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Comparison of the Level of Implementation of the IOSCO Principle "Regulation Should Promote Transparency of Trading" in the European Union and Colombia

Comparación del nivel de aplicación del principio de la IOSCO «La regulación debe promover la transparencia de la negociación» en la Unión Europea y Colombia

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Comparación del nivel de aplicación del principio de la IOSCO «La regulación debe promover la transparencia de la negociación» en la Unión Europea y Colombia

Comparação do nível de implementação do princípio da IOSCO "A regulamentação deve promover a transparência das negociações" na União Europeia e na Colômbia

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SUMMARY

This article assesses and compares the level of implementation of the IOSCO principle concerning trading transparency in the regulatory framework of the European Union and Colombia. For that purpose, the author applies the methodology set by IOSCO, so as to assess the level of implementation of the referred principle in the regulatory framework of the mentioned jurisdictions. Nonetheless, the scope of the research is narrow to the study of the level of trading transparency of the transactions executed in the stock exchange.

KEYWORDS

Capital Markets; Securities regulation; IOSCO Principles; Trading Transparency; Pre-trade and Post-trade information.

** Artículo de reflexión.*

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RESUMEN

Este artículo evalúa y compara el grado de implementación del principio IOSCO en relación con la transparencia del intercambio en el marco regulatorio de la Unión Europea y de Colombia. Con tal fin, el autor aplica la metodología establecida por IOSCO para evaluar el grado de implementación del principio mencionado en el marco regulatorio de las jurisdicciones mencionadas. Sin embargo, el alcance de la investigación es limitado para estudiar el grado de transparencia de los intercambios ejecutados en la bolsa de valores.

PALABRAS CLAVE

Mercados de capital; regulación de títulos valores; principios IOSCO; transparencia de las operaciones bursátiles; información pre-trade y post-trade.

RESUMO

Este artigo avalia e compara o grau de implementação do princípio da IOSCO relacionado à transparência das negociações no marco regulatório da União Europeia e da Colômbia. Para tanto, o autor aplica a metodologia estabelecida pela IOSCO, de forma a avaliar o nível de implementação do referido princípio nos marcos regulatórios das jurisdições mencionadas. Contudo, o escopo da pesquisa é limitado ao estudo do nível de transparência das negociações realizadas na bolsa de valores.

PALAVRAS CHAVE

Mercados de capitais; regulação de valores mobiliários; princípios da IOSCO; transparência de negociações; informações pré-negociação e pós-negociação.

INTRODUCTION

The International Organization of Securities Commissions (IOSCO) has established some principles of securities regulation, the principles intend to protect investors; ensure that markets are fair, efficient and transparent; and the reduction of systemic risk. The accomplishment of the mentioned objectives requires the provision of adequate pre-trade and post-trade information to market participants.

Taking into account the foregoing, the purpose of this research is to assess and compare the level of implementation of the IOSCO principle concerning trading transparency in the regulatory framework of the European Union and Colombia. For that purpose, we are going to apply the methodology set by IOSCO, so as to assess the level of implementation of the referred principle in the regulatory framework of the mentioned jurisdictions. Nonetheless, the scope of this research is narrow to the study of the level of trading transparency of the transactions executed in the stock exchange, however the scope of this research has been broadened just as much as necessary to answer the key questions[1] regarding the level of trading transparency of dark orders.

In the first section of this paper, we are going to describe the objectives of IOSCO Principles of Securities Regulation, the methodology and benchmarks to assess the level of implementation of the referred principles, the relation between the provision of information and the achievement of the main objectives of IOSCO as well as the relationship between the provision of trading information and market transparency. In the last part of this section, we are going to explain some of the differences between the trading environments of the European Union and Colombia.

In the second section of this paper, we are going to examine the scope of the IOSCO principle "*Regulation should promote transparency of trading*", the criteria to assess this principle in different regulatory environments and some considerations regarding an adequate assessment of market transparency. Furthermore, we are going to describe the key issues concerning the realization of this principle, the key questions used to evaluate the level of implementation and the benchmarks established by IOSCO to determine the level of implementation of the mentioned principle.

