Department of Finance: Master's Degree in Financial Economics

Financial Market Law and Regulations

Central Counterparties and Trade Repositories in Post-Trading Infrastructure under EMIR Regulation on OTC derivatives

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Summary

Resume

This thesis is proposed to evaluate CCP clearing under EMIR, providing an overview of the OTC derivatives markets, the provisions of EMIR in practice, and then a cost-benefit analysis of the Regulation. Centralized clearing of OTC derivatives gives important advantages such as lower systemic risk, effective default management, and the mitigation of counterparty risk, lower complexity, and higher efficiency and transparency. But, these benefits must be weighed against potential structural weaknesses in the centralized management that relate potential costs (as the financial failure of a central counterparty), moral hazard, adverse selection, increased regulatory arbitrage, and increased costs of trading and controlling. The document will then focus on how to optimize the allocation of risk under the EMIR, in order to increase the probability that the overall objectives of the EMIR can be achieved in practice, and the other obligations introduced by the Regulation. The Regulation has to guarantee the optimization of allocation of risk for CCPs. It will require the determination and the proper balance of clearing eligibility for OTC derivatives, and it will also be necessary to ensure rigorous compliance to CCP risk governance and harmonisation practices, and more efforts made to reaching interoperability of CCPs in the near future. The financial crisis has generated a major renovation of the regulation of securities and derivatives markets. The debated and long-awaited Commission Proposals to review the keystone Markets in Financial Instruments Directive 2004 (MiFID I) were presented in October 2011. In this work, I studied the level to which the ongoing reforms, and Markets in Financial Instruments Directive (MiFID II) and Regulation (MiFIR), will expand the market of derivatives and public securities, although similarly reducing the field application of private markets (which are essentially the "unregulated" OTC markets). This paper also examines the latest developments and the costs and benefits of MiFIR and MiFID II, considering how these reforms reshape the EU share trading marketplace. Both the European Union (EU) and the United States (US) have adopted primary legislation that aims to meet

the commitments of the G20 that all standardized over-the-counter (OTC) should be cleared through a central counterparty (CCP) and that OTC derivative contracts should be reported to trade. European Securities and Markets Authority (ESMA) in Europe and the Securities Exchange Commission (SEC), as well as the Commodities Futures Trading Commission (CFTC) in the United States decide which derivatives are eligible and, when applying the clearing obligation. This work, after a deeper study of the Dodd-Frank Act (passed in July 2010), focuses on the analysis between EU and USA Regulations. There is a significant commonality of approaches between EMIR and Dodd-Frank in relation to the regulation of OTC derivatives markets, but there are also some significant differences.

"I'm probably not going to be popular for saying it, but I think almost all derivatives, as many as you can physically get to, should be on clearinghouses and should be on exchanges." These are the exact words of Vikram Pandit, former CEO of Citigroup, at the annual meeting of the Securities Industry and Financial Markets Association (SIFMA) in 2011.

It's not often that a banker of his level, until a short time ago at the head of one of the biggest financial institutions in the world, relies on the transparency of the immense derivatives market where banks make real money. Nowadays Pandit is no longer at the helm of the bank, and most of his colleagues think differently. Too bad, 5 years after the outbreak of the crisis caused by the reckless use of derivatives, these financial instruments continue to increase in the opacity: now, according to BIS, amounts into the world to 638 thousand US billion dollars. It is about 9 times more than the GDP of the entire world. That is 7% higher than 2007 levels. But now rules, in Europe and in the U.S., begin to change.

These financial instruments are very useful because they serve to businesses and banks to cover various risks: for example, from fluctuations in interest rates or exchange rates. But in the last decade there has been a real abuse: derivatives have proliferated like mushrooms, too often losing their original vocation (hedging of risks) to assume a new one (instruments to speculate). They became, as the financier Warren Buffett said, tools "of mass destruction."

Currently, there are many more companies on credit default swaps (insurance against default on debt) which debts themselves. The group Alcoa, to give just one example, had gross debt of 8.8 billion dollars (according to the 2012 budget) but credit default swaps to $ 26 billion ; insurance on the debt held by investors, in fact, they are almost three times greater than the debt itself. It is as if a person would ensure three cars for fire and theft, while having one.

