

Review of economic predictions for 2030, as assessed by the Deutsche Bank Research Group

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Abstract

With technology growing faster than ever before, and problems regarding data handling triggering sentiments of change among the majority of the population, the next decade will certainly be one to follow closely, as a big revolution in how economy interacts with these established and steadily-growing technologies is being proposed by analysts and experts all around the world. We take a look at some of these proposals and predictions while giving an insight from the point of view of upcoming projects and enthusiasts willing to step into the market.

Index Terms – Blockchain, industry, economic sectors, fiat currency, digitization, decentralization.

I. INTRODUCTION

In the past few years, we have seen the unfolding of the period of fastest development in technologies, especially with the popularization and widespread of blockchain as a new means of safely distribute and share information, without having to rely on any central server, device or organization. Since the release of Ethereum in 2015, the availability of smart contracts has fueled the launch of thousands of projects that cover a wide variety of necessities for developers, investors and end-users.

Now that we are at the gates of a new decade*, most people are excitedly looking back at the progress and advancements achieved since 2010, and this has certainly been quite the decade for blockchain and cryptocurrency. But when we talk about topics like this,

*Technically, a decade begins on its year *one*, meaning the next one begins in 2021. However, it is popular to refer to decades as the group of ten years beginning in the *zero* year, calling them “the ‘20s”, for example.

both the past and the future and important, no matter how difficult it becomes to predict the latter. This is why the Deutsche Bank, through their Research Group, released *Konzept – Imagine 2030*¹, a publishing containing the main economic topics where this new decade will bring important changes and improvements. We will be reviewing this release and give a bit of insight from our perspective, focusing on what their predictions could mean to startups and low-level projects that want to grow in a landscape that may seem hostile or unwelcoming.

II. BACKGROUND

Back in 2010, Bitcoin was still a concept that was not properly grasped by the majority of people. Most just looked at it as a digitization of fiat currency that could be stored in banks, with the exception of not existing in physical forms. The huge news back in the day involved CoinPal, a way to use Bitcoin in PayPal, as it was beginning to be widespread as a payment mechanism. This initiative started the first discussions about Bitcoin’s capacity for simultaneous transactions, with even Satoshi Nakamoto stepping in with his insight in open forums like BitcoinTalk.org. 2010 was also the year of the infamous Bitcoin-Pizza transaction, which would become one of the most effective unsolicited advertisement campaigns in modern history.

From there on, Bitcoin would remain shrouded in a certain mystery while its userbase grew as media started to portray it² and more services grew from it, including BitPay and Coinbase. Legal attention was being caught across the world, with the first rulings being released in Texas, that would determine bitcoin are “a currency or a form of money”³. A big surge in users came in 2014, with mobile gaming company Zynga announcing that

they would start accepting Bitcoin as a payment method for in-game purchases.

In 2015, with the release of Ethereum⁴, the crypto market started to experience the benefits of diversification, as the number of users increased drastically, despite exact statistics not being properly reported due to the nature of cryptocurrency itself. The birth of smart contracts and the Solidity programming language opened the doors to a new wave of blockchain enthusiasts to a world of simple, accessible ways to develop decentralized apps, which later evolved into the ability to propose and create new models for blockchain, focusing on solving problems like scalability and transaction times growing longer as userbases keep growing.

Fast forwarding to 2018, the memory of the dire “crypto winter” should quickly come to mind. Up until late 2017, most tokens were growing steadily, reaching their top values as we entered January 2018. This increase in prices, along with the popularization of the concept all around the world, propelled the release and trading of Bitcoin futures, with which came a time of complete speculation and reduced trading volumes, which caused a constant, steep drop in prices all through the year, reaching falls of around 80%. After this, many people were very pessimistic about the future of cryptocurrency as a whole, with many believing it would not survive 2019.



