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Financial bubbles and their risks for the effectiveness of law

Las burbujas financieras y sus riesgos para la eficacia de la ley

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Abstract

It is possible to affirm that financial bubbles have been present throughout almost the entire economic history of the civilized world. In fact, the growth of trade and financial activity has led to an increase in the frequency with which these financial bubbles appear. Effects that are accentuated considering that the financial markets have been opening up more and more not only for professional investors, but also for consumers in general. This implies an increase in the harmful effects that a bubble can represent, and the risk that States cannot guarantee the protection of social and economic rights of consumers. In this scenario, the fintech phenomenon is analyzed and whether this trend could become a future bubble, which is why the implementation of a regulation that is adequate to guarantee economic growth and the competitiveness of financial activity is recommended, while the rights of the people who invest in said companies are protected.

Key words

Financial bubble, legal protection, consumers, fintech.

Resumen

Es posible afirmar que las burbujas financieras han estado presentes a lo largo de casi toda la historia económica del mundo civilizado. De hecho, el crecimiento del comercio y la actividad financiera, han supuesto un incremento en la periodicidad con las que dichas burbujas financieras se presentan. Efectos que se acentúan si se tiene en cuenta que los mercados financieros han ido abriéndose cada vez más no solo para inversores profesionales, sino para consumidores en general. Esto supone un aumento en los efectos nocivos que una burbuja puede representar, y el riesgo de que los Estados no puedan garantizar la protección de derechos sociales y económicos de los consumidores. En este escenario se analiza el fenómeno fintech y si dicha tendencia pueda llegar a constituir una futura burbuja, razón por la cual se recomienda la implementación de una regulación que sea adecuada para garantizar al crecimiento económico y la competitividad de la actividad financiera, al tiempo que se protejan los derechos de las personas que inviertan en dichas empresas.

Palabras clave.

Burbuja financiera, protección legal, consumidores, fintech.

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I. INTRODUCTION

The traditional theory of the market price of a product states that it is determined by demand and supply; and that when there is a balance between these two constants, then it is understood that the market for a said product is at a zero-equilibrium point. However, in practice, what is appreciated is that said theory does not incorporate emotional aspects of people, and how these emotions can lead to points of critical imbalance that affect the stability of the economy and the realization of the rights of consumers, an aspect that is appreciated today, where the markets respond mainly to external stimuli such as Elon Musk's Twitter, rather than to the reality of Tesla's financial and productive structure.

Such aspects have largely been determining factors in the well-known financial bubbles, whose consequences entail high social and economic costs for the states, directly or indirectly affecting the realization of the legally recognized rights of individuals. Due to the globalization of financial markets, as well as their liberalization, its effects are increasingly common and geographically extensive, which is why, in this sense, no State is protected against such risks.[1]

A clear example of this scenario was observed in the *dot.com* case, which is the speculative phenomenon that led to the formulation of a financial bubble between 1997 and 2001, due to the disruption in the market of technology companies, associated with the internet. This case is mentioned, due to the growing trend for investments in technology, in all segments, including the financial sector. More from the previous case, it is important to verify if, in the case of Fintech, we are facing a possible new bubble.

Therefore, based on the deductive method, and making use of the empirical analyzes reported in the analyzed doctrine, it is possible to conclude that, in this case, the result will be different, to the extent that it will be the same traditional financial sector, in charge of serve as a regulator of said undertakings, to the extent that, otherwise, it could lead to its exit from the market.

II. DEFINITION OF ECONOMIC BUBBLE

An economic bubble can be understood as a disproportionate increase in the value of a good concerning its real value. It is a phenomenon that does not respond to a logical explanation, but rather, on the contrary, to a motion moved by irrationality (Posner, 2009, p. 10). This is a situation that can occur in all types of goods traded on the market, in which there is an unusual interest in

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[1] Recently we have faced issues such as the Coronavirus that has put the stability of the world economy in check, or crises that, although not as famous, their effects are indirectly reflected in the purchasing power of consumers such as what happens with shipping container crisis.

their acquisition, given the illusion that the increase in their prices and the demand for it will be constant, ignoring the market saturation point.

