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SHORT SELLING RESTRICTIONS IN CONNECTION WITH THE FINANCIAL CRISIS OF 2007–09

Abstract

The aim of this article is to discuss legal solutions and their influence on the functioning of the financial market. These solutions were implemented by regulatory authorities in the United States and at the ministerial level in the European Union in the wake of the financial crisis. To better understand the given problem, the following issues are discussed: the profile of short selling, the theoretical concepts explaining its influence on the capital market, and its regulation on financial markets.

Keywords: short-selling, short-sale constraints, financial crisis, financial market.

1. Introduction

Short selling is one of many investment strategies that exist on the financial market. The nature of this strategy means that it has many opponents, mainly among the management of public limited companies. Its opponents raise the moral concern of earning on companies' failures by presenting its practitioners as unfeeling and guided by self-interest. What is more, the opponents of short selling argue that the lack of regulation of short selling (or even its abolition) may cause so-called "bear raids", that is, the intentional reduction in the price of a given company by spreading false information. As a result, the short seller may achieve outstanding rates of return. In contrast to these accusations, the followers of short selling argue that giving the opportunity to transact business of this kind increases the efficiency and liquidity of the financial market. Also, these transactions are the elements of many portfolio strategies.

The debate on the effects of short selling on the capital market has been ongoing for 400 years, bringing many different regulatory solutions. The character of this debate, and the legal solutions resulting from it, were repeatedly the result of a situation which took place on the stock market in a given period. This situation also occurred during the current financial crisis. The steps taken by the regulators were a direct result of the sudden decline in stock market prices.

The aim of the present article is to present legal solutions and their influence on the market. These solutions were implemented by the regulatory authorities in the US and at the ministerial level in the EU in reference to the financial crisis.

2. The Essence of Short Selling

Short selling is a one of the main investment strategies pursued on financial markets. The essence of this strategy is the selling of a security that the seller does not own at the moment of selling. In US legislation, a definition of short selling was presented by the Securities and Exchange Commission within the confines of Rule 3b-b. According to this rule, "short selling is the sale of securities that the seller does not own or any sale that is consummated by the delivery of a security borrowed by, or for the account of, the seller"[1]. In the case of European Union legislation, there was no common definition of short selling for all the Member States until 2012. What is more, in most Member States there was no such definition even in national legislation (IOSCO 2003a). This kind of regulation was absent, for instance, in Germany, France and Italy. The situation in EU legislation has changed with the implementation of Regulation (EU) No. 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps. This regulation provides the following definition of short selling: "'short selling' in relation to a share or debt instrument means any sale of a share or debt instrument which the seller does not own at the time of entering into the agreement to sell including such a sale where at the time of entering into the agreement to sell the seller has borrowed or agreed to borrow the share or debt instrument for delivery at settlement"[2].

[1] Securities and Exchange Commission, Rule 3b-3 (no longer in effect).

[2] Article 2 (2) Regulation (EU) No. 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps (the Regulation also specifies the regulatory framework in EEA countries).

The use of a short selling strategy may serve three purposes (McCaffrey 2010, pp. 483–84). First, the seller assumes profit from anticipated declines in securities prices. The seller sells borrowed securities at a high current price and hopes to repay the loan with securities purchased at a subsequent lower price. Second, short selling is used by market makers. They respond to incoming and buy orders for stocks they do not have, and sell shares they do not possess. Market makers use short selling when they can acquire stocks within designated settlement periods as part of their market-making function. Third, short selling is used in order to create investment portfolios suitable for a given investor. Short selling does not serve here as a possibility to clear a profit from the right anticipated decrease of share prices; it is only an element of a complex market strategy.

It is worth paying attention to the fact that the structure of aims for which short selling was used has changed during the history of financial markets. As J. G. McDonald and D. C. Baron (1971, p. 2) point out, by the end of the 1940s "short positions established with a speculative motive comprised about two-thirds of the total short interest of members and non-members"[3]. Next, in 2008, A. Avramovic (2008, p. 5) conducted a similar analysis of the short selling market and its results were different.

According to these results, only 0.7% of short selling operations made by hedge funds had a speculative character. Also, in the case of the Warsaw Stock Exchange, there is a significant dominance of short selling operations connected with the activity of market makers. This situation partly results from a reduction in the number of companies whose shares may be sold short. There are 436 companies listed on the Warsaw Stock Exchange, whereas only 141 of them may have their shares sold short within the confines of actions conducted by market makers, and the shares of only 30 companies may be sold for speculative purposes or for purposes connected with the creation of portfolio strategies.

Short selling used for speculative purposes is perceived by some investors as risky. According to these investors, the potential losses connected with short selling are not limited by anything. In theory, the shares of a company may increase ad infinitum, and thus they increase the losses of a short position's owner. However, the losses of a long position's owner of shares of a given company are limited – their value may drop below zero.

Besides the risk connected with the increase of share prices after their short selling, an investor who uses short selling risks that the lender of the

[3] This includes the results of an opinion poll conducted by the SEC on the New York Stock Exchange in 1947.

shares will demand their return (Staley 2001, p. 27). Such a situation may take a place, for example, when a client of a brokerage house (an institution that lends shares) wants to sell them or demands a real delivery of borrowed shares. For the practitioner of short selling, this may mean a forced buy-in of shares on the market at their current prices; as a result he or she may incur losses. What is more, it is worth adding that the practice of short selling may also bring a higher level of regulatory risk (which is the risk of change in the regulatory framework) in comparison with occupying long positions in companies' shares.