In the third section, we are going to answer from a regulatory perspective the key questions concerning the level of implementation of the principle "*Regulation should promote transparency of trading*" in the legal framework of the European Union and Colombia. Additionally, we are going to determine the resulting benchmark according to the answers to the key questions.

1. *See section 2.3, infra.*

In the fourth section of this paper, we are going to determine if there is any difference concerning the level of implementation of the mentioned principle. Additionally, we are going to recommend some measures in order to improve the level of trading transparency in the European Union and Colombia, based on the analysis made in the third section.

This qualitative research will be carried out from the regulatory perspective, especially by identifying the powers conferred to the supervision authorities, the relevant provisions of applicable laws, rules and regulations of the European Union and Colombia. This research will be narrow to the study of the regulation at an European level, and will not use or intend to perform any sort of empirical research or analysis.

Section No. 1. Implementation of IOSCO Principles of Securities Regulation

In the first part of this section, we are going to explain the most important aspects of the methodology used to assess the level of implementation of the principles of securities regulation. In the second part, we are going to describe the relation between the provision of information and the achievement of the main objectives of IOSCO. We will then go on to explain the relationship between the provision of trading information and market transparency, as well as some of the positive and negative effects of market transparency on capital markets. Finally, in the third part of this chapter, we are going to explain the differences between the trading environments of the European Union and Colombia, with respect to the number of stock exchanges that are available to trade securities in each region.

1.1. Methodology to assess the level of implementation of IOSCO Principles of Securities Regulation

In this section we are going to examine: i.) the scope of the methodology and subjects that can be assessed; ii.) the description of the assessment process; and iii.) the explanation of the assessment categories.

1.1.1. Scope of the methodology

The methodology is intended to be applied to the securities markets, derivatives, information service providers, secondary markets, intermediaries and financial instruments traded in capital markets. Nonetheless, the methodology also takes into account the current configuration of specific markets, the level of development and participation of the members of those markets[2].

Furthermore, this methodology does not apply to some markets, for instance the currency, bullion or tangible commodity markets. However, this methodology is applicable when securities intermediaries who trade on the interest of their customers[3].

1.1.2. Description of the assessment process

The assessment process is considered as a tool to identify gaps, inconsistencies, weaknesses and specific issues in which it could be required to extend or modify the powers of the supervisors. Moreover, the assessment is helpful to determine the priorities for enhancements or modification to existing regulation[4].

However, the assessment suggests an overview of the market structure and applicable regulation, in order to evaluate if legal frameworks properly address the key issues concerning the implementation of IOSCO principles. Furthermore, the evaluation process is not just a checklist, since it demands the exercise of judgement to determine the sufficiency of programs, resources or level of achievement of certain principles[5].

During the evaluation process, assessors must be aware that the level of the regulation of each jurisdiction depends on factors such as the structure of market, sophistication of its participants, entry requirements, sort of products traded, degree of integration with other markets, technological developments, and risk management. Additionally, the supervision model and the form of regulation can vary with regard to the type of legislation, administrative rules, guidelines and/or procedures, since the principles

2. See IOSCO, supra note 8, at 15.

3. See IOSCO, supra note 6, at 5.

4. See IOSCO, supra note 8, at 15.

5. See IOSCO, supra note 1, at 15.

do not specify regulatory methodologies nor supervision models[6].

The methodology advises that key questions are the first step in assessing the level of implementation, since they provide an adequate diagnosis to evaluate the methods used by each jurisdiction to address the key issues[7]. Moreover, the methodology provides that it is possible to assess the level of implementation from two different perspectives[8]: i.) the legal perspective encompassing the identification of the powers of authorities, the relevant rules, and the procedures created to realize the objectives; and ii.) from the empirical perspective, it is necessary to collect data and other information required to measure properly the performance of the authorities in addressing the key issues[9].

Moreover, IOSCO principles of securities regulation accept that in certain circumstances it is appropriate to exempt a trading system from direct regulation and/or supervision. Nonetheless, in these circumstances the regulator should grant the exemption on a transparent, accessible and consistent basis, since regulators are encouraged to promote equal treatment among the market participants[10].