According to what has been stated, a first stage is given by a phenomenon of upward speculation in prices in its initial stage, followed by stagnation of prices in the upper part of the bubble, and subsequently gives rise to a loss of confidence, accompanied by falling prices in its final stage.

Effects that can become even more acute when the financial sector takes part in the bubble formation process, which, moved by profit expectations -irrationality- invests the resources of investors and savers, ignoring the growing risk that such a product in the economy -irresponsibility- may entail.

Part of the problem that can occur in the growth stage is associated with the possibility of committing fraud and anti-competitive conduct. The foregoing, to the extent that the controls, whether by the investors themselves, and even by State entities, seem to be much laxer when things are going well, ignoring conduct that would otherwise be judged contrary to the legal system (Bhattacharya and Yu, 2008, p. 7).

In the financial scenario, Guzmán and Trujillo (2008, p. 67) point out that despite the assumption that investors trust the integrity of price mechanisms, the empirical evidence leads to the conclusion that this is not the case. This may be one of the determining elements in the formation of financial bubbles, associated with what Shiller (2015, p. 48) calls irrational exuberance, in the sense that historically "markets have been overvalued to unsuspected and unsustainable levels under the influence of market psychology". This position coincides with the work of Kindleberger and Aliber (2015), in which they review how recent economic history has been marked by the existence of bubbles.

The crux of the matter is that the bubbles, once they burst, cause a series of direct and indirect damages that affect all of society in general. As if a section of the food chain were missing, affecting an entire ecosystem, the bursting of a bubble implies declarations of bankruptcy of companies, job losses, rescue measures that imply new taxes, and, in general, the affectation of social rights.

The aspect that ends up leading to what Posner (2009, p. 11) considers to be the most serious type of economic depression, because it occurs after a mistaken belief of a change in the economy, among which technological advances can be found; the incorporation of technological progress at this point is given from the postulate that the advance of science -technology- supposes an increase in economic growth in terms of production, as well as consumption, increasing utility in a scenario of economic stability (Solow, 1992, p.71).

That said, it could then be thought that there is a greater propensity to make erroneous decisions when it comes to the expectation of a new, disruptive technology that can revolutionize the economic structures of society, and that is why bubbles end up taking place. In other words, techno-

logical development, which is so important for improving the quality of life of humanity, cannot be demonized, but rather, the disproportionate interest in profits that implies the adoption of poorly analyzed or irrationally adopted decisions.

III. BEHAVIORAL FINANCE

It is considered appropriate to start this section by pointing out that behavioral finance arises from less narrow analyzes than those that arise solely from economic theory. As Soros (2008) said, "I start from the idea that our understanding of the world we live in is inherently imperfect because we are part of the world we want to understand." (p.35)

The foregoing to the extent that it is possible to find errors in what would be the decision-making process, and overconfidence scenarios (Ritter, 2003, p. 429). Thus, this feeling arises from a simple analysis that takes, as its starting point, that the number of predecessors that invest is greater than the number of predecessors that do not invest (Bikchandani and Sharma, 2000, p.7).

Enthusiasm, as well as panic, are behaviors that make no distinction between social classes, religions, or ethnicities. They are people's emotions. These are ideas that can generate a social contagion, to which Rook (2007, p. 80) refers in terms of collective "somnambulism" or "hypnosis", and to the extent that the rumor spreads, it is giving credibility to history, taking it as if it were an absolute truth, which leads to the belief that the product boom will remain constant over time (Shiller, 2008, p. 41).

In this aspect, the determining role played by social networks as suitable means for the massification of information is currently evident. Networks quickly serve as multipliers of the behavioral effect of economic behavior that leads to the formulation of herd behavior, without considering information that may suggest different arguments (Rook, 2007, p. 75). That is to say, the economic decisions of people, including the financial markets, currently seem to be more influenced by the influence of Twitter or a movement that starts through Facebook than by a true financial analysis or productive capacity of a good or service.

Indeed, when people see that others are getting rich from a business, the question they ask is why not do it too? (Kindleberger and Aliber, 2015). This hypothetical question raised here is what we consider, leads many people, including the CEOs of large corporations, including financial institutions, to make decisions about investing in certain businesses, unaware of the associated risks, or simply without carrying out a simple examination of the way prices rise; price rises that are well known cannot be eternal.