Considering the essence of short selling and its regulatory framework in different legislative systems, it is worth mentioning the division of short selling into: conventional short selling, and naked short selling.

In the case of conventional short selling, the investor borrows or in the nearest future will borrow shares (the investor locates shares[4]) which take part in short selling. In contrast to conventional short selling, in naked short selling the seller not only does not borrow shares and does not locate them, but also has no such intention. The result of naked short selling is a situation where the buyer of shares does not get them from the short seller (failure to deliver). As S. Gruenewald, A. F. Wagner and R. H. Weber (2009b, p. 118) point out, theoretically the result of naked short selling may be a situation where over 100% of a company's shares will be sold short. In other words, shares which do not exist in reality will be sold.

In the context of the division into conventional and naked short selling, it is important to remember that some countries, through regulations on the accounting of short selling transactions, have limited short selling to the conventional type. One such example, prior to the global crisis, was the United States of America[5]. However, as R. Elul (2009) points out, in this case too one can speak of invisible naked short selling, which functions only for three days after selling shares short. In the case of many European countries before the global crisis there was a lack of regulation concerning the accounting of short selling transactions in the central legislation of those countries, i.e. France, Germany, the UK, and Italy (IOSCO 2003b).

[4] The "locate" rules are formulated in Regulation SHO from 2004, published by the SEC.

[5] In the US, according to Regulation SHO, the transaction must be settled within three business days. If the seller fails to deliver the securities, the clearing agency closes the transaction on the account of the short seller.

3. Short Selling on Financial Markets – An Historical Outline

The history of short selling on financial markets is as turbulent and long as the functioning of those markets. The creation of capital markets has been closely connected with the search for new ways of protecting against risk and price speculation by investors. More than once, short selling has been seen the solution to those challenges. The history of short selling is also the history of the conflict between the practitioners of short selling and the issuers of securities. An outline of the history of short selling is essential to better understand the problems which regulatory authorities had to face during the latest financial crisis. This outline is also a good source of information about the measures which could be taken by regulatory bodies as regards short selling regulations and their short-term and long-term effects. The outline undoubtedly shows that history does repeat itself.

Seventeenth-century Amsterdam was one of the first centres of capital market development in the world. The first joint-stock companies were established in 1610 in Amsterdam. Moreover, it was in Amsterdam where one of the first conflicts between the practitioners of short selling and a company's management took place. The company in question was the Dutch East India Company. At the beginning of the seventeenth century, the shares of the Dutch East India Company (along with the shares of other companies) underwent a sudden appreciation due to a growing stock market bubble. This bubble burst after a short time and the management of the company identified short selling as the main reason for the decline in prices. In a letter to the authorities, the management wrote that bear raids, which were carried out in the form of short selling, had caused huge damage to innocent shareholders (the management also pointed out that the shareholders included many widows and orphans) (Meeker 1932, p. 205). The stock exchange authority replied that the decline in prices was not caused by speculation but by the company's poor results. Despite this interpretation, the Dutch banned short selling in February 1610. The ban was lifted a short time after being implemented.

A situation similar to that in the Netherlands occurred on the capital market of Great Britain in 1720. In the history of financial markets it is called the South Sea Bubble. In this case, too, regulators and company managements were unfriendly towards the practitioners of short selling. Consequently, short selling was banned in a bill passed in 1734, yet it was repealed in 1860 (Meeker 1932, p. 107). Financial crises and charges against short selling as their cause also took place in France. A consequence of the

so-called Mississippi Bubble, which burst on the French market, was a royal decree in 1742 which banned short selling if the security was not owned by the seller (Staley 2001, pp. 236–37). The ban on short selling in France survived both the French Revolution and the Napoleonic Revolution; it was lifted in 1882 in accordance with the recommendations of a special state commission set up to investigate the effects of futures and short selling on the market. Between 1863 and 1866, there was another stock market panic. This time bank shares experienced one of the biggest drops in prices. The cause was stagnation on the credit markets (Juglar & Thom 1916, p. 4). Once again the practitioners of short selling were blamed, as a result of which a bill banning short selling on bank shares was passed in 1867 (Meeker 1932, p. 107). In 1878, the Royal Commission proved that the drop in the price of bank shares was not an effect of speculation but of the low quality of bank assets. This diagnosis is largely similar to that of the financial crisis of 2007–09.

The next European country to experience an economic depression that resulted in stock market regulation was Germany. The depression, which spread across the whole country, united politicians in the fight against speculation on both commodity and capital markets. As a result, the Reichstag passed a bill which banned trade in grain and flour with futures as well as futures on the shares of companies from the mining and industrial sectors. The bill also introduced a register of speculators and was implemented in 1897. The result of the bill was low and unstable corn prices and capital flow to foreign financial centres in London and Amsterdam. K. Staley notes that this bill was like the foundation of a financial market based on bank agency (the continental model, also called the German--Japanese model) (Staley 2001, pp. 239–40).