Image 1. Total market capitalization of cryptocurrencies during the entirety of 2018. The decrease in both market capitalization and trading volumes is the defining factor of what we now call the “crypto winter”. Via cointelegraph.com

However, a change in sentiment, mainly triggered by many controversies taking place of companies like Facebook mishandling and selling their user’s personal

data⁵, along with the development of new alternatives for blockchain represented a healthy recovery for the market, which is the situation we are currently seeing.

III. BANKING AND ECONOMICS

The main focus of these kind of analyses, mainly those coming from worldwide known banking institutions, is how blockchain and cryptocurrency can generate long-term changes in how we look at monetary transactions, from disrupting the payment mechanisms and networks we are currently using, trying to replace fiat currency as the go-to equivalent to acquire goods and services to creating investment opportunities around the nature of tokens, be it to take advantage or mitigate the volatile nature of most of them.

III.a. The last years of fiat currency

The first big change that must be analyzed is the gain of popularity of cryptocurrency and other alternatives against fiat currency, up to a point where a possible complete replacement is being considered for the following years. People all around the world are starting to consider decentralized options that offers them complete control over their money.

These sentiments are strengthened as a consequence of low labor costs the population growing out of work-appropriate ages all around the world. With a reduced number of people entering this demographic compared to the previous generation, and the upcoming “workforce” being more interested in the gig economy^{6, 7}, the need for a model of fiat currency that can properly remunerate their efforts is also getting lower, and most freelancers are looking for alternatives that allows them for easy handling and being able to earn it from clients all around the world, all of it while avoiding the need to trust in a centralized bank or institution.

According to the researchers, the possibility of fiat money surviving this decade relies on breaching the gap that has been created between labor and capital, that is: reversing the share of GDP represented by labor. Of course, this might be a difficult task, given that the downward trend has been going on for over 40 years,

but the importance of fiat currency as a tool to remunerate work in an equivalent way may be enough of a driving force for governments to make these efforts.

III.b. Next ten years across the globe

There are important situations developing in some big economic powers and other rising economies with great potential that may define the course of the rest of the world. The most important examples, according to the Deutsche Bank, are China, as this following decade could bring a shift in the driving force of their economy, Europe, since their banking systems and institutions seem to have lagged behind the rest of the developed economies, and India, as their promise of solid economic growth might see another decade of staying unfulfilled.

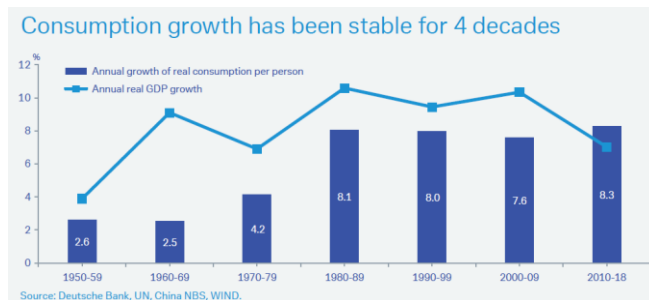


Image 2. Annual consumption growth vs. Annual GDP growth by decades. This shows the beginning of a possible reversal in production-consumption dynamics in the upcoming decade.

China has become a huge powerhouse in terms of economy and has been under the spotlight in the recent years for the constant frictions with the U.S. and political issues that have motivated events like the Hong Kong protests earlier this year. Whether or not most of the population agrees with their social and political tendencies and decisions, their economy is a force that must be reckoned, and the analysts want to focus in how it has been and will be driven in the coming years. Since the last two decades have been clearly defined by encouraging an export-centered model (2000s) and it later evolved into its current state, focused in public investments, researchers believe that the next decade will revolve around consuming, with a large chunk of the working population entering their retirement. This

may be an open gate for technology startups that would like to venture into the Chinese market, but they should always be aware of the additional limitations that this decision brings in term of international communications and content restrictions.