This type of behavior can be due to different causes, one of the most important being excessive confidence in one's abilities to identify market trends. In other scenarios, also quite common, it can be due to familiarity with the investment object, which can lead to an underestimation of the

real risk (Ritter, 2003, p. 431). Sometimes the low-risk aversion of CEOs is due more to the fact that they are investing other people's capital and not their assets.

In addition to the statements, Vélez (2006, p. 23) refers to the credibility effect, which is granted by average investors and consumers, to the predictions offered by financial "gurus" and other authorities in the sector that is supposed to work within of greater rationality thanks to the volumes of information they have at their disposal, as well as their experience in the markets. However, we consider that the only thing predictable is that the financial markets and the rationality of investors are unpredictable.

For traditional economic analysis, based on mathematical laboratory formulas, it is a variable that is difficult to determine, since what is observed is like a sociological phenomenon, beyond the legal scenario, it permeates the psyche of people, and induces them to make certain decisions. The foregoing could not be considered as a subjective process of each agent in the formation of her consent; but, in a process of collective rationality that objectifies, and gives the feeling of absolute truth to group thinking (Vélez, 2006, p. 10), which is increasingly susceptible to being affected by externalities that do not always respond to empirical data, but on many occasions simply to a rumor that is created through social networks.

It is then a systematic deviation of human decisions, of the expected rationality when they are in situations of uncertainty (Guzmán and Trujillo, 2008, p. 69). Regardless of whether the agents who make the decisions have financial education or not, the effect of human emotions is a variable that is difficult to determine; hence the difficulty for the regulator to be able to establish protection frameworks to the extent that many decisions, which are taken to be well informed and understood, do not respond to said logic, leading to breaches and even bankruptcies with all the effects that this entails.

We can conclude this point by pointing out that beyond the rationality of the agents regarding economic decision-making, it seems that the determining aspect is more than the available information, the need for consensus, which is the generator element of group thinking; in which there is no room for dissent, which can lead to group rejection (Rook, p. 86 and 87).

IV. THE LEGAL EFFECT

The previously described situation, although it primarily takes place in a scenario that is financial in nature, quickly extends its effects to the social sector, generating implications in the recognition of economic and social rights, regardless of whether they are consumers or businessmen. Consequences that even transcend the borders of the states, given the interconnection of economies today, and the existing facilities for the placement of capital far beyond the limits of legal systems.

As already noted, in the process, the occurrence of behaviors that can affect competition law is observed, and that in some way can sometimes be ignored by the states themselves; even, as Bamberger (2010, p. 702) notes, legal schools have not been very active on issues such as compliance and the lack of actions to mitigate the risks that this may entail, or simply the positions adopted tend to favor the interests of its nationals on the transnational balance.

For this reason, and considering that these types of financial crises are increasingly common, a regulation that is more adjusted to the issue is required to avoid new crises at a global level (Maldonado, 2021). However, we understand that it is not easy to regulate the autonomy of the will to negotiate, which is what becomes the true engine of the economy; but if it is required to do so on the establishment of prudential limits on their formulation because experience teaches that Smith's invisible hand does not always seem to rock the economy at the correct rhythm.

What has been noted is of greater importance, if one considers that, at present, Fintech businesses, and, in general, most ventures, move at a speed that is almost impossible to be tracked from the right. This aspect is aggravated when it is observed that, thanks to globalization, the circulation of capital at a planetary level is almost free; and technological advances have done the rest.

Even the need for regulation is necessary to the extent that, at present, it can be said that the livelihood of many of these businesses depends on people's private information. In other words, the private life of consumers has become the asset to be negotiated. Therefore, who would be held accountable if such a massive circulation of information failed? This is demonstrated, for example, by the fact that much is said about the benefits of inclusion favored by technology, but little is said about the risk of people's information facing a cyber-attack (Giudici, 2018).