Short selling has its interesting history not only in Europe. Financial crises and attempts at market regulation have also taken place in the US. One example is the short selling ban passed by the authorities of New York in 1812 during the war with Great Britain. Yet the real control was implemented during the Great Depression of the 1930s. In 1938, the SEC issued Rule 10a-1 under the Securities Exchange Act, which prohibited short sales of exchange-listed securities at levels below the last sale price, or at the last sale price "unless that price was above the next preceding different price" (a zero-plus tick); the purpose was to prevent short sellers from driving prices down through sales at progressively lower prices (Hazen 2005, p. 443). This rule is called the zero-plus tick rule, or uptick rule, and it was one of the rules of short selling to be in force for a long time. In US legislation it functioned for over seventy years. The SEC's first attempt to

suspend the rule temporarily was in 1976, but after a long consultation it abandoned the idea[6].

In 2004, the SEC passed a new regulation called the SHO. Under this regulation, the uptick rule was temporary suspended for selected joint--stock companies. The shares of those companies were to fulfill the role of an experimental group, whose results would next be compared with the control group, that is, shares of companies that were not short selling-minded. The purpose of this natural experiment was to give an unequivocal answer about the effects (both positive and negative) of having no limitation in the form of the uptick rule. Among the analyses carried out on the basis of comparing the pilot actions (that is, with the uptick rule suspended) with the control actions were those that pointed to the positive effects of suspending the uptick rule. The advocates of this view included G. J. Alexander & M. A. Peterson (2008), L. Bai (2006), K. Diether, K. H. Lee & I. Werner (2006), J. Wu (2006), and K. M. Zhao (2012). On the basis of these scholars' reports and analyses, and on the basis of its own research, the SEC decided to suspend the uptick rule during the closed session on 6 July 2007. This decision was implemented on 14 August 2007.

Regulation SHO from 2004, besides the decision to test the importance of Rule 10a-1, also brought in other regulations connected with short selling. Among the issues it tackled it is worth mentioning the definition of ownership in the case of short selling and the establishment of rules to specify aggregated short net positions. Furthermore, the regulation established the requirement of marking if selling is long, short, or is numbered as short exempt[7], and it also increased Regulation M. Additionally, the SHO almost eliminated the possibility of naked short selling by introducing the need for location securities which fit for borrowing before efficient short selling[8].

To sum up: the world entered the financial crisis of 2007–09 rich in experiences connected with short selling during crises and attempts to regulate it. In the European Union there was an absence of common rules regulating the short selling market. In the US, on the other hand, Regulation SHO was implemented and the uptick rule was abandoned.

[6] During the consultation, the opponents of suspending the uptick rule were the management of the New York Stock Exchange and Amex, who argued that the action could destroy the stock exchange.

[7] For example, short selling transactions made by market makers.

[8] Regulation SHO, Rule 203, Securities and Exchange Commission, Release No. 34–50103.

4. The Influence of Short Selling on the Parameters of the Capital Market

The problem of the place of capital markets (or, in a broader sense, financial markets) in the modern market economy is currently the subject of heated academic debate. In the course of this debate, assertions about the financialisation of the modern economy very often appear (Ratajczak 2012, pp. 281–303). Regardless of the discussion about the place of the financial market in the economy, it is unquestionable that the market economy needs a measurement of efficiency in the form of the cost of capital provided to it by this market (Czekaj & Owsiak 1992). It is also important to note that this measurement should be as efficient as possible.

The efficiency of the capital market may be considered on three levels:

– allocative efficiency, that is, the market's ability to provide money to branches of economy that will use it in the most efficient way;

– operational (functional) efficiency, which is connected with ensuring convenient conditions to transact businesses on the capital market;

– information efficiency, which means that the market always reflects all available information in prices (Fama 1970, p. 383).

As E. W. Nowakowski (2010, p. 50) notes, in reference books the efficiency of the capital market responds to information efficiency. The information-efficient market provides the basis for making correct decisions concerning the allocation of resources in the real economy. This results in the executive having to define the framework of the capital market in such a way that it ensures the market's maximum efficiency (Stigler 1975, p. 88). This leads to the question: How do regulations connected with short selling influence the efficiency of the market?

The problem of the relationship between the regulation of short selling and the efficiency of the capital market has been tackled by many theorists interested in the functioning of financial markets. The first person to explain this issue in theoretical terms was E. M. Miller (1977, pp. 1151–68). According to his model, share prices are revalued in a situation where there is regulation of short selling. This explains the fact that investors, although they possess the same amount of information, have different opinions. What is more, as regards short selling opportunities, price formation is done only by the optimists. This situation leads directly to overpricing on the market. Additionally, as M. J. Harrison and D. M. Kreps (1978, pp. 323–36) have shown, the scale of share price revaluation on the market may be even higher than that suggested by E. M. Miller. This results from the fact that a lack of short selling makes it possible for even the most

optimistic investor to assume that shares prices will rise in future. In such a situation he or she is willing to pay a higher price for a share, even if in reality this price should be lower. The essence of this state is reflected in B. Cornell's (1999, p. 31) statement that "until there are no investors who use short selling, every investor has a possibility to make profits in the longer perspective". The influence of short selling on the efficiency of the capital market is differently presented by D. Diamond and R. Verrecchia (1987, pp. 277–311). According to their model, share prices are not revalued for the sake of publicly-available information in a situation of a lack of short selling, although in such a situation the speed of price adaptation falls for the sake of private information. In Diamond and Verrecchia's model, rational investors are aware of the fact that they do not possess full information about given assets. Considering this fact, they observe the volume of stock trade. They consider a drop in the volume as a withdrawal from trade by people who possess private information. As a result, rational investors take appropriate investment steps, which leads to a drop in prices. The hypothesis about the volume's influence on the amount of return from shares is confirmed by W. Louhichi (2012, pp. 625–32). However, according to the results of research conducted by A. Bris, W. N. Goetzmann and N. Zhu (2007, pp. 1029–79), the lack of opportunity to use short selling significantly limits the speed of information flow. This situation may lead to the longer existence of ineffective companies on the market (Elul 2009).