In order to determine the assessment rating, the evaluator must provide an answer to the key questions, depending on the answers obtained. The level of implementation can score as fully, broadly, partly or not implemented. Moreover, the key questions must be answered as "Yes" or "No" question, although the answer must elaborate on the underlying reasons that support the final answer[11].

In most cases, the assessor must exercise judgement to evaluate the materiality of any weakness as well as the applicability of some key question in a specific jurisdiction, since in some circumstances the key questions are not applicable[12]. Additionally, the evaluator should exercise judgement at the time to assess the sufficiency of resources, enforcement or effective achievement of regulatory functions[13].

After evaluation of the answers given to the key questions, the assessor is in a position to determine the assessment rating that corresponds to the specific principle. Nonetheless, evaluator must examine if the rating obtained is according with the general perception of the existing regulation, in case of discrepancies between the rating benchmark and the general appreciation[14] of the assessor, assessor can provide an elaborated explanation to upgrade or downgrade the rating in just one category[15].

1.1.3. Explanation of the assessment categories[16]

The assessment rating is the result of the evaluation, we proceed to explain the conditions to assign each of the assessment categories[17]:

1.1.3.1. Fully Implemented: when all the assessment criteria specified in the benchmarks is fulfilled without deficiencies.

1.1.3.2. Broadly Implemented: when it is not possible to provide positive answers to all the applicable key questions, or some key questions are exempted without any material affect to the proficiency to address the key issues.

1.1.3.3. Partly Implemented: when the result of the assessment complies with the

6. See IOSCO, supra note 1, at 222.

7. See IOSCO, supra note 1, at 16 and 18.

8. See IOSCO, supra note 8, at 17.

9. As mentioned in the introduction, this research is limited to analysis from the legal perspective and does not lead to any conclusion regarding the extent of which transparency is achieved in practice. Additionally, transparency in practice is achieved by regulation only to a relative extent, depending on the legal system and enforcement of existing regulation.

10. See IOSCO, supra note 1, at 222.

11. See IOSCO, supra note 1, at 18.

12. E.g. countries in which it is not possible to access to secondary markets.

13. See IOSCO, supra note 8, at 18.

14. General appreciation refers to the perception of existing regulation as a whole, since the assessor need to take into account all the answers for the key questions, in order to determine properly the benchmark.

15. See IOSCO, supra note 1, at 19.

16. This section provides the answer to the third research question.

17. See note 28, supra.

characteristics set by the definition of partly implemented.

1.1.3.4. Not Implemented: when major deficiencies are found and the particular situation falls within the specific definition of not implemented.

1.1.3.5. Not Applicable: A principle could be considered as not applicable, if its implementation is not possible, as a result of the structure of the market or legal and institutional considerations. In some cases, it is required that the assessor exercise judgement, since the methodology does not specify the particular conditions to provide this category.

Despite the existence of general references to the assessment categories, it is necessary to consult the specific benchmark established for each principle, since the evaluation can vary in consideration to the scope of each principle, the jurisdiction assessed and the key questions.

1.2. Provision of trading information and market transparency

In this sub-section, we are going to explain the relationship between the provision of trading information and market transparency, as well as some of the positive and negative effects of market transparency. Additionally, we are going to explain the relationship between market transparency and the achievement of the main objectives of IOSCO.

1.2.1. The relation between the provision of trading information and market transparency, and some of its positive and negative effects on capital markets

Market transparency is considered as the level at which information concerning trading (i.e. pre-trade and post-trade information) is made publicly available[18] in real time. On the one hand, "pre-trade information" encompasses the disclosure of investment firm bids and offers, this information can be helpful for investors, in order to know with certainty the price at which they can trade a specific financial instrument. On the other hand, "post-trade information" concerns the prices at the volume of the individual transactions concluded, this information could be helpful for investors, since they can be aware of the transactions concluded by third-parties[19].

1.2.1.1. The positive effects of the provision of trading information

IOSCO states that market transparency might facilitate price discovery, enabling investors to make informed investment decisions and make feasible the proper assessment of the performance of an investment. Moreover, the provision of trading information allows investors to compare the prices of financial instruments, as well as to evaluate the transactions concluded by other market participants[20].