However, we cannot continue to think of traditional regulation models, but with a futuristic cut, closer to techno-finance. With which, a true dialogue of knowledge between legal science and other disciplines such as engineering and economics is required to formulate regulations that adjust to new trends and avoid the formation of bubbles and the occurrence of crises that suppose not only an economic risk, but the affectation of the rights of consumers and people in general.

V. THE DOT.COM BUBBLE

Examples of bubbles abound throughout history. Although we believe that their effects ultimately end up being the same, the scenarios in which they develop may vary. That is why we have proposed to make a brief analysis of the dot.com bubble, given that it developed at a time like the present in which interest in technology was shown as the flag that would show the north that the economy should follow, and, therefore, the formulation of law.

Ljungqvist and Wilhelm (2003, p. 725) show, with great precision, how, in 1996, *dot.com*, or companies that offered technological services through the Internet, started with an average valuation in the market, and how quickly said price increased, skyrocketed, leading to more than 2,000 of these companies being listed, only to drop again in 2000.

The process was associated with a growing wave in the development of fiber optics and infrastructures associated with the subject for technological advancement (Barkley, Rosser, and Gallegati, 2012, p. 454). Afterward, it was just enthusiasm without rationality, in which investors began to bid to buy assets in any company that claimed to have an idea of the dot.com issue (Chandrasekhar, 2014, p. 11).

Which led to a point of euphoria that facilitated its popularization, even among people with limited financial capacity: the realization of the American dream (Bose, 2002, p. 3410). This position is consistent with the data shown by Ofek and Richardson (p. 17), who point out that in the case of dot.com, the number of retail investors shot up to unusual levels.

The widespread enthusiasm made it difficult to implement regulations on the subject, given the appearance of wealth generated by the model (Barkley, Rosser, and Gallegati, 2012, p. 455). For governments, it was like putting a stick in the wheel of growth, which can be considered an unpopular measure that could have high costs at the polls.

Perhaps, for this reason, the disclosure of television advertising was even allowed, despite the irresponsible and potentially false content (Coyne and Traflet, 2008, p. 194), observing that, more and more, the media, and, currently, the networks social factors, are determining factors in the formation of bubbles.

Stock price growth continued, and in real terms, the only thing keeping it up was the belief that stock prices would continue to rise because, in terms of the dot.com company's fundamentals, no variation would support said increase. However, once pessimistic investors began to doubt this idea, a chain reaction began that ended up bursting the bubble (Ofek and Richardson, p. 30).

These aspects show that, in the case of the formation of the bubble, one can observe, on the one hand, an interest in markets that involve technological disruption – or at least the hope of reaching it. On the other hand, it was observed that the maintenance of prices was simply due to an unrealistic illusion of constant price increases. Finally, the role of the State is minimal in this kind of scenario.

However, note that after the bankruptcies that occurred, the business competition was affected in the first instance, without considering public confidence in the asset markets and all the defaults that occurred. Reason for which, as already noted, although a bubble cannot be predicted, at least what is pointed out is that corrective measures can be taken from the right-hand side to mitigate their effects.

VI. WILL FINTECH BE A FUTURE BUBBLE? AND WHAT ABOUT REGULATION?

Law and national regulators cannot continue with the traditional slow wait to see what direction sociological phenomena take before going after them. They must anticipate this type of situation and regulate it to favor its development and guarantee the rights of people in general. Especially, whether it is called Fintech, algorithmic trading, blockchain, cryptocurrencies, or smart contracts, technological change is not a situation, but a new reality.

We agree with Soros (2008, p. 144), who points out that the reorganization of financial markets, including access to new previously unexplored segments, poses a real challenge for financial authorities on how to control them and avoid the harmful consequences that historically have caused them.

That would be the Fintech scenario, which represents a new business model based on the provision of financial services through technological platforms, offering “fast and agile” solutions in segments that the traditional financial system does not have easy access to. However, part of these advantages is given by the fact that these new competitors, many of them are outside the surveillance of the entities of the traditional financial system.

As they are not subject to such surveillance, they also do not have to support the heavy structures of financial institutions to guarantee the stability of the financial system. An aspect that is inevitably an eye-catcher due to its lower operating costs, but, at the same time, poses a greater risk due to the lack of efficient regulation.