For Europe, the present does not seem as bright. Their economy seems to be stagnated, as unemployment peaked at 12% while the Chinese economy doubled in size and both U.S. and China seem to be increasing their advantage in terms of technology while the European Union lacks behind in adopting and implementing new ones. This combined with an aging population that is no longer able to work (22% of Germany's population is over 65 years old, with that number increasing past 25% in this decade) will bring dire times for the economic union if they don't start acting soon. Many countries are already offering more encouraging legislations for tech-savvy investors to base their projects in their countries (Estonia, Switzerland and Liechtenstein, for example), but there are also problems in the banking systems that require more drastic measures, and the Deutsche Bank proposes the implementation of a symmetric inflation target, so the deflationary effects can be mitigated effectively during the transition to more modern approaches.

Lastly, India is in a current state of permanent observation by the rest of the world. Most are concerned that their economy did not fulfill their promise of growth in this decade⁸ and are taking that fact as a premonition of another decade of stagnation, making them cautious when investing. However, the Deutsche Bank suggests that it might be the other way around: that the slow years will work as a foundation for a doubling or tripling by 2030, from \$3 trillion to \$7 trillion. From boldly cutting corporate tax rates, which would boost foreign investments and offset the slowdown in demand, to a potentially strengthening middle class that may see their income doubled to \$4,500 per year, there are a big number of factors that may drive the whole Indian economy forward in the following years.

IV. DAY-TO-DAY CHANGES

Besides entirely economic changes driven by politics and legislations, the new decade will bring forth a variety of changes in society, personal relationships and the way we live our everyday lives. Of course, these changes will definitely have great effects in our economy, since they will change and define our priorities in terms of spending and investments.

IV.a. Urbanization and transportation

A first, important point to look at is how urban planning and growth will evolve in the following years, thus creating a possible change in the distribution of storefronts and marketplaces. If digitization and e-shopping keep gaining momentum and popularity, as Amazon grew nearly tenfold this decade⁹, physical stores might become a concept of the past, which would boost the current movement of de-urbanization we have been seeing in certain big cities of the world. Internal immigration is growing steadily, especially in European capitals like London and Paris, as a growing population is starting to look for alternatives with more space.

This comes with a redistribution in the population, which raises two important necessities: a sufficient transport system that can connect the current and new population nuclei and steady routes for the movement of goods and services to the most secluded areas. The latter is already being covered, with services like Amazon offering simple (and sometimes free) shipping within countries, while the first will be a main point of development during the upcoming years. The implementation of blockchain.

The decrease in popularity of physical stores will change the way upstarting business must deal with generating engagement with their audience, by implementing new technologies to allow users to not only buy their products, but also create communities around what they offer, increasing their engagement and sales. Meanwhile, other project are focused on fixing the current issues that exist with both centralized platforms and blockchain mechanisms, which would set the foundations for completely trustless services.

IV.b. Climate policies

A top priority for most of the population worldwide is climate change. as more projects and social movements seem to gain momentum with each passing year. More and more high-ranking politicians are pushing for measures to reduce the impact that industry and corporations have on the environment, and a big number of projects are looking to solve some of the most important social issues in the world without forgetting about the importance of sustainability and reduced emissions.

A first big step is already being taken: carbon emissions, despite still growing, are growing at a much slower rate than in previous years, meaning that the current efforts are indeed making an impact and that maintaining them could revert the trend to a point where carbon emissions are reduced every year. This, combined with politic and economic measures being taken to incentivize the development of renewable energy generation¹⁰, are the strongest evidence to believe that the efforts against climate change are working, but that's not to say we should stop right now.

Of course, we are still at a point where the alternative energies do not cover the global necessities of most of the population, especially in countries where electricity is scarce. This either means that more investments should be made to further improve on the concepts of solar, wind and other energy generation mechanisms, or to gradually push changes on the way we consume in our day-to-day life, changing our mentality towards having a more global scope on the impact of our actions.

IV.c. The obsolesce of plastic cards

Another big change we might see in our everyday interactions and lifestyles is the decrease in popularity of plastic debit and credit cards. With the appearance and massive adoption of entirely digital payment methods like PayPal and ApplePay, there may come a time when smartphone functionalities might turn plastic cards entirely obsolete.

This position is fortified by the theory that fiat currency might not disappear entirely, as it has been a staple of our society for over two centuries and survived

incredible economic downfalls and a period of untethering from physical assets like silver and gold. The concept of fiat currency, according to the Deutsche Bank, might be in danger but it's probably too solid and widespread for it to be entirely replaced by the end of the decade. However, plastic cards have only been issued for around 50 years, which can make the process of leaving them behind a lot easier, even more if the security systems associated with the electronic payments system keep improving.

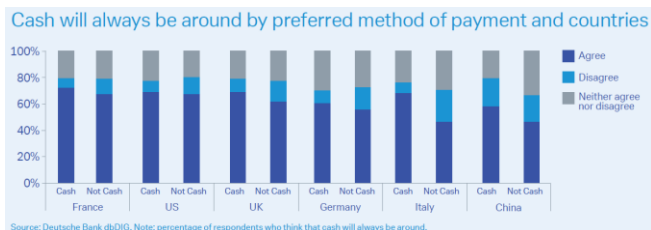


Image 3. Survey performed by the Deutsche Bank. The results show a clear majority of people still prefer the use of cash to different payment methods.

V. OTHER NOTICEABLE CHANGES

We want to cover some other areas that might not have a direct impact in global economies, but more of a change in mentality or habits in our lives as societies that could eventually have certain economic impact, especially if they become more popular trends as the decade moves on.

V.a. Political and academic trends

More and more people are thinking that globalism as social trend is slowly powering off. After years of this trend being promoted by governments and a big part of the population, the results being seen are not exactly what they were expecting. Both politically and economically, the attempts to establish globalist measures have created huge amounts of polarization in countries like the U.S. and the U.K., with powerful movements of backlash against massive immigration and in favor of more localized, nation-focused use of funds and legislation.

With this, economic advancements will more likely be motivated by the necessities of the people instead of countries trying to stay on par with the rest of the world:

a country that sees no need in adopting electronic payments or cryptocurrency will definitely not spend their resources in these fields. This is a very slippery slope that can result in stagnation, but with measures that benefit small and upcoming projects, foreign capital and investments might still be attracted, while still having the needs of the permanent population as a first priority.

V.b. Demographics

In terms of demographics we have two main trends to cover: the first, related to our previous point, is a potential decrease in the immigration rates of certain countries, and the second is the reduction in workforces, as worldwide populations grow older and the number of people entering working ages is reducing constantly.

The latter problem could easily be fixed by offering job incentives to immigrants, so they can compensate the lack of workforce and help the economy maintain itself in a stable state. However, with immigration laws being in the verge of a drastic tightening in the upcoming years, these incentives might be reduced, and the workforces of many countries will be maimed. It will be a matter of time until we see the first results of the new political trends of demographics, and more time after that for governments to react to the potential problems it may bring to their economies until we find a balance that creates stable landscapes for each country.

V.c. Sports and entertainment

Giving people something to fill their free time with has been a pillar of societies since the beginning of history, and it has only become more important in our era of technology and digitization. Sports have a more global reach than ever, the same goes to certain TV productions and franchises, cinema is moving tenths of billions of dollars every year and gaming reached a market size of nearly \$3 billion, and all of this is caused due to the access to these contents being as easy as it has been since their conception.

With new ways of creating engagement via tokenization of assets and the ever-growing reach of stable internet connections, big names like sports teams, media franchises and news outlets might reach new levels of influence outside of their local audiences, which increases the total revenues almost exponentially. This combined with the rise of freelancing and a tendency for shorter workdays, will make the entertainment industry as a whole increase in popularity even more in the upcoming years.

VI. CONCLUSION

As the Deutsche Bank states, we are facing a decade of big economic changes more directly driven by society and technology than politics, and that should be taken as an eye-opener by everyone of us, considering that each person can become part of influencing movements that can bring forth the changes needed to improve our lives and stay on the edge as technology moves forward. It is now, more than ever, our chance to build the societies we want to live in and to leave to our following generations, so we must face this opportunity with assertiveness and ambition, without forgetting about those that live around us.

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