

SPECULATIVE BUBBLES – APPEARANCE AND GROWTH

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Abstract:

The global financial market is constantly changing, and this is why research topics in this area are endless. The purpose of this article is to highlight the premises of appearance and expansion of speculative bubbles from the perspective of large volumes of financial transactions done far from the fair price. Many researchers believe that stock market indexes through their evolution over time have the ability to anticipate crises or the moments when the speculative bubbles appear. In this article we show that this is not always true, and we state that every time stock market indexes will be adjusted to the real economy.

Keywords: *Speculative Bubble, Stock Exchange Markets, Stock Market Indexes.*

JEL classification: *G01 - Financial Crises*

1. Introduction

The term of speculative bubble refers to the situation where are completed large volumes of transactions in security market, far beyond their equilibrium price. In such situations, the price at which transactions are concluded is not related to the intrinsic value, real value of an asset. We find in the specialized literature different names for this concept (market bubble,

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bubble price, financial bubble), but they essentially refer to the same thing: trading assets at prices much higher than normal.

Speculative bubbles could be formed on any market, as long as there are traded assets on it (whatever they may be): on the real estate market, on the consumer credit market, art and other paintings market, but the most commonplace where we can find these bubbles, is the stock market. This is due to the nature of this market: on this market trades are made continuously and financial assets have symbolic values associated, depending on the supply and demand for them.

2. The emergence and expansion of speculative bubbles

The stock market is considered to be a barometer for national economies and also for the world economy as a whole, this is because the stock market reacts at all the events, information or changes that occur and have an influence on it. This means that the stock market reacts in times of growth and economic boom but also in times of crisis. Given the synthesis capacity of the overall progress of stock market, the stock market indexes are the finest tools for analyzing the evolution of stock exchanges. Therefore many researchers believe that indexes can anticipate crises. If they do or not depends on the situation, but each time they will adjust to the real economy. However, there are situations in which the real economy falls into crisis before stock markets, in which case the stock markets will adjust to the real economy. Therefore, we cannot always say that stock market is a harbinger of crises.

Speculative bubbles are part of the economic cycle and are characterized by a rapid expansion (in our case this expansion is seen as price rises of traded securities) which is followed by an equally rapid contraction (seen as sharp decrease of prices) (Brooks & Katsaris, 2003). The impact of drastic declines in stock prices can be dramatic on listed companies as the financial market is permanently linked to the real economy (Wang & Wen, 2010). In fact, the stock market is a key economic indicator of any economy where we find the operation of such stock market (Stoica & Gruia, 2006, p. 413).

We must not confuse any drop in stock prices (or a decrease in its activity) with the moment of a bubble bursting. Price fluctuations are normal

issues in any stock exchange. Regularly, quotes are adjusted based on necessary corrections on each stock market. Most of the times, speculative bubbles formed on stock markets are associated with a decline of the macroeconomic indicators for the real economy they mirror.

Throughout history, we can identify several moments when bubbles were formed. The basic principle beneath bubble formation is the continuous growth of traded asset prices, this growth being maintained by speculators activity, that are always looking for new opportunities to win. Despite the fact that speculators are aware that purchase prices are high, they always hope for more. The high prices that speculators are buying securities at are based on the profit potential to be gained from holding these securities.

Once triggered this spiral, the "snowball" effect - as Buffett calls it - occurs again, until the vision, perception and expectations of market actors' change. Thus, the sellers come on the first plan. They will generate massive trades with the securities they held and will determine the change of the general market trend. The end of the bubble is often abrupt and dramatic.

If for the first half of bubbles formation stock market participants are euphoric and enthusiastic, for the second half when the bubble burst their feelings turn into despair. Many of them go bankrupt. We do not generalize this idea. Many participants also benefit from the effects of speculative bubbles break by taking short positions on the market that will bring far greater returns in a very short time. If we associate the necessary timeframe for speculative bubbles formation with the economic cycles, we find that for growth and boom extending over long periods of time, the growth rate of the market price is moderate. In contrast, periods of decline and crisis take shorter span of time, but the rate of decrease in the market price of securities is higher than in their growth phase. Therefore, the possibility of achieving significant gains in short periods of time is not excluded, especially as manifested by short sales and leverage through margin trading assets. However, changing the positions of speculators in the market proves to be very difficult to realize.

