14,000 hunter-gatherers to a whopping 8,000,000,000 smart-phone-wielding airplane-flying creatures, in a span of just 75,000 years.

This massive and prolonged population growth could not have been sustained, had there not been major technological and engineering advancements at innumerable critical junctures of the human civilization. If every human uses K units of resources (e.g., food, house, clothes, etc.) during its lifespan, then 14,000 and 8,000,000,000 humans would demand 14,000K and 8,000,000,000K units of resources in their entire lifetimes. These resources we nowadays call *Goods and Services* (G&S). It is very important at this point to note that a hunter-gatherer way of amassing resources could not have supported this gigantic population growth (more about that may be in some separate discussion). It was clear that the innovations should have had to be there on the cards in the human society, just to be alive collectively. Now the key question is:

> *Who will cater to this massive growth in human demand, which is unavoidable with the similar growth in human population?*

This demand of the humans should have to be met with the supplies in equal measure. And for that, it was necessary to ride on the back of the technological innovations and discoveries, to generate this required supplies (aka, goods and services); therefore, constant and continuous technological innovations are not a luxury, rather, without which, this overgrown human species is seriously under the threat of getting extinct.

From the above discussion it is clear that, on the one hand, there is demand, and on the other there is supply; to create value (or asset) in the ecosystem, this demand and the supply need to be met and change hands. To do this, people felt the necessity to have a financial system, where the exchange between the demand and the supply will take place smoothly (such a financial system is colloquially called a market). There are a few things that need to be pinned down right now to take stock of two important factors in a financial market:

1. As the population grows, to make every person have a better chance getting an income opportunity, the overall demand in the market should preferably be high; the higher the better. This is a necessary condition but may not be sufficient for a person to have an income source.
2. For a person to have a realistic chance of an income opportunity, he should be able to cater to some amount of demand generated in the market. If he is not in a position to provide this (e.g., he lacks training or skillsets), he remains unemployed and in the extreme case may die from hunger. The poverty of this nature has nothing to do with the size of the demand. This mere fact underlines an important fact of the economy of a nation: the underlying reason behind poverty, hunger, famine and unemployment may not be the lack of demand or of supply, it is because of the lack of appropriate skillsets and training.

The earliest financial instrument used as an exchange of medium is called the Barter system. Barter system allows two parties to exchange goods and services in a direct manner, without requiring any intermediate entities between them. For example, suppose two people possess 1 kg of fish and 5 kgs of bananas respectively. If one of them needs the other's merchandises, and if they think these two products are worth the same, they can exchange them directly.

When the Barter system existed 6000 years ago, it eventually fell out of favor as our economic complexities grew, and as our trading intricacies deepened. The major problem this system had is now known as the Double Coincidence of Wants. In simple terms, the odds that two people exactly want to trade each other's merchandise at the same time as well as at the same place could be very small, especially when the goods and services are quite diversified in the economic system. The system of bartering suffered from many other serious disadvantages.

- The system does not support store of value: If I have produced 10 mangoes, which could be very useful today to buy 15 apples. But I do not need apples today but would be needing them a week later by which time the quality of the fresh mangoes will degrade and they are no longer as valuable.
- The system does not easily support deferred payments (or repayment of debts at a later time possibly with interest): What if the buyer wants to buy now and pay later with interest. The proposition is quite lucrative for the seller. But, within the barter system it was difficult for the seller to calculate and keep track of the exact amounts of debt to be paid at a later time with interest.

As a result, to address the new complexities in the financial system, a new mode of payment system was conceived that had all the aforementioned missing properties, and we started to call them "money". After its birth, the system of money had never looked back. Money can be thought of as a uniform scale against which all goods and services can be valued and more importantly that value can be transferred with speed and ease. In the beginning, money was implemented using coins that either had some intrinsic value (aka commodity value) or were backed by government reserves of precious metals; however, as economic outputs and products had become diversified and high-volume, it was no longer possible to back money against precious metal coins. Then came the era of paper-notes whose intrinsic values are much lower than their denomination. Coins and paper-notes signed by the government are together called the nation's currency or the legal tender. If the currency's intrinsic value is significantly lower than its face value (or denomination), then it is called a fiat currency. Fiat currency draws its high face value from the people's trust in the government. The paper-notes and coins issued by the central bank of a country have remained the primary set of financial instruments for trading goods and services, until it was turned on its head by the emergence of the Internet.

From all these anecdotes as mentioned above and from the big pictures that they reveal, the evolution of the human financial system stretched over thousands of years has been singularly the story of creation and management of assets by making the exchange of goods (as well as services) increasingly faster, easier and more accessible. Indeed, the speed, the ease of use and the accessibility are the three cardinal components of a financial platform to bring more and more people into the business ecosystem. Although touched upon earlier in this piece, as our population grows at a breakneck speed, and to sustain this growth for a long time, there is no other choice than to speed up and invigorate the business activities. The advent of the Internet and its taking the world by storm is just another momentous step to shake up the business activities. E-commerce solutions -- thanks to the high-speed internet connections -- underpinned by card-based payment systems (as opposed to physical currencies) have made trading lightning fast.

To conclude, the progress of human civilization is closely tied to the evolution in our collective endeavour in creating wealth through discovering novel opportunities. Such an evolution process of our financial systems is notoriously slow, so much so that it is almost invisible to most of us. At certain localized and discrete checkpoints our financial system may appear to support selfish, brutal, cruel as well as vicious behaviours, as though the world is on the verge of an apocalypse. But at the end of the day, when all the different beads are strung together, the garland coming out as the big picture reveals a very different story, and that was a story of kindness, empathy, and camaraderie, so that all can live. Because consciously or unconsciously mankind perhaps knew that together they stand, divided they fall. Very lately our financial systems have been disrupted yet again by various new-age technologies such as AI/ML, IoT, Blockchains etc. It is still unclear which ones will finally survive and become mainstream, but one thing is certainly clear: when the steady state reaches, the new changes in our business stratosphere would again tell the story of human companionship and cooperation, like it did throughout history. Because this is our destiny, otherwise we would not have grown from a paltry homo-sapiens band of 14,000 odd individuals roaming the dense forests under the constant threat of marauding predators, to a community of 8,000,000,000 smart humans --

sophisticated, disciplined and high-tech -- flying spacecrafts higher and higher with an ambition to conquer the outer space!