For this reason, it would be possible to understand that we could find ourselves facing a new internet bubble with the respective consequences, as analyzed in this work, if it bursts. Such statements are since the market for this type of asset has reached peaks similar to those of the dot.com bubble, despite the unclear nature of its business model (Chandrasekhar, 2014, p. 10).

Although, we agree with Peña (2019), in the sense that Fintech seems to be more the enthusiasm of some entrepreneurs, but that ultimately their market segment has been and will be absorbed by traditional financial institutions, in the first instance, given their internal reorganizations to stay in business, and, then, thanks to their economic muscle, that will make them take over (van de Beek, 2020).

In addition, surely, another obstacle that Fintech companies will face, and that could generate a decrease in their competitiveness, will be once they are subject to precautionary regulation that promotes greater protection of the financial consumer, as well as the protection of the economy. The foregoing will necessarily lead to an increase in the preferential rates that they can currently charge to assume the weight of preventive regulation to consumer protection.

An example of this is presented from the analysis of the Wirecard case, a German Fintech with a great boom and a strong capitalization. The situation that generated its good publicity and the weakening of State controls in the face of the appearance of solvency and good management. However, in June of this year 2020, the company applied for an insolvency procedure in which a series of internal mis-managements, to keep the product attractive externally, were revealed (Zeranski and Sancak, 2020), an aspect that could not be in another way, it meant the implementation of stricter controls in the operation of this type of Fintech, leading to an increase in its operational costs.

Beyond what happened, it is observed that this case confirms the thesis raised around Fintech, since despite being a company with good capital, its effect on the economy is marginal, and on the contrary, it opens a box of pandora on the goodwill and good practices of these entities, which we hope will end up increasing the controls that are promoted to achieve good economic development without disregarding legal guarantees.

Another aspect that leads us to consider that its impact will be reduced is associated with the coronavirus. Although, in a first instance, the pandemic has led to an increase in the consumption of digital services, which has led to a considerable increase in Decentralized Finance, which allow, through the tokenization of assets, the celebration of a growing number of peer-to-peer operations, reducing transaction costs, with the security offered by the chain of blocks regarding the transparency of operations.

Thus, in the face of Fintech and other disruptive financial service models, what is expected is for new regulatory models to be established from the edge of a law that is broad enough not to cut the wings of economic development, but strict enough to clearly outline the parameters of action of businessmen, without endangering the privacy of consumers, or the economy in general.

VII. CONCLUSIONS

Predicting the formation of the next financial bubble seems to be an impossible task despite diary risks and a lot of information that supposes it. The only certain thing is that, in some sector of the economy somewhere in the world, it must already be forming. People's enthusiasm for any product is a phenomenon that does not even depend on their academic background. It simply begins to form like a wave in the ocean that, as it gains strength, becomes a tsunami that destroys everything in its path.

This type of phenomenon is increasing today to the extent that the media and social networks play a multiplier role in information, regardless of its veracity, especially in the formation of the herd effect. This is increasingly clear because today people do not want to feel excluded from social dynamics, in addition to the fact that people, nowadays, thanks to technology, can make investments even from their cell phones.

Thus, the dream of riches in a purely capitalist environment where the measurement of people is done in consideration of their heritage favors these formations. At least that is how it was noted in the dot.com case, in which many of the investors were retailers without much experience in the sector, but with the expectation of high profits, unaware of risks or issues as simple as portfolio diversification to reduce the possibility of loss.

However, if one part of the problem is the difficulty in predicting the formation of a bubble, the other part is given by the lack of action of states to control the excesses of euphoria and the unfounded increase in the prices of certain goods and services, which quickly leads to unrestrained speculation and even illegal conduct.

Now, in the case of Fintech, even though many of the elements are similar to what happened during the dot.com bubble, we understand that it will be the same traditional financial sector, which will serve as a self-regulator of said initiatives, for one part, to absorb the best developed ones; on the other hand, so that, through its reformulation, they can also begin to compete in the segments in which they did not previously compete, dominating the market and reducing the effervescence; and, finally, that technology continues to advance at such a fast pace that Fintech itself currently competes with a much more threatening player such as Decentralized Finance.

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