The foregoing promotes efficiency and confidence in the market, since the provision of trading information could lead to an increase in the number of transactions and a consequent rise in the liquidity available in the market. According to IOSCO experience[21], an increase in market transparency might have a positive impact on the liquidity of a market and investor confidence, since the provision of pre-trade and post-trade information could facilitate and reduce the assessment cost of execution risk[22], which could be considered as an incentive for market participants to provide liquidity to the capital markets[23].

Nonetheless, mandatory transparency may have a stronger impact in less liquid markets, because the provision of pre-trade and post-trade

18. The means used to provide information to the public and individual investors can vary according to the particularities of the regulation of each jurisdiction, since IOSCO does not prescribe specific means to provide the referred information, even in some cases regulation does not clarify the means.

19. See IOSCO, supra note 1, at 11.

20. IOSCO, Regulatory Reporting and Public Transparency in the Secondary Corporate Bond Markets, at 2 and 15 (2018).

21. IOSCO, Analysis of The Application of IOSCO's Objectives and Principles of Securities Regulation for Islamic Securities Products, at, 5, 29 and 30 (2008).

22. Execution risk refers to "The risk that a transaction won't be executed within the range of recent market prices or within the stop order limits that have been set by an investor". See (https://www.yourdictionary.com/execution-risk), last visited (28-10-2019).

23. See IOSCO, supra note 32, at 15 and 16.

information may reduce uncertainty and price ranges, which could also lead to a larger number of transactions, because the market is perceived as being fairer and more stable by investors[24]. Despite the positive effect of transparency, is possible that some market participants make irrational decisions as a consequence of the influence of cognitive bias, social influence and emotions[25].

Moreover, the provision of trading information allows investors to compare the quality of their executions with other market users, since investors could have enough data available to compare the results obtained. Moreover, the publication of trading information is helpful for investors, because they can assess the size and prices of the executed transactions, in order to make an informed investment decision. In general terms, the publication of trading information increases the confidence of investors in the market, as long as they perceive the prices as fair enough to enter into a transaction[26].

In conclusion, the disclosure of trading information is a key element to ensure market transparency. At the same time, an improvement in market transparency may increase the number of transactions, promote market efficiency, strengthen the confidence in capital markets, reduce the assessment cost of execution risk, and an increase of liquidity. As a result of the provision of trading information and its consequences, investors perceive the market to be fairer and more stable, since the gap among prices is smaller and it reduces market volatility. Despite the foregoing some actors could act irrationally under the influence of other factors[27].

1.2.1.2. The negative effects of the provision of trading information

Despite the advantages and benefits derived from market transparency, an inadequate increase of market transparency may decrease the profits received by dealers, since the disclosure of trading information might improve dealers' capability to adjust prices according to their future level. Hence, the improvement of market transparency reduces investors' execution cost, but it also reduces the incentives for traders to enter into market transactions. The reduction of incentives may cause a decrease in the number of transactions, which may lead to a reduction of the trading information provided to the public, because there are fewer transactions to report[28].

In addition, empirical studies have proven that transaction costs may increase after the implementation of new rules, which is coherent with the fact that markets' liquidity may decrease as a result of the implementation of new market transparency rules, because higher transaction costs may reduce the number of orders placed by traders[29]. Moreover, the issuers of securities do not necessary take advantage of the increase of market transparency, since it is expensive to process the information subject to disclosure. Furthermore, the disclosure of additional information represents an increase of the processing costs incurred by traders, since they have to process more information[30]. However, the cost incurred by traders in most of cases is transferred to investors, thus investors may pay higher fees as a consequence of the disclosure of additional information[31]. Furthermore, there is empirical evidence that the publication of additional information strengthen the asymmetries among qualified, professional, and retail investors, causing a significant reduction of the number of transactions as well as market liquidity[32].

The absent of consensus regarding the positive and/or negative effects of market transparency might be consequence of the examination of discrete events or the evaluation of different

24. P. Asquith, T. Covert. P. Pathak, The Effects of Mandatory Transparency in Financial Market Design: Evidence from the Corporate Bond Market, at 1 (2013).