But there is more. There are banks that have so many derivatives in the financial statements to be overcome, by themselves, the GDP of the world. JP Morgan, according to data from the Office of the Comptroller, has belly derivatives for 70 billion US dollars. Bank of America for 65 thousand billion. Citigroup to 51 thousand. Not to mention the countless scams against local authorities or "holes" that occasionally find themselves here and there in the balance sheets of banks. So this is a huge market that needs to be regulated, but should be treated, also, under special surveillance.

Instead derivatives exchanges take place, in the age of a pushing digitalization, still on the phone through a trader; few derivatives are bought and sold on technology platforms. The reason seems to be that the big banks earn a lot of money from this opacity, because they are market makers (those who make the market and decide the bid-ask prices). And being the big banks lending policy (in 2012 the financial sector in the U.S. has been the second most generous American parties), they are pushing for the rules do not change.

But the first steps are moving forward. The hope is that, sooner or later, the derivatives come back what they were: tools to reduce risk not increase them.

European Framework: Overview

The consideration of politicians and regulators on financial markets has changed after the 2008 crisis and, also, it highlighted the vulnerability of OTC markets to systemic shocks and revealed the failure of self-regulation for the financial sector to effectively evaluate systemic issues relating to their activities. The intervention of governments and international policy makers was triggered by the opacity of the OTC markets, resulted from a lack of transparency on the positions and exposure, and the subsequent uncontrolled spread in a systemic dimension of counterparty risk. Regulators accused the markets and their actors for being driven by purely selfish private interests and excessive moral hazard; for externalizing the costs of their activities to society; and for free riding on their systemic position and role (“Too Big To Fail”).

Derivatives markets have been the battleground of an international post-crisis regulatory intervention. The derivatives pre crisis scenario was characterized by the coexistence of derivatives markets, public and private. Both in the United States and the European Union, commodities derivatives, futures and options were traded mainly on public markets, such as the Chicago Mercantile Exchange (CME) and Eurex. Buyers and sellers then operated in regulated and supervised markets, where they traded standardized contracts in a lit environment. Since the 2000, a group of global financial institutions (referred to as

G15) have created a huge OTC market for financial derivatives, built upon bilateral transactions highly customized. The financial crisis was most severe and widespread through the OTC markets, so that the media blame derivatives for causing the whole financial collapse, while regulators have decided to intervene with force to restore stability, trust and confidence in financial markets.

Because of the cross-border and international dimension of the OTC markets, the G20 and the FSB, which represents the major economies of the world, adopted international guidelines to provide a common framework, also harmonized for national regulators to reorganize their financial systems.

The new architecture of derivatives markets is balanced on four pillars:

1. promotion of OTC derivatives standardization;
2. transparency through trade reporting to centralized trade repositories;
3. establishment of a central clearing system;
4. trading on exchanges and electronic platforms.

These are the four pillars of the EU regulatory action. To implement these guidelines, the European Union decided to follow two paths: first, by adopting a new regulation on the financial infrastructure to build new structural elements of derivative markets; secondly, the revision of the existing MiFID, to adapt the existing rules on trading venues.

The European debate around the reforms after the crisis began in October 2008, when the Commission appointed a 'High Level Group on Financial Supervision', chaired by Jacques de Larosière. The High Level Group published its recommendations in early 2009, with the objective of investigating the causes of the financial crisis in Europe and to set a new regulatory program 'to take the European Union forward'.

Mr. de Larosière, in his introductory speech, stressed the importance of establishing mechanisms to challenge systemic financial risks, to reduce the cyclical amplifiers and to enhance transparency. Following this initiative, the Commission adopted two communications in July and October 2009 taking a position on the OTC market. On 15 September 2010, after a consultation phase highly participatory, the European Commission published a draft regulation on the ''OTC derivatives, central counterparties and trade repositories' implementation of the recommendations of the de Larosière group and the guidelines FSB. The Council of the European Union, the European Commission and the European Parliament reached a political agreement on the final text of 9 February 2012 and the text was approved by the European Parliament in plenary session March 29, 2012. In the end, July 4, 2012 the European Parliament and the Council adopted the Regulation on OTC Derivatives, Central Counterparties and Trade Repositories (known as EMIR), which came into force on August 16, 2012.

According to the provisions of EMIR, the European Securities Market Authority (ESMA) proposed to the Commission nine additional delegate regulations and implementing regulations, approved on December 19, published in the Official Journal on February 23, 2013 and entered into force on March 15, 2013.

So, in light of the proclamation of the G20 leaders, the European Market Infrastructure Regulation (EMIR) came into being in order to transpose these political commitments into practice across the EU.

OTC Derivatives Markets: Overview

Historically the OTC derivatives markets developed on a bilateral basis, which means that OTC derivative contracts have been negotiated and settled bilaterally between counterparties. Typically this meant that counterparties to an OTC derivatives contract negotiated contractual and economic terms under the standardized International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement architecture documentation, and put in place settlement procedures to monitor for changes in margin requirements and counterparty creditworthiness and contractual compliance.

The nature of this relationship meant that each counterparty to an OTC derivative contract was exposed to counterparty risk, i.e. the risk that the other party would be unable to meet its payment obligations under the OTC derivatives contract. The techniques that have been developed by market participants to reduce counterparty risk are netting of bilateral positions (aggregate close-out netting of all OTC derivatives exposures between two counterparties); collateralization of net remaining exposure (the posting of collateral to cover potential risks); and operations of compression and tear-up that eliminate redundant and reduce counterparty risk.

However, the bankruptcy of Lehman Brothers has shown serious operational weaknesses, including the under collateralization of OTC derivatives positions, the non-transparency present in bilateral OTC derivatives and the increased risk of infection or "daisy chain" effect, for which the default of a counterparty triggers the default of a long chain of other counterparts. It may be noted that while there has been significant growth in the value of reported and estimated collateral in uncleared OTC derivatives markets. There still exists a significant portion of undercollateralized OTC derivatives across the major OTC derivatives classes, and 28.6% of undercollateralized OTC derivatives overall.

European Market Infrastructure Regulation: Overview

The EMIR is an EU Regulation, and thus its provisions are "directly effective" in all 27 EU Member States, which means that it is not necessary for the transposition of legislation into national law. EMIR applies to "financial counterparties" (FCs), such as banks, investment firms, fund managers, and insurers, as well as the "non-financial" (NFCs), which includes all entities that are not defined as FCs. Basically, the EMIR requires among other things that all OTC derivative contracts nominated as subject to mandatory clearing by the European Securities and Markets Authority (ESMA), be centrally cleared by an authorized central clearing counterparty (CCP), and that all outstanding counterparty derivatives contracts be reported to an authorized trade repository (TR).

This requirement covers the five major classes of derivatives, particularly credit, equity, interest rate, commodity and foreign exchange (FX) OTC derivatives. From the outset it should be noted that the CDS actually represent only 4.22% of the total notional amounts outstanding for OTC derivatives, with the majority made up of contracts on interest rates probably simpler structured and transparent (77.32%), and foreign exchange contracts (10.43%).

Furthermore, the type of OTC contracts remaining, which includes equity-linked contracts (0.99%) and commodity contracts (0.47%), only represent a minute part of the OTC derivatives markets and are difficult to standardize. Consequently, despite public pressure for reform in the wake of the recent financial crises, from one point of view it could be argued that this initially calls into question the current need for the introduction of CCP clearing of OTC derivatives.

The EMIR also requires the implementation of new standards of risk management, including higher requirements on capital and monitoring, for all bilateral OTC derivatives not subject to mandatory CCP clearing. CCP will be authorized by the national financial regulators, but will be subject to legal oversight by new Domestic Supervisory Colleges (DSC) which are to be specifically established. In the UK, for example, the controller is the Bank of England (BoE) since April 1, 2013.

The global financial system has to support up to $ 6.7 billion in compliance costs, to be in line with the provisions of the anti-crisis laws that are coming into force in the United

States than in Europe, and they're going to regulate especially derivatives markets over-the-counter, until now known not only to have the same rigidity of regulated markets.

According to CEB TowerGroup, a consulting firm which published some researches, the various regulations introduced by the two sides of the Atlantic to reduce counterparty risks in operational transactions with derivative contracts excluded from regulated markets, in particular, the European Market Infrastructure Regulation (EMIR) in the European Union and the Dodd-Frank Act in the United States, will have an important role in varying the competitive scene of the major financial centres.

The main detail of costs incurred by banks, corporations, asset management companies and hedge fund investments will focus on the technological front. These progresses require new systems for risk management, for connectivity between the clearing houses, banks and customers, and for the registration of the trade in specialized databases. A front on which banks and brokers are gearing up, with significant investments made in 2011.

According to CEB in particular, 40% of the more than 6 billion will be spent by banks and 27% by funds and institutional investors. At the same time, all these investments are making the fortune of many consulting firms that have specialized exclusively on the implementation of new regulations, and are preparing for an increase in profits in England, the United States and Canada.

An example is Rule Financial, an independent provider of consulting services in particular in the areas of technology, which recently announced a 15% increase in revenues and a growth strategy for the future. Rule Financial has decided to recourse to a strategy of relocation "nearshoring" in Poland, where 178 employees could be 200 by the end of the year.

The firm launched a software application managed services from its headquarters in London and expects further growth in the United States. As described by Chris Potts, CEO of Rule Financial, "this new wave of new regulations that followed the financial crisis of 2008 is driving the strategies of those who work in the financial market with regard to the technology front. Dodd-Frank, EMIR and Basel III are just some of the regulations on which we follow our customers. The decision to open in Poland further supported the demand for our services.

Potts added that Rule Financial aims to exploit this process of implementation of legislation to expand the business.

Moreover, although the EMIR came into force on August 16, 2012, its full implementation will be gradual and will happens over a number of different. Mainly, because the first level legislative requirements under EMIR will be implemented in practice through a series of technical standards which are still in process of being finalized, although nine regulatory and implementing technical standards were adopted by the European Commission on December 19, 2012. EMIR's requirements will apply to Central Counterparties, Financial Counterparties, Non-Financial Counterparties, and Trade Repositories.

Financial Counterparties are defined to include investment firms, credit institutions, authorized insurance undertakings, assurance and reinsurance undertakings, undertakings for collective investment in transferable securities (UCITS), occupational retirement institutions, and alternative investment funds; and Non-Financial Counterparties including all other businesses established in the European Union that are not Financial Counterparties.

Derivatives take in consideration all derivatives listed under the Markets in Financial Instruments (MiFID), including financial derivatives (physically or cash settled); commodity derivatives (cash settled); commodity derivatives traded on a regulated market or MTF, multilateral trading facility (physically settled); and commodity derivatives which have characteristics of other derivative financial instruments (physically settled).

The main obligations under the EMIR will be:

- the mandatory centralized clearing of certain standardized classes of OTC derivatives through CCPs;
- the application of risk mitigation techniques (including timely confirmation, portfolio reconciliation and compression, contract valuation and dispute resolution) for non-centrally cleared OTC derivatives;
- the reporting of all OTC derivatives to Trade Repositories;
- the application of organizational, conduct of business and prudential requirements for CCPs;
- the application of requirements for Trade Repositories including a duty of public disclosure.

ESMA will be the central body that mandates which classes of OTC derivatives will be considered for mandatory clearing, and it will use both a "top-down" and a "bottom up" to do this.

The top down approach involves the choice of ESMA, which on its own initiative, must assess CCP clearing obligations should apply to a certain class of OTC derivatives. This will involve the holding of a public hearing and consultations, with the subsequent development and presentation of technical standards for the approval by the European Commission. In particular, ESMA, on its own initiative and after conducting a public consultation and after consulting ESRB, notifies the Commission the classes of derivatives that should be subject to the clearing obligation but for which no CCP has obtained an authorisation, yet. However, the European legislator sets out guidelines to determine the suitability for OTC derivative contract clearing. Said guidelines are based on the observation of features that can already be found in the markets under consideration.

The bottom up approach consists of national regulatory authorities authorizing central counterparties to clear certain types of OTC derivatives classes followed by public consultations and the development of technical standards for those OTC derivatives highlighted by ESMA. In particular, the process starts with the CCPs filing an authorisation application to clear a given class of derivatives with the competent national authority (CNA); the CNA then notifies the decision made by ESMA that—after conducting a public consultation and after consulting the European Systemic Risk Board (ERSB)—can confirm the decision and harmonise it Europe-wide. Non-Financial Counterparties which use OTC contracts exclusively for commercial hedging purposes and which are "objectively measurable as reducing risks directly relating to the commercial activity or treasury financing activity of a non-financial company or its group" will be excluded from the OTC central clearing obligation. In addition, when a Non-Financial Counterparties surpasses one of the thresholds on the basis of a 30-day rolling period, then it will be subject to mandatory OTC central clearing. The clearing thresholds are based on a gross notional of € 1 billion (credit and equity OTC derivatives) and € 3 billion (interest rate, FX, commodities, and other OTC derivative contracts).

Lastly, Trade Repositories that are currently authorized or registered in the EU must re-apply for registration under EMIR in six months from the date of entry into force of relevant technical standards, and central counterparties currently authorized EU must apply for EMIR authorization within six months of the entry into force of the technical standards.

The general objectives of EMIR take account of reducing the market interdependencies, mitigating counterparty and systemic or contagion risks, and increasing the stability of the market and the transparency in the OTC derivatives markets. It has been highlighted that in theory within the EMIR, it’s possible to reduce the systemic risk in OTC derivatives markets; the Regulation, also, offers more effective mitigation, relocation and management of counterparty risk; it diminishes complexity, costs and information asymmetries; it increases efficiency and transparency; and it delivers a more effective management system in case of CCP default. Additionally, the substantial legal framework of the EMIR provides adequate direction and flexibility to guarantee that the centralized clearing system of the CCP can run effectively. However it must be recalled that the EMIR is not a cure for all the problems, and there are structural weaknesses such as adverse selection, failure of a CCP, moral hazard, and the potential regulatory arbitrage in the system which, if not properly addressed, could lead to an increased systemic risk. Particularly, if too many classes of OTC derivatives are omitted from the obligation of mandatory clearing, the system cannot reach the critical mass required to deliver liquidity and efficiency of multilateral netting, while at the same time providing an inefficient financial system to mitigate systemic risk.

In order to guarantee that the EMIR provides a convenient solution for the centralized clearing of OTC derivatives, it was hence discussed that the correct determination and the balance of clearing eligibility for OTC derivatives will be necessary to properly optimize the allocation of risk for CCP in the European Union. This optimization will be further supported by confirming strict observance to central counterparty risk management and harmonization practices by the competent authorities, and ensuring that better efforts are made to promote and achieve interoperability of CCPs as soon as possible. Thereby, an effective transition, from bilateral to centrally cleared OTC derivatives markets under the EMIR, will be ensured optimizing the allocation of risk for central counterparties.

The introduction of the EMIR, certainly, has an impact on the transparency of the trading market of OTC derivatives, and it provides to supervisors an effective tool to examine the system through the supervision of the activities of CCPs and TRs. In particular, the availability of aggregate data on the prices of OTC derivatives published by Trade Repositories reduces the information asymmetry between investors and brokers who negotiate as direct counterpart.

Through an analysis of the development of OTC derivatives regulations in Europe and U.S. (EMIR and Dodd-Frank Act, respectively), emerged that, the two regulations seems very similar, but there are some differences. The most significant are the selection method of derivatives with mandatory central clearing, the substantial asymmetry of timetables, the American "Push-Out" provision and the Volcker rule. Overall, it seemed that the European legal framework is less restrictive and disruptive than the American one, which proposes that some regulatory arbitrage could emerge for the benefit of Europe. The two Regulations, albeit not impeccable, are potentially able to improve the approach of the use of OTC derivatives and they could have an important positive impact on markets' stability. Thus, the public consideration of OTC derivatives would expect enhancements in the next years, if the number of OTC derivatives scandals will decrease and more efficient regulations will be successfully developed.

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