On the other side of the theoretical debate is the model of I. Goldstein and A. Guembel (2008, pp. 133–64). In this model, the authors emphasise that the opportunity of short selling may result in "bear raids" on listed companies. Consequently, such "raids" are followed by a rapid drop in shares price value, which may block the company's access to other sources of finance (for example, bank loans) and lead to its bankruptcy. This is a kind of self-fulfilling expectation.

Much research has been conducted to examine the influence of different forms of short selling regulation on the parameters of the capital market. Most of this research points to a negative correlation between the scale and strength of regulation of this form of investment and the efficiency of the capital market. Depending on the form of regulation, it may also result in increased bid-ask spreads, a decreased volume of transactions and/or increased changeability (Herinckx & Szafarz 2012). The relationship between the increased changeability of the market and the operation of short selling may be explained in a simple way. In a situation where the market experiences a rising trend and company shares become revalued (in relation

to their fundamental value), the practitioners of short selling provide shares on the market by limiting the scale of growth.

In this context, short selling replaces the issuing of subsequent packets of shares by companies. What is interesting is that the short selling practitioners' response to higher demand for shares is faster than the issuing of shares by the company[9]. Thus, short selling prevents the "use" of information asymmetry between individual investors and the company's management because, according to the research, companies that make subsequent issues of shares have lower rates of return compared to other companies (Greenwood & Hanson 2012).

By selling short, the investor is obliged to buy shares in the future, in contrast to instruments that allow him to "play on reduction" and do not include a physical delivery clause.

The amount of short selling in a given asset is the latent demand for this share. Making this demand free may limit the drop in prices, thus limiting changeability[10]. Short selling also makes it easier to detect "creative accounting" used by listed companies. In her book, K. F. Staley presents several examples of companies that hid their real financial situation by using clever accounting solutions, and this situation was detected by the practitioners of short selling. Staley calls these investors "police officers" who watch over listed shares (Staley 2001, p. 36).

Staley also argues that short selling limits "moral hazard", which appears in a situation where there are financial connections between a financial institution that gives references and a priced company. A positive relationship between the number of public offerings and the level of companies' valuation will lead to a situation in which financial institutions are more interested in the increase of shares than in their precise estimation. As a result, they achieve higher income, which results from cooperation in regard to issuing shares.

5. SEC Regulatory Changes Caused by the Financial Crisis of 2007–09

The financial crisis of 2007–09 resulted in regulatory changes to short selling on the capital market in many countries around the world. Some of the measures were provisional in character while others were implemented into legislation permanently. From the global economy's point of view, most important are the solutions adopted by the stock market's regulators in the US.

[9] This is a result of institutional barriers, i.e., the time needed to prepare a public offering.

[10] Obviously, the exceptions are "bear raids", but these constitute only an incremental part of short selling activities.

The financial crisis "stepped in" the American stock market shortly after the SEC decided to abolish the uptick rule. This decision was taken in the summer 2007, and the drop in shares prices on markets began in the autumn of 2007. Thus, at the moment the crisis appeared, in US legislation there was no rule to limit short selling in order to limit the drop in asset prices. Besides the drop in prices, the crisis also significantly increased changeability (measured by VIX). This resulted in an extremely difficult situation on the financial market.

The deepening crisis and the many difficult problems faced by financial institutions in regard to "toxic" assets induced the regulatory agency in the US to take remedial steps[11]. On 15 July 2008, the SEC decided that the entity which sells short securities issued by the 19 main financial companies has to borrow the shares before short selling. The 19 institutions comprised: BNP Paribas Securities Corp., Bank of America Corporation, Barclays PLC, Citigroup Inc., Credit Suisse Group, Daiwa Securities Group Inc., Deutsche Bank Group AG, Allianz SE, Goldman Sachs Group Inc., Royal Bank ADS, HSBC Holdings PLC ADS, J. P. Morgan Chase & Co., Lehman Brothers Holdings Inc., Merrill Lynch & Co. Inc., Mizuho Financial Group Inc., Morgan Stanley, UBS AG, Fannie Mae & Freddie Mac. The aim of this decision was to limit the drop in the main financial institutions' share prices by eliminating even "invisible" naked short selling (Elul 2009). Three days after the decision, the SEC decided to exclude market makers from its regime.

When the investment bank Lehman Brothers announced its bankruptcy on 15 September 2008, it was clear that the SEC would be forced by public opinion to take more radical action to bring the situation on the financial markets under control. Four days after the bankruptcy of Lehman Brothers, the SEC announced an emergency temporary ban on short selling for 799 financial institutions[12]. According to the SEC's decision "this emergency action should prevent short selling from being used to drive down the share prices of issuers even where there is no fundamental basis for a price decline other than general market conditions"[13]. As in the case of the earlier decision, in this situation too, the market makers did not have to comply with

[11] A chronology of the measures taken by the SEC is described in detail by Gruenewald, Wagner & Weber (2009a, pp. 14–15).