25. Mullainathan, S and Thaler, R, Behavioral Economics, Cambridge, Nber Working Paper Series (2000), at 2.

26. See IOSCO, supra note 1, at 236 and 237.

27. See note 36, supra.

28. Lewis, R and Schwer, M, The Effects of Transparency on Trading Profits and Price Informativeness: Evidence From Corporate Bonds (2018), at 22.

29. Madhavan, A, Porter, D, and Weaver, D, Should Securities Markets Be Transparent?, Journal of Financial Markets, Volume 8, Issue 3, (2005), at 61.

30. Di Maggio, M and Pagano, M, Financial Disclosure and Market Transparency with Costly Information Processing, Forthcoming, Review of Finance, (2016), at 2.

31. Learner, Heidi, An Examination of Transparency in European Bond Markets, Position Paper, CFA, (2011), at 15.

32. See Di Maggio, M and Pagano, M, supra note 46, at 3 and 4.

environments according to the same parameters[33]. In consequence, we consider that it is necessary to calibrate the level of trading transparency according to the particular conditions of each jurisdiction. Otherwise, the regulatory framework may reduce the liquidity, the number of transactions as well as the incentives provided to traders to enter into capital market transactions.

1.2.2. The relationship between market transparency and the achievement of the main objectives of IOSCO

IOSCO has three main objectives, which are: i.) protection of investors; ii.) ensuring that markets are fair, efficient and transparent; and iii.) the reduction of systemic risk. IOSCO intends to achieve the referred objectives by the definition of standards, supervision of markets, cooperation with regulators, as well as the issue of recommendations and principles of securities regulation[34].

In order to protect investors, IOSCO considers that market transparency is one of the most powerful strategies, because informed investors are able to evaluate the potential risks and benefits of an investment[35]. In order to promote market transparency, regulation should promote that investors have fair access to market facilities and the implementation of measures that promote a transparent price formation process. Moreover, applicable regulation should encourage the implementation of practices that promote equal treatment of orders as well as reliable price formation. In order to ensure an objective and reliable price formation, trading and material information should be published in a timely and widespread manner[36].

Taking into account the information provided previously in this section, trading transparency is a material issue for the achievement of IOSCO objectives, since the provision of information: i.) facilitates investors to assess potential losses and/or benefits of a specific investment[37]; and ii.) promotes transparency and reliability in the price formation process, because investors have an idea about market conditions before they enter into a transaction.

1.3. Trading environments in the European Union and Colombia

There is a huge gap between trading environments of the European Union and Colombia. One of the most relevant differences is the fact that the European Union has multiple stock exchanges to trade securities, whereas Colombia has only one stock exchange to trade securities. On the one hand, in the European Union there are one hundred and thirty-four[38] multilateral systems, which gather multiple third-party buying and selling interests in financial instruments[39]. On the other hand, in Colombia there is only one stock exchange to trade securities[40], since the other bourse is narrowed to the trade of commodities, which are not considered as securities by applicable regulation[41].

Taking into account the foregoing, the European Union has a market considerably more developed, since there is more competence among stock exchanges in the European Union, which is because investors and issuers have one hundred thirty-four options to choose the more convenient platform or platforms to list and consequently trade financial instruments. In contrast, Colombia has a monopoly in which one company supplies the services related with the trade of securities, and that firm is capable to charging whatever price it wants because investors and issuers do

33. Freyedon Ahmadi, The relationship between transparency and capital market efficiency in Iran Exchange market, (2015), at 112.

34. See IOSCO, supra note 6, at 1.

35. See IOSCO, supra note 1, at 10.

36. See IOSCO, supra note 1, at 11.

37. The performance of an investment is unpredictable, since it is not possible to forecast the future behavior of all the factors that determine the performance of an investment, such as monetary policies and new taxes among others.

38.(https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_upreg), last visited (28-10-2019).

39. European Parliament and Council, DIRECTIVE 2014/65/EU (MIFID II), Art. 4 No. