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Utilization of derivative instruments in money laundering activities: a normative analysis

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Introduction

When an illegal activity aims at generating profits, the criminal subjects involved are forced to face the problem on how to reintroduce in the real economy the capital acquired through their unlawful behavior.

Money laundering is in fact the process of cleaning all the income and revenues earned through the implementation of illegal operations and procedures.

As it can be easily understandable, this crime is of particular dangerousness for any economic system integrity and stability, and consequently political bodies and apical subjects of jurisdictions pays particular attention in building solid and reliable sets of rules to contrast in the most efficient way the exercise of this activity.

The extremely interesting thing about anti-money laundering measures is that, in order to keep up with the development of new and renovated laundering schemes, they must be subject to an ongoing procedure of improvement and revision to comply with the stability and integrity requirements of the financial market.

The continuous control and monitoring on the adequacy of the measures enforced by supervisory authorities causes the entire supervisory framework to be extremely challenging and dynamic, making it highly fascinating.

Through this thesis I will try to analyze the European regulations on money laundering and derivative contracts in order to identify eventual normative gaps that could permit criminal subjects to perform money laundering activities using such instruments.

After giving a general overview on the notion of money laundering and on the purposes of the activity, I will analyze and examine multiple aspects of the crime itself and its dangerous and possibly harmful implications on the financial market giving also a brief exemplification of its sequential stages of execution.

Secondly, I will outline the extensive concept of derivative instrument and therefore describe how the different types of contracts work, depending on their classification ad on the position occupied in the transaction considered.

These premises are needed in order to understand the two elements that I am going to analyze in this thesis:

- for what concern money laundering, it is extremely important to understand the reasons behind the phenomenon, consequently the motivations that encourage criminal subjects to perform the activity, and particularly the methodologies applied to perform the laundering procedures
- on the other hand, for what regards derivative contracts, it is fundamental to understand the structure and the different instruments' employment depending on their nature and characteristics.

I will also describe in the most possible accurate way the diverse money laundering schemes involving the most common categories of derivative contracts, in order to practically explain how these instruments, if not properly regulated and supervised, might considerably damage the financial market's integrity with harmful reflexes also on real economies.

Particular attention will be given to purposes and determinants of using a specific type of derivatives instead of another depending on the most appropriate laundering scheme that the criminal subject is willing to perform.

Having all the elements to perform an accurate examination, I will then proceed to a normative analysis by primarily examining the European regulations and directives on the subject and secondly I will also take into consideration the numerous recommendations of the Financial Action Task Force[1] and the most recent peer reviews published by the European Supervisory Authorities in order to have an exhaustive view on potential issues and shortcomings.

In this study, I will take into account the development of these measures even by examining previous regulations' weak points and exposed shortcomings in order to

[1] Also known as Groupe d'Action Financière (GAFI), it is an intergovernmental organization developed by the G7 in order to implement policies aimed at fighting and limiting the money laundering activities and the terrorist financing.

highlight how the legislation has improved through the years and perform an exhaustive and efficient normative analysis.

Finally, I would like to point out that aim of this thesis is not only limited to highlight regulatory gaps or inefficiencies in the legislation, but also, and most importantly, in provide constructive suggestions and reliable solutions to the exposed issues.

Chapter I

General Concept of Money Laundering

With the term *money laundering* the Financial Action Task Force denote a process in which criminal individuals or organizations disguise the illegal origins of revenues coming from their illicit activities.[2]

The European Community, the institution that can be considered as the progenitor of the current European Union, defined money laundering as a procedure aiming at «the conversion or transfer of property, knowing that such property derives from a serious crime, for the purpose of concealing or disguising the illicit origin of the property or of assisting any person who is involved in committing such an offence or offences to evade the legal consequences of his action, and the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from serious crimes».[3]

The process of money laundering is carried out because it is extremely complex for criminals to use earnings obtained through illegal practices, and therefore law infractors must find ways to make those profits appear like they come from legitimate activities.

If this is done without being noticed and the whole process is completed successfully, criminals are able to maintain control over their proceeds[4] and provide an apparently legitimate cover for their income.[5]

The money launderer subject is not only someone who disguise the origin of the property coming from illegal activities, but also someone who tries to conceal and make difficult

[2] Financial Action Task Force (2019), Money Laundering, https://www.fatf-gafi.org/faq/moneylaundering/
[3] Art. 6, co. 1, lett. a) and b), European Community Convention on Laundering, Search, Seizure and Confiscation of the Proceeds from Crime, 8 November 1990
[4] For the purposes of the above-mentioned European Convention on Laundering, Search, Seizure and Confiscation of the Proceeds from Crime, the term *proceeds* refers to «any economic advantage from criminal offences».
[5] BANERJEE, *What is Money Laundering*, in University of Exeter, 2002, http://people.exeter.ac.uk/watupman/undergrad/rtb/laundering1.htm#

the discovery of the origin, the physical location of the capital involved, the collection and the seizure of the incriminated funds.[6]

Moreover, every person using the property obtained through a crime is also amenable of punishment for money laundering activity.

1.1 Criminalization of money laundering activities

For a long time, money laundering has been considered a minor crime, or even not crime for a certain temporal length, due to the concept that since the process of laundering unlawful capital can exist only if a prior crime is committed, money laundering was itself considered as part of the prior crime.

For this reason, in the past money laundering has been considered as a consequence of a crime whose revenues needed to be laundered after, not a separate felony.

The process has been underestimated for a long time but starting from the 1930s a more macroeconomic view has been considered by governs and lawmakers, a view that has been emphasized by the increasing utilization of virtual markets for financial trades.[7]

As a matter of fact , it has to be considered that the integrity of the financial markets and of the banking service is profoundly, if not totally, depending on the perception that the operation that are carried out in it are regulated by legal, professional and ethical standards.[8]

A solid erosion in the financial markets confidence might have direct effects on savings resulting from caused changes in the income distribution of the society as a whole.[9]

Moreover, since the entire financial system relies on its integrity reputation, money laundering activities may affect the confidence on markets regulation authorities, leading

[6] HETZER, *Money Laundering and Financial Markets*, European Journal of Crime, Criminal Law and Criminal Justice, 2003, pg. 266
[7] QUIRK, *Macroeconomic Implications of Money Laundering*, Working Paper, Washington DC, International Monetary Fund, 1996, pg. 10
[8] BANERJEE, *Macroeconomic Consequences of Money Laundering*, in University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/macroeconomic.htm
[9] QUIRK, last pap. cit., pg. 10

to a loss of trust in subjects and organizations currently operating and trading through financial instruments.[10]

The International Monetary Fund broaden the concept of possible negative effects of money laundering in the financial system by also considering the increase in volatility of international capital trades, changes in money demand and the possible contamination of illegality on perfectly lawful financial trades.

In particular, the recommendations focus on the Foreign Exchange Market[11] as it appears to be markedly exposed to money laundering effects since the volume of cash and currencies involved in its transactions makes it a considerably vulnerable target.

Along with what has just been explained, it is really important to point out that also political institutions, as long as the collectivity as a whole, are not exempted from money laundering's risks.

1.1.1 Political risks

The Basel Committee on Banking Supervision[12] and the FATF mutually agreed on defining a politically exposed persons (PEP) «as individuals who are or who have been entrusted with a prominent public function. Due to their position and influence, it is recognized that many PEPs are in positions that potentially can be abused for the purpose of committing money laundering offences and related predicate offences, including corruption and bribery, as well as conducting activity related to terrorist financing».[13]

Those individuals, in a particular way when they come from countries that have some serious corruption problems, may abuse their official functions, especially when some conflicts of interests arise during their duty.

[10] ELAMIN, *Is Capital Market Integrity Really Essential for Anti-Money Laundering?*, 2018, pg. 6

[11] The Foreign Exchange Market (FOREX) is a decentralized market in which currencies are traded and in which their rates are determined.

[12] The Basel Committee on Banking Supervision (BCBS) is a committee established by the central bank's governors of the G10 that gather banking supervisory authorities.

[13] FINANCIAL ACTION TASK FORCE, *Politically Exposed Persons. Recommendations 12 and 22*, 2013, pg. 3

The Financial Action Task Force classified the possible vulnerabilities that could be abused by politically exposed persons or their associates in two main areas:

The first concerns the lack of appropriate due diligence applied by a private banker to its customers, or their activities: this might happen since the job of the private banker consist in helping its clients to invest and protect their asset in the financial market and an inadequacy in the application of the due diligence could facilitate malicious behaviors of some corrupt politicians.

On the other hand, the second concerns the employment of an official intermediary in order to open a banking account on someone else's behalf so that evil-intentioned political exposed peoples might manage and operate on a virtually anonymous account, since the trades and other operations made with that account appear like they are made by another person.

1.1.2 Social implications

For what concern the social aspect, it has to be considered with absolute relevance the fact that money laundering is tightly linked to the criminal activities that generates it.

The problem is the influence that organized crimes have at economic and institutional level because some extremely probable consequences concerns the deterioration of the social sphere and, in a wider view, the ultimate weakening of the collective ethical standards and of the western democratic institutions of society.

This phenomenon is what leads illicit financial activities to grow and expand: in a few words we could say that the development and the ongoing innovations money laundering activities enables the criminal operations to continue.[14]

It has to be specified that money laundering processes have always existed, even if in different shapes. The firsts documented cases of money laundering activities comes from around the 1st century B.C. China Empire.

[14] BANERJEE, *Social and Political Costs*, in University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/social%20and%20political%20costs.htm

It has been inferred that some Chinese merchants transferred, and in this way "laundered", money through numerous business in order to avoid the high taxes degree afflicting them.[15]

Of course, methods and reasons were slightly different 2,000 years from today's purposes, but not as much as people would normally expect.

1.2 Money laundering history and background

It is said that the expression "money laundering" have originated during the investigations on the Italo-American mafia during the 1930s.

In fact, during the prohibition period in the United States, some criminals, such as Al Capone, used to purchase laundromats business in order to mix the illegal profits coming from prostitution and bootlegged liquor sales with totally legitimate ones.

Later in the 1980s, the crime attracted particular interest especially in the U.S.A. due to the high amount of money that was laundered by drug cartels and other criminal organizations. At the beginning money laundering was not treated as a proper crime, but it was instead considered a way to track down the revenues of drug crimes in order to investigate and possibly catch the individuals running those illicit activities.

In this sense, money laundering can be also considered as the *Achilles heel* [16] of criminal activities.

It has been frequent, and it is still frequent even in current days, that investigations and connections made through records of financial transactions allowed authorities to detect and uncover capital with undisclosed origins and the identities of the subjects and organizations that were trading them.

[15] O'CONNEL, *What Is Money Laundering and What Is Its History?*, The Street Journal, 2020, https://www.thestreet.com/personal-finance/education/what-is-money-laundering-14897715
[16] BANERJEE, *The Achilles Heel*, in University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/conclusion.htm

Especially in the first 1980s, money coming from embezzlement[17] or other financial frauds could only be localized through a money laundering investigation that overlooked the possible transfer of capital in the financial market.

Systemically targeting the money laundering activities can cause criminals considerable financial damage, since the regimentation put in place will deprive them of their illegitimate gains[18]

The establishment of more and more strict anti-money laundering rules was put in place in several countries between the 1980s and the 1990s, primarily due to the possibilities for law enforcers to put in place the confiscation of properties with the burden for the single individuals or organizations to prove the legitimate origin of the aforementioned source of capital.

Normally before that, authorities had to prove the individual's culpability in order to impound their property, making the investigative process more complex for the inquirers.

The money laundering activities were then brought back into the limelight after the 9/11 attack at the World Trade Center.

The attack led to significant attention at terrorism phenomenon and the way in which the activities get financed throughout the world.

For these reasons, soon after the event the G7 expanded the mandate of the Financial Action Task Force on Money Laundering to cover also the financing of terrorist organizations[19] and the United States Congress enacted the Patriot Act.[20]

During the first decade of the 21st century many factors have facilitated the diffusion of money laundering[21]: surely the globalization and the interconnections between foreign

[17] The embezzlement is a crime concerning the misappropriation of capital and funds placed in some person's trusts, either to be held or to be used for specific purposes.
[18] BANERJEE, last site cit.
[19] Financial Action Task Force, FATF's global efforts on combating terrorist financing, https://www.fatf-gafi.org/publications/fatfgeneral/documents/terroristfinancing.html
[20] The Patriot Act, where the acronym P.A.T.R.I.O.T. stands for "Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism", is an act empowered by George W. Bush in an effort to strengthen the U.S. national security and combat terrorist activities and their financing.
[21] BANERJEE, *Money Laundering in the European Union*, in University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/explosion%20of%20money%20laundering.htm

markets played a major role in the spreading of the crime, especially if considered the advent of the world wide web.

Capitals are now able to travel in few seconds through many countries, that means many and different jurisdictions, therefore that the traceability of the money is now much more arduous for competent authorities.

1.3 The costs of laundering money

What people do not usually think about is that to make the task of regulators and police officers as arduous as possible the money launderer must be willing to lose a portion of its illegal revenues during the various transactions on the market.

In order to avoid anti-money laundering measures and supervisory entities, criminals aim at preventing possible detection of their misconduct through the disguise of any possible financial benefit even remotely related with their unlawful behavior.

For this reason, criminals must be willing to lose a lot of money in the process.

Usually, people take for granted the fact that money launderers will be able to use the revenues coming from their illegal activity as a whole, without taking into consideration that money laundering processes are extremely expansive procedures.

Money laundering is implemented for three different purposes:[22]

- Being able to effectively earn and have actual disposal of an illegal income
- Hide the source of an income
- Change the "financial shape"[23] of an income

Obviously all these *escamotages* are implemented to lower the risk of dictation, usually by seeking out countries or sectors where there are weak or ineffective anti-money laundering programs. Because of that, since the objective of money laundering is to get

[22] Financial Action Task Force, Money Laundering, cit., https://www.fatf-gafi.org/faq/moneylaundering/

[23] With the locution "changing the financial shape" of an amount of money it is intended a change in the essence of the financial resources, for example a change from cash transactions to securities transfers.

the illegitimate capital back to the subject who gained it through illegal activity, launderers usually prefers to transfer those funds through stable financial systems.[24]

The procedure follows three different phases, or, more appropriately, stages, where the dirty funds are transferred, washed and finally reintroduced in the market.

1.4 Stages of the money laundering process

1.4.1 Placement Stage

This first stage is defined as placement stage, where the "dirty" money enters in the financial system. This is done to relieve the criminal from holding a large amount of filthy capital that could possibly bring the criminal's undesired attentions of regulatory authorities.

It is at this specific stage that money launderers are most likely of being caught since allocating large amount of capital in the financial markets may raise some suspects in the markets' supervisors.[25]

There are multiple paths that criminals may undertake to carry out the placement stage both virtual and "physical".[26]

The first method is the currency smuggling which is basically a practice where there is the physical movement of the capitals derived from illegal activity out of the country.

This usually happens to escape from a stringent legislation to a more mild one so that it is easier for criminals to introduce the illicit capital in the financial market.

Another method consists in the purchase of assets with the dirty revenues. This is a method that has never gone out of style, especially when considering fraud that involve a limited amount of money.

[24] Financial Action Task Force, last site cit.

[25] About Business Crime Solution, Money Laundering: A Three-Stage Process, https://www.moneylaundering.ca/public/law/3_stages_ML.php/#:~:text=After%20placement%20comes%20the%20layering,illicit%20money%20from%20its%20source

[26] BANERJEE, last site cit.

Sometimes, criminals use also established companies or financial institutions to hide and disguise their revenues since, as Bernard Madoff[27] used to allege and profess, the best place to hide cash is with a lot of other cash.

Finally, the method that got my attention and that will be analyzed later in thesis is the one involving the help of securities brokers that may simplify the process of access of the dirty revenues through large deposits structures that can mask the illegitimate origin of the capital.

1.4.2 Layering stage

After the illicit capital has entered in the financial system the layering stage take place: in this phase the launderers participate, or more often delegates to brokers or securities market experts, a series of conversions and movements of the funds to distance them from their source.[28]

When the capital has already entered in the financial system, the illegal revenues are canalized through a series of purchases and sales involving investment instruments, such as bonds, stocks or derivatives contracts, in order to generate a perfectly legal stream of cash flow coming from an apparently legitimate provenience.

1.4.3 Integration stage

By doing that, the launderer re-enters the capital in the legitimate economy during the third and final stage of money laundering, the integration stage.[29]

While placement was considered the riskiest stage due to the higher degree of risk of being detected by authorities that criminals have to face, the integration stage is considered the safer one, since the "laundering" of the capital is almost complete and the chance of being uncovered lays almost only on possible inside-informants operating within the criminal organization.

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[27] Bernard L. Madoff is a former investment advisor and chairman of NASDAQ currently incriminated and plead guilty of several financial frauds.
[28] Financial Action Task Force, last site cit.
[29] It is the final stage of the money laundering process and it concerns the moment in which the capital is returned to the criminals from what seems to be legitimate sources.

The funds are used to access the legitimate economy through many means such as shell companies[30] and physical properties.[31]

Sometimes, even foreign banks are used in order to make even more difficult the targeting for law enforcers.

This last method of course, since there is the involvement of another subject (the foreign bank), request a higher level of sophistication and it is usually implemented by skilled financial experts.

By following these paths, the malefactor will have at its complete disposal absolutely lawful funds that would then be used for investing in other securities or other physical assets and properties.

1.5 Terrorist financing

When considering money laundering through financial securities, terrorist financing has to be taken into account, too. Just like for money laundering, this activity involves the use of many different stratagems to disguise and hide from the authorities illegitimate funds and capitals that will be used for financing terrorist activities.

Following the definition given by the United Nations, the act of financing terrorism covers the action of collecting or providing funds with the purpose and intention of carrying out a terrorist act. The just mentioned funds can be of any kind and type and most importantly, on the contrary of the previously considered money laundering crime, they may also have legal provenances.[32]

The Convention wanted to target both the originators of such funds and their collaborators in the terrorist financing process. It also has to be mentioned that for the crime to exist it is not fundamental the actual utilization of the funds, it is sufficient the prove that the indicted capital has been collected for the purpose of committing a terrorist act.

[30] Shell companies are organization without active business operations or significant assets. They are not always illegal but sometimes they are used for illegitimate reasons such as money laundering and shady business dealing.
[31] BANERJEE, last site cit.
[32] Art. 1, co. 1, International Convention for the Suppression of the Financing of Terrorism, United Nations General Assembly, 1999

Of course, since the first article clarify that the funds that can be used for terrorist financing can also be totally legitimate funds with legal origins, it was important to analyze and define in what a terrorist act consists.

The Convention gives a clarification on matter by defining it «Any other act intended to cause death or serious bodily injury to a civilian, or to any other person not taking an active part in the hostilities in a situation of armed conflict, when the purpose of such act, by its nature or context, is to intimidate a population, or to compel a government or an international organization to do or to abstain from doing any act».[33]

The mechanism of financing such illegal activity can happens through the same methods and instruments as the ones used for launder money.

1.5.1 Correlation between terrorist financing and money laundering

The reason behind that is that financing individuals or organizations that intend to use a certain amount of capital for financing their terrorist activity is, as I already explained, considered a crime, so the subjects who are willing to finance such activities must be able to disguise the purposes of such money transfers in the financial market between different entities.

When the terrorist activity is planned and implemented by single individuals or lone wolves[34] it often only involves the use of cash, given the usual limited requirements and capacity of those act.

On the other hand, when the terrorist act is carried out and programmed by a larger organization, there might be the necessity of continuous flows of money to finance the activity.

This happens especially when the organization seeks or intend to perpetrate a large number of subversive attacks in a repeated and extended method of action usually with the aim to overthrow the established authorities, so as a war tactic, to intimidate a certain

[33] Art. 2, co. 1, lett. b), International Convention for the Suppression of the Financing of Terrorism, United Nations General Assembly, 1999

[34] The expression "lone wolf" refers to someone who commit a terrorist act alone, without any assistance from any group and outside any established command structure.

portion of the population, or to earn attention from medias and the collectivity on religious, political and social issues.

The needs of constant financing for these kind of operations makes the continuous usage of cash excessively suspicious and totally vulnerable for detections from authorities. That is why, also for terrorist financing, the utilization of financial instruments and securities is broadly common.

These premises were given considerable importance in the above paragraphs in order to highlight and bring attention on the common practice of using financial securities for these illegal activities so that, in the next chapters, this thesis could focus on the usage of one group of financial instruments in particular: derivative contracts.

Chapter II

Overview on Derivative Contracts

2.1 The securities market

Nowadays the securities market plays a major role in the worldwide economy. An incredibly large number of subjects operate their businesses in the financial markets, ranging from multinational companies, industrial conglomerates, SME[35] and individuals.

According to the executive summary of the 2009 FTAF report on Money Laundering and Terrorist Financing in the Securities Sector, the increasing volumes of operators, the features of some peculiar characteristics typical of the financial industry and its adaptability and global reach has make it tempting for those who would abuse it for illegal purposes, like money laundering and other market manipulation activities.

Just like in any other business, also the securities sector has to deal with fraudulent activities, in particular with the activities performed through an illicit use of its financial instruments.

The securities instruments are commonly classified in three different macro-categories that correspond to:

- Equity securities (e.g. common stocks)
- Debt securities, (e.g. bonds and debentures)
- Derivatives contracts (e.g. futures, forward, options, swaps, etc.)

The reason behind my choice of analyzing derivatives contracts for their utilization on money laundering schemes derives from the facts that it has been noticed how, especially in the last twenty years, these financial instruments resulted more inclined to be used for money laundering activity in comparison to other securities.

[35] Small and medium-sized enterprises: companies that stays below certain thresholds concerning their staff headcount and their balance sheet totals.

Before going into detail with the technical procedures that are currently used to launder dirty funds it is important to understand their nature and the main features of their different categories.

2.2 Derivatives contracts

Derivatives are financial instruments whose value depends on, or is derived from, the value of another asset, also called *underlying asset*.

Those assets are basically securities on which a derivative contract value is based upon[36] and it is important to point out that the possible underlying assets of derivative contracts can be classified in a large variety of different categories such as: financial stocks, currencies, interest rates, financial index, commodities, etc.

In order to properly understand how derivative contracts work and how they can be used to launder money, it is important to take a look and describe the markets in which they operate: Exchange-Traded Markets and Over-The-Counter Markets.

The most regulated and controlled ones are the Exchange-Traded Markets.

2.3 Official-exchange markets

An exchange market is a trade place where individuals sell and buy highly standardized derivative contracts that have been previously defined by the exchange itself.[37]

The Chicago Board Options Exchange (CBOE) is currently the largest and the most important official exchange market for derivatives.

In fact, it has been noticed how options, like futures in previous years, have progressively become very popular securities instrument among investors[38]. Exchange market used to work through the so called "open outcry system".

[36] The Economic Times, Underlying Asset, https://economictimes.indiatimes.com/definition/underlying-asset
[37] HULL, *Options, Futures, and other Derivatives*, Pearson, 2018, pg. 24
[38] Statista, Largest derivatives exchanges worldwide in 2019, https://www.statista.com/statistics/272832/largest-international-futures-exchanges-by-number-of-contracts-

This system involved a physical meeting between traders in the actual Exchange Building where verbal and hand signal communication where used as long as shouting and gestures in a predetermined sequence in order to buy or sell stocks, options, futures and so on.[39]

2.4 Over-the-counter markets

In this thesis I will give particular attention on derivative instruments traded outside of the regulated markets, both for the fact that the OTC traded contracts are not as highly standardized as the ones traded through the intermediation of official exchanges and also because of the volume of transaction involved.

In fact, it must be pointed out that the majority of transactions involving derivative contracts take place in what are known as Over-the-Counter Markets (OTC).[40]

An OTC market is a decentralized and virtual exchange place where the participants trade their financial instruments directly between the parts involved in the transaction.[41]

The main subjects that usually operates in the OTC markets are banks, fund's managers, corporations, but also individuals that may benefit from the absence of an official mediation.

Indeed, the OTC markets structure allow participants to execute trades without others being aware of the price at which the trade is completed.[42]

Of course, this feature gives the two parts the power and the advantage of negotiating the trade and fixing a price without any other active subject in the market knowing, especially for unusual and infrequently traded instruments. However, it has to be taken into account that in the real market banks and other financial institutions that operates in the OTC, often act as market maker for the most commonly traded instruments.[43]

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traded/#:~:text=The%20National%20Stock%20Exchange%20of,to%20CME%20Group's%204.83%20trillion

[39] Capital.com, Open Outcry System, https://capital.com/open-outcry-system-definition

[40] HULL, last pap. cit., pg. 25

[41] KRAMER, *Over-The-Counter Market*, in Investopedia, 2019, https://www.investopedia.com/terms/o/over-the-countermarket.asp

[42] Associazione Nazionale Enciclopedia della Banca e della Borsa, Over-the-Counter (OTC) Trading, http://www.bankpedia.org/index.php/en/118-english/o/23322-over-the-counter-otc-trading

[43] HULL, last pap. cit., pg. 26

Usually, participants simply contact and interact with each other straightly by phone or through e-mails and the transaction, due to the fact that OTC markets are typically considered subject to fewer regulations and consequently with a high degree of liquidity, may come at a premium.[44]

Once an OTC transaction has been arranged, there are two different possibilities: the counterparts may clear the trade bilaterally or they can either present it to a central counterparty (CCP).[45]

The role of a central counterparty is to rest between the parties involved in the derivatives transaction in order to avoid that one of the two counterparts will have to bear the full risk if the other parts default.[46]

2.5 The most common types of contracts

2.5.1 Futures contracts

A futures contract is a financial instrument that entails the obligation of buying or selling the underlying asset at a certain price and at a predetermined time. Since futures are exclusively traded in official exchange markets, they are highly standardized, and they usually feature commodities, currencies and stock indices as underlying assets.

The specifications are almost identical for all the participants of the market, so it is easier for buyers and sellers to transfer the contract ownership to another part.[47]

For this reason, given the high standardization of the contract's specifications, the only significant contract variable among the participants is the price, which, for the futures contracts, is settled daily.

Futures are financial instruments created by regulated exchanges, so it is the exchange responsibility to harmonize the standardization of each contract.[48]

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[44] KRAMER, last site cit.
[45] EUROPEAN CENTRAL BANK, *Financial Stability Review – Central Counterparty Clearing Houses and Financial Stability*, 2005, pg. 178
[46] HULL, last pap. cit., pg. 25
[47] CME Group, Introduction to Futures, https://www.cmegroup.com/education/courses/introduction-to-futures/definition-of-a-futures-contract.html
[48] CME Group, last site cit.

The main specifications of future contracts involve:

- What can be delivered
- Where it can be delivered
- When it can be delivered

The aim is to specify in the most detailed way the exact nature of the agreement between the two parties.[49]

By doing so, it's important to determine the underlying asset, the contract size (so the amount of asset that will be traded in a single contract), where and when the delivery of the asset traded could be done.

Another essential notion about futures contracts consists in the price and position limits.

In fact, as I specified above, futures contracts prices are daily settled, and future exchanges are the ones responsible to impose a price limits to avoid huge prices changes from day to day.[50]

If the price happens to be outside of the limit, the contract cannot be traded and the counterparts that where operating on it are locked in their position until the moment in which the price re-enter between the allowed thresholds.

On the other hand, for what concern the position limit, it is a preset level of ownership [51] disposed by the exchanges that limits the quantity of derivatives contracts that a trader, or a related group of investors are allowed to possess.

2.5.2 Forward Contract

A forward contract, like a future contract, is an agreement to buy or sell an asset at a certain future time for a certain price.[52]

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[49] HULL, last pap. cit., pg. 59, 60
[50] Finance Train, Price Limits in Futures Contracts, https://financetrain.com/price-limits-in-futures-contracts/
[51] SCOTT, *Position Limit*, in Investopedia, 2019 https://www.investopedia.com/terms/p/positionlimit.asp#:~:text=A%20position%20limit%20is%20a,traders%20and%20investors%20may%20own
[52] HULL, last pap. cit., pg. 28

While futures contracts are bought and sold only in official exchanges, forwards are traded in the previously mentioned over-the-counter markets.

Forwards works like futures but with the peculiarity of being completely customizable instead of being highly standardized.

For this reason, specifications valid for futures are not taken into account when speaking of forward contracts since underlying asset, amount and delivery date are totally tailored to the need of the two counterparts.

As their OTC nature makes it way easier to contrive and personalize terms, the shortage of central clearing houses, the previously mentioned central counterparts, gives rise to a higher degree of default risk.[53]

Another important difference between forward and futures contracts is the settlement of the price: futures prices are settled daily, while forwards have their price settled only at the maturity.[54]

Since I just mentioned the difference in price settlement between those two derivative contracts, I will seize the opportunity and draw the attention on another risk, related to forward contracts.

Since those instruments have a nonstandard nature and their prices are settled at the end of the contract, what would happen if the rate specified in the contract differ from the spot rate at maturity?

The risk of default for the institutions that originated the forward contract is very high.

In the event of default by the client, the risk is way higher than if the price of the contract were marked-to-market[55] regularly.

If we extend this scenario to a large part of the transaction that happen every day the possibility of a large-scale default does exist, even though banks and large financial corporations usually moderate the risk by being prudent in the choice of the counterpart.[56]

[53] DHIR, SCOTT, *Forward Contracts*, in Investopedia, 2020, https://www.investopedia.com/terms/f/forwardcontract.asp
[54] The maturity is the moment in time in which a financial instrument is ready to be paid.
[55] Daily settlement is an example of marked-to-market
[56] DHIR, SCOTT, last site cit.

2.5.3 Financial Options

Financial options are, just like futures, forwards and every other derivative instruments, contracts based on the value of an underlying asset.

The main difference between options and the other two types of derivative mentioned above is that while futures and forward contracts actually require the holder[57] to buy or sell the underlying asset at maturity, the options just give the holder the opportunity to do so.

There are two different types of financial options: American options and European options. The difference between these two different types is that American options can be exercised at any time during the length of their life, while European options can only be exercised at maturity.

The option holders have the faculty to sell or buy the underlying asset at maturity, depending on the type of contract they hold: a call option gives the holder the right to buy the underlying asset at a certain price while a put option gives the holder the possibility to sell the underlying asset for a certain price.[58]

2.5.4 Swaps

A swap agreement is a derivative contract between two counterparts through which cashflows will be exchanged in the future.

As well as forwards contracts, swaps are highly customizable instruments and are not traded on official exchanges but are instead traded over-the-counter.

In the swap agreement it has to be specified the dates in which the cash flows will be paid and also the methods that will be used to calculate them.[59]

This type of derivatives contract is often used for speculating or hedging on future currency exchange rates.[60] The most common type of swap contract is the one concerning

[57] The holder is the buyer of the financial options. It has the power to decide whether to buy or sell the option in the moment at which the contract is exercised.
[58] HULL, last pap. cit., pg. 235
[59] HULL, last pap. cit., pg. 174
[60] HETZER, last pap. cit., pg. 274

the exchange of interest rates and, more precisely, the exchange of a fixed rate of interest for the LIBOR[61], also commonly called "*LIBOR-for-fixed*" swap.

These types of derivative contracts have been given increasing importance in over-the-counter derivatives markets, especially in recent years.

Following the statistics produced by the Bank for International Settlements, more than half of all the derivatives exchanged in the OTC market during 2019 consisted in interest rate swaps.[62]

Obviously, swaps are not always linked to exchange in interest payments, and other common agreements might involve other underlying assets like commodities, currencies, debts and equities.

The common factor is that the exchange happens between a fixed and a variable cashflows that relies on the assets.

The commodity swaps refer to contracts where an exchange of a floating commodity price for an established price over a predetermined maturity happens.[63]

Currency swaps concerns an agreement between two parties where the interest and the principal payments on debt in different currencies are exchanged.[64]

Finally, debt-equity swaps, as the name suggests, involve the exchange of debt for equity. It is considered a common method for companies to reallocate their capital structure and refinance their debt.[65]

The peculiarity that differentiate these derivatives from the others pertains on the concept of exchanging values of different assets: an attribute that can also be used to exchange not only values but also risks, like the potential for a credit default in a bond.[66] Now that

[61] The London Interbank Offered Rate (LIBOR) is one of the primary benchmarks for short-term interest around the world and considered as the interest rate at which a Bank with AA rating is able to borrow from other banks.
[62] Bank of International Settlements, Global OTC Derivatives Market – Foreign exchange, Interest rate, Equity linked contracts, https://www.bis.org/statistics/derstats.htm
[63] CHEN, SCOTT, *Commodity Swaps*, in Investopedia, 2020, https://www.investopedia.com/terms/s/swap.asp
[64] These type of swaps contracts where used during the 2008 – 2011 financial crisis by the Federal Reserve and the ECB to stabilize the euro currency.
[65] CHEN, SCOTT, last site cit.
[66] CHEN, SCOTT, last site cit.

some basic information has been given about these main types of derivatives contracts it is now time to take a look about how they work and the mechanics behind them.

2.6 How derivatives contracts work in the financial market

2.6.1 Operation with futures contracts

As it has been previously seen, futures contracts are traded on an official exchange and the details of the derivative are uniformed by that exchange.

The first important thing to say about futures operations is that most of the futures contract do not last till maturity. This usually happens because traders decide to close out their position before the delivery period stated in the contract.[67]

Another important thing about futures and their functioning is that the delivery price, usually defined as K, is fixed at the beginning of the contract and remains fixed until the maturity, usually defined as T.

The correlation between these two variables is that, usually, the longer it is the length of the maturity, the higher will be the delivery price.

Also, as we advance in the delivery period the contract's price converges to the spot price of the underlying asset.[68] If the holder has to buy the contract at maturity it is said that it takes a *Long Position* on the contract while if the holder has to buy the future, we refer to the operation as *Short Position*.

When we consider a long position, the holder of the contract will have a cash outflow, so the outcome of the operation will be equal to (-) K by its perspective. In this case there will be a profit only when the delivery price, so K, is lower than the spot price of the underlying asset, S_T [69].

On the other hand, if we take in consideration a short position, the holder will cash the delivery price instead, with an outcome equal to (+) K. The profit will here exist only if the delivery price (K) is higher than the spot price of the asset S_T.[70]

[67] HULL, last pap. cit., pg. 49
[68] HULL, last pap. cit., pg. 50
[69] The Options Guide, long Future Position, https://www.theoptionsguide.com/long-futures.aspx
[70] The Options Guide, last site cit.

Explained that, it is important to point out what are the maximum profits and losses for the holder when operating in long and short position on futures contracts.

This will help us later identify how some players in the derivatives market use these types of contracts in order to perform money laundering.

When a long position is taken, the maximum profit is theoretically unlimited since the price of the underlying assets can possibly increase with no limits, while the maximum loss in which an holder might incur is equal to the delivery price itself since that is the amount of money that we are going to risk on the operation.

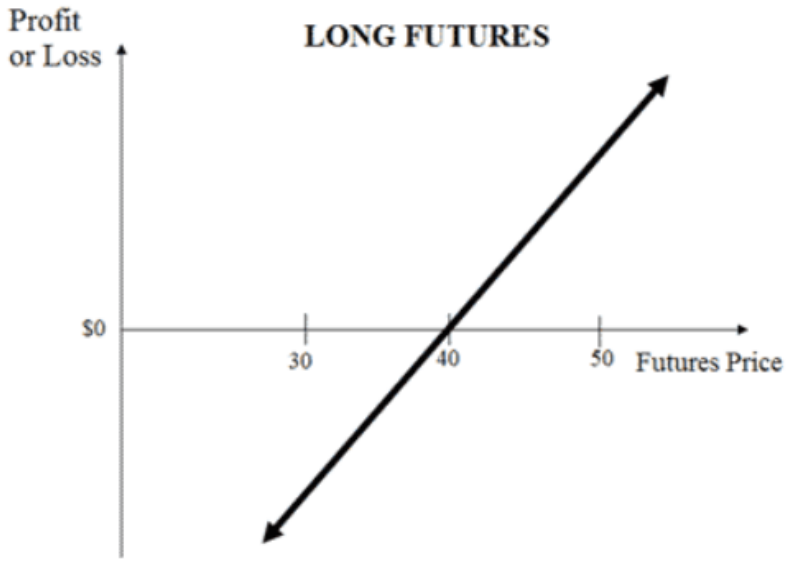

Figure 1. Profit and loss in a long position [71]

When we consider, by contrast, a short position, the maximum profit will be equal to the delivery price at which we are going to sell the futures to another trader and the maximum loss from this same operation will potentially be unlimited since the spot price of the underlying assets might increase *ad infinitum* causing the holder a loss equal to the difference between the spot price and the delivery price.

[71] The Options Guide, last site cit.

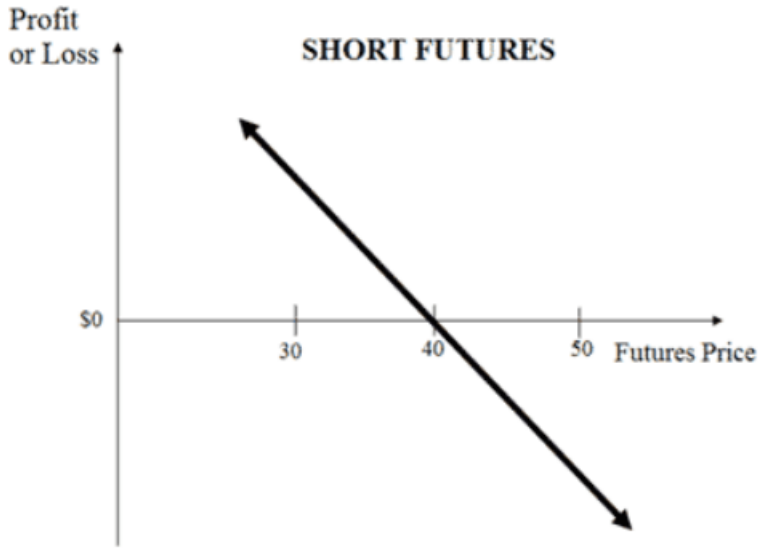

Figure 2. Profit and loss in a short position [72]

The limitless lost that a holder might suffer operating in a short position is the reflection of the riskiness of this operation in respect of the exercise of a long position.

In order to mitigate, or at least limit, the possibility of suffering a potential considerable loss, official exchanges have implemented what is called "Mark to Market Mechanism".

Through this mechanism the underlying assets value is determined according to market prices at the end of each day[73] in order to ensure that margin requirements are being met.

Margins are cash, bonds or other marketable securities deposited by the investor to its broker in order to minimize the possibility of a loss through a default of the future contract.[74]

If, as time pass by, the holder is not able to pay the margin call[75], he is forced to close the position in advance with a loss equal to his relevant cumulative gain.

[72] The Options Guide, Short future position, https://www.theoptionsguide.com/short-futures.aspx#:~:text=The%20short%20futures%20position%20is,to%20sell%20in%20the%20future
[73] Borsa Italiana, Marking to Market - Glossario Finanziario, https://www.borsaitaliana.it/borsa/glossario/marking-to-market.html
[74] HULL, last pap. cit., pg. 52
[75] A margin call occurs when the value of an investor's margin account falls below the broker's required amount.

2.6.2 Operation with forward contracts

Forward contracts work exactly just like futures contract do.

Their operation involves long and short positions too, with the only difference, as mentioned before, that forward contracts are only traded over-the-counter.

Lastly, while maximum profit and loss for every position is the same as for the futures contracts, forwards cannot automatically count on the mark-to-market mechanism backup system in situation of considerable losses since only futures contracts are settled and traded in official exchanges. In fact, forwards, being traded over-the-counter, may include mark-to-market and daily margin calls only by customize their contract specifications during the trade's negotiation between the counterparts.

2.6.3 Operations with financial options

While when considering futures and forwards only long and short positions have to be taken into account, with financial options the situations gets a little bit more complicated.

Indeed, with this kind of contracts, also put and call position has to be contemplated.

As I explained before, there are two kinds of financial options: Call options, that gives the holder the opportunity to buy the underlying asset when it expects the price to increase, and Put options where the holder is given the opportunity to sell the asset when it expects the price to decrease.

The holder has the faculty to choose if the contract will be exercised, while the writer is obliged to follow the holder's instructions.

These instruments are more intricate in respect to futures and forwards contracts since both call and put options may be exercised in a long or short position.

When a holder is in possess of a call option, so an option that gives him the right to buy the underlying asset in an expectation of price increase it is said that he is in a long-call position.[76]

[76] Macroption, Call, Put, Long, Short, Bull, Bear: Terminology of Option Positions, https://www.macroption.com/call-put-long-short-bull-bear/

When a holder is in possess of a put option, so an option that gives him the right to sell the underlying asset in an expectation of price decrease it is said that he is in a long-put position.

In this case, the maximum profit deriving from this position is potentially unlimited while, if the holder decides to not execute the option, he will only suffer a lost equal to the option premium[77].

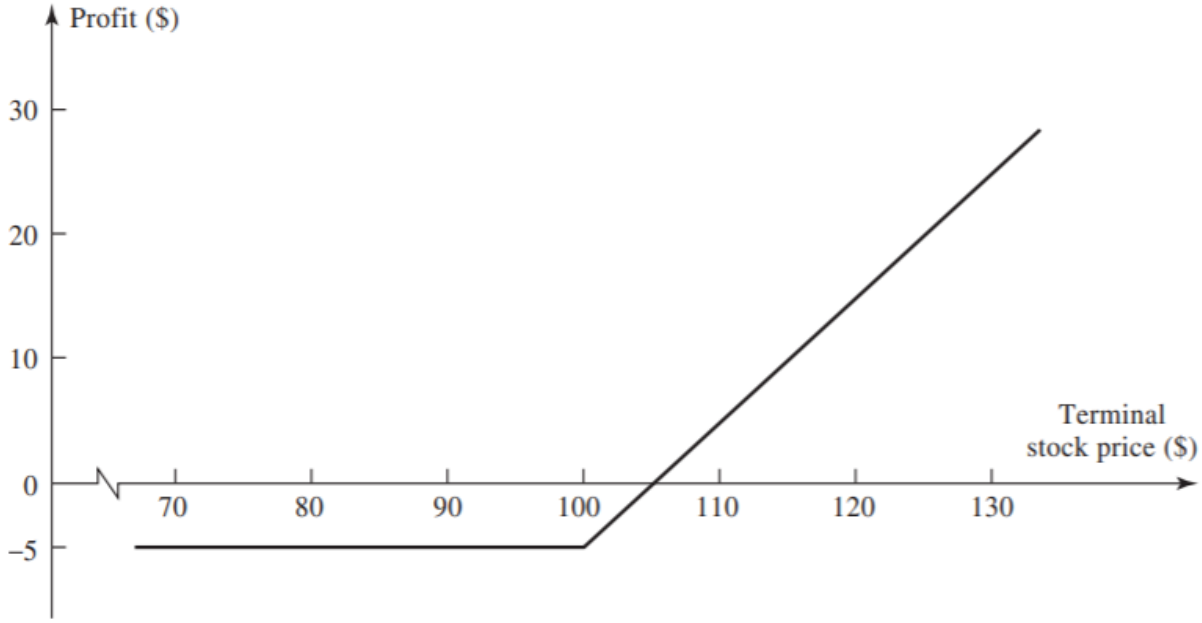

Figure 3. Profit and loss in a long position with a call option [78]

On the other hand, when an option is sold with the intention of buying it back later expecting a price decrease the position is named short-call.[79]

With this position the maximum profit that the writer can achieve is equal to the option's premium, so the price of the option that the holder gave to him in order to become the new holder of the contract.

[77] The premium is the market's price of the option that the holder pays to the writer.
[78] HULL, last pap. cit., pg. 236
[79] Macroption, last site cit.

It is important to point out that the maximum loss for the writer here is theoretically unlimited since the price can potentially increase with no limits, and that is why when operating a call option the position of the writer is way riskier that the position of the holder.

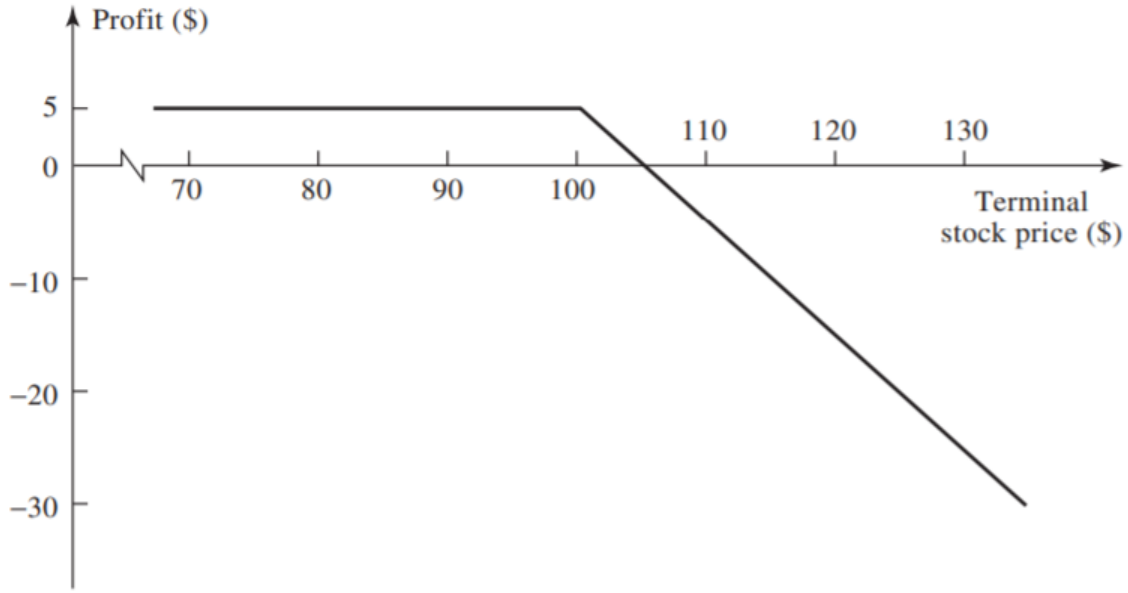

Figure 4. Profit and loss in a short position with a call option [80]

As I already explained, also put options have long and short positions.

When a put option is bought and own by the holder the situation outlined is called long put and in this case the holder is expecting a decrease in price to make a profit, on the contrary in respect to the long call.

There will be a profit if the final price of the underlying asset S_T will be lower than the delivery price K.

If the underlying's price is going to be greater than the delivery price of the contract than the holder will likely not execute the option.

The maximum profit will be equal to the delivery price, while if the option is not executed the loss in which the holder will incur will be equal to the option's premium.

[80] HULL, last pap. cit., pg. 238

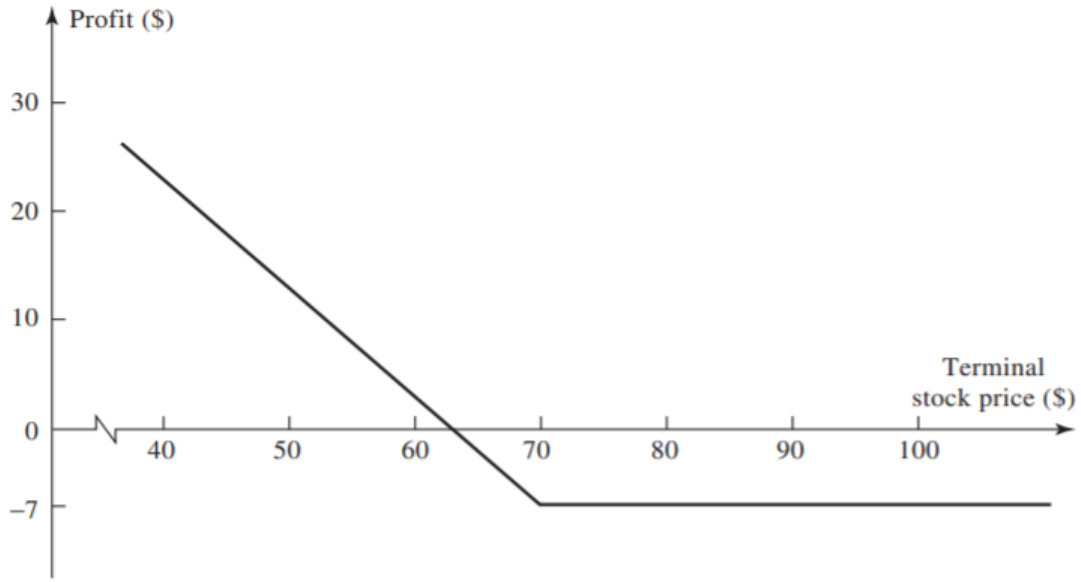

Figure 5. Profit and loss in a long position with a put option [81]

Lastly, if a put option is sold with the purpose of buying it back later the position is called short put.

If the underlying price is greater than the delivery price then the writer will make a profit by receiving the option's premium, while if the underlying price is going to be lower than the delivery price, the writer is going to lose money.[82]

The writer will profit the option's premium but his possible lost will be equal to the delivery price of the contract.

[81] HULL, last pap. cit., pg. 237
[82] Macroption, last site cit.

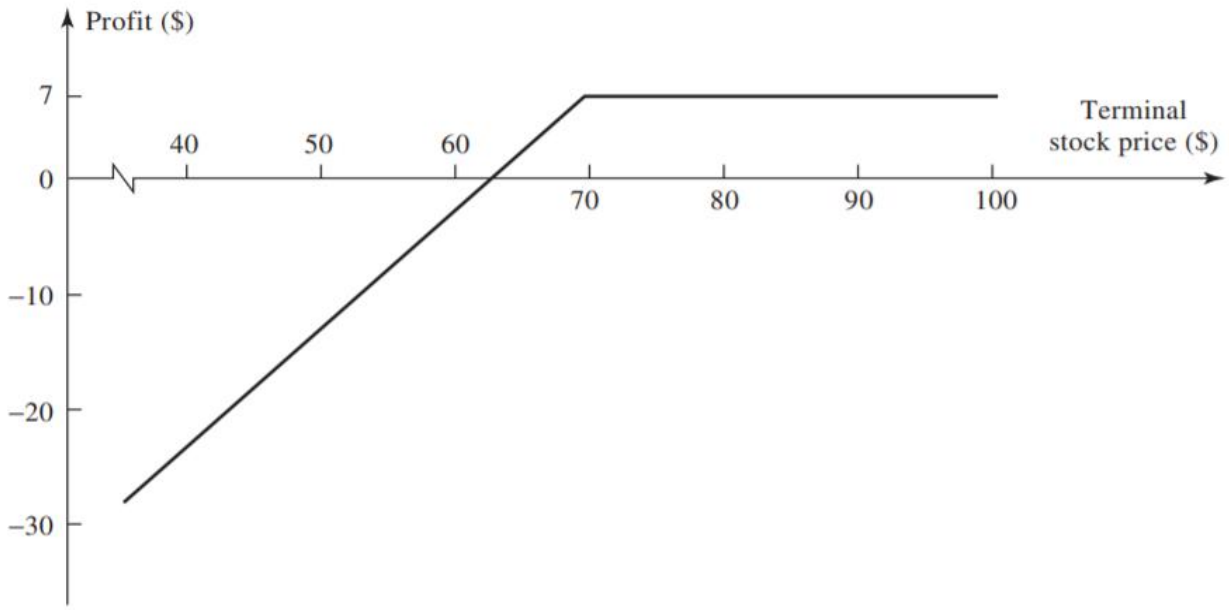

Figure 6. Profit and loss in a short position with a put option [83]

2.6.4 Operations with swap contracts

Swaps contracts are commonly used for the exchange of different cashflows in the futures, but in certain situations they can also be used to transform the nature of a liability or of an asset.

Moreover, it is important to point out that the two counterparts, if they are not financial companies, do not usually get in touch directly to negotiate a swap contract: in fact, they usually both perform the transaction with the help of a financial institution by directly dealing with it.

Currently financial institutions and commercial firms are the main operators in the swaps markets with very few individuals participating in these transactions.[84]

Each of the subjects that are willing to operate through swap contract generally rely on banks or on other financial institutions to arrange a deal with the counterpart.

[83] HULL, last pap. cit., pg. 238
[84] MCCAFFREY, *An Introduction to Swaps*, in Investopedia, https://www.investopedia.com/articles/optioninvestor/07/swaps.asp

Of course, it is highly unrealistic that two different companies will approach the financial organization at the same time with the intentions of operating in opposite position on an identical swap contract.[85]

For this reason, financial institutions, also take the market maker position, in which essentially they operates with swap contracts without already having another counterparty with which counterbalance the position that has just been opened[86], doing what is usually referred to as *warehousing*[87] swaps.

As I said in the previews paragraphs, the plain vanilla swap contract concerns the exchange of interest rates and different currencies.

When operating with swaps derivatives it is good to remember that when those kind of contracts are first initiated, especially the interest rate swaps, their worth is really close to zero and only after their existence for a while their value becomes positive or negative for the holder.

Two different approaches are used to value interest rate swaps contracts:

- Valuation in terms of difference between two distinct bonds prices
- Valuations in terms of FRAs[88] portfolios

2.6.5 Bonds prices approach

By valuing the swaps using the difference between two bonds it is assumed that the contract itself can be considered, from the point of view of the floating rate payer counterpart, as a long position in a fixed rate bond and a short position in a floating rate bond.[89]

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[85] HULL, last pap. cit., pg. 179
[86] BREWER, MINTON, MOSER, *Interest-rate derivatives and bank lending*, Journal of Banking & Finance, 2000, pg. 358 ss.
[87] It consists in the practice of warehousing the swap and use interest rate derivatives to hedge the risk exposure until the financial organization is able to find an off-setting position on the very same swap.
[88] Forward Rate Agreements (FRAs) can be considered as over-the-counter derivatives contracts in which two different counterparts determine the rate of interest that will be exchanged on a notional amount and on an agreed date in the future.
[89] HULL, last pap. cit., pg. 187

This assumption can be demonstrated by the equation:

$$V_{\text{swap}} = B_{fix} - B_{fl}$$

Where V_{swap} is the value of the swap contract while B_{fix} and B_{fl} are respectively the values of the fixed rate bond and of the floating rate bond.

On the other hand, from the point of view of the fixed rate payer counterpart, the swap contract can be seen as a long position in the floating rate bond and a short position on the fixed one, so that the value of the contract can be determined with the specular equation:

$$V_{\text{swap}} = B_{\text{fl}} - B_{\text{fix}}$$

The financial worth of the fixed rate bond can simply be estimated by calculating the present value of all the cash flow that the counterpart who has the right of ownership on such bond will collect through time.

At the same time, the floating rate bond B_{flow}, has a value which is exactly equal to the notional principal immediately after the payment of the cashflow.

This trait can be explained by considering that the borrower grant LIBOR for every ripening date because, at this specific time, the bond is considered a fair deal. By following this logic it can also be assumed that right before the moment in which the payment is made, the floating bond's value will be equal to the notional principal plus the floating payment that will be made during the upcoming exchange of payment. [90]

By doing a simple discounting operation the worth of the floating rate bond will be:

$$B_{\text{fl}} = (L + k^*)e^{-r^*t^*}$$

Where the notional principal is represented by L, the upcoming payment maturity is transposed as t*, k* is the payment that will be made at the upcoming maturity and the swap zero rate, or LIBOR, for time t* is expressed with r*.

[90] HULL, last pap. cit., pg. 187

2.6.6 FRAs portfolio approach

Sometimes a swap contract can also be analyzed and valued as a portfolio of FRAs.

In this case, a plain vanilla swap contract can be valued, just like forward rate agreements, by assuming that forward interest rates are realized.

First of all, the swap zero curve is used to determine the forward rates of every single LIBOR rates that will condition the cash flows in the contract.

After that, by always assuming that the forward rates are equal to the LIBOR rates the swap cash flows are calculated. The value of the contract is then obtained by simply discounting the swap cash flows just estimated.[91]

2.7 Purposes of trading with derivatives contracts

These types of financial instruments are some of the most traded securities in the world, both between private subjects and official institutions.

A lot of different people that operate in the financial market make use of such contracts for different purposes, but traditionally derivatives traders are classified in three different categories:[92]

- Hedgers
- Speculators
- Arbitrageurs

2.7.1 Hedgers

Traders classified as hedgers tend to use derivatives contracts in order to reduce the risk coming from potential future movements in the financial market.

Usually the financial strategy followed by a hedger involves the use of derivatives to lay out a speculative or an arbitrage position.[93]

[91] HULL, last pap. cit., pg. 189
[92] Corporate Financial Institute, Participants in the Derivatives Market, https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/derivatives-market/
[93] FinBid, Derivatives & Hedging, https://finbid.com/derivatives-hedging/

After defining the strategy, the hedger should evaluate the risk at which the investment is exposed, measure and choose which risks in the strategy are acceptable, which should be hedged and finally implement the hedging strategies on unacceptable risk using derivatives contracts.

It also has to be pointed out that while futures and forwards contracts are outlined for neutralizing the risk by fixing the price that the hedger will cash or pay for the underlying asset, options contracts provide an insurance service[94] that, as explained above, has its price in the option's premium.

They also allow investors to protect themselves against unfavorable price movements in the future while offering them the benefit from favorable price movements.[95]

2.7.2 Speculators

Speculators use derivatives to gamble and bet on the future floating and movements of a market variable. In this context, it can be said that whereas hedgers aim to avoid risk exposure on adverse movements in underlying assets prices, speculators tend to take riskier positions by betting that the price of the asset will go up or down.[96]

Futures, forward and options can all be used to obtain some leverage but futures and forward bring the risk of a potential large loss as well as a potential large gain while with options the speculator's loss is limited to contract's premium.

2.7.3 Arbitrageurs

Arbitrageurs take counterpose positions in two or more derivatives to realize a profit. This is done by substantially locking in a riskless profit by entering into transactions in two or more market at the same time.[97]

[94] HULL, last pap. cit., pg. 36
[95] FinBid, last site cit.
[96] BARTRAM, *Corporate hedging and speculation with derivatives*, Journal of Corporate Finance, 2019, pg. 10
[97] HERZEL, *Arbitrage opportunities on derivatives: a linear programming approach*, University of Perugia, Watam Press, 2005, pg. 589

Arbitrage opportunities do not last for long, especially nowadays where a huge number of models and programs are employed in order to discover and take advantage of such opportunities. If there is a discrepancy in the price of an asset, it will likely be fixed in a relatively short amount of time.

2.7.4 The fourth category of derivatives traders

Now that I summarized the three major categories of derivatives traders, I would like to introduce you to what I claim to be the fourth category of derivatives users: the money launderers.

It is a very complex category in which an intricate set of different individuals operate together with the goals of disguising the illegal origin of a certain amount of money or impede the authorities in discovering the origin of the involved fund or their location in the financial markets.

It is a category that has developed only in recent years on a considerable scale, since before the advent of the total globalization of the markets, the methods employed by launderers were mostly applied in the real economy.[98]

Nowadays, in order to be able to clean capitals coming from unlawful activities it is necessary to implement a complex series of operations.

By taking for granted that the riskier operation for a money launderer operating in the securities market occur during the placement stage, so when the money are actually placed in a financial fund, the utilization of derivatives contracts take place during the already described second stage of money laundering.

During the layering stage, the derivative instruments are used to disguise the origin of the fund from the authorities that regulate the financial market by carrying out a sequence of operation through different positions in such contracts.

The subjects that operates for this illicit scope do not only involve criminals and illegal organization but, often, there is also the abetment of some brokers with technical expertise on derivatives trading. It is in fact necessary a non-common degree of knowledge of the securities markets, and also a certain degree of expertise on managing the different types

[98] HETZER, last pap. cit. pg. 267

of operations and schemes in which derivative contracts are involved to reach the integration stage.

The availment of derivative contracts in proper tactics finally leads to complete the third stage of the laundering, where the funds are ready to be brought back into the financial accounts of criminal individuals and to be reintegrated in the legitimate financial system as lawful earnings coming from legal operation carried out through derivatives instruments.

In the following chapters I am going to expose why derivative contracts, are used in money laundering and how they are taken advantage of in that illegal practice by professional launderers.

Chapter III

Money Laundering through Derivatives Instruments

3.1 Why derivatives are used to launder money?

As already stressed in the last chapter, securities markets, and more specifically derivatives markets, are well known to be used for money laundering activities.

As explicitly and, for a certain part, controversially stated by the former head of unit at the European Anti-Fraud Office Wolfgang Hetzer, derivative instruments are known to encourage deregulation while tempting individuals and companies to perform money laundering and avoid due assessments.[99]

In particular, derivatives contracts are mostly used in the illicit practice of money laundering because their complexity, their daily volume of transactions and the intricacy of the market in which they operate provide a perfect cover for hiding and "clean" dirty money.[100]

In fact, most of the trading activities concerning derivatives are usually conducted through a broker and it is highly frequent that market participants are unaware of the identities of the subjects behind the broker with which they are dealing.[101]

In order to be more specific, the Financial Action Task Force gave some precocious outlines in the *FATF Report: Money Laundering and Terrorist Financing in the Securities Sector* (October 2009) about the vulnerabilities of the securities markets concerning money laundering and illegal financing.

The report gives particular attention to the global reach of the securities sector and the speed of transactions across a high number of onshore/offshore jurisdictions and financial

[99] HETZER, last pap. cit., pg. 264
[100] RiskScreen.com, Money Laundering with Derivatives, https://www.riskscreen.com/kyc360/case-studies/
[101] RiskScreen.com, last site cit.

markets and the ability to transact in financial instruments via an intermediary which may provide a relative degree of anonymity.[102]

Another aspect that is taken in consideration is the high liquidity of some securities products, in particular derivatives instruments, that must be settled or may be settled in cash.[103]

This characteristic is surely a feature that attracts a lot of delinquent individuals and criminal organizations since revenues coming from irregular activities are often collected and obtained in cash, due to the difficulty in traceability compared to other electronic methods of money transfer.

3.2 The role of financial intermediaries

Most of those illegitimate trades involving derivatives contracts in the markets gets financial intermediation by brokers. Of course, by dealing and trading a sum of money that has an unclear provenance, they become associates in the illegal activity, so usually they are paid by the same individuals that are trying to clean the dirty capital.

The most simple way in which this might happen is by simply bribe them with cash, but it is very difficult to transfer a high volume of capital using physical currencies besides the fact that this process is also highly risky for both the counterparts.

For this reasons, more complex methods are used to avoid those issues, like the usage of safe custody facilities[104] for exchanges of currency or other goods of significant value, like diamonds, jewelry etc.

Even though it is safer for criminals, this method can raise some suspicious in the bank's vigilant authority too: if the bank, while supervising, notice that more than one person have access to that safe custody facility and that several access are made by different

[102] FINANCIAL ACTION TASK FORCE, *Money Laundering and Terrorist Financing in the Securities Sector*, 2009, pg. 9
[103] FINANCIAL ACTION TASK FORCE, *Guidance for a Risk-Based Approach, Securities Sector*, 2018, pg.8
[104] Safe custody facilities can be used to exchange values between counterparts since banks have no right to know how much the amount of the custody's content is or even what is the nature of it.

subjects in a limited period of time, it may inform the competent authorities that might then start an investigation on those suspicious operations.

Another method, that has been brought back in vogue in recent years, is the wash trade technique[105] using high frequency trading models in superfast computers with high speed internet connections that allows to perform tens of thousands of trades per second.[106]

Of course, this technique is illegal as well, but reports have shown that the methodology is still frequently utilized.

3.3 Derivatives contracts as "washing machines"

The concept itself might not seems really complicated, but the actual execution of the whole process requires a high expertise of the securities market.

First of all, the brokers on which the criminals rely on, must open at least two different banking accounts.

In one of them, or more in the eventuality that the accounts opened are more than two, the criminal subjects deposit the capital with illicit origins that needs to be laundered, while the other ones will be used to receive the laundered funds.

At this moment the brokers will take a long position on derivative contracts related to a specific underlying asset with the money that were previously deposited in the firsts accounts and, at the same time they will go short, so they will sell, the exact same amount of derivative contracts related to the identical underlying asset.[107]

Later, in the same trading day, the broker must close both the open positions in order to get hold again of the capital invested.

If the price of the underlying assets price has gone down, the long position will have lost money, while if the price rose the short position will be the one with a loss of money.

[105] Wash trade technique is a market manipulation's procedure where the investor buys and sells the same financial instruments so that the continuous trade generates commission fees to the brokers in order to compensate them for something that cannot be openly paid for.
[106] CHEN, *Wash Trading*, in Investopedia, 2020, https://www.investopedia.com/terms/w/washtrading.asp
[107] RiskScreen.com, last site cit.

After closing the operations, the brokers simply assign the losing position to the accounts where criminals previously deposited their illicit revenues and the winning position, so the position who gained value through the trading day, in the others accounts.[108]

At this point, the funds in the account assigned to hold the clean capitals will actually be claimed as profits from financial trading and, therefore, perfectly legal and ready to re-enter in the official economy.

An important thing to remember here is that, as I already stressed before, this process is not cost free.

In particular, for what concerns securities such as derivatives contracts, the *spread*[109], so the difference between the offer and the bid price of the underlying asset has to be taken into account.

For this reason, the amount of profit generated by a derivative contract will always be lower than the loss of the opposite position when considering the same derivatives contract linked to the same underlying asset.

The difference between these two amounts is equal to the actual costs that criminals must be willing to pay in order to produce a completely clean fund coming from apparently lawful transactions.

With this way of performing money laundering, launderers simply use the loss occurred in the losing position to legitimize revenues with a dirty origin and make them appear like totally legal and, most importantly, financially justifiable.

3.4 Criminal activities linked to money laundering

Money laundering techniques are often used to commit financial frauds and, as it has just been seen, sometimes transactions involving derivatives instruments coincides with transactions designed to commit money laundering in the securities market.[110]

[108] HAFNER, *Money-Laundering with Derivatives*, Geneva, 2001, pg. 8
[109] The spread is the gap between the bid and the ask prices of a security or asset, like a stock, bond or commodity and it is also known as a bid-ask spread.
[110] MONEYVAL, *Use of Securities in Money Laundering Schemes*, 2008, pg. 60

Such transfers, including the ones involving derivatives instruments, can also be used by malicious subjects to justify unexpected profits or losses:

this happens in cases of companies (public or privates) that tries to enhances their balances just before the report date, when business partners are hiding profits from each other or when managers misappropriate or steal from their company.[111]

Other than this, more frequently such transactions are even utilized for hiding and disguising property capitals from creditors or even for mere capital flight operations.[112]

3.4.1 Capital flight activity

The phenomenon of capital flight occurs when firms or individual subjects pursue the intention of transferring capitals to another country.

Financial securities have always been utilized as legitimate vehicles to move money in speed from one asset to another and from one country to another allowing individuals the possibility of trading and investing in a rapid and agile way.

However, it must be considered that together with the legitimate utilization of such instruments, also a misuse of their characteristics has been carried out hand in hand.

Following the Moneyval guidelines, the most common methodology that has been observed among criminals using derivatives contracts for capital flight as long as money laundering is the purchase and sales of securities at an off-market price.

After purchasing a derivative contract with a currently low nominal value from a foreign country, even though it has to be specified that this scheme can also be applied to different variety of securities, the ill-intentioned subject sells the contract again to a related person in the host country at a significantly inflated price.

At this point, the figurehead in the host countries, that can be a physical subject but also a fictitious company, can either decide to hold the contract or sell the derivative at market

[111] MONEYVAL, last pap. cit., pg. 60

[112] Capital flight can be considered a large scale exiting from a nation due to imposition of capital control or other adverse situations for the fund's holder. The phenomenon can be legal, as when a foreign investor repatriate its money back to the country of origin, or it can be illegal, like when considering the infringement of regulations that restrict the possibilities of transferring assets and capitals out of the country.

value, realizing a loss that, in that way, can also reduce its tax liability. These processes are commonly and regularly used by offshore companies in low tax jurisdiction.[113]

3.4.2 Tax evasion activity

Another activity strictly related to the money laundering processes through derivatives instruments is the avoidance of due taxes and assessments.

Just like for capital flight, derivatives contracts can be also used for tax evasion by business entities.

The schemes involve transactions that can be performed in different tax periods, between different countries and also exploiting differing taxation rules among different jurisdictions. A series investigations leaded by some tax audits conducted by the Polish fiscal authorities[114] can be used as a concrete example of cases involving tax minimization or total tax evasion utilizing derivatives: the schemes were constructed so that «the taxpayers failed to declare income resulting from the sale of securities in their tax returns»[115] and, in some cases, the companies involved[116] arranged transactions to produce substantial losses in order to decrease, or at least limit, the taxable capital originating from their revenues.[117]

The different categories of derivatives contracts all operates with different mechanism in the market and that is why, before discussing the current principles that regulates and coordinate the anti-money laundering activity involving derivatives, in the next paragraph there is going to be an overview on the different schemes and sequence of transactions that are proper of the different features of the above mentioned contracts.

[113] MONEYVAL, last pap. cit., pg. 69
[114] The Polish authorities noticed suspicious transactions involving debt obligations and other securities in general arranged at prices way below the markets purchasing cost.
[115] MONEYVAL, last pap. cit., pg. 63
[116] Most of the companies involved were joint stock and limited liability companies.
[117] MONEYVAL, last pap. cit., pg. 63

3.5 Technical examples

Futures, options and swaps can all be used to launder money through different methods.

In fact, to make the process more complex and at the same time more difficult for the rulers to detect, brokers usually divide the capital that needs to be laundered by investing in different types of derivatives contracts, so that the tracking of the various operations involved turns out harder for the competent authorities to be detected.

The important thing that has to be pointed out is that the choice of usage of one type of contracts rather than another one is not irrelevant.

Every type of derivatives launder money through different methods, so their usage is conditioned by the method that is considered the most appropriate by the broker when taking into account the nature of the capital and the sort of the illicit activity that made possible the collection of the illegal funds.

The valuation of the security that should or should not be utilized for the operation is usually entrusted to financial experts hired from the criminal organization or to the brokers that will actually run the sequence of washing operations, usually basing the choice on its level of competence on the category of derivatives in which he is the most proficient.

During the next sections, there is going to be an analysis on the most utilized schemes for every class of derivative contracts, taking into account not only the procedures, but also the side costs and effects of the desired outcome for every strategy and arrangement perpetrated by criminal organizations.

3.5.1 Forwards contracts employment

When considering the usage of a basic derivative such as a forwards contract for example, the primary strategy is to organize the process, after the investment on both sides of the futures contract so that the losing position is assigned to the account where the money that have to be laundered.[118]

[118] GRABBE, *How to Launder Money in the Futures Market*, Janus-Book, https://memresearch.janus-book.com/grabbe/futlaund.htm

As I explained before, in order to realize this whole process, the criminal individuals must rely on someone with a peculiar expertise of the financial markets and of derivatives contract in particular.

In fact, for the whole operation to work, it is needed the ability to predict, with the lowest possible percentage of error, in which direction the price is going in order to be able to forecast the fluctuation of the forwards value and therefore direct and allocate the losses and the revenues of the operation as explained in the last paragraph.

Another important aspect that criminals and brokers have to take in strong consideration is that the accounts opened for this illicit purpose should be held and managed by parties that results unaffiliated and totally independent between them.

In few words there must be the appearance that no agreement has been established among the various figureheads or shell companies involved so that the transactions can be easily confused without raising suspicious attention in the enormous number of derivatives trades around the world.

During the last fifteen years a lot of international organization and oversight authorities elaborated some guides containing the main sets of operation and strategy used by criminal organization to launder money and/or finance other prosecutable felony and illegal activities like terrorism.

The Moneyval[119] elaborated a set of typical schemes, with some of them involving futures and forwards, that are currently put in place by criminal association to launder money.

The most common one concerning futures and forwards, as they are easily interchangeable because of the similarity of their mechanism even though OTC contracts are statistically less likely to be detected than futures and, for that reason are often preferred over futures, is about trading an overprice or underprice security.

One criminal associate purchases a future or a forward contract at a very cheap price and then resells it through an intermediary at an artificially inflated price to the subject detaining the fund with an illicit origin. At this point, the profit deriving from the sale of the future/forward, which would be determined by the difference of the cheaper price at

[119] The Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism, also known as Moneyval, is a monitoring body of the Council of Europe.

which the contract was purchased and the inflated price at which it was sold to the criminal partner, will be entirely considered as legally obtained.[120]

Seen that futures contract are traded only on official exchanges, it is harder for criminals to use such instruments for illegal purposes and that is the reason why delinquents often prefer to use instruments that are exchanged over-the-counter.

Forwards are a good alternative for futures contracts in that sense, since they are highly customizable and, most importantly, not dependent from official exchanges regulations.[121]

3.5.2 Financial options employment

By considering instruments that are not traded on official exchange, financial options surely play a role of absolute consideration.

According to the Financial Action Task Force, derivatives contracts like options presents money laundering and/or terrorist financing vulnerable exposures when a counterpart, dealing with such kind of instrument, decides to deal with it on terms considered worse than those normally convenient in an impartial and balanced market to guarantee that the other party involved receives a net payment: in this respect, a financial option traded over-the-counter might be used to transfer and launder illegal funds.[122]

On this very same report, it is demonstrated how a transaction involving financial option might actually conceal a money laundering scheme: for example, let us assume that a counterpart has some capital in an intermediation account that he wants to transfer to another counterpart. It is also assumed the presence of a financial security that has a market price of $7 per share.

The most common way for transferring the fund will be via wire transfer or through a bank check but, if the counterparts have the purpose of laundering money, the strategy will be selling for a nominal premium a cash-settled put option on the security, with a strike price of $15 per share for , let's say, 10,000 shares.

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[120] MONEYVAL, last pap. cit., pg. 42
[121] Which are known to be way stricter than OTC markets prescriptions.
[122] FINANCIAL ACTION TASK FORCE, *Money Laundering and Terrorist Financing in the Securities Sector*, cit., pg. 21

At this point, the counterpart buying the option will immediately exercise the contract and, since the derivative is cash-settled, the subject selling the option will pay to the other counterpart the difference between the strike price and the market price of the security for an amount of $80,000 as formulated right below. [123]

($15 x 10,000 shares) - ($7 x 10,000 shares) = ($8 x 10,000 shares) = $80,000

This fund will appear like a perfectly legal outcome from financial operations between different counterparts, without raising suspects about a transfer of capital originated through potentially illicit activities.

Furthermore, the report specifies that when using a financial option to transfer capital there is not even the actual need of exercising such contract since the traders might charge a high premium for a worthless contract, like a call option with a strike price hundreds of times higher than the market price[124], or by simply exercising an out of the money financial option.[125]

A resounding example of recent illicit utilization of financial options for the purpose of money laundering is the scandal uncovered by the SEBI[126] in 2019.

The authorities uncovered a massive money laundering scheme involving more than 9,000 subjects including investors, brokers and several small companies' promoters.[127]

The investigation regarded the use of financial option that where thinly-traded in the market by the above mentioned subjects, to launder money.

It is estimated that the fraud started at the beginning of 2015, but the system was not unveiled until the 2016 by Rajeev Agrawal, a former member of the of the SEBI authority.

[123] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 22
[124] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 22
[125] When a financial option is out of the money it means that it has no intrinsic value (which is the difference between the current price of the underlying asset and the strike price of the financial option) and it only contains extrinsic value.
[126] The Securities and Exchange Board of India is the authority that regulates Indian securities and their commodity market.
[127] BURUGULA, *Illiquid options for money laundering: Crackdown may net a windfall*, The Economic Times, 2019, https://economictimes.indiatimes.com/markets/stocks/news/illiquid-options-for-money-laundering-crackdown-may-net-a-windfall/articleshow/67952598.cms?from=mdr

The allegations concerning the abuse of the exchange platform where initially issued through an *ex parte* order to only 59 entities, but as the investigations by the authority deepened on the illicit operations, the board realized the enormous width of the scheme.[128]

The method used, following the report of the CNBC, is strictly similar to the scheme explained at the beginning of the chapter considering a broker and at least two accounts ran by at least two subjects:

- Subject A, that wants to fake a loss of $10 to reduce his tax outgo
- Subject B, that wants to clean $10 worth of capital originated through illicit activity

The broker «…will put A and B on the opposite of a series of trades in some options contracts that no sensible trader will touch. The trades will be matched such that B makes a profit of $10 and A will show a loss of the same amount».[129]

Through an agreement between the two counterparts, subject B will later return the capital to subject A in cash or other less detectable physical assets, so that the transaction will only have the purpose of launder dirty money for subject B and avoid, or at best lighten, the tax burdens for subject A.

3.5.3 Interest swap contracts employment

Interest rate swap contracts are also exchanged over the counter, and for this reason counterparts can specifically customize their feature in order to remodel them into instruments with money laundering properties.

In this case, the structure of the system is strictly related to the basic technique explained at the beginning of the chapter but, since swap contracts operates in a more marked different way in respect to the other derivatives instruments, the procedure is a little bit different.

[128] BURUGULA, last site cit.
[129] NAIR, *Tax evasion through options trades: SEBI's settlement is tax dept's loss*, CNBC TV18, 2020, https://www.cnbctv18.com/market/tax-evasion-money-laundering-options-sebi-settlement-6472971.htm

For interest swap contract the mechanism is similarly based on the concept of "losing" the dirty money on one part the contract and "gain" the derivative earning on the other side of the swap.

A practical example could involve two different criminal association and at least one financial institution which must be an accomplice of one of the two organization.

I must say that it is not necessary that the institution as a whole is owned or run by felonious subjects, it is sufficient for the organization to have some trustworthy people in the key roles of the institute that will help the proceeding of the transactions without inform and advise the competent authorities.

It is clear that such schemes are usually implemented by well-established criminal associations that can count on assets and resources rarely available among common criminals.

Moreover, the transaction often happens between organizations operating in different legislations so that detection is more complicated for the regulators.

The contract will agree an exchange of interest rate payments on an underlying amount between the two associations.[130]

Just like in the most common interest rate swaps, there will be a fixed interest rate and a floating interest rate, corresponding to the LIBOR.

When the LIBOR goes up, the money is laundered for one counterpart, while when it goes down, since all derivatives contracts works through a specular mechanism, it will be the other organization having its money laundered.

This happens because only one counterpart can benefit from the movements of the floating interest as it fluctuates following the market trends.

In fact, if the plan is to launder money for both the criminal association, there will be the necessity of having a second interest swap contract with the same condition but with the counterpart reversed on their first contract position.[131]

[130] HAFNER, last pap. cit., pg. 7
[131] HAFNER, last pap. cit., pg. 7

The two criminal associations must be sophisticatedly organized to generate these opposing cash flows.

It also has to be said, that besides being more efficient for both the organizations, with this scheme the costs of transactions are considerably reduced.[132]

Even though this is theoretically the most convenient interest rate swap scheme to launder money between criminal associations, it still remains a niche process.

The explanation for this choice seems to rely on both the higher risk of getting caught by the authorities and the difficulties to establish a confidence and reliance relation between different criminal association.

For the success of the whole operation, there must be a consolidated and trustworthy connection among the criminal associates of the two organization, since there is the need of a unison sequence of operation from both the counterparts in order for the scheme to be accomplished.

Moreover, since the operation to launder money for both the criminal organizations at the same time involve the utilization of two specular interest rate swap contracts, the possibilities of being detected are exponentially higher.

Two derivatives contracts that are mirrorlike operating on the same underlying assets, or involving the same fixed and floating interest rate in the case of a swap instrument, will surely rise some concern over competent authorities since two similar contract traded in exact opposite positions by counterparts that appear to have some kind of relation between them, as it has been seen in previous examples and case studies, are lowkey more inclined to be detected and controlled by regulators.

It always has to be remembered that, when derivatives are employed to launder money, the launderer must act shrewd and operate in the most possible vigilant way to avoid detections.

[132] MONEYVAL, last pap. cit., pg. 63

3.6 Development of the regulations and increasing attention on market manipulation activities

In fact, especially in recent years, the legislation regulating the utilization of securities, and in particular the regulation of derivative contracts has become more and more rigorous and severe going hand in hand with a stricter regulation on activities that could lead to money laundering.

As it will be seen in the next chapter, during this thesis I decided to analyze the evolution of the European legislation on money laundering and on derivative instruments, especially regarding the ones that are not traded through official exchanges, and give also notable relevance to the recommendation of the FATF and of other supervisory authorities on money laundering in the securities markets.

The analysis will follow the steps taken by the European entities until the development of the current regulation, together with an analytical examination of public entities motivations and considerations behind the numerous normative upgrades on the subject.

The European Union is in fact at the forefront for what concern supervision on financial markets.

Through the development of regulations and the establishment of numerous supervisory authorities, the UE has been able to efficiently cover most of the *blurred areas* that previously were not, or just partially, regulated by a solid legislation.

Chapter IV

Regulations and Supervision

As mentioned before, in this chapter I am going to follow the development of the European regulation on money laundering and on derivative instruments by not simply analyze the measures contained in the various acts, but rather highlight gaps and shortcomings in previous directives and regulation in order to better understand the improvements and the sequential normative adjustments of the legislation.

This methodology is fundamental to fully understand previous weak points in the legislation and therefore allow an efficient and effective normative analysis.

I am primarily going to analyze the development of the European anti-money laundering legislation and then I am going to examine the different regulations that prescribe normative requirements and guidelines for derivative instruments and their utilization in the European financial market.

4.1 First directive against money laundering

The first set of regulations concerning money laundering at European level was made in 1991 by the Council of the European Economic Community in cooperation with the European Parliament.

The directive «on prevention of the use of the financial system for the purpose of money laundering»[133] was primarily implemented due to the concern that banks and other financial institutions could be used to launder capital coming from unlawful activities. The directive established three pillars, or duties, that credit[134] and financial institutions[135]

[133] Directive (EU) 91/308/EEC
[134] According to art. 1 of the 91/308/EEC Directive, “credit institutions” have to be intended as defined on 77/780/EEC and 89/646/EEC Directives.
[135] Financial institutions have to be intended as an undertaking other than a credit institution whose principal activity is to carry out one or more of the operations included in numbers 2 to 12 and number 14 of the list annexed to Directive 89/646/EEC or an insurance company duly

had to put in action and enforce in order to facilitate the detection of possible criminal behaviors.

These pillars included:

- Customer/client identification
- Record keeping
- Reporting suspicious transactions to competent authorities

4.1.1 Client identification

According to the directive, member states shall guarantee that credit and financial institutions must require identification of their clients when opening an account, offering safe custody facilities or, most importantly, when taking part in a business relation.[136]

At the same time, institutions must ensure the identification requirement even when a sum amounting to €15,000 or more is involved in a transaction.

The co. 2 of the 3rd article specifies that this threshold is applicable even if the transaction is not carried out in a single take, but it is instead performed through several operations that seems to be linked.

By knowing that, criminal organizations tries to rely on different brokers, financial experts and large numbers of figureheads to disguise their derivatives transfers as non-linked transactions and, in this way, go above the €15,000 without being detected and identified.

4.1.2 Record keeping

The record keeping pillar manifest the responsibility for credit and financial institutions to keep record for at least five years of every document involved in transactions that can be considerate admissible in court proceeding and used as evidence in any investigation into money laundering.[137]

authorized in accordance with Directive 90/619/EEC in so far as it carries out activities covered by that Directive.

[136] Art. 3, co. 1, Directive (EU) 91/308/EEC

[137] Art. 4, Directive (EU) 91/308/EEC

It is required the record also in case of identifications, and the reference of the credentials must be hold for at least five years after the relation with the client has ended.

4.1.3 Report of suspicious transactions to competent authorities

The third pillar has been implemented to «ensure that credit and financial institutions and their directors and employees cooperate fully with the authorities responsible for combating money laundering».[138]

The intent was to tone down confidentiality rules among institutions employers when a money laundering activity was suspected.

In this way, their responsibility got extended to inform the competent agencies when indicators of money laundering arise and to provide, at the authorities request, all the necessary information.

Also, related to the reporting to competent authorities, in this directive it is contained the obligation for financial institutions to abstain from the execution of transactions suspected of being related to money laundering operations. In cases when the restrain is such way is impracticable, the institution involved must notify the authorities instantly afterwards.[139]

4.1.4 Vulnerable points of the regulation

This regulation was surely important for financial institutions in which it gave them some sets of procedures to embrace and follow to combat money laundering, but some weak features of the directive were pointed out after a while.

First of all, the directive gives prescriptions and takes into consideration only credits and financial institutions.

This problem arises when the EU authorities became conscious, but most importantly cognizant, about the fact that it is not necessary to operate only through financial institutions to launder money.

[138] Art. 6, Directive (EU) 91/308/EEC
[139] Art. 7, Directive (EU) 91/308/EEC

At the time the utilization of cash was broadly common among criminal organization to transfer money and, moreover, after the implementation of the first directive, the money laundering activity could easily switch to business involving physical properties like cars, shops, art paintings ecc.

At this point, the best way to control and make possible eventual investigation on money laundering activities was to channel all the transactions through credit and financial institutions.

The solution thought to settle this operation was found in imposing a limitation on the utilization of cash, since the usage of ordinary currencies for payments still requires no identification and, therefore, no record keeping.

4.2 Second directive

Due to the development of the securities market and due to the vulnerable characteristics of the former legislation, exactly ten years after the implementation of the first directive, the European Parliament decide to update de legislation in force at the time.

The second directive broadened the list of subjects that had to comply to the three pillars contained in the first directive.

In fact, besides credit and financial institutions as in the first article of the directive 91/308/EEC also «the following legal or natural persons acting in the exercise of their professional activities»[140]:

- auditors, external accountants and tax advisors;
- real estate agents;
- notaries and other independent legal professionals whether:
    - by assisting in the planning or execution of transactions for their client
    - or by acting on behalf of and for their client in any financial or real estate transaction
- dealers in high-value goods, whenever payment is made in cash, and in an amount of €15,000 or more;
- casinos.

[140] Directive (EU) 2001/97/EC

4.3 Third directive

Along with the enforcement of this regulation, also the FATF enacted detailed recommendation on money laundering and on countering terrorist financing.

The third directive took into consideration the revised recommendation standards of 2003, mainly focused on the implementation of a stringent regulation due to changing economic and financial situation in the wake of 9/11 terrorist attack.

4.3.1 Customer due diligence

The most important updates, contained in the third directive were the definition of politically exposed persons, already treated in the first chapter, and the implementation of customer due diligence procedure.

The differences with the identification process consist in the fact that due diligence complies identification plus the following additional obligations that are needed to understand the purposes and the nature of the business transactions.

The procedure comprise the identification of the customer's identity on the basis of data or documents obtained through reliable source, the credential of the beneficial owner basing the information on adequate measures to verify its identity, collect the record of the information concerning the nature and the purposes of the business relation and the continuous monitoring of such business relationship to ensure that the transactions involved are consistent with the institution's or person's knowledge, the business activity, its risk profile including the source of funds and the updated data and information.[141]

This last two points are extremely important, especially for what concern derivatives contracts.

In fact, it is imperative for the authority to understand the intentions behind the transactions and the purposes of the business relationship in order to prevent crimes involving financial securities.

[141] Art. 8, co. 1, lett. a), b), c), d), Directive (EU) 2005/60/EC

When, for example, an employee of a credit or financial institution do notice that some transactions or customer behavior is not in line with the usual parameters and gets suspicious he can promptly notify his perplexities to the authorities.

Furthermore, the operation is eased and can have a higher incidence on combating money laundering if the conduction of ongoing monitoring among business relations is considered together with constantly profile updating.

Always following the other directive principles, customer due diligence should be applied to the institutions and the persons covered by this regulation when:

- establishing a business relation
- carrying out single or series of linked trades corresponding to an amount of €15,000 or more
- when a suspicion of money laundering or terrorist financing is present, with no regards to thresholds or exemptions
- when there are doubts about the truthfulness of the client identification details.[142]

With the updates and revisions on this regulation given by the commission directive 2006/70/EC, a list of politically exposed persons has been catalogued and the due diligence procedure was developed to assure through technical criteria when, if a subjects is involved in public authority and its identity and activities are publicly available, a client can represent a low risk for money laundering or terrorist financing.[143]

4.4 Financial Intelligence unit

The third directive also instituted the Financial Intelligence Units «which serves as a national center for receiving, analyzing and disseminating to the competent authority's suspicious transaction reports and other information regarding potential money laundering or terrorist financing».[144]

[142] Art. 7, lett. a), b), c), d), Directive (EU) 2005/60/EC
[143] Directive (EU) 2006/70/EC
[144] Recital n. 29, Directive (EU) 2005/60/EC

It was responsibility of the member states to establish the Financial Intelligence Unit, and the unit itself was then responsible and accountable for suspicious transactions' data recording and collecting.

The FIU is an administrative authority that gather data on suspicious transactions and financial movements that can hide money laundering or terrorist financing activities.

It evaluates and examine the information and decides whether the reports should be passed to the investigative authorities[145] and be used as possible evidences since it has to be taken into consideration that that the FIUs and the investigative agencies works very closely with the judicial authorities.

Usually FIUs get contacted by credit and financial institutions employers that notice that something is not working following the standard parameters or receive aggregate reports by financial intermediaries.[146]

Another important thing involving the Unit is that it can also physically examine and inspect all the institutions and subjects that can be considered accountable for the anti-money-laundering obligations to verify compliance with active cooperation requisite through the analysis of reported and unreported transactions.

Beyond the reporting duty, FIUs also conduct studies and analysis with the goals of identifying trends, evaluate the money laundering and terrorist financing phenomena and analyze potential weaknesses of the financial and regulatory system. The evaluations are made for economic sector at risk, categories of financial instruments and single irregularities.[147]

[145] In Italy, two of those investigative authorities are the Special Foreign Exchange Unit of the Finance police and the Antimafia Investigation Bureau.
[146] Art. 9, co. 5, Directive (EU) 2005/60/EC
[147] Banca d'Italia, The Role of the Financial Intelligence Unit (FIU), https://uif.bancaditalia.it/sistema-antiriciclaggio/uif-italia/index.html?com.dotmarketing.htmlpage.language=1

4.4.1 Functioning of the FIUs

The FIUs network has basically been conceived to facilitate and ease a highly protected connection required for the exchange of information between the entity that denounces a suspicious operation and the authorities.[148]

Under the international and also Italian anti-money laundering legislation, the units are given responsibility for receiving and analyzing information and related exchange reports with the other FIUs.[149]

The connections and continuous flows of information between the different Units is essential for the traceability of financial flows since, as it has been seen in the previous paragraphs for what concerns derivatives contracts, often launderers trades through different countries and, therefore, different jurisdictions.

When the suspicious of money laundering or terrorist financing activities are revealed to be appropriate by, purely by way of example, the Italian FIU, the following step taken by the Italian unit is the opening of the practice for the issue of sanctions by the Ministry of the Economy and Finance.[150]

4.5 Reporting obligations

Another important aspect of the third directive concerns the required cooperation among persons and institutions covered by the above mentioned regulation.

These subjects, involving also the directors and employees of such entities, must totally collaborate «by promptly informing the FIU, on their own initiative, where the institution or person covered by this Directive knows, suspects or has reasonable grounds to suspect that money laundering or terrorist financing is being or has been committed or attempted» and «by promptly furnishing the FIU, at its request, with all necessary information, in accordance with the procedures established by the applicable legislation».[151]

[148] Europol, Financial Intelligence Units, https://www.europol.europa.eu/about-europol/financial-intelligence-units-fiu-net
[149] Banca d'Italia, last site cit.
[150] Banca d'Italia, last site cit.
[151] Art. 22, co. 1, lett. a) and b), Directive (EU) 2005/60/EC

If we consider the points of view of the directors or employers of the covered entities, they must be able to recognize if the transaction features some specific characteristics. The aspects that must cause cautiousness and wariness are the size, the characteristics and the nature of the transaction considered but, aside from the proper features of the transaction itself, it is really important also to consider the business activity or the financial volume and importance that the subjects involved in the transaction.[152]

4.5.1 Role of the FIUs in the reporting obligations

The FIUs facilitate the exposure of possible unlawful characteristics of the operation through key anomaly indicators and models delineating atypical conducts.

When in presence of a suspicious transaction, the report must be filed immediately without further waiting, possibly before the operation is effectively executed.

Following, always as a consistent example, the procedure of the Italian legislation, in cases when the covered entities are not able to pursue an adequate identification of the clients, they must not execute the transaction or the business activity with the undetectable subjects. At the same time, the entities covered by the directive must transmit the report to its legal representative and, if the legal representative find the allegations well founded, he proceeds to notify at the national Financial Intelligence Unit without reporting the identity of the person who noticed anomalous characteristics in the transaction or in the subject identification.[153]

The Unit will then conduct the analysis on the report filed and it can also acquire additional information from the suspects or exchange information with foreign intelligence units that might have other data on the transaction or on the subjects involved.

The financial analysis on the transactions or on the instruments involved in the operation consists «in a series of technical-financial examinations designed to use all the information acquired in order to understand the context that generated the report, pinpoint

[152] Banca d'Italia, The reporting of suspicious transactions, https://uif.bancaditalia.it/adempimenti-operatori/segnalazioni-sos/index.html?com.dotmarketing.htmlpage.language=1
[153] Art. 42, co. 1, 2, 3, 4, d.lgs. 231/2007

personal and operational ties, trace the suspicious financial flows and determine their likely purposes».[154]

After the completion of the analysis, if the report requires further analysis, it is transmitted with accurate indication on the suspicious operations to the already mentioned Finance Police and to the National Antimafia Prosecutor for further investigation.

4.5.2 Confidentiality and exceptions

The important aspect that has to be pointed out is that the completion and the filing of the reporting obligation is legally protected by a guarantee of confidentiality as well as the anonymity of the person making the report.[155]

On the other hand, if the report is considered unfounded the entities who signal it to the attention is informed of the reason of the evaluation by the FIU.

Of course, the reporting obligation does not apply on subjects that, due to their profession, are not able to meet the required duty such as «notaries, other independent legal professionals, auditors, external accountants and tax advisors only to the strict extent that such exemption relates to ascertaining the legal position for their client or performing their task of defending or representing that client in, or concerning judicial proceedings, including advice on instituting or avoiding proceedings».[156]

4.6 Fourth Directive

Almost ten years after the third directive the European parliament and council enacted the IV anti-money laundering and terrorist financing directive.

One of the most significant introductions in the EU legislation against money laundering frauds in the securities market concern the figure of the *Beneficial Owner*.

[154] Banca d'Italia, last site cit.

[155] Banca d'Italia, last site cit.

[156] art. 34, co. 2, Directive (EU) 2015/849

4.6.1 Beneficial ownership

The beneficial owner is a subject who controls the customer of a financial or credit institution on whose behalf the business activity is being carried on, or that can even benefits of ownership even though the title to some form of property or actions in the financial market is conducted in another name.[157]

The innovation that this directive brought in the detection and fulfillment of the customers identification requirements for the entities covered by the regulation is unquestionably fundamental.

It has already been seen in the previous chapter how frequent and commonly figureheads are utilized by money launderers in the securities market, especially when considering operation through derivatives contract where, due to the high complexity of their structure and transactions, it is really hard for intelligence agencies to actually identify the potentially other subjects behind every transaction.

In most cases the beneficial owner and the legal owner are the very same subject but, since these two kinds of ownership concepts are diverse and quite distinct, sometimes it happens that the two ownership are distinguished in more than a single subject.

In this directive, besides the already strongly established duties of due diligence and identification for the customer involved in transactions or business activities with the financial or credit entities, also the identity of the beneficial owner needs to be verified.

The directive stated that there was the necessity of identifying the beneficial owner and suggested to do it by utilizing the percentage of shareholding ownership interest as evidential factor.[158]

The regulation also included that «the need for accurate and up-to-date information on the beneficial owner is a key factor in tracing criminals who might otherwise hide their identity behind a corporate structure. Member States should therefore ensure that entities incorporated within their territory in accordance with national law obtain and hold adequate, accurate and current information on their beneficial ownership, in addition to

[157] CHEN, *Beneficial Owner*, in Investopedia, 2020, https://www.investopedia.com/terms/b/beneficialowner.asp
[158] Recital n. 12, Directive (EU) 2015/849

basic information such as the company name and address and proof of incorporation and legal ownership».[159]

4.6.2 National central registers for beneficial owners

In order to intensify the transparency measures, the UE Member States must collect and store in a centralized record separated and different from the company register in order for the Authorities to benefit from the collection of these data.

After the completion of this step, the central database will then be filled by the obliged entities and made the information included completely and totally available for FIUs and other competent authorities.

The national central registers have to include the name, the year of birth, the nationality, as well as the nationality, and the percentage held by the beneficial owner.

The directive also suggest that even other persons should have granted the access to the beneficial ownership information who can demonstrate a valid interest with respect to the main crimes covered by the regulation, money laundering and terrorist financing, but also to the other previously mentioned related offences like tax frauds and corruption. For this reason, the information held ensure access to:

- competent authorities and FIUs, with no restriction
- obliged entities, withing the due diligence framework
- any subject that can demonstrate a legitimate interest.[160]

The fourth directive also updated and strengthen the legislation on tax crimes and gambling sectors.

[159] Recital n. 14, Directive (EU) 2015/849
[160] Art. 30, co. 5, let. a), b), c), Directive (EU) 2015/849

4.6.3 Implementation of gambling sector regulations

Launderers have frequently abused the gambling services to launder revenues with unlawful origin.

In the third directive the gambling services were identified in the casinos business while on the fourth directive the definition of gambling service became more exhaustive by defining the business as an activity involving «wagering a stake with monetary value in games of chance, including those with an element of skill such as lotteries, casino games, poker games and betting transactions that are provided at a physical location, or by any means at a distance, by electronic means or any other technology for facilitating communication, and at the individual request of a recipient of services».[161]

The strategy utilized by the EU legislator consisted in implementing a procedure in which when a customer is involved in a transaction with a value amounting to €2,000 or more the providers of gambling services will pose a higher risks profile in applying customers due diligence measures.[162]

At the same time, the directive suggests the EU member state to ensure that the entities covered by the legislation apply the same prevention on the collecting of winnings and in other operations related to the gambling activity and the possibility for the member states to exempt specific gambling service providers.

4.6.4 Tax crimes regulation

Fiscal crimes are strictly connected with the money laundering activity, especially when involving derivatives contract.

As it has been noticed in the previously provided examples of derivatives employment for money laundering, some contracts are utilized not only to disguise the origin of the capital traded, but also to transfer the funds through different jurisdictions having different tax regulation in order to make the traceability more difficult for the authorities.

With this directive, the tax crimes are officially embodied among the violations strictly related to money laundering and terrorist financing activities.

[161] Recital n. 12, Directive (EU) 2015/849
[162] Recital n. 21, Directive (EU) 2015/849

Tax frauds related to direct and indirect taxes were then specifically considered and defined as criminal activities.[163]

The regulation also provides specifications about the different designation that each EU member state might give to different tax offences.[164]

In fact, it has to be considered that every single EU member state has a different national legislation and regulation concerning tax offences and therefore various and distinct definitions of tax crime.

The directive does not seek to harmonize the divergent definitions of tax crimes among member states but encourages them to cooperate and to exchange information between the EU Financial Business Units.

4.6.5 Updates on the politically exposed persons definitions

The definition of politically exposed person became more specific and was extended to other subjects in this regulation.

While in the third directive the definition was circumscribed to «natural persons who are or have been entrusted with prominent public functions and immediate family members, or persons known to be close associates, of such persons»[165], the fourth directive give specific instructions and guidelines to the covered entities and institutions on subjects on which it must be assured PEPs due diligence.

The prominent public functions included in the regulation as examples are heads of State, heads of government, ministers etc., but in the directive are included also the family members, such as the spouse, the children or the parents of a politically exposed persons and any «persons known to be close associates» such as natural persons known to have beneficial ownership, legal arrangements or business relations with a politically exposed person. [166]

[163] The question was taken into consideration after the FATF highlighted the relation between tax crimes and money laundering in its revised Recommendations.
[164] Recital n. 11, Directive (EU) 2015/849
[165] Art. 3, co. 8, Directive (EU) 2005/60/EC
[166] Art. 3, co. 11, let. a), Directive (EU) 2015/849

Moreover, the regulation took a further precautionary measure concern the pursuance of the due diligence measure even after the termination of the public or related function.

When a politically exposed person is no longer in charge of a prominent public function, the entities covered by the directive are obliged to consider the continuation of the risk posed by that subject and, for the reason, the standard PEPs risk-sensitive measures must be empowered for at least twelve months after the termination of their prominent public duties.[167]

It has to be pointed out that the fourth directive paid also attention on the possible indirect effect that these measures might have on the business relationships involving politically exposed persons.

It must be clear that the intention of the regulation is not to stigmatize the subject that fall into the preceding definitions as persons that are often involved in criminal activities.

It is important to consider the due diligence requirements related to PEPs just as preventive measures, since refusing to execute a transaction or operate in a business activity with a subject defined as a politically exposed person is antithetical and discordant with the principles of the directive and of the FATF Recommendation.[168]

4.6.6 Restrictions on cash payments

As pointed out multiple times during my analysis, the cash payments are still one of the most utilized means to re-enter illegitimate earnings coming from criminal activity in the legitimate economy.

The utilization of large cash payments allows criminals to take advantage of economic transactions with a ridiculous low risk of movements traceability and therefore an even lower risk of being detected by the authorities.

Since the threshold imposed by the third directive was still considered too high by analysts and regulators, the limit was furtherly lowered in the fourth directive from

[167] Art. 22, Directive (EU) 2015/849
[168] Recital n. 33, Directive (EU) 2015/849

€15,000 to €10,000 for single take transactions or several operations which appear to be linked.[169]

The directive also states that EU member states may also autonomously decide to empower and apply stricter measures in their jurisdictions.

4.7 Fifth directive

The fifth directive 2018/843 amended the 2015/849 legislation on prevention measures against money laundering and terrorist financing.

The directive developed and updated some of the hints given by the previous directive to the member states in the light of the fact that the vulnerabilities and the nature of the potential threats to the financial market integrity are constantly evolving.

Moreover, the measures were taken to «ensure the increased transparency of financial transactions, of corporate and other legal entities, as well as of trusts and legal arrangements having a structure or functions similar to trusts with a view to improving the existing preventive framework and to more effectively countering money laundering activities and terrorist financing».[170]

The most important aspect that absolutely needed to be mentioned is the regulation and the coverage and analysis of the crypto currency's phenomenon for the first time by an institutional entity that recognizes the problem of potential misuse of virtual currencies by criminal subjects.[171]

Now that a general overview about the regulation on money laundering and terrorist financing has been given, I will examine the prescription and regulations proper of securities and derivatives instruments so that a complete normative analysis on current regulation can be implemented.

[169] Art 2, let. e), Directive (EU) 2015/849
[170] Recital n. 2, Directive (EU) 2018/843
[171] Recital n. 10, Directive (EU) 2018/843

4.8 Securities Regulation

The directives analyzed above must be considered as the general regulation among EU member states that broadly oppose to financial frauds related to money laundering.

Some of the aspects outlined have an enormous impact on the utilization and regulation of derivatives instruments such as the customer due diligence procedures carried out by the obliged entities, the institution of Financial Intelligence Units in every member state, the tax crimes restrictions etc., but in order to have a clear vision on the utilization of derivatives contracts on money laundering activities it is fundamental to examine also the set of rules and recommendations that specifically regulates the securities markets.

As previously stressed out, securities are typically categorized into debt securities, equities and derivatives.

I used the word "typically" because not every jurisdiction incorporates derivatives, or some of their different subsets, in their definition of financial securities[172], but this is something that will extensively be analyzed in the next chapter.

The securities markets can be used to both launder money and generate illegitimate assets that eventually will later have to be laundered through other securities.

The FATF include three specific offences, known as *designated offences*, that lead to money laundering in the financial market:

- Insider trading
- Market manipulation
- Securities fraud

For the purpose of money laundering through derivatives contracts, the focus of the analysis will be the market manipulation and the securities fraud offences, since these are the most common infraction related to the utilization of derivatives instruments.

[172] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 16

4.8.1 Market manipulation

With the terms market manipulation the international legislation refers to the behavior of a subject and its handling of a securities, in this case of a derivative contract, intended to mislead or beguile investors and authorities by affecting and controlling the market for a specific contract, or a specific securities if generally speaking.[173]

The most common market manipulation scheme employed by criminal subjects is colloquially referred to as *pump and dump* scheme.

This scheme involves an artificially created buying pressure for a specific derivative instrument traded over-the-counter.

The trading volume's increase of the security results, as direct effect, in a consequential increment of the contract's price which is then promptly sold off again by the same criminal subjects at an inflated value.[174]

The artificial increase of the contract price is defined as *pumping* the derivatives value in the market while the quick sold after the attainment of the optimal inflated price is defined as the *dump*.

The FATF identified a list of suspicious indicators[175] that might concern the perpetration of market manipulation offences linked to money laundering when detected:

- The repeated trading in derivatives that are illiquid, low price or difficult to price by a client
- The deposit of physical securities or assets and at the same time requests to register the contracts involved into a multitude of accounts that do not appear to be linked.
- One counterpart purchases the derivative at a high price and then sells it off to another counterpart running into a considerable loss.
- The allocation of derivatives contracts in non-related accounts without apparent business reason.

[173] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 50
[174] Federal Bureau of Investigation, Market Manipulation Fraud, https://www.fbi.gov/scams-and-safety/common-scams-and-crimes/market-manipulation-pump-and-dump-fraud
[175] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 51

- Engagement in prearranged derivatives trading, including wash or cross trades of low-priced derivatives contracts.

4.8.2 Securities frauds

This practice in some way embrace and incorporate also the insider trading and the market manipulation.[176]

Moreover, for this type of fraud, the perpetrators utilize misleading schemes related to the purchase and sale of a security.

Just like it has been done for the market manipulation analysis, the regulation considered evaluated the utilization of derivatives instruments in order to determine some suspicious indicators that can be considered useful by competent authorities and the before mentioned obliged entities to detect this practice which the FATF strictly relates to the money laundering activity.

The signals that should warn the authorities are: [177]

- The client opens multiple accounts for diverse legal subjects that are controlled by him;
- The client collects many and frequent transfers coming from other parties and
- He divides the incoming funds in many different accounts;
- The client makes numerous payments to other parties just closely subsequently having received incoming transfers by third parties;
- The transactions of funds concern investment activities.

4.9 Risk based approach

As it has been seen, the most effective method considered by regulators and authorities to record and ideally detect possible derivatives fraud in advance is the recognition of common traits and indicators among the various money laundering activities involving securities.

[176] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 53
[177] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 54

For these reasons, the preferred procedure implemented by regulators and utilized by obliged entities to prevent the money laundering activity through financial instruments is the *risk-based approach*.

The European council defined it as an approach involving «the use of evidence-based decision-making in order to target the risks of money laundering and terrorist financing facing those operating within it more effectively».[178]

It is utilized to mitigate the actual risks that the utilization of securities, and in particular of derivatives contracts, for money laundering purposes with which the authorities have to deal on a daily basis.

It was originally formulated by the FATF in 2003 and then revised in the 2012 recommendations[179] becoming a fundamental concept to the effective implementation of all the anti-money laundering requirements.[180]

It has therefore become a central prerequisite for the conformity on the identification and due diligence regulation, even though its utilization does not only limit to compliance activities.

Following the European Council instructions, the risk-based approach should be developed and applied on several levels.[181]

First of all, every single country should implement an evaluation concerning their specific nation to determinate and estimate their national risk assessment in their legislation by developing a flexible set of measures that can target in a more efficient way possible suspicious schemes of laundering transactions.[182]

The purpose of this operation is to have different outcomes from the several risks analysis made by the various countries so that the knowledge acquired can then be shared among the different state authorities as well as with the obliged entities.

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[178] Recital n. 22, Directive (EU) 2015/849
[179] FINANCIAL ACTION TASK FORCE, *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation*, 2012, pg. 8
[180] Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism, Risk-Based Approach, https://www.coe.int/en/web/moneyval/implementation/risk-based-approach
[181] Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism, last site cit.
[182] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 8

Secondly, the action of the competent authorities should be commonly coordinated so that the enforcement of the necessary anti-money laundering measures can be integrated and equalized in every country.

Finally, the obliged entities should be aware of the suspicious indicators identified by the authorities and should apply the suggested anti-money laundering measures.

The importance of utilization of the risk-based approach has been recognized at European and international level among authorities and public institutions.

The European Parliament was one of the firsts legislative bodies that established specific authorities, the European Supervisory Authority including the EBA[183], EIOPA[184] and ESMA[185], to implement and enforce the approach of risk identification at European level through their Joint Committee.[186]

In particular, obliged entities like financial institutions and authorities should use the risk-based approach in sync with the information recorded on the national central registers.

The exclusive reliance on the registers do not fulfil the clients' due diligence required by the European legislation and therefore the utilization of the risk-based approach is fundamental for the accomplishment of the prevention measures.

This approach aims at preventing possible financial frauds and detect the ones that are currently taking place in the financial markets subject to the authorities supervision.

When the due diligence procedure and the risk-based approach are enforced on customers and beneficial owners before all the transaction involving financial instruments or at the beginning of a business relationship the utilization of derivatives contracts for money laundering purposes become extremely difficult for criminals.

It always has to be remembered that criminal subjects choose operates through financial instruments, in this specific case through derivatives contracts, instead of using other methods because the perceived risk that they take into account is exponentially lower.

[183] Regulation (EU) 1093/2010
[184] Regulation (EU) 1094/2010
[185] Regulation (EU) 1095/2010
[186] Recital n. 23, Directive (EU) 2015/849

The most important aspect of the risk- based regulation is its approach to supervision of credit and financial institutions.

In its recommendations, the FATF defines the risk-based approach to supervision the operations carried out by the competent authorities to designate and assign their resources to the proper anti-money laundering and terrorist financing surveillance.[187]

The allocation of resources in areas that are sensed and perceived to have higher risk can help the authorities in improving the fight on money laundering even on critical areas, such as the securities sector.

4.9.1 Independence of supervisors

Besides the need of financial support by the countries that rely on them, authorities should work with sufficient operational autonomy to guarantee possible unlawful influence and pressure from public institutions that might foster unlawful behavior of political exposed persons.[188]

Also, appropriate supervisions must be enforced on authority employees in order to avoid external pressure and criminal infiltration in the institution.

4.9.2 Sanctions

To ensure the full compliance with the regulations and recommendations, the FATF suggests national jurisdictions to develop a wide range of commensurate and balanced sanctions in order to dissuade potential criminal subjects in being involved in money laundering activities.

The aspect that should be taken in consideration is the variety of subjects at which this recommendation should be applicable.[189]

In fact, penalties should apply not only to credit and financial institution that do not follow the regulation, but instead the legal responsibility must be applicable also to physical persons working for the obliged entities that materially helped criminals through the

[187] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 98
[188] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 99
[189] FINANCIAL ACTION TASK FORCE, last pap. cit., pg. 26

money laundering process or omitted to report suspicious indicators that could have prevented the crime to be put in place.

The sanctions aspect has become of fundamental importance in fighting and preventing money laundering through securities and specifically through derivatives contracts.

4.10 Sixth directive

During the writing of this master thesis, the 6th directive against money laundering and terrorist financing has come into effect for European member states.[190]

In this directive, a key role is given to the harmonization of money laundering definitions, including a list 22 predicate offences that are now considered integral parts of the money laundering crime.

Moreover, there has been a considerable tightening to sanctions and penalties related to money laundering activity in the financial market for both natural and legal persons.

This extension of criminal liability has to be considered as extremely important and it might turn out to be one of the most relevant deterrents for money laundering in the European jurisdiction.

The fact that both legal entities and natural person can be considered responsible, and therefore accountable, for money laundering related activities changes the way of conceiving the crime itself.

4.10.1 Aiding and abetting, inciting and attempting

The directive upgraded the regulation by stating that members states should «take all the necessary measures to ensure that aiding and abetting, inciting and attempting an offence referred to in this regulation is punishable as a criminal offence».[191]

[190] Directive (EU) 2018/1673 came into effect for member states on 3rd December 2020 and have to be implemented also by financial institutions by 3rd June 2021
[191] Art. 4, Directive (EU) 2018/1673

With utilization of the expressions *aiding and abetting*, the regulators wanted to include any subject or entity under the responsibility of committing the crime of money laundering when participating by any means and at any level in the operations.

Of course, the legislation contemplates a specific set of aggravating circumstances when considering a situation in which money laundering offences in the securities market are suspected:

- When the offence has been committed by a criminal organization
- When the offence is perpetrated by an obliged entity during the exercise of its regular activities
- When, for the purpose of the laundering activity, offences related to corruption are committed involving officials of the European Communities as well as officials of member states of the European Union.[192]

4.10.2 Penalties and sanctions for natural persons and legal entities

The regulation also defined the measures that member states have to adopt to dissuade and prevent criminal offences related to money laundering offences.

Natural persons are punishable with up to four year of jail time when committing the offences referred in the 3rd article of this directive and, as usually the European regulation allows, a distinct sole discretion is given to member states that may and should apply additional sanctions and measures when the situation so requires.[193]

The directive also evidences how even entities that incite or attempt to launder money in the financial market can be considered accountable for money laundering offences.[194]

When taking in consideration legal entities, such as companies or financial institutions, the criminal liability for such offences has been determined to lie not only on employers misconducting with an unethical behavior, but also on directors and manager that are

[192] Art. 2, co. 1, let. h), Directive (EU) 2018/1673
[193] Art. 5, co. 2, 3, Directive (EU) 2018/1673
[194] According to article n. 7 of this directive, member states must take into account that a proceeding against a legal entity do not preclude the liability of individual laundering perpetrators having a natural person status.

from now on considered under the regulation responsibility for failing to control or detect the transgression committed by their subordinates.[195]

The persons committing a money laundering crime having a leading role or position in the incriminated legal entity may be identified and taken as accountable when one or more of the next characteristics are applicable on the subject:

- The subject has power of representation of the legal entity
- When it is employed in an authority that takes decision on the behalf of the legal entity
- When it is employed in an authority that govern and exercise control of the legal entity.[196]

The penalties for suspected unlawful misconducts by convicted legal entities concerns the proportionate and deterrent effect that the regulation should have on liable subjects.

The directive contemplates sanctions involving both criminal and non-criminal fines as long as other punitive measure:

- The exclusion from the concession of having public aids
- Exclusion from access to public grant, concessions and funding (it could be temporary or permanent)
- Disqualification from commercial activities (it could be temporary or permanent)
- Being subjected to judicial supervision
- A judicial close down order
- Closure of the establishments used to commit money laundering related offences (it could be temporary or permanent).[197]

[195] Art. 7, co. 2, Directive (EU) 2018/1673
[196] Art. 7, co. 1, let. a), b), c), Directive (EU) 2018/1673
[197] Art. 8, let. a), b), c), d), e), f), Directive (EU) 2018/1673

4.10.3 Cooperation among European jurisdictions

As it has already been stressed during the course of this study, one of the primary tools that the authorities have at their disposal is the record keeping of movements and transactions in the securities market.

For this reason, a highly efficient network and cooperation has been established between the different national Financial Intelligence Units at European level.

In order to improve the effectiveness of sanctions and penalties among convicted individuals and entities, the 6th directive provides a more complete regulation on the cooperation between different European jurisdictions.

Each member state must establish its jurisdiction over a money laundering related offence in the securities market when the detected offence has been carried out totally or partially in its territory and when the convicted subject who committed the crime is one of its nationals.[198]

The directive gives possibility to member states to even decide to extend their jurisdiction outside of their countries on money laundering related offences when the crime is committed to advantage, or for the benefit, of a legal entity established in its territory.[199]

Since one of the most common methods to disguise the origin of unlawful funds and make more difficult the detection by competent authorities of capitals that need to be laundered is conducting transaction through multiple jurisdictions, the directive introduced a new set of data sharing requirements in order to facilitate the criminal prosecution of linked infractions[200] extremely useful in cases when money laundering offences involve dual criminality.[201]

In fact, the new regulation contemplates a strict cooperation between member states, and, therefore, jurisdictions concerning the choice of which of them should prosecute the

[198] Art. 10, co. 1, let. a), b), Directive (EU) 2018/1673
[199] Art. 10, co. 2, let. a), b), Directive (EU) 2018/1673
[200] Comply Advantage, The 6th Anti Money Laundering Directive (6AMLD): What You Need to Know, https://complyadvantage.com/knowledgebase/6th-money-laundering-directive-6amld/
[201] The dual criminality principle may occur when a crime has already been perpetrated in a country, but its financial profits are laundered in another jurisdiction.

offence and the offender if the contested crime is presumed to have been committed within more than one jurisdiction.[202]

In order to evaluate every single case, member states are provided with a list of specific factors that must be taken into account to influence the decision:

- On which jurisdiction the offence was committed
- The residency or nationality of the offender
- The country of origin of the victims
- The jurisdiction's territory on which the offender was caught.[203]

4.11 European Market Infrastructure Regulation I

These principles related to money laundering offences and regulating transactions of securities in the financial market are the same principles that regulates derivatives contracts.

Since money laundering offences committed within official exchanges are more likely to be exposed to authority's detection, the European supervisors wanted to implement a stricter regulation also on over-the-counter transactions where, due to the decentralization of the transactions and the fact that the price and value features of the derivatives traded are known only to the two counterparts, criminals are more enticed to operates.

More than 95% of derivatives instruments are traded over-the-counter, where the huge volume of transactions might in some ways disguise illicit utilizations of such contracts from the authorities.[204]

With the institution of the European Market Infrastructure Regulation in 2012 and its came into effect in 2013 the OTC markets has been subjected to several new requirements and regulations having the goal to reduce the transparency gap between trades happening on official exchanges and over-the-counter transactions.

[202] Art. 10, co. 3, Directive (EU) 2018/1673
[203] Art. 10, co. 3, let. a), b), c), d), Directive (EU) 2018/1673
[204] European Commission, Derivatives - EMIR, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/derivatives-emir_en

With the adoption of this regulation, supervisors also wanted to reduce, or at least mitigate, both credit and operational risk.

4.11.1 Transparency

First of all, the legislators introduced reporting and clearing obligations in order to enhance transparency in derivatives markets.

The report should include the detailed features of any derivatives contracts concluded[205] and the record of such information must be kept by counterparties or a Central Clearing Counterparty for at least five years following the termination of the contract.[206]

The European Commission defines as subjects that «interpose themselves between counterparties to a derivative contract, becoming the buyer to every seller and the seller to every buyer. In doing so, CCPs become the focal point for derivative transactions thus increasing market transparency and reducing the risks inherent in derivatives markets».[207]

The counterparts and the CCPs should make the report available to supervisory authorities no later than the working day following the modification or the conclusion of the contract.[208]

The records of the derivatives must be centrally collected and maintained by a legal subject better defined as *trade repository*[209] and, in the eventuality that it is not available, counterparties and CCPs must report all the details to the European Securities and Markets Authority.

The Authority must also be considered accountable for the supervision on trade repositories and is also responsible for authorizing and denying accreditation.[210]

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[205] «Its type, underlying maturity, notional value, price and settlement date» following art. 9 co. 5, let. b) of the 648/2012 European Regulation
[206] Art. 9, co. 2, Regulation (EU) 648/2012
[207] Art. 2, co. 2, Regulation (EU) 648/2012
[208] Art. 9, co. 1, Regulation (EU) 648/2012
[209] Trade Repositories are data centers that keep and collect the recorded characteristics of the traded derivatives.
[210] European Commission, EU Rules on Derivatives Contracts, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/derivatives-emir_en

4.11.2 Limitation of credit risk

In order to mitigate the counterparties credit risk of derivatives contracts the European Parliament and Council, following the agreements of the Pittsburgh summit [211], established the mandatory clearing of all standardized OTC derivative contracts through CCPs in the European Market Infrastructure Regulation.

By clearing, the EU legislators meant the process of establishing positions and secure possible exposures from the positions involved by verifying the availability of financial instruments or cash.

When financial and non-financial counterparties enter in an over-the-counter derivative instrument which has not been cleared by a CCP, they must apply the proper risk-mitigation technique which must at least include «the timely confirmation, where available, by electronic means, of the terms of the relevant OTC derivative contract and formalized processes which are robust, resilient and auditable in order to reconcile portfolios, to manage the associated risk and to identify disputes between parties early and resolve them, and to monitor the value of the outstanding contracts».[212]

4.11.3 Limitation of operational risk

The EU regulators refer to operational risk when considering possible problems or struggle that specific supervisory control subjects might face when operating to accomplish their duties under the operational standards specified in the regulation.

Potential sources of operational risk must be identified and minimized by trade repositors through proper strategies and processes. The supervisors wanted to mitigate operational risks in order to ensuring the maintenance of trades repository's function and the complete accomplishment of their obligations.[213]

The European Market Infrastructure Regulation provided a list of so-called *infringements* pertinent to the operational risk requirement that might cause a breach in the regulation

[211] G20 summit in Pittsburgh, 26 September 2009.
[212] Art. 11, co. 1, let. a), b), Regulation (EU) 648/2012
[213] Art. 79, co. 1, 2, Regulation (EU) 648/2012

and therefore allow the misuse of derivative instruments in money laundering activities or in other unlawful financial operations.

The infringements related to operational requirements concern actions and behaviors of the previously mentioned trade repositories.

The infringements checklist is developed following two basic aspect of the regulation analyzed, the operational reliability and the safeguarding and recording of derivatives data:

- The operational reliability, when the trade repository is not able to identify sources of operational risk or even when it does not mitigate those risk through the implementation of proper procedures and it does not enforce a business continuity policy and an adequate recovery plan aimed at ensuring its repository's obligations.[214]

- The safeguarding of the information received, when the trade repository does not ensure confidentiality and integrity of received data, when it utilizes these information for commercial purposes without the approval of the counterparties involved in the transaction, when the information are not promptly recorded or maintained, when derivatives instruments are not properly calculated by class position and the characteristics of the contracts do not comply with the reporting obligations contemplated in art. 9 of the same regulation, when parties are not allowed to access to a contracts and correct the information contained and , most importantly, when no reasonable steps are taken to prevent and avoid a mistreatment or a misuse of the data kept in the repository's system.[215]

4.11.4 Equivalence of the enforcement framework in non-EU countries

Emir regulatory analysis must be concluded with the consideration of the principle of equivalence, which basically allows the recognition of third countries based CCPs and trade repositories that meets G20 anti-money laundering goals and EU regulatory standards contained in the EMIR by the European Securities and Markets Authority.

[214] Annex I, co. II, let. a), b), Regulation (EU) 648/2012
[215] Annex I, co. II, let. c), d), e), f), g), h), Regulation (EU) 648/2012

The CCPs or trade repositories located in this third countries could apply, through a procedure, in order to earn the recognition from the ESMA: in such way, these entities could have been utilized by subjects operating in trades involving over-the-counter derivatives that need to be cleared and record or report transactions as prescribed by the European Market Infrastructure Regulation.[216]

Moreover, the European Commission could expand the equivalence principle to other topic covered by EMIR, like reporting, risk mitigation techniques, definition of margins for derivatives that have not been cleared etc.[217]

The list of equivalent decisions implemented by the European Commission consists in 24 implementing acts concerning both the third country taken into consideration and the areas for which the equivalence decision has been developed.

Under EMIR, the jurisdictions which have some areas covered by the implementation of at least one Commission Equivalent Decision are the ones of:

- Japan: for the equivalence of financial exchanges, the valuation, dispute solution, margin requirements of derivatives transactions and the regulatory framework for Central Counterparties
- Australia: for the equivalence of financial markets and regulatory framework for Central Counterparties[218]
- Canada: for the equivalence of recognized exchanges and regulatory framework for Central Counterparties[219]
- United States: for the equivalence of designated contract markets, enforcement arrangements for derivatives transactions and regulatory framework for Central Counterparties[220]
- Singapore: for the equivalence of approved exchanges and regulatory framework of Central Counterparties[221]
- Hong Kong: for the equivalence of the regulatory framework for Central Counterparties[222]

[216] European Commission, last site cit.
[217] European Commission, last site cit.
[218]Commission Implementing Decision (EU) 2016/2272
[219] Commission Implementing Decision (EU) 2016/2273
[220] Commission Implementing Decision (EU) 2016/1073
[221] Commission Implementing Decision (EU) 2016/2270
[222] Commission Implementing Decision (EU) 2014/754

- United Arab Emirates: for the equivalence of the regulatory framework for Central Counterparties[223]
- Mexico: for the equivalence of the regulatory framework for Central Counterparties[224]
- South Korea: for the equivalence of the regulatory framework for Central Counterparties[225]
- Brazil: for the equivalence of the regulatory framework for Central Counterparties[226]
- New Zealand: for the equivalence of the regulatory framework for Central Counterparties[227]
- South Africa: for the equivalence of the regulatory framework for Central Counterparties[228]
- Switzerland: for the equivalence of the regulatory framework for Central Counterparties[229]
- India: for the equivalence of the regulatory framework for Central Counterparties[230]
- United Kingdom: for the equivalence of the regulatory framework for Central Counterparties, but only for a limited period of time.[231]

4.12 European Markets and Financial Instruments Regulation

When considering European derivatives regulation, a noteworthy mention must be spent for the European markets and financial instruments regulation, also commonly known as MiFID II/MiFIR.

This regulation, published in 2014 and entered in force in 2018, has as primary aim the investors protection but the most interesting aspects for the purpose of this thesis regards

[223] Commission Implementing Decision (EU) 2016/2278
[224] Commission Implementing Decision (EU) 2015/2041
[225] Commission Implementing Decision (EU) 2015/2038
[226] Commission Implementing Decision (EU) 2016/2276
[227] Commission Implementing Decision (EU) 2016/2274
[228] Commission Implementing Decision (EU) 2015/2039
[229] Commission Implementing Decision (EU) 2015/2042
[230] Commission Implementing Decision (EU) 2016/2269
[231] Commission Implementing Decision (EU) 2020/1308

the enhancement of efficiency and, especially, transparency in the European financial market.[232]

4.12.1 Supervisory measures and financial product monitoring

First of all, the regulation reconfirms the central role of the European Security and Markets Authority in monitoring and supervising the European market and the financial instruments that are «marketed, distributed or sold»[233] in it.

Very important is also its temporary intervention powers given by legislators, which basically allows the ESMA to constrain and even provisionally preclude transactions involving specific financial instruments or some particular features, as long as definite financial practice, that could harm in some way the transparency and/or the integrity of the European financial market.[234] Competent authorities should take into account specific characteristics and criteria adopted by the European Commission that must be used to determine the degree of threat to the stability of the European financial system.

The factors considered include the degree of complexity of the financial instrument considered, the relation between the instrument and the subjects involved in the transaction, the degree of innovation of the product traded and the size of the instrument's notional value in relation with the stability of the market considered.[235]

4.12.2 Improving transparency and financial market integrity

Moreover, the MiFIR is particularly important due to its purpose of limiting and reduce the utilization of *dark pools*[236] and OTC trading[237] trough multilateral and organized trading facilities as well as regulated markets.[238]

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[232] European Securities and Markets Authority, Policy Activities - MIFID II, https://www.esma.europa.eu/policy-rules/mifid-ii-and-mifir
[233] Art. 39, co. 1, Regulation (EU) 600/2014
[234] Art. 40, co. 1, let. a), b), Regulation (EU) 600/2014
[235] Art. 42, co. 7, let. a), b), c), d), Regulation (EU) 600/2014
[236] Dark pool is a common term to describe a non-official financial exchange that substantially allows private counterparts to perform financial transactions without revealing the identity of the subjects involved.
[237] European Securities and Markets Authority, last site cit.
[238] Art. 28, co. 1, let. b), c), Regulation (EU) 600/2014

The V Title of the regulation is specifically important, as it concerns the further regulation on derivatives contracts and their trading obligations.

In fact, as prescribed by art. 34 of the MiFIR, ESMA published, and regularly update, a specific register[239] including all the different classes of derivative contracts that have the obligation to be traded on regulated markets, multilateral trading platforms and organized trade facilities.

These measures were taken in order to possibly prevent taking advantage of over-the-counter trading and its more moderate and flexible provisions by ideally inhibit the financial misuse of derivatives and, therefore, avoiding, or at least limiting, the employment of such instruments in market manipulation activities, including money laundering.

MiFIR also provides new regulation for clearing counterparties, stating that the clearing process must be enforced on all derivatives contracts traded on regulated markets[240] and implementing the non-discriminatory access to CCPs [241] and trading venues.[242]

4.13 EMIR issues

When strictly considering the legislation on derivative instruments, it was noticed by the European Central Bank how even if the implementation of the European Market Infrastructure Regulation was considered a solid step forward into the regulation of derivative contracts, the transparency procedures in over-the-counter transactions still needed to be enhanced.

The 2016 ESRB report on OTC derivatives regulation[243] emphasized the objective fact that the employment of trade repositories and the advent of the reporting obligations contemplated in the European Market Infrastructure Regulation had significantly reduced

[239] EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Public Register for the Trading Obligation for derivatives under MiFIR*, 2021
[240] Art. 29, co. 1, 2, Regulation (EU) 600/2014
[241] Art. 35, co. 1, let. a), Regulation (EU) 600/2014
[242] Art. 36, co. 1, 2, 3, Regulation (EU) 600/2014
[243] EUROPEAN SYSTEMIC RISK BOARD, *Shedding light on dark markets: First insights from the new EU wide OTC derivatives dataset*, 2016, pg. 9

the overall number of *missing observations*[244] and the exposure to risk of markets operators, but as reported by the European Central Bank, professionals experiences have shown that a considerable shortcoming was given by data quality.[245]

In the ECB report, data quality issues have been categorized in two main groups:[246]

- Problems due to the misreporting by trade repositories or counterparties
- Problems due to the discrepancies in harmonization and standardization.

4.13.1 Misreporting

It was noticed that a considerable number of derivative contracts reported did not report the related mark-to-market values, even though the majority of counterparties were specifically obliged to provide daily data on it.[247]

After an investigation by the European Systemic Risk Board with the joint effort of the European Securities and Market Authority, trade repositories and other national authorities, it was possible to address this issue mainly to the deficiency in submitting cancellation notices for cancelled transactions and the failing to assimilate cancellation messages.[248]

As specified in the ECB relation, even though this problem could have been undertaken by the entities entitled of analyzing and signal the transactions data to competent authorities, the presence of this issue put into evidence a substantial range of improvement in the underlying procedures carried out by both trade repositories and counterparties.

[244] The European Systemic Risk Board refers to missing observations as failed detections of possible unlawful OTC transactions.
[245] EUROPEAN CENTRAL BANK, *Looking back at OTC derivative reforms – objectives, progress and gaps*, 2016, pg. 21
[246] EUROPEAN CENTRAL BANK, last pap. cit., pg. 21, 22, 23
[247] EUROPEAN CENTRAL BANK, last pap. cit. pg. 21
[248] EUROPEAN CENTRAL BANK, last pap. cit., pg. 22

4.13.2 Lack of harmonization and standardization

It has been observed by professionals that during the usual practice of OTC market supervision some of the factors used for the surveillance of derivative contracts should have been revised and updated.

In fact, following the regulatory technical standards implemented by EMIR, counterparties are required to record and notify more than 85 different variables.

These variables were implemented with the intention of standardizing the data collection and the supervision processes as much as possible, but as it has been seen in the second chapter, the mechanics of derivative contracts are different for every type of instruments and, most importantly, their characteristics can be subject to a high degree of customization, especially when considering over-the-counter contracts.

For example, it has been brought to the ECB attention that when filing the transactions' data, trade repositories and counterparts only had one single field available for the indication of the maturity date, even though there are some important typologies of derivatives contracts that may have two maturities date, such as forward rate agreements and swaptions.[249]

This "single field shortcoming" has been perceived as an important gap in the supervision framework, especially if considered that this imperfection is present in other variables, for example the ones involving the recording of the initial and variation margin.

Even though there was an improvement that allowed counterparties to draw up separate reports when the transaction involve a combination of derivative instruments, like swaptions, and that allows the effective reporting of their detail and information[250], there were still aspects that do not consent the correct fulfillment of the reporting agents obligations as well as the examination of data and information from authorities.

The most blatant aspect, once again highlighted by experienced professionals, concerned interest rate benchmarks of interest rate swaps and its provision to competent authorities.

[249] EUROPEAN CENTRAL BANK, last pap. cit., pg. 22
[250] Art. 1, co. 1, let. b), Regulation (EU) 2017/104

Specifically, under the European Market Infrastructure Regulation the field pertaining to the interest rate benchmark were provided to counterparts in a free-text form and, for this reason, the two parties often provided different values. [251]

Moreover, when considering OTC derivative instruments, the ECB pointed out also a more generic issue regarding a lack of compliance in the methods of reporting the different «life-cycle events of a contract».[252]

The above mentioned report also described how the complications in the examination and identification of a derivative contract can gravely impede the authorities obligation to collect and analyze transactions information as well as correctly determine the effective notional amount for every trade without the risk of double counting the same value for the same transaction multiple times.[253]

4.14 European Market Infrastructure Regulation II

In order to solve these technical issues and allow a smoother collecting and reporting procedure, in 2019 the European Parliament enacted the Regulation 2019/2099, mostly known as EMIR 2.2.

This regulation focuses on the improvement of the EMIR regulation by paying particular attention to the central clearing counterparts' supervision.

In particular, through this revision there has been an improvement of the CCP's supervision performances and a further development of the third countries equivalence regulation and codification.

4.14.1 Improvement of CCPs supervision

First of all, there has been a significant enhancement in the operativity of EMIR colleges with a slight renovation on the methods for record and analyze transaction information.[254]

[251] EUROPEAN CENTRAL BANK, last pap. cit., pg. 22
[252] EUROPEAN CENTRAL BANK, last pap. cit., pg. 23
[253] EUROPEAN CENTRAL BANK, last pap. cit., pg. 23
[254] Art. 1, co. 3, 4, 5, 6, Regulation (EU) 2019/2099

In particular, these colleges have also been addressed of the responsibility of extend their duties and obligations also to extra EU CCP's.

Moreover, this regulation established «a permanent internal committee (…) for the purposes of preparing draft decisions for adoption by the Board of Supervisors and carrying out the tasks»[255] listed in the regulation concerning the shortcomings in the resilience of CCP's and in other responsibilities.[256]

Finally, ESMA has been given the role of continuous supervision also for non-European clearing counterparts in order to guarantee an ongoing compliance with the obligation specified in the first European market Infrastructure Regulation.[257]

4.14.2 Extra-EU CCPs classification

EMIR 2.2 proposes also a new categorization of non-EU clearing counterparts by identifying and classifying third countries CCPs into two main class: Tier 1 and Tier 2.

The classification take into account the possible systemic risk that these clearing counterparts may put forward in the European Union by grouping the lower systemic risk CCPs in Tier 1 and the CCPs that are likely to become critical for the financial stability of the European Union or for one or more of the member states in Tier 2.[258]

Regarding this aspect, the regulation determined a list of the analyzed features, like the nature, complexity and size of the CCP's business relations in the EU and the potential effect of the CCP failure on the European financial market.[259]

In addition, by April 2021 ESMA should extend the CCP college principle also to CCPs operating outside of the Union in order to improve the supervisory process.[260] This has been decided also to implement an ongoing regulatory supervision and monitoring process of any regulatory developments in non-EU countries.

[255] Art. 24a, co. 1, Regulation (EU) 2019/2099
[256] Art. 24a, co. 7, 9, 10, Regulation (EU) 2019/2099
[257] Recital n. 43, Regulation (EU) 2019/2099
[258] Recital n. 9, Regulation (EU) 2019/2099
[259] Art. 1, co. 6, let. b), Regulation (EU) 2019/2099
[260] BONDUELLE (2020), *EMIR 2.2 (EMIR Review – CCP's Supervision)*, Société Generale, 2020, pg. 3

Finally, always regarding the supervision framework, the regulation introduced some game changing measures regarding possible sanction even to non-EU CCPs.

In particular, the EMIR 2.2 states that the European Securities and Markets Authority is also responsible for potential fines and sanction to CCPs operating outside the European Union with the eventual possibility of conducting on-site inspections if suspicious acts or performances are detected.

To conclude the regulatory analysis, the enforcement of EU regulations and implementing decisions as well as the recommendations of the FATF have surely helped competent authorities to detect and limit the utilization of derivative contracts for money laundering and terrorist financing purposes.

As it can be seen from the development of the regulation, supervisors periodically expanded regulatory standards to keep up with the evolution of means and schemes used by launderers.

In the next chapter I am going to highlight potential shortcomings in the current regulation and outline a few points of reflection on possible deterrents for criminal subjects that aim at using derivatives instruments as means to launder capitals having unlawful origins.

Chapter V

Regulatory and Supervisory Gaps

During the development of this thesis, in particular during the production of the previous chapter on regulation and supervisions, I noticed how some possible breaches in the current legislation might still affect the integrity of the financial market.

The proficiency of perceiving and reduce money laundering risk through law codification must be supported by a common identification of the subject analyzed by all the public entities applying to the regulation.

As it has been seen in my analysis, particular relevance has been given to FATF Reports and Recommendations concerning money laundering in the securities sector.

I think that the analysis of potential breaches on the anti-money laundering in the securities market's regulations should first focus on what the jurisdiction considers as security, and so on which financial instruments the recommendations can be applied.

5.1 Financial products classification

The 2009 FATF Report developed a list of most common financial instruments that should be considered derivatives by member jurisdictions and regional organization.

I deliberately used the word *should* as some of the member countries did not identify or treat such instruments as securities, and therefore it is still extremely difficult to classify the regulatory regime that must be applied to these products.[261]

The FATF Report indicates that at the time «five jurisdictions do not define options as securities; six jurisdictions do not define futures as securities; seven jurisdictions do not define swaps as securities and one jurisdiction indicated that swaps do not exist in its jurisdiction; ten jurisdictions do not define forward rate agreements as securities, and

[261] FINANCIAL ACTION TASK FORCE, Money Laundering and Terrorist Financing in the Securities Sector, cit., pg. 16

three jurisdictions indicated that forward rate agreements do not exist in their jurisdictions; ten jurisdictions do not define commodity derivatives contracts as securities and three jurisdictions indicated that commodity derivatives contracts do not exist in their jurisdictions».[262]

By paying attention to these considerations, it is easy to understand how the degree of risk of money laundering activities through derivatives instruments is undoubtedly related to the regulatory identification of which instruments are considered securities, and therefore subjected to their specific relevant legislations, and which ones are not.

I will focus on the European framework from now on but I think that it must be taken into consideration that the situation evidenced by this FATF report represent in a concrete way the identification and classification issues at which derivative contracts were subjects just twelve years ago.

5.2 EBA concerns on AML regulation

On September 2020, while this master thesis was being written, the European Banking Authority released a paper containing the response to the Commission's consultation on how to enhance and empower the regulatory and supervisory framework on money laundering activities.[263]

The idea behind this call for advice was to take into consideration possible recommendations based on the expertise of the EBA on financial products regulation and, before anything else, having a confrontation with EBA professionals who have experience on the field, seen that the EBA has the responsibility of leading and coordinate the fight against money laundering in the European financial market.

After an examination of the EBA report, I decided to include some of the aspect covered in the EBA response, in particular the parts concerning the harmonization of the current regulatory framework and the tightening of other AML considered elements.

[262] Financial Action Task Force, last pap. cit., pg. 16, 17
[263] European Banking Authority, EBA calls on the EU Commission to establish a single rulebook on fighting money laundering and terrorist financing, https://www.eba.europa.eu/eba-calls-eu-commission-establish-single-rulebook-fighting-money-laundering-and-terrorist-financing

5.3 Harmonization of AML aspects

The first recommendation regards the harmonization and, more specifically, it concerns the adjustment of all the divergence between European regulation and national rules that could favor misuses of the EU financial market for money laundering purposes.[264]

The EBA, together with the other Supervisory Authorities, identifies some problems in many areas that, if fixed, could provide and financial integrity to the European market and legal certainty for its participants. Of course the harmonization of certain aspects must also respect the flexible nature of the anti-money laundering supervision, but those two elements can successfully be combined through the utilization of a regulation, rather than a directive, as it has already been applied in other areas of market supervision, like EMIR and EMIR 2.2.[265]

5.3.1 Customer due diligence concerns

One of the central fields in which the EBA has shown some concerns regards the harmonization of the customer due diligence measures.

The commission is recommended to improve the due diligence requirements dictated by the anti-money laundering regulation in order to enhance the effectiveness of the supervisory practices. The harmonization should not be implemented through a rigid procedure, but it should instead be achieved by focusing «on outcome, as well as processes».[266]

This means that due diligence measures should be implemented with a focus on the target approach so, in this case, collect data of the customer involved in the operation and detect possible suspicious factors that could signal the presence of money laundering activities.

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[264] EUROPEAN BANKING AUTHORITY, *Opinion of the European Banking Authority on the future AML/CFT framework in the EU– Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing,* 2020, pg. 2

[265] EUROPEAN BANKING AUTHORITY, *EBA Report on the future AML/CFT framework in the EU – Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing,* 2020, pg. 9

[266] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 12

The aim of the regulators is not only to accumulate information on the clients, but it is instead determining the degree of risk correlated to every transaction or financial operation and the disclosure of eventual suspicious details.

The focus on the outcomes of the due diligence procedures and the identification of the degree of risk could then be used to implement a more flexible approach, always in line with the European anti-money laundering standards but that could also asses the due diligence measures with the pertinent level of risk determined.

Specifically, it should be developed a draft of traits and characteristics that can help distinguish and easily identify every client and beneficial owner from one another, with possible data integration when the transaction's degree of risk requires it. [267]

Moreover, the EBA wishes for the establishment of verification criteria in order to provide the authorities the official sources of customers information and data that should be used for verifying the veracity of the evidences collected through the construction of a similar scheme of categorization consisting in the classification of these sources in different degree of reliability.[268]

5.3.2 Anti-money laundering risk valuation

The anti-money laundering directive is based on the risk-based approach, as well explained in the last chapter.

It is true that this regime acknowledges the identification of different levels of risk, but it does not give the authorities a specific and accurate guidance on how the degree of money laundering risk should be identified.[269]

The advice of the banking Authority is to preserve the current approach, but to supplement it by taking into account additional information such as «findings from national risk assessments, differences in the population of financial institutions and the complexity of the sector»[270] in order to make more efficient the identification of money laundering related risks and further emphasize the central role of the risk-based concept that must

[267] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 12
[268] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 12
[269] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 19
[270] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 20

ensure an EU common approach able to produce comparable outcomes in every member state.

In order to achieve a common EU shared scheme for money laundering risks identification, the EBA suggests a specific mandate for the authority to improve the existing features and promote the new technical aspects of a more detailed risk assessment procedure.[271]

5.3.3 Cooperation among supervisors

It seems clear, even to non-experts, that a certain degree of cooperation is fundamental to provide an efficient supervision service in the European financial market.

In particular, the EBA professional experts evidence the inefficiency of information and data exchange between supervisory authorities and between authorities and national Financial Intelligence Units.[272]

This shortcoming might affect the integrity of the financial markets as a whole, since the presence of an information sharing problem, due to a fallacious data exchange between competent authorities and entities, could in some way encourage criminal subject to perform transactions of illicit capitals.

In fact, a data sharing problem can easily turn in a major supervisory issue that can heavily influence the deterrent factor that the enforced anti-money laundering measures should have on criminals.

The EU institution have implemented some acts[273] with the intent of harmonize the exchange of information but the EBA remark that these measure do not have the same normative strength of an EU regulation, or of the Technical Standards developed by the same EBA, and therefore the consistency of the data sharing synergy might be lacking if one of the ESAs desists to apply the measures in a proper way.

[271] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 20
[272] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 21
[273] For example, the "Multilateral agreement on the practical modalities for exchange of information pursuant to article 57a (2) of EU Directive2015/849" and the "Anti-Money Laundering Colleges Guidelines"

The gaps could be fixed through direct applicable regulation covering the issues that has just been discussed.

In particular, the EBA recommends the implementation and the enforcement of firmer data protection and sharing standards on competent authorities and national Financial Intelligence Units in order to correct the current situation. Moreover, it is desirable the institution of a procedural consuetude having as object the production of a valuation «by the FIU, of the quality of individual financial institutions' suspicious transaction reports as well as their comparative analysis of suspicious transaction reports by type of financial institutions»[274] that could considerably improve the detection of suspicious operations and, most importantly, it could help identify and eventually fix possible reporting problems when the assessments do not comply with the upgraded regulatory standards developed.

5.4 Vulnerabilities in the AML regulation

The second recommendation of the EBA regards the enhancement of some of the AML regulatory aspects and an invigoration of inadequate provisions.

Even for this recommendation, it has been taken into account the so far experience with the current regulation of professional supervisors and therefore two main macro-fields have been delineated to better highlight the problems deriving from regulatory fragilities of the AML directives:

- Authorities supervision
- Valuation of suspicious transactions and activities

5.4.1 Authorities supervision

The main problem about supervision refers to the different duties' perceptions of the authorities that operates in this framework. [275]

[274] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 22
[275] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 24

The issue has emerged after the publication of the 2019 Commission report on the assessment of recent alleged money laundering cases involving EU credit institutions,[276] where the apparent lack of regulatory clarity and the consequent difficulties in implementing the AML directives have contributed to some meaningful gaps in the current anti-money laundering legislation.

The first diatribe regards the different considerations of supervisory authorities about their role on anti-money laundering issues.

The dispute focuses on the nature of their supervisory duties, in particular concerning the limitation of their job to mere valuators of financial entities' compliance or the expansion of the supervision concept to a wider range of actions and obligations, giving valuations not only on financial institutions control operations, but also assessing possible breaches or inadequacies in the authorities supervision framework.[277]

Moreover, the EBAs' report highlights an even more worrying aspect about the different perception on supervision.

In fact, it has been noticed how «the processes that competent authorities follow and the standards they apply when monitoring and enforcing financial institutions' compliance with their AML/CFT obligations differ, at times significantly».[278]

When considering these statements, it is important to remember that these supervisory entities are the ones who currently have the duty to control the European financial institutions' compliance measures enforced through the anti-money laundering legislation.

Therefore, the alarming aspect is that the analysis on the efficiency of an anti-money laundering procedure in a financial institution, pursued by different authorities of distinct jurisdictions, could lead to contrasting outcomes even when considering the very same institutions' control procedure.

[276] EUROPEAN COMMISSION, *Report on the assessment of recent alleged money laundering cases involving EU credit institutions*, 2019, pg. 22, 23
[277] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 25
[278] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 26

5.4.2 Transactions and activities control

As explained in the previews paragraph, competent authorities have different visions on the nature of their supervisory role.

This can be explained by the fact that the measures contained in the current European anti-money laundering legislation, especially in the directives in force, were adopted to centralize the control activities on operations and trades instead of actively considering also wider supervisory aspects like clients' conduct and the improvement of supervisory legislation.

In its recommendations[279], the EBA observes and points out how suspicious transactions have been reported with «significant differences in the nature, substance and content»[280] among competent authorities of different member states.

This means that the appropriate information required by distinct supervisory authorities can substantially differ from one member state to another.

The major concern about this situation is that competent authorities of some member states have simply focused on supervising the operations of financial institutions under their competence, and sometimes they have made it their unique purpose in the supervisory framework making the compliance control of anti-money laundering measures in those member states «not always effective».[281]

The EBA suggests the European Commission to elaborate a cost-benefit analysis on a possible extension of financial institutions' supervisory obligations in order to comprehend in the framework, and therefore analyze, also suspicious activities in addition to financial transactions.

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[279] EUROPEAN BANKING AUTHORITY, *Opinion of the European Banking Authority on the future AML/CFT framework in the EU - Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing,* cit., pg. 2

[280] EUROPEAN BANKING AUTHORITY, *EBA Report on the future AML/CFT framework in the EU – Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing,* cit., pg. 27

[281] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 27

In fact, as I had the opportunity to read the opinion of EBA experts and professional on the issue,[282] an expansion to suspicious activities it would be a considerable improvement in the supervision operations, taking also in consideration that a more wide approach could consist in a better enforcement of the AML directives and in an enhancement of the control procedure.

Having an extensive and exhaustive supervisory attitude could bring a significant contribution to a more complete view of money laundering dangers and exposures of the European financial market.

Of course, this proposition must be carefully prepared and processed in order to become effective and, most importantly, legally binding for supervisory authorities and it is for this reason that the EBA recommend a scrupulous evaluation of the project suggested to better outline and define possible integrative measures to the current anti-money laundering legislation.

A more comprehensive approach on supervision was also strongly advocated by the FATF, especially in its recommendations' 2020 updates enacted during the writing of this thesis, where it is expressed the hope of a concrete control process that could be addressed to all phases and facets of the supervisory practice.

5.4.3 Involvement of prudential supervision

Lastly, the EBA consider of extreme significance in its report the relationship that must be expressively established between anti-money laundering measures and European prudential requirements.[283]

[282] EUROPEAN BANKING AUTHORITY, *Opinion of the European Banking Authority on the future AML/CFT framework in the EU- Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing*, cit, pg. 2 ss.
[283] European Commission, Prudential Requirements, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-supervision-and-risk-management/managing-risks-banks-and-financial-institutions/prudential-requirements_en (These measures were taken by the EU to reflect the Basel III standards on International Banking Regulation in the European supervisory framework).

The deficiency of specific and unambiguous requisites competent authorities could not be able to «consider the impact of ML/TF risk on prudential objectives and as a result, fail to ensure the sound and prudent management of financial institutions».[284]

In fact, in the Capital Requirements Directive[285] it is not specified whether prudential supervisors should deal with money laundering risk in their required operations and duties.

But, as I had the opportunity to verify, in the same directive, specifically in the second section regarding arrangements, processes and mechanisms of institutions, it is expressively stated that credit institutions are required to implement «effective processes to identify, manage, monitor and report the risks they are or might be exposed to».[286]

This excerpt from the directive has been interpreted by the EBA as a clear reference to all risks that could endanger European financial institution and consequently threaten the integrity and stability of the European financial market and therefore the authority considers the implied inclusion also of the money laundering risk.[287]

Most importantly, in the last paragraphs the EBA recommends the European Commission to mandate, to the Authority itself, the finalization of a series of technical measures that could eventually be implemented among all competent authorities regarding a more precise and consistent supervisory scheme that might be carried out among member states and competent authorities, the possibility for all authorities to consult competent authorities and Financial Intelligence Units about anti-money laundering issues or if there has been estimated a possible increment in money laundering risk for specific transactions or activities during the review processes and, finally, ensure a stronger consideration of money laundering risks and vulnerabilities among all competent authorities in their ongoing supervision procedures.[288]

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[284] EUROPEAN BANKING AUTHORITY, *EBA Report on the future AML/CFT framework in the EU – Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing,* cit., pg. 48
[285] Directive (EU) 2013/36
[286] Art. 74, co. 1, Directive (EU) 2013/36
[287] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 48
[288] EUROPEAN BANKING AUTHORITY, last pap. cit., pg. 49

5.5 Derivatives regulation's issues

In the last chapter it has been made clear how the regulation on derivatives instruments, especially on contracts traded over-the-counter, has significantly improved the supervision processes and at the same time diminished money laundering frauds related to the European financial market.

In fact, many of the normative actions that has been taken by the European Parliament and Commission in the last fifteen years derive from the problematic approach that was previously used to supervise derivative contracts transactions and detect suspicious operations involving these instruments.

This premise is essential to better compare the previous situation with the current one, in order to analyze and evidence possible shortcomings that still persist today.

5.5.1 STORs as crucial indicators

During the following analysis I took into great consideration suspicious transaction reports since supervisory authorities and research centers usually rely on such standard indicators to perform examinations on the extension of unlawful financial activities in a specific jurisdiction.

Transaction reports are in fact extremely important indicators of anti-money laundering measures efficiencies and they can also evidence the local performance of a regulatory authority since, logically, the more active it is, the more suspicious transaction reports are issued in that country. [289]

When I had a look on 2019 ESMA peer review,[290] I noticed that derivative contracts cover just a limited portion of the total suspicious transaction and order reported to NCAs.[291]

[289] CURTET, *Suspicious Activity Reporting Varies Significantly Across Europe*, Moneylaundering.com, 2019, https://www.moneylaundering.com/news/suspicious-activity-reporting-varies-significantly-across-europe/

[290] EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Peer Review on the collection and use of STORs under the Market Abuse Regulation as a source of information in market abuse investigations*, 2019, pg. 36

[291] National Competent Authorities for financial services: in Italy we have Commissione Nazionale per la Società e la Borsa, also known as CONSOB.

In order to be more specific, the ESMA final report highlights how of all the 13,411 STORs submitted only a small amount of reports, around 7%, involved examinations concerning derivative contracts.[292]

Therefore, the portion of suspicious transactions and orders reports on derivative instruments evidences a considerable discrepancy when considering these contracts markets volume.

It is extremely complex to verify, and most importantly quantify, the actual size of the European derivative contracts market but, when considering the same period analyzed by this peer review, it has been estimated in having a value of around 612 trillion euros, more or less 45 times higher than the EU Pil as a whole, and currently more than 90% of this volume is composed by OTC derivatives exchanged outside of the regulated markets.[293]

A first explanation this discrepancy could be that since the great majority of derivative contracts are traded over-the-counter, and therefore are highly customizable, it is extremely more complex for supervisors to efficiently detect unlawful operations or the involvement of suspicious subjects in the transaction, since, as mentioned in the second chapter, derivatives traders are usually subjects that comply with third parties indications.

Secondly, another explanation could in fact take into account the role of CCPs and challenge their approach to supervision.

As specified by the European market infrastructure regulation, CCPs have the duty to record and keep track of all the suspicious elements of an OTC derivatives transactions: some of them could be just partially efficient and therefore my suggestions include a more strict and stringent examination of local clearing counterparts performances and, more broadly, an improvement in the supervision approaches considering the analysis not only of the single transactions itself but, as specified in paragraph 5.4.2, taking into account a wider supervising vision that should ponder and assess other aspects of the counterparts, the contracts and the underlying assets that are involved in the operation as a whole.

[292] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 39
[293] MURATORE, *Quell'oceano di derivati che rischia di inondare l'Ue*, Inside Over, 2019, https://it.insideover.com/economia/quelloceano-di-derivati-che-rischia-di-inondare-lue.html

5.5.2 Improving data quality under EMIR

The other aspect that must be analyzed consists in the assessment and valuation of appropriate derivatives transactions data for supervision purposes under the market infrastructure regulation.

In fact, the ESMA, through the *Data Quality Action Plan*[294] 2019 peer review, put in prominence some supervisory actions aiming at improving the qualities of transaction involving over-the-counter derivatives information and reports.[295]

As previously mentioned in the EMIR related paragraph, it is now possible for the European securities and markets authority to perform on-site inspections and assessments on NCAs performances.

During the 2019 on-site visits, ESMA has found that some of the six NCAs examined, specifically four of them, demonstrated inadequate analytical tools to properly detect the over 126 reporting fields required by the European Market Infrastructure Regulation, manifesting, as results, poor data quality.[296]

In order to reform and possibly improve the quality of reported details and information, the ESMA, through the just mentioned peer review, determined that the currently enforced data supervision by national competent authorities should be characterized by five different components, or attributes, that the European authority considers essential for a proper and efficient supervisory approach.

NCAs should improve their data quality supervision processes in order to become more regular, proactive, comprehensive, advanced, and well established.[297]

[294] The Data Quality Action Plan has the duty to review the six national competent authorities that supervise the most important and significant derivatives markets in the European Union: the Netherlands Authority for the Financial Markets (AFM), the French Authority of the Financial Market (AMF), the German Federal Financial Supervisory Authority (BaFin), the Central Bank of Ireland (CBoI), the Cypriot Securities and Exchange Commission (CySEC) and the UK Financial Conduct Authority (FCA) even after Brexit, since the implementation of the equivalence decision 2020/1308.
[295] EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Final Report: Peer review into supervisory actions aiming at enhancing the quality of data reported under EMIR*, 2019, pg. 4
[296] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 18
[297] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 14

The *regularity* attribute should indicate a series of supervisory operations that are not carried on provisionally or on specific occasions, but instead that are implemented on a periodic and recurrent basis.

Proactivity is among the most important aspects considered and highlighted by the European securities and markets authority.

A systemic implementation of this feature in supervisory operations would mean not only proceeding in response to a self-addressment of deficiency or shortcomings by supervised entities, but preferably a continuous and efficient supervisory action aimed at preserving the European financial market integrity.

An adequate supervision by competent authorities should also *comprehend and include* the essential information's quality attributes identified by ESMA, as specified in the paper, of «accuracy, completeness, consistency, timeliness and duplication».[298]

With the term *advanced*, ESMA wanted to evidence the adequate and capable means to perform an effective surveillance action on any improper or illegal operation.

To conclude, the approach to supervision should also be *well established*, meaning that the conduct of the authority should be organized and structured through a sequence of operations «approved by senior management».[299]

When considering this aspect, the European securities and markets authority gives legitimate importance to the role of senior management, in particular for what concerns the enhancement of reported data quality.

Subjects that are employed in apical positions in national competent authorities are not only accountable for coordination and organizational duties: they should also be invested of the major responsibility of making significant and valuable innovation to the supervisory framework and, specifically speaking, on the improvement of information reported by the reporting counterparties.

[298] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 37
[299] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 15

5.6 MiFDII/MiFIR shortcomings

On September 2020 the European Securities and Markets Authority provided a further review report having as aim the assessment of the current transparency regime and the trading obligations for non-equity instruments, especially derivative contracts.

5.6.1 Post-trade reporting issue

Through this review, ESMA identified particular criticalities in the post-trade transparency measures, even though some respondents involved in the analysis expressed in a positive way relating on the increase of post-trade data and defined the transparency scheme as decent.[300]

In order to perform an empirical and objective analysis it is important to report in this thesis that the respondents involved expressed different opinions on the effectiveness of post-trade transparency measures contemplated in the MiFIR, but the general view of ESMA, regarding «the need of a more streamlined and uniform post-trade regime across jurisdictions»[301] in order to enhance the efficiency of the financial market, has been broadly supported.

The interesting fact is that, as different experts outlined some points of reflection, a major concern involved the possibility that the poor nature of post-trade details and information could be strictly correlated with an inadequacy in the enforcement process.[302]

In particular, specific criticalities have been found in involving non-equity instruments and their data transparency.

ESMA aspires at developing guidelines for what concern an improved and more reliable data collection process for the post-trading phase, so that the discretion regarding different possibilities of reporting for national competent authorities will no longer be possible and a more consistent and homogeneous supervisory regime can eventually be implemented.

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[300] EUROPEAN SECURITIES AND MARKETS AUTHORITY, *MiFID II/MiFIR Review Report - MiFID II/ MiFIR review report on the transparency regime for non-equity instruments and the trading obligation for derivatives*, 2020, pg. 41

[301] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 41

[302] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 42

In the consultation paper examined, the authority focuses on the urgency of providing more real-time data during the post-trading phase so that the approach utilized by the European Union can reduce the current differences with the US system, and in particular be inspired by the US swaps transparency mechanism.

This system consists in an approach «where the large majority of transactions are reported in real-time and only very few transactions are eligible for a very short deferral of, in most cases, 15-30 minutes».[303]

The postponement of reports usually happens when block trades[304] are performed and therefore major control procedures are required.

It must also be mentioned that during the examination of the European context, the Commodity Future Trading Commission, also known as CFTC,[305] expressed to ESMA the willingness to further modify its transparency approach, but at today's date a final decision still has not been made.

5.6.2 ESMA suggestion

Even though the Commodity Future Trading Commission has not decided for an ultimate resolution yet, it is of extreme interest for ESMA to pursue a development in the European post-trade transparency regime, also because an eventual alignment and calibration between the two regimes would significantly improve the control operations performed by competent authorities and, as a result, it would be easier to detect suspicious operation or transaction involving derivative contracts.

ESMA recommendation focuses on the possible implementation of an improved deferment system organized in two fundamental points.

The aspects considered in the consultation paper, referred as Option 1 and 2,[306] concern primarily the provision of post-trade data concerning transactions with over the large in

[303] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 43
[304] A block trade is a financial transaction involving a large number of securities traded at a determined price between two counterparts, just like every transaction involving a single financial instrument.
[305] The Commodity Futures Trading Commission is a US government agency that has the duty to regulates and supervise the US derivatives markets.
[306] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 41

scale limit and involving illiquid instruments as soon as possible, with the trade's volume being concealed to allow a faster data publication process.

Secondly, as the trade has been made, ESMA requires also the record for the volume of the transaction to be provided no later than two weeks from the conclusion of the deal.[307]

As I am now approaching in drawing the analysis conclusions of the regulations and directives examined, I will give particular attention to the before considered suggestions and recommendations of professional experts and of the related supervisory authorities.

They do not only have the opportunity to deal on a daily basis with any kind of issues regarding the legislation itself, but they have also the duty to identify possible shortcomings in the control and supervisory field and, in the specific case of this thesis, to focus on money laundering and derivative instruments provisions' vulnerable aspects.

5.7 Outcome of the normative analysis

The European directives and regulation that have been taken into account in this normative analysis to possibly highlight shortcomings or dangerous criticalities in the measures analyzed present a well-organized and robust structure that do not present significant weak points for what concern the essence of the regulation itself.

The constant improvement of the relevant measures, mostly due to a continuous report activity performed by all European Supervisory Authorities,[308] has allowed a regular and consistent enhancement of the EU regulations in this field, building up both solid normative principles and strong deterrent components in fighting money laundering through derivatives contracts.

At this point however, it is important to point out that, as recent authorities reviews have confirmed and highlight, some elements of the regulations still have quite potential for improvement.

After examining the European normative acts and the most recent Supervisory Authorities reports on anti-money laundering and derivative instruments regulations, I

[307] EUROPEAN SECURITIES AND MARKETS AUTHORITY, last pap. cit., pg. 44
[308] In particular, the European Banking Authority for what concern the Anti-Money Laundering measures, and the European Securities and Markets Authority for the aspects relating to derivatives instruments regulation (EMIR and MiFIR).

can confidently assert that even though there seems to be no presence of tangible and concrete normative gaps, there still is a huge margin of improvement for specific aspects, especially in the supervision and control frameworks.

5.7.1 Indications on anti-money laundering shortcomings

The analysis on anti-money laundering directives evidenced specific issues relating to the lack of harmonization among the existing measures and some concerns were also expressed by the European Banking Authority regarding an excessive focus on suspicious transactions rather than on suspicious activities.

The problem regarding the lack of harmonization can be solved by identifying all the divergencies and dangerous variations among the European regulations and the incompatible national measures of EU member states.

Of course, in order to identify all possible discrepancies between EU and national measures, an extensive normative analysis, and therefore a considerable effort, would be required, but I think it is an essential process that the EU must be willing to make to preserve both the integrity of the financial market and the cohesion between European and national jurisdictions.

As previously mentioned, the EBA has expressed particular apprehension not only for evidenced discrepancies regarding customer due diligence measures,[309] but also for the cooperation among European supervisors and the exchange of relevant information between them.

Even though the European Commission has already enacted some measures in that sense,[310] I strongly agree with the EBA in the necessity of stronger regulation covering the matter, considering also that a directly applicable legislation could ease the detection of data reporting problems between European entities and therefore enhance the supervision activity.

[309] See *supra* paragraph 5.3.1
[310] See *supra* note 275

As previously mentioned, however, the major concern about anti-money laundering issues, does not rely on the regulation but rather on the different perceptions about the supervision concept.

This recommendation relies on the development and implementation of a wider approach to supervision that might force supervisory authorities to not simply or exclusively focus on suspicious transactions but to rather perform supervision over the broader concept of suspicious activities.

In fact, it has to be considered that the consideration of supplementary elements, in addition to suspicious transactions and the related aspects, could allow a better enforcement of the legislation and a considerable improvement in the control procedure.

The application of this suggestion could significantly diminish the risk of evaluate in different ways, depending on the approach applied by the supervisory authority, the very same control procedure pursued by an institution and therefore it could also be easier to promptly identify dangerous inadequacy in local authorities' performances compliance.

5.7.2 Suggestions on derivatives regulations issues

The examinations performed on the European Market Infrastructure Regulation and on the Market and Financial Instrument Regulation to underline eventual normative breaches had similar results as the one on anti-money laundering regulations.

It has been noticed how, just like for anti-money laundering measures, the regulations regarding derivative contracts and their utilization in the financial market did not highlighted any intrinsic normative gap in the regulation, but rather a series of elements and aspects whose quality, if not improved, could just lead to a partial and limited efficiency of the regulations mentioned above.

When examining and applying the approach suggested by the European Securities and Markets Authority Peer Review on the utilization of Suspicious Transaction and Order Reports as analysis tools for empirically quantify the effectiveness and the efficiency of local competent authorities and their reporting obligation, it clearly stands out the discrepancy between the number of reports regarding derivative instruments suspicious

operations and the substantial portion of the actual derivatives transaction volume in the European financial market.[311]

Since more than 90% of derivatives contracts are traded over the counter, a possible solution for this issue could involve a more tight and rigorous supervision on central clearing counterparts, where all transactions involving OTC contracts must be cleared and most importantly reported if they features any suspicious element.

In addition, another major issue concerning the supervisory aspects of derivatives contracts has also been identified in the concrete quality of reported information on derivatives transactions.

Through the Data Quality Action Plan and its peer review made by ESMA, it has been possible to diagnose some issues in the actual quality of recorded data due to the ascertained inefficiency to properly identify every EMIR required reporting field by most of the National Competent Authorities examined and their currently utilized analytical tools.

Out of the six NCAs taken into consideration by the Data Quality Action Plan, only the French Authority of the Financial Market (AMF) and the Netherlands Authority for the Financial Markets (AFM) had an appropriate instruments board that properly complies with the EMIR risk-based approach to supervision[312] and that are therefore able to guarantee a good quality for the reported data.

In the ESMA's peer review on supervisory actions aiming at enhancing the quality of data reported under the European Markets Infrastructure Regulation, the authority express the need for all National Competent Authorities to pursue the enhancement of data reporting quality through a process that should be regular, proactive, inclusive, advanced and well established, as further specified in paragraph 5.5.2.

Ultimately, even for the Markets in Financial Instrument Regulation it has not been found any significant normative gap that might express a normative breach in the legislation.

Here, too, however, some issues have been evidenced even though not in the actual structure of the regulation itself, but rather in the aspect regarding the transparency in

[311] MURATORE, last site cit.
[312] EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Final Report: Peer review into supervisory actions aiming at enhancing the quality of data reported under EMIR*, cit., pg. 18

post-trade data reporting concerning non-equities instruments and, in particular, derivative contracts.

In the ESMA peer review related to this problem, it is specifically expressed the necessity of a more compatible and homogeneous post-trade reporting system among different member states and the enhancement of post-trade transparency regime in view to establish an eventual alignment with the U.S. post-trade regime to facilitate and promote supervision activities on transactions involving derivatives between these two different jurisdictions.

I am perfectly aware that these suggestions cannot be implemented in a limited period of time in light of the fact that the will for change does not always easily convert in a smooth process, especially when considering of developing, and most importantly internalize, new concepts and resolutions.

Nevertheless, I am also strongly convinced that the reception of these indications by the European political bodies and their eventual implementation could considerably and positively affect the European financial market integrity and even influence the perception of potential risk incurred by launderers, enhancing in that way also the deterrent factor of the already existing measures.

Conclusions

This thesis wanted to perform an analysis on money laundering activities performed through derivatives instruments in order to better understand the relation between this crime and such complex securities instruments whose, for the great part,[313] are still currently traded outside regulated markets.

The goal was to possibly uncover criticalities and weaknesses in the regulations from which criminal subjects could benefit in order to perform money laundering through the employment of derivatives.

There were very poor examples of previous research on this specific matter, but through the analysis of European directives and regulations I have been able to perform a solid normative analysis both on money laundering and derivative contracts regulations, while also considering the recently published report of the European Securities and Markets Authority and of the European Banking Authority on the legislative acts examined.

As it has been previously anticipated at the end of the fifth chapter, after performing the analysis on the European legislation and after examining the authorities' peer reviews, I can confidently assert that even though there are not actual normative gaps in the regulations, there are some elements that can surely be improved.

This means that the issue does not rely on the actual measures prescribed, but rather on their enforcement by competent authorities and on the approach through which they relate on the concept of supervision.

I decided to take into account also these elements because I think that, in order to perform an efficient analysis on a policy subject, and therefore also delineate possible solutions to potential problems, it is extremely important to acknowledge and contemplate in the study also all the related factors that might affect the desired implementation and efficiency of a legislation and its measures.

[313] See *supra* paragraph 5.5.1

As said, the analysis on the regulations does not evidence any weak point in their structure or in the related measures but even if the issues detected were not actual regulatory gaps, the impact that these shortcomings currently have on the financial market is absolutely deleterious.

Problems of such entities might significantly affect the effectiveness of the measures enforced and, if not properly fixed, they could even negatively affect the deterrent factor of such regulations.

The degree of risk that a criminal subject is willing to undertake in order to perform unlawful activities is strictly correlated with the possibilities of being noticed and, eventually, being detected by supervisory authorities.

For this reason, even if the structure of the regulations appears to be stable and well-conceived, the evidenced problematic aspects of the AML and derivatives measures could seriously affect their efficiency.

By taking into account the EBA and ESMA suggestions, it would be desirable to expect an improvement in the effectiveness of the supervision framework on suspicious activities and transactions, and a more adequate approach to capably implement the updated view on AML and derivatives supervision.

I am strongly convinced that a solid regulation is not sufficient if some of its related aspects are not properly enforced.

The ongoing monitoring of European authorities on anti-money laundering and derivatives legislation plays a central role in determining and anticipating the arise of regulatory issues or inefficiencies in the application of the measures.

Moreover, opinions and warnings issued by professional experts, as well as the European Commission Calls for Advice, are of strategic importance in order to rapidly detect difficulties or complications in the actual applications of the prescribed standards.

I think that this methodology, used both by the EBA and ESMA, consisting in taking into strong consideration also the impression and assumptions of the subjects whose duty is to literally enforce such measures, should be further improved through a better elaboration of their reports and alerts in order to further refine and maximize the European supervision efficiency.

Finally, as last consideration, I think is really important to specify the presence of possible exposure or eventual additional shortcomings both in the supervisory approach of competent authorities and on the actual implementation of the legislative acts' measures.

In fact, it has to be remembered that the most efficient method to uncover and expose normative shortcomings, especially in the financial sector, is to actually work with the regulation and experience daily confrontation with the measures that must be applied.

Many of the recommendation of both EBA and ESMA originated trough reports and alerts issued by professional experts that, by working on the supervision field, have to deal on a daily basis with the European AML measures or with the derivatives regulation.

The legislative acts that are currently enforced are quite recent and this is the main reason behind the almost total lack of opinions and reports on the matter, since the EBA and ESMA's peer reviews on current measures implementation issues have been published just few months ago.

As evidenced in the fourth chapter, the European legislation concerning market manipulations' crimes and the regulation of financial instruments are in an ongoing process of revision and improvement to keep up with uncovered shortcomings and normative concerns regarding, as highlighted by this thesis, not only the regulation itself but also the approach to the updated measures and, most importantly, their enforcement in the European jurisdiction.

I am absolutely positive about the possibility of bridging the current gaps and properly filling the evidenced margins of improvement trough the indications identified by this thesis and, for these very same reasons, I am also expecting a subsequent gradual and progressive enhancement of the future monitoring and revision processes on AML and derivatives regulations.

Bibliography

- BARTRAM, *Corporate hedging and speculation with derivatives*, Journal of Corporate Finance, 2019
- BONDUELLE, *EMIR 2.2 (EMIR Review – CCP's Supervision)*, Société Generale, 2020
- BREWER, MINTON, MOSER, *Interest-rate derivatives and bank lending*, Journal of Banking & Finance, 2000
- ELAMIN, *Is Capital Market Integrity Really Essential for Anti-Money Laundering?*, University of Juba, 2018
- EUROPEAN BANKING AUTHORITY, *EBA Report on the future AML/CFT framework in the EU – Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing*, 2020
- EUROPEAN BANKING AUTHORITY, *Opinion of the European Banking Authority on the future AML/CFT framework in the EU– Response to the European Commission's call for advice on defining the scope of application and enacting terms of a regulation to be adopted in the field of preventing money laundering and terrorist financing*, 2020
- EUROPEAN CENTRAL BANK, *Financial Stability Review – Central Counterparty Clearing Houses and Financial Stability*, 2015
- EUROPEAN CENTRAL BANK, *Looking back at OTC derivative reforms – objectives, progress and gaps*, 2016
- EUROPEAN COMMISSION, *Report on the assessment of recent alleged money laundering cases involving EU credit institutions*, 2019
- EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Final Report: Peer review into supervisory actions aiming at enhancing the quality of data reported under EMIR*, 2019

- EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Final Report: Peer review into supervisory actions aiming at enhancing the quality of data reported under EMIR*, 2019
- EUROPEAN SECURITIES AND MARKETS AUTHORITY, *MiFID II/MiFIR Review Report - MiFID II/ MiFIR review report on the transparency regime for non-equity instruments and the trading obligation for derivatives*, 2020
- EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Peer Review on the collection and use of STORs under the Market Abuse Regulation as a source of information in market abuse investigations*, 2019
- EUROPEAN SECURITIES AND MARKETS AUTHORITY, *Public Register for the Trading Obligation for derivatives under MiFIR*, 2021
- EUROPEAN SYSTEMIC RISK BOARD, *Shedding light on dark markets: First insights from the new EU wide OTC derivatives dataset*, 2016
- FINANCIAL ACTION TASK FORCE, *Guidance for a Risk-Based Approach*, Securities Sector, 2018
- FINANCIAL ACTION TASK FORCE, *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation*, 2012
- FINANCIAL ACTION TASK FORCE, *Money Laundering and Terrorist Financing in the Securities Sector*, 2009
- FINANCIAL ACTION TASK FORCE, *Politically Exposed Persons. Recommendations 12 and 22*, 2013
- HAFNER, *Money-Laundering with Derivatives*, Geneva, 2001
- HERZEL, *Arbitrage opportunities on derivatives: a linear programming approach*, University of Perugia, Watam Press, 2005
- HETZER, *Money Laundering and Financial Markets*, European Journal of Crime, Criminal Law and Criminal Justice, 2003
- HULL, *Options, Futures, and other Derivatives*, Pearson, 9th edition, 2018
- MONEYVAL, *Use of Securities in Money Laundering Schemes*, 2008
- QUIRK, *Macroeconomic Implications of Money Laundering*, Working Paper, Washington DC, International Monetary Fund, 1996

Regulatory references

- Decreto Legislativo 231/2007, *In attuazione della direttiva 2005/60/CE*
- Directive (EU) 2001/97/EC, *Amending Council Directive 91/308/EEC on Prevention of the Use of the Financial System for the purpose of Money Laundering*
- Directive (EU) 2005/60/EC, *On the Prevention of the use of the Financial System for the Purpose of Money Laundering and Terrorist Financing*, 2005
- Directive (EU) 2006/70/EC, *Laying down implementing measures for Directive 2005/60/EC of the European Parliament and of the Council as regards the definition of 'politically exposed person' and the technical criteria for simplified customer due diligence procedures and for exemption on grounds of a financial activity conducted on an occasional or very limited basis*
- Directive (EU) 2013/36, *On access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC*
- Directive (EU) 2015/849, *On the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC*
- Directive (EU) 2018/1673, *On Combating Money Laundering by Criminal Law*
- Directive (EU) 2018/843, *Amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU*
- Directive (EU) 91/308/EEC, *On Prevention of the Use of the Financial System for the purpose of Money Laundering*

- Implementing Decision (EU) 2014/754, *On the equivalence of the regulatory framework of Hong Kong for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2015/2038, *On the equivalence of the regulatory framework of the Republic of Korea for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2015/2039, *On the equivalence of the regulatory framework of South Africa for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2015/2041, *On the equivalence of the regulatory framework of Mexico for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2015/2042, *On the equivalence of the regulatory framework of Switzerland for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2016/1073, *On the equivalence of designated contract markets in the United States of America in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council", Commission Implementing Decision 2017/1857 (2017), "On the recognition of the legal, supervisory and enforcement arrangements of the United States of America for derivatives transactions supervised by the Commodity Futures Trading Commission as equivalent to certain requirements of Article 11 of Regulation (EU) No 648/2012 of the European Parliament and Council" and Commission Implementing Decision 2016/377 (2016), "On the equivalence of the regulatory framework of the United States of America for central counterparties that are authorized and supervised by the Commodity Futures Trading Commission to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2016/2269, *On the equivalence of the regulatory framework for central counterparties in India in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2016/2270, *On the equivalence of approved exchanges in Singapore in accordance with Regulation (EU) No 648/2012 of the*

European Parliament and of the Council" and Commission Implementing Decision 2014/753 (2014) "On the equivalence of the regulatory framework of Singapore for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council

- Implementing Decision (EU) 2016/2272, *On the equivalence of financial markets in Australia in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council" and Commission Implementing Decision 2014/755 (2014), "On the equivalence of the regulatory framework of Australia for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC Derivatives, Central Counterparties and Trade Repositories*
- Implementing Decision (EU) 2016/2273, *On the equivalence of recognized exchanges in Canada in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council" and Commission Implementing Decision 2015/2040 (2015), "On the equivalence of the regulatory framework of certain provinces of Canada for central counterparties to the requirements of Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories*
- Implementing Decision (EU) 2016/2274, *On the equivalence of the regulatory framework for central counterparties in New Zealand in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2016/2276, *On the equivalence of the regulatory framework for central counterparties in Brazil in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2016/2278, *On the equivalence of the regulatory framework for central counterparties in the United Arab Emirates in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council*
- Implementing Decision (EU) 2020/1308, *Determining, for a limited period of time, that the regulatory framework applicable to central counterparties in the United Kingdom of Great Britain and Northern Ireland is equivalent, in accordance with Regulation (EU) No 648/2012 of the European Parliament and of the Council*

- Regulation (EU) 1093/2010, *Establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC*
- Regulation (EU) 1094/2010, *Establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/79/EC*
- Regulation (EU) 1095/2010, *Establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC*
- Regulation (EU) 2017/104 , *Amending Commission Delegated Regulation (EU) No 148/2013 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories with regard to regulatory technical standards on the minimum details of the data to be reported to trade repositories*
- Regulation (EU) 2019/2099, *Amending Regulation (EU) No 648/2012 as regards the procedures and authorities involved for the authorization of CCPs and requirements for the recognition of third-country CCPs*
- Regulation (EU) 600/2014, *On markets in financial instruments and amending Regulation (EU) No 648/2012*
- Regulation (EU) 648/2012, *On OTC Derivatives, Central Counterparties and Trade Repositories*
- United Nations General Assembly, *International Convention for the Suppression of the Financing of Terrorism*, 1999

Web references

- About Business Crime Solution, *Money Laundering: A Three-Stage Process*, https://www.moneylaundering.ca/public/law/3_stages_ML.php/#:~:text=After%20placement%20comes%20the%20layering,illicit%20money%20from%20its%20source
- Associazione Nazionale Enciclopedia della Banca e della Borsa, *Over-the-Counter (OTC) Trading*, http://www.bankpedia.org/index.php/en/118-english/o/23322-over-the-counter-otc-trading
- Banca d'Italia, *The reporting of suspicious transactions*, https://uif.bancaditalia.it/adempimenti-operatori/segnalazioni-sos/index.html?com.dotmarketing.htmlpage.language=1
- Banca d'Italia, *The Role of the Financial Intelligence Unit (FIU)*, https://uif.bancaditalia.it/sistema-antiriciclaggio/uif-italia/index.html?com.dotmarketing.htmlpage.language=1
- BANERJEE, *Macroeconomic Consequences of Money Laundering*, University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/macroeconomic.htm
- BANERJEE, *Money Laundering in the European Union*, University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/explosion%20of%20money%20laundering.htm
- BANERJEE, *Social and Political Costs*, University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/social%20and%20political%20costs.htm
- BANERJEE, *The Achilles Heel*, University of Exeter, 2002, https://people.exeter.ac.uk/watupman/undergrad/ron/conclusion.htm
- BANERJEE, *What is Money Laundering*, University of Exeter, 2002, http://people.exeter.ac.uk/watupman/undergrad/rtb/laundering1.htm#

- Bank of International Settlements, *Global OTC Derivatives Market – Foreign exchange, Interest rate, Equity linked contracts*, https://www.bis.org/statistics/derstats.htm
- Borsa Italiana, *Marking to Market - Glossario Finanziario*, https://www.borsaitaliana.it/borsa/glossario/marking-to-market.html
- BURUGULA, *Illiquid options for money laundering: Crackdown may net a windfall*, in The Economic Times, 2019, https://economictimes.indiatimes.com/markets/stocks/news/illiquid-options-for-money-laundering-crackdown-may-net-a-windfall/articleshow/67952598.cms?from=mdr
- Capital.com, *Open Outcry System*, https://capital.com/open-outcry-system-definition
- CHEN, *Beneficial Owner*, in Investopedia, 2020, https://www.investopedia.com/terms/b/beneficialowner.asp
- CHEN, *Wash Trading*, in Investopedia, 2019, https://www.investopedia.com/terms/w/washtrading.asp
- CME Group, *Introduction to Futures*, https://www.cmegroup.com/education/courses/introduction-to-futures/definition-of-a-futures-contract.html
- Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism, *Risk-Based Approach*, https://www.coe.int/en/web/moneyval/implementation/risk-based-approach
- Comply Advantage, *the 6th Anti Money Laundering Directive (6AMLD): What You Need to Know*, https://complyadvantage.com/knowledgebase/6th-money-laundering-directive-6amld/
- Corporate Financial Institute, *Participants in the Derivatives Market*, https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/derivatives-market/
- CURTET, *Suspicious Activity Reporting Varies Significantly Across Europe*, in Moneylaundering.com, 2019, https://www.moneylaundering.com/news/suspicious-activity-reporting-varies-significantly-across-europe/
- European Banking Authority, *EBA calls on the EU Commission to establish a single rulebook on fighting money laundering and terrorist financing*,

https://www.eba.europa.eu/eba-calls-eu-commission-establish-single-rulebook-fighting-money-laundering-and-terrorist-financing

- European Commission, *Derivatives-EMIR*, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/derivatives-emir_en
- European Commission, *Equivalence Decision under EMIR*, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/derivatives-emir_en
- European Commission, *EU Rules on Derivatives Contracts*, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-markets/post-trade-services/derivatives-emir_en
- European Commission, *Prudential Requirements*, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/financial-supervision-and-risk-management/managing-risks-banks-and-financial-institutions/prudential-requirements_en
- European Securities and Markets Authority, *Policy Activities - MIFID II*, https://www.esma.europa.eu/policy-rules/mifid-ii-and-mifir
- Europol, *Financial Intelligence Units*, https://www.europol.europa.eu/about-europol/financial-intelligence-units-fiu-net
- Federal Bureau of Investigation, *Market Manipulation Fraud*, https://www.fbi.gov/scams-and-safety/common-scams-and-crimes/market-manipulation-pump-and-dump-fraud
- Finance Train, *Price Limits in Futures Contracts*, https://financetrain.com/price-limits-in-futures-contracts/
- Financial Action Task Force, *FATF's global efforts on combating terrorist financing*, https://www.fatf-gafi.org/publications/fatfgeneral/documents/terroristfinancing.html
- Financial Action Task Force, *Money Laundering, How is Money Laundered*, https://www.fatf-gafi.org/faq/moneylaundering/
- Financial Action Task Force, *Money Laundering*, https://www.fatf-gafi.org/faq/moneylaundering/
- FinBid, Derivatives & Hedging, https://finbid.com/derivatives-hedging/
- GRABBE, *How to Launder Money in the Futures Market*, 1996, https://memresearch.janus-book.com/grabbe/futlaund.htm

- KRAMER, *Over-The-Counter Market*, in Investopedia, 2019, https://www.investopedia.com/terms/o/over-the-countermarket.asp
- Macroption, *Call, Put, Long, Short, Bull, Bear: Terminology of Option Positions*, https://www.macroption.com/call-put-long-short-bull-bear/
- MCCAFFREY, *An Introduction to Swaps*, in Investopedia, 2019, https://www.investopedia.com/articles/optioninvestor/07/swaps.asp
- MURATORE, *Quell'oceano di derivati che rischia di inondare l'Ue*, in Inside Over, 2019, https://it.insideover.com/economia/quelloceano-di-derivati-che-rischia-di-inondare-lue.html
- NAIR, *Tax evasion through options trades: SEBI's settlement is tax dept's loss*, in CNBC TV18, 2020, https://www.cnbctv18.com/market/tax-evasion-money-laundering-options-sebi-settlement-6472971.htm
- O'CONNEL, *What Is Money Laundering and What Is Its History?*, in The Street Journal, 2020, https://www.thestreet.com/personal-finance/education/what-is-money-laundering-14897715
- RiskScreen, *Money Laundering with Derivatives*, https://www.riskscreen.com/kyc360/case-studies/
- SCOTT, CHEN, *Commodity Swaps*, in Investopedia, 2020, https://www.investopedia.com/terms/s/swap.asp
- SCOTT, DHIR, *Forward Contracts*, in Investopedia, 2020, https://www.investopedia.com/terms/f/forwardcontract.asp
- SCOTT, *Position Limit*, in Investopedia, 2019, https://www.investopedia.com/terms/p/positionlimit.asp#:~:text=A%20position%20limit%20is%20a,traders%20and%20investors%20may%20own
- Statista, *Largest derivatives exchanges worldwide in 2019*, https://www.statista.com/statistics/272832/largest-international-futures-exchanges-by-number-of-contracts-traded/#:~:text=The%20National%20Stock%20Exchange%20of,to%20CME%20Group's%204.83%20trillion
- The Economic Times, *Underlying Asset*, https://economictimes.indiatimes.com/definition/underlying-asset
- The Options Guide, https://www.theoptionsguide.com/long-futures.aspx