[12] The list of institutions is available at: http://www.sec.gov/rules/other/2008/34-58592.pdf.

[13] Emergency Order Pursuant to Section 12(k)(2) of the Securities Exchange Act of 1934 Taking Temporary Action to Respond to Market Developments, Exchange Act Release No. 58, 592, 94 SEC Docket 460 (25 August 2009).

the decision, along with options market makers, block positioners, and OTC market makers. Then the SEC delegated the creation of a list of companies with a ban on short selling to the management of stock markets, and the list was expanded to 200 companies. What is interesting, eight companies asked to be removed from the list on their own.

On the same day, the SEC also took a decision that obliged the management of investment institutions to report to the commission about the amount and value of all shares sold short[14]. Initially, these reports had to be published two weeks after the SEC received them. In mid-October 2008, the regulation under which these reports became public was implemented[15].

During the financial crisis, the SEC also adopted regulations that increased requirements within the scope of closing positions connected with the non-delivery of shares by the short seller[16]. According to these regulations, the position had to be closed out "by no later than the beginning of regular trading hours on the settlement date following the day the participant incurred the fail to deliver position"[17].

What is more, it also implemented a rule called the "naked short selling anti-fraud rule". According to this rule, "short sellers, including broker--dealers acting for their own accounts, who deceive specified persons, such as a broker or dealer, about their intention or ability to deliver securities in time for settlement and that fail to deliver securities by the settlement date"[18] are guilty of embezzlement.

In March 2009, the IOSCO, which associates supervisory bodies from 13 countries around the world (including the SEC) published a report on the regulation of short selling (IOSCO 2009). This report includes four rules, and the regulations on short selling should be constructed in accordance with them. According to these rules,

– "short selling should be subject to appropriate controls to reduce or minimise the potential risks that could affect the orderly and efficient functioning and stability of financial markets";

– "short selling should be subject to a reporting regime that provides timely information to the market or to market authorities";

[14] Also companies outside the financial sector.

[15] Regulation SHO Rule 10a-3T, Securities and Exchange Commission, Release No. 34–58785.

[16] Regulation SHO Rule 204T, Securities and Exchange Commission, Release No. 34–58773.

[17] *Ibid*.

[18] "Naked" Short Selling Antifraud Rule (10b-21 Rule), Securities and Exchange Commission, Release No. 34–58773.

– “short selling should be subject to an effective compliance and enforcement system”;

– “short selling regulation should allow appropriate exceptions for certain types of transactions for efficient market functioning and development”[19].

The above-mentioned rules became the basis for reforming regulatory frameworks concerning short selling in many countries around the world, including the US and the European Union.

Referring to rules presented by the IOSCO, the regulatory body in the US allowed some provisional solutions to expire while other rules became permanent. In US legislation, regulations which tightened the sanctions on naked selling and strengthened the T+3 standard became permanent[20]. The crisis triggered a debate about restoring regulations that prevent short selling with specified movements of asset prices. The debate had its beginnings when the SEC proposed five possible norms in this area. These alternatives may be divided into two groups. The first group includes solutions which implement regulations that are mandatory for all shares, regardless of their situation on the market[21]. The second group, on the other hand, has suggested regulatory solutions, according to which limitations on short selling will be implemented, independently for each share, where there is a sudden drop in the share price of a given company. The suggested solutions in this group are called “circuit breaker rules”.

The SEC’s first proposal was the introduction of a regulatory framework. Based on this, it would be impossible to sell short with a price which is below the highest price currently offered by the buyers (on the national level)[22], if the best current bid price is lower than the earlier bid price, different from the latest price[23]. Under the second proposal, the price of short selling should be equal or higher than the previous price of selling if this price of selling was lower than the price noted earlier. The proposal from the “circuit breaker” group begins with a rule according to which the ban on short selling of a given company’s shares lasted until the end of the day. During that day, the value of those shares dropped around a specific percentage value. In the case of the fourth proposal, in a situation where there is a sudden decline in rates, the modified uptick rule will be used. In this case, selling is based

[19] *Ibid*., pp. 8–11.

[20] Regulation 204, which replaced regulation 204T at the end of July 2009, liberalises some of the restrictions introduced by Regulation 204T.

[21] As in the case of the uptick rule, which existed until 2007.

[22] The price offered by the buyers is also called bid.

[23] The earlier regulation which referred to the bid price was the NASD bid test rule.

on bid prices. The fifth proposal is similar to the fourth one. Its guidelines concerned the introduction of the classical uptick rule instead of a modified version of it.

A decision to choose one of the given solutions was made by the SEC on 24 February 2010. On the basis of this decision, Rule 201 was introduced into Regulation SHO. According to its provisions, it will be impossible to sell short a share of a given company with a price lower or equal to the current best bid price offered on the national market, in a situation where the price of a company's share drops by about 10% compared to previous day's close. This rule applies until the end of a day when the drop was noted and during the following day. This solution should be considered while searching for a compromise between ensuring capital market efficiency on the one hand, and regulatory pressure from society and politicians, caused by the financial crisis, on the other. As D. P. McCaffrey (2010, p. 519) notes, "the SEC made the best of a bad situation, choosing the most efficient option available".