In essence, the mechanism of speculative bubbles formation and how their effects come to the real economy can be presented as follows:

Figure 1. Speculative bubbles formation



Source: authors processing

Figure 2. Bursting speculative bubbles



Source: authors processing

The theory of rational expectations argues that assets market prices are formed based on information available to all participants and using known methods of determination. This means that security prices cannot be different from their intrinsic value (fundamental value) unless it is proved that the information on which the prices were based was totally wrong (French, 2009, p. 2). However, the stock exchange investments practice shows something else. The speculators remain active in the market, and generate very high prices for the securities. This is why so often prices have no connection with their intrinsic value. This strategy is aimed at achieving ever greater profits. We find somewhat ironic these issues as "greater fool theory". The essence of this theory could be summarized as follows: those involved in the strategy should avoid being the last link, because the last investors who are out from their long positions after the bubble burst, have suffered most and marked the biggest losses.

3. Speculative bubbles – from history

We can find many examples in history of such bubbles in different business areas. The oldest known speculative bubble we can identify was in the years 1634 - 1637 in Amsterdam known as "Tulip mania". Back then the prices of tulip bulbs have skyrocketed, on a background somewhat unjustified. Several researchers found that the increase in the price of tulip bulbs, was determined by the massive influx of silver and gold in Amsterdam which was also determined by currency liberalization, augmented commercial transactions and the success of the Dutch navy in confiscating treasure off sea (French, 2009, p. 19) .

Later, between years 1711-1720 a new speculative bubble would make its presence felt: South Sea Bubble. For the United Kingdom, the seventeenth century can be characterized by an increase in trade and transactions in general and also industrial expansion, which required the creation of public banks to facilitate the completion of transactions between merchants and those of other British areas, especially in Europe. The establishment of a public bank in the United Kingdom was not sought only by traders; it was also a necessity from the perspective of the British government. Thus, that it could better manage the country's economic situation given that it

was at war against France, Ireland and Scotland. Its Sources to finance the country's deficit resulted from the war needed to be identified. In 1711 a public-private partnership named "South See Company" was established to strengthen the UK budget and to reduce the national debt cost. Its name derives from the company that had a monopoly on trade with the countries of South America, monopoly lost in favour of Spain after the war against it was lost.

Company's share price has increased a lot (from a just over 100 pounds in 1719 to nearly 1,000 pounds in 1720), reaching their peak in 1720, when the bubble burst. This is where the name came from, "South See Bubble". The impact on investors was devastating and the economy was deteriorating at all levels. Words were spread about a scheme to cover irregularities on purpose of operating this company and also about the involvement of politicians in disguise. Subsequent to the bubble bursting in 1720, an investigation has started to reveal all these abuses, but it will remain in history as a failure in the functioning of this market (French, 2009, p. 75).

The list of examples of speculative bubble goes as follows: in 1720 all of the Mississippi company's share price known a fabulous increase, in the 1840s the increase in share prices of transport companies, known as the "Railway Mania", between 1995-2000 price increases for company's share in the IT domain, known as the "dot-com bubble" or the speculative real estate bubble that started in 2007 in USA and which has had a major impact on many real estate markets in the world and on the quotations of securities listed on the world's major exchanges.

4. Causes of speculative bubbles

The roots and reasons that cause these bubbles represent a challenge for both investors and stock market researchers in this field. We could find a causal link between their formation and the formation of economic cycles, both in the national economy and the global economy. Other causes could be: speculative transactions, uncertainty and lack of rationality of the actors acting on these markets. However, there is no universally accepted view with regard to the factors causing speculative bubbles.

Some voices from the investment spectrum consider that speculative bubbles formation is determined by rising inflation rate, so we could identify between factors that cause inflation, the ones that are causing securities price increase over their fundamental value. From our point of view, the speculative bubbles have to do with an imbalance caused by a misperception regarding gain opportunities for investors. The economic imbalance caused by speculative bubble formation can be translated into artificial situation created in the market, especially for short-term speculative bubbles. The impact of long term speculative bubbles is more severe, these could lead to global economic crisis.

We identified as possible causes for the appearance of speculative bubbles in recent times the demonetization of gold in the 1970s when there was an excess monetary expansion, and also in trading contracts with excessive leverage.

The two doctrines that relate to possible causes of speculative bubbles, tackles this problem from two different points of view. Thus, Keynes's theory advocates believe that the main causes of speculative bubbles could be identified in human behavior, whose rationality is not at all times tested. Human behavior is often based on spontaneous decisions which are taken because of feelings of optimism (reliable feelings) over evaluated and not based on rigorous mathematical and statistical models developed (Keynes, 2009, p. 211). On the other hand, the economists of the Austrian school (Mises, Friedman) consider as speculative bubbles reasons the variations of the monetary supply in the economy (Moraru & Tănase, 2012).

Even with these exposures of great economists of the world, the factors causing the appearance of speculative bubbles and also the crisis generated by them, fail to fully explain a causal relationship. Keynes's theory does not explain why the crises are not continuous (in time) and Austrian economists' theory does not demonstrate that during periods of increased money supply, the economy cannot go into crisis (Moraru & Tănase, 2012).

Therefore, excessive liquidity in the financial system (money supply growth) can be a major cause of formation for these bubbles, which occur as a result of expansionary monetary policy adopted by banks (by practicing low interest rates). When the market knows low interest rates, investors have a preference for purchasing securities or real estate not for deposits, because the

yield that could be obtained is higher for the former. This fact determines the rising price in the market, leading finally to the moment when the bubble bursts. In this case, central banks are compelled to intervene in the market and to adopt a contraction monetary policy, in order prevent putting at risk the stability of the national currency. Another aspect to be pointed out in this case is the possibility for investors to contract loans at low interest rates and use these borrowed money for investment on the stock markets. This could lead to a rise of prices for listed securities.

When the central bank policy is to practice high interest rates, investors prefer investing in the real economy. They are not borrowing money to invest in the stock market because the borrowing cost is too high and the probability of covering it from the potential gains on the securities market is quite low.

Conceivably, the psychological factors have more impact than the economic factors that affect the speculative bubbles formation (Hong, Scheinkman, & Xiong, 2006). We discussed earlier about the "greater fool theory" although ironically named like that, it outlines the best conditions to form bubbles. According to this, investors buy securities at higher prices than the fundamental values and hope to sell them at an even higher price. At the beginning of the transaction they do not consider those titles worth that price; however they buy, hoping that they will be able to sell them to someone else willing to buy them at a higher and higher price. The "Greater fool theory" is based on exaggerated optimism (Scheinkman & Xiong, 2003) shown by investors in the market and by their impulse on the market through their massive purchases they make. The investor's optimism (identified by the theory as "fools") translates into buying overvalued assets with the hope of selling them to other speculators (identified as "greater fools") at a higher price. Through this mechanism, speculative bubbles are increasing, as long as they can find in the market other investors who are willing to pay more for already overvalued assets. It all ends when the market no longer finds any investor willing to pay an increasing price for those assets overvalued. Last link fails and the chain breaks. At this time the inevitable occurs and the crisis seem to appear.

Directly related to this theory, we identified the principle of extrapolation. Extrapolation involves transposing past courses on to the future,

meaning that if in the past securities had a certain growth rate, they will continue to grow in the future at the same rate of growth.

The herd behavior as part of behavioral theory is also one of the anomalies on the stock market investments. In essence, the herd behavior is the involvement of buyers or sellers investor in the direction of market, thereby amplifying the stock market trend. This theory also includes the moral hazard anomalies described as a situation where investor behavior may take a different turn after he started a firm position in the market. His vision may change as a result of such failure to assume the risk and consequences of his action.

The views of various market actors through the causes of speculative bubbles remain divided, each of the formulated hypotheses has a dose of credibility but also limits.

5. Conclusion

More important than the causes of the speculative bubble formation are the effects that it produces bursting in the economy. The excess demand for financial securities listed involves the formation of the bubbles, whose burst cause a contraction of the economy to alleviate excess. The end of speculative bubbles leads to numerous bankruptcies and a deterioration in the value of financial securities listed.

Taking into consideration the effects that speculative bubble burst produces both, for the investment and for the real economy; the issue is how to act in order to prevent them. The easiest solution seems to be the establishment an international creditor with adequate capacity in terms of available financial resources to intervene in the market when nobody is willing to buy (the final stage of bubble formation before it breaks).

In the presence of this giant creditor on the market, the other investors will be somehow protected from the follow-ups, given the possibility of mitigating the market panic, minimizing the negative effects. Many economists saw the IMF playing the role of the giant creditor, as a lender of last resort, mainly due to its role in the international monetary system, but the IMF has, at least for now, neither the resources nor the wish to stand in front of a global speculative bubble.

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