Rule 201 on the "alternative uptick rule + circuit breaker", introduced by the SEC in 2010, applies to all securities defined by law as "NMS stock". "NMS stock" includes all "NMS security other than options". "NMS security", on the other hand, means "any security or class of securities for which transaction reports are collected, processed and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in listed options"[24]. SEC representatives emphasised, in relation to comments received during the legislative process, that in future this rule may also include "non-NMS stock" noted on the OTC Bulletin Board or elsewhere on the OTC market[25]. What impact on the efficiency of financial markets did the provisional solutions have and what was the result of introducing Rule 201? The effects of short-term regulations adopted during the crisis were described in three independent studies conducted by E. Boehmer, Ch. M. Jones & X. Zhang (2009), V. Fotak, V. Raman & P. K. Yadav (2009), Credit Suisse (Avramovic & Mackintosh 2008), and I. Marsh & N. Niemer (2008). All these studies pointed to the negative effects of introducing a temporary ban on short selling. These effects included a drop in volume and an increase of spreads. What is more, the studies pointed to the lack of evidence about the impact of the short selling ban on limiting the probability of a high drop in prices. On the basis of the aforementioned studies, it may be concluded that the

[24] NMS Rule 600(b)(46), Securities and Exchange Commission, Release No. 34-57621.

[25] Amendments to Regulation SHO, Securities and Exchange Commission, Release No. 34–61595, p. 49.

ban on short selling should not be treated as an efficient direct instrument of economic policy used in order to limit drops on stock markets but as an instrument of "moral suasion".

When trying to answer the question about the effects introducing the alternative uptick rule + circuit breaker, it is worth emphasising that the procedure of "including protection" (that is, introducing the alternative uptick rule in regard to company shares) concerns a relatively small number of companies. Historical data for the 9 April 2001 to 30 September 2009 period show that "the price tests restrictions of Rule 201 would have been triggered, on an average day, for approximately 4% of covered securities"[26]. Thus, the SEC paid attention to the fact that during the crisis this number may even have reached 68%[27].

6. European Union Law Regulating Short Selling after the Latest Financial Crisis

In the legal system of the European Union, until the crisis, there was no common legal framework defining the practice of short selling in the Member States. What is more, regulatory frameworks were slightly different in each Member State. The most liberal regulations were in the UK[28]. Neither the FSA nor the stock exchanges which function in the UK used regulations connected with short selling. In a poll for the IOSCO, FSA employees emphasised that they did not consider short selling to be a factor that had a negative impact on the efficiency and certainty of the financial market. The situation in Italy was similar to that of the UK. In the Netherlands, there was a lack of national regulation. However, Euronext Amsterdam imposed the obligation to report and account for short selling according to the T+3 rule. In France, under the CMF rule, according to which at the end of the business day there cannot be a debit on the account, short selling transactions had to be accounted on the same day, which is connected with the ban on short selling[29].

Euronext Paris also limited short selling to the most liquid shares. In Spain, as in France, there was the obligation to account for transactions

[26] *Ibid*., p. 11.

[27] *Ibid*., p. 79.

[28] This resulted in the fact that the average value of open short positions was 2% of the total capitalisation of the market. By comparison, in the USA, where the uptick rule was in force, this value was 1.5% (IOSCO 2003b, p. 6).

[29] Naked selling had to be covered until the end of the day.

on the same day the business was transacted. Those who broke this rule were fined by the Servicio de Compensación y Liquidación de Valores. In Sweden, the practitioners of short selling had to produce weekly public reports that did not include the personal details of the short seller. In Germany, on the other hand, a transaction had to be accounted for within two days. In Poland, short selling was limited to a few shares listed on the stock exchange. These are just a few of the differences that existed between Member States in terms of legal solutions.

In the case of the anti-crisis measures applied, there were also significant differences among the Member States. The UK was the first country to take action to limit short selling. On 19 September 2008, it introduced a ban on the short selling of financial institutions' shares (the day after the same decision was taken in the US).

A ban on the short selling of financial institutions' shares during the crisis was also introduced in Ireland (19 September 2008), Italy (1 October 2009), the Netherlands (5 October 2009), Greece (6 October 2008), Austria (10 October 2008) and Denmark (13 October 2008). In Italy and Austria, the ban also concerned companies outside the financial sector.

Member States also tried to limit the drop in share prices by introducing a naked short selling ban. The first country to introduce this solution was Luxembourg. The decision to ban the naked short selling of financial institutions' shares was taken on 19 September 2008. The same decision was taken by the German Bafin on 20 September. Then, the stock exchange in Frankfurt extended the ban to all listed companies. The next countries to introduce the naked short selling ban were as follows: the Netherlands (21 September 2008 for shares of companies outside the financial sector), Belgium (22 September 2008), France (22 September 2008), Italy (23 September 2008), Portugal (24 September 2008) and Austria (27 October 2008).

Another instrument used by the Member States was the introduction within the scope of reporting and publishing of owned short positions. This form of action by the supervising body was used both to supplement the policy of "bans" and as an independent instrument. During the crisis, the obligation to use several forms of reporting and publishing was introduced in Belgium, France, Greece, Hungary, the Netherlands, Portugal, Spain, and the UK. Apart from the above-mentioned types of regulations, in the European Union there were also regulations which referred to the price used in short selling. On 6 October, Greece took the decision to establish the uptick rule for the shares of all listed companies. Four days later, the

stock exchange in Vienna introduced the circuit breaker rule for the shares of all companies.

In the European Union there were also countries that took no action to regulate short selling during the financial crisis. These were the following: Cyprus, the Czech Republic, Finland, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Sweden (Gruenewald, Wagner & Weber 2009a, pp. 1–15).

The impact of the regulatory measures on the financial markets of Member States depends on how short selling was regulated before the crisis and on the type of instruments used by supervisory bodies during the crisis. Based on the findings of research about the effects of regulating short selling in Europe between 2008 and 2009, A. Hernickx and A. Szafarz (2012, pp. 24–40) state that neither form of regulation is effective in limiting the drop in prices. Additionally, all the regulations used have had a negative impact on the efficiency of the financial market. The least harmful regulation for the efficiency of the market is the ban on naked short selling, because although it influences the growth of changeability and the growth of bid-ask spreads, it also decreases trading volume. On the other hand, the ban on naked short selling has a negative impact on trading volume and also causes the increase of spreads. The decrease in trading volume and the growth of efficiency are also an effect of the obligation to report short positions.

To sum up: before the crisis there was a range of regulations on short selling in the Member States of the European Union. The applied anti-crisis measures also took different forms in each country. Finally, on 15 September 2012, the European Commission proposed a common regulation for all Member States of the European Union[30].

As a result, the European Parliament and the Council of the European Union adopted Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps. This regulation was then supplemented by Regulation (EU) No 918/2012 of the European Commission of 5 July 2012. The legal provisions established by the above regulations entered into force on 1 November 2012.

The European Parliament regulation introduced a common definition of short selling and some frameworks to regulate it for all Member States. First, under this regulation, the possibility to use naked short selling was

[30] Proposal for a regulation of the European Parliament and of the Council on short selling and certain aspects of credit default swaps, European Commission, 2010/0251 (COD), 15 September 2010.

significantly limited. According to Article 12, an investor may enter into short selling only where one of the following conditions is fulfilled:

– "the natural or legal person has borrowed the share or has made alternative provisions resulting in a similar legal effect;

– the natural or legal person has entered into an agreement to borrow the share or has another absolutely enforceable claim under contract or property law to be transferred ownership of a corresponding number of securities of the same class so that settlement can be effected when it is due;

– the natural or legal person has an arrangement with a third party under which that third party has confirmed that the share has been located and has taken measures vis-à-vis third parties necessary for the natural or legal person to have a reasonable expectation that settlement can be effected when it is due"[31].

In practice, this amounts to the abolition of naked short selling. As a result, in some Member States[32], it may lead to a growth of changeability and a growth of bid-ask spreads on the capital market. On the other hand, this kind of regulation may have a significant impact on limiting problems connected with accounting for transactions (a limited case of "failure to deliver").

The second change introduced under the European Parliament regulation is requirements, common for the whole EU, concerning the reporting and publishing of owned short positions. The obligation to report and publish depends on the short net positions owned by the investor. According to Article 3 of the regulation, "for the purposes of this regulation, the position remaining after deducting any long position that a natural or legal person holds in relation to the issued share capital from any short position that that natural or legal person holds in relation to that capital shall be considered a net short position in relation to the issued share capital of the company concerned"[33]. Under this definition it is essential that an investor, in order to calculate a position, has to consider not only the position in shares, but also the position in other financial instruments whose value depends on the price of those shares. The European Commission includes options and futures

[31] Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps, Article 12.

[32] Especially in countries with an insufficiently developed asset borrowing market and in countries that did not have such strict regulations on naked short selling before the crisis.

[33] Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps, Article 3(4).

among such instruments[34]. Thus, synthetic short positions also have to be reported and published.

According to Article 5 of the regulation, the investor (a natural or legal person) is obliged to notify the competent authorities when the value of net short positions in shares equals 0.2% of the issued share capital of the company concerned and each 0.1% above that[35]. In the notification, the investor must present information concerning his or her identity, the size of the position, the name of the issuer of the net short position, and the date of opening, changing or closing the position.

The second element of transparency policy in the European Parliament's regulation is the procedure to publicly disclose the personal details of the investor who owns significant net short positions in the shares of a given company.

Table 1

Register of Short Selling Kept by the Polish Financial Supervision Authority (data from 25 November 2012)

No	Owner of short position	Security	ISIN	Short position net (%)	Date of position's calculation
1	GLG Partners LP	CEDC	US1534351028	2.97	21.11.2012
2	Discovery Capital Management LLC	KGHM	PLKGHM000017	0.82	02.11.2012
3	Blue Ridge Capital LLC	KGHM	PLKGHM000017	1.51	02.11.2012
4	Black Rock Institutional Trust Company National Association	NETIA	PLNETIA00014	1.13	02.11.2012
5	Morton Holdings INC	PKNORLEN	PLPKN0000018	1.04	02.11.2012
6	Wellington Management Company LLP	BRE	PLBRE0000012	1.43	01.11.2012

Source: www.knf.gov.pl.

[34] Commission Delegated Regulation (EU) No 918/2012 of 5 July 2012 supplementing Regulation (EU) No 236/2012 of the European Parliament and of the Council on short selling and certain aspects of credit default swaps with regard to definitions, the calculation of net short positions, covered sovereign credit default swaps, notification thresholds, liquidity thresholds for suspending restrictions, significant falls in the value of financial instruments and adverse events, Annex 1.

[35] Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps, Article 5(2).

When the level of 0.5% of the company's issued share capital and each 0.1% above that is exceeded, the data is published[36]. The scope of the published data corresponds to the data which has to be notified to the regulatory body. Table 1 presents a sample list of public information about investors who own significant positions in company shares.

Naked short selling and transparency policy do not apply to the shares of companies whose main turnover platform is located outside the European Union and the European Economic Area[37]. Also, market makers are excluded from certain requirements. Sanctions and administrative penalties for failing to observe the provisions of the regulation are established by the regulators of each Member State.

7. Conclusions

In the history of financial markets, attempts to regulate short selling have recurred during financial crises. This practice took place both in Europe and in the US. One may say that the history of regulating short selling is as long as the history of financial markets. Past experience shows that the tightening of regulation is synchronised in time with the occurrence of financial crises. Such a situation also occurred during the latest financial crisis between 2007 and 2009.

When considering the problem of regulation, it is important to point out that in periods of crises regulatory bodies which control the functioning of markets are subject to pressure from politicians, public opinion, and the management of listed companies. The results of a poll conducted by NYSE Euronext in 2008 reveal the strength of this pressure. According to the poll, as many as 59% of managers considered short selling to be harmful, 75% wanted short selling to be banned during increased market changeability, and 92% stated that the managers of investment funds should publish short positions[38]. Additionally, as J. R. Macey, M. Mitchell and J. Netter (1989, pp. 817–20) point out, in the past block positioners made use of the limitations of short selling. This group includes most institutional investors who have meaningful influence over the shape of regulatory policy on stock markets.

On other hand, short selling helps to make the capital markets more efficient. This relationship was confirmed by theory and numerous empirical

[36] *Ibid*., Article 6(2).

[37] *Ibid*., Article 16.

[38] A poll conducted for NYSE Euronext, entitled "Short Selling Study: The Views of Corporate Issuers", 17 October 2008, available at: www.nyse.com/pdfs/ShortSellingStudy10212008.pdf.

investigations. These investigations showed that short selling lowers bid-ask spreads, accelerates information flow, limits changeability, and increases volume. The greater efficiency of capital markets also leads to a better allocation of resources in the economy. This means that regulatory solutions are a kind of compromise between higher market efficiency and limiting the manipulation of shares and public pressure.

The situation described above was also present during the latest financial crisis. Approximately thirty countries around the world introduced various short selling regulations in order to calm the situation on internal financial markets. Among these countries were the two biggest world economies: the EU and the US.

The subprime crisis was initiated in the US. It resulted in the rapid growth of uncertainty on financial markets. The SEC tried to control the situation by regulating short selling. Among thXe provisional measures used during the crisis, it is important to mention the ban on the short selling of financial institutions' shares and the obligation to report short positions owned by managers of investment funds to the SEC. The crisis also led to long-term solutions, such as harsher penalties for using naked short selling and the T+3 standard as well as the introduction of the alternative uptick rule + circuit breaker. It should be emphasised that the effects of the alternative uptick rule + circuit breaker are limited as regards the efficiency of the capital market. This is because the rule only applies to the shares of few companies.

Before the crisis, the regulatory frameworks in the European Union that governed short selling were different in each Member State. Also, the reactions of each national regulator to the crisis were different. There were Member States which banned short selling and others which introduced no regulations at all during the crisis. Each introduced regulation concerning short selling was ineffective as regards attempts to limit the drop in prices on the capital market. It should be added that the ban on naked short selling had the least negative impact on the efficiency of the market.

A permanent solution to the crisis was the introduction in EU legislation of a common framework to regulate the problem of short selling. In accordance with this framework, the ban on naked short selling was established. The new regulation adopted by the European Parliament and the Council of the European Union also obliged short sellers to report to the supervisory body if their short net position exceeded the level specified in the regulation (0.2% of the value of issued shares of a given company).

What is more, if this level is significantly exceeded (0.5% of the value of issued shares of a given company), information about the short seller is

published. This type of transparency policy is connected with the meaningful growth of costs for short selling practitioners, mainly as a result of the daily cost of estimating positions (including derivatives). In this way, the operating efficiency of the capital market is significantly impaired.

In its report on transparency policy, the IOSCO draws attention to the fact that it is essential to establish the purpose of using its particular instruments (IOSCO 2009, p. 18). Undoubtedly, the main aim of the authors of the new European legal framework was to limit the manipulation of share prices caused by bear raids. Still, the question remains whether this form of public information about short selling practices will become a register of speculators like the one introduced at the end of the nineteenth century, whose aim was to stigmatise its practitioners.

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Abstract

Regulacje prawne dotyczące krótkiej sprzedaży wprowadzone w związku z kryzysem finansowym lat 2007–2009

W artykule podjęta została problematyka regulacji funkcjonowania krótkiej sprzedaży na rynku finansowym. Przedstawiono zmiany wprowadzone przez władze regulacyjne w USA oraz na szczeblu centralnym Unii Europejskiej w odpowiedzi na kryzys finansowy w tej istotnej dla funkcjonowania rynku finansowego kwestii. By lepiej przybliżyć wskazaną problematykę, przeprowadzono także charakterystykę pojęcia krótkiej sprzedaży, omówiono teoretyczne koncepcje wyjaśniające jej wpływ na funkcjonowanie rynku kapitałowego oraz przedstawiono historię jej regulacji na rynkach finansowych.

Słowa kluczowe: krótka sprzedaż, regulacje krótkiej sprzedaży, rynek finansowy, kryzys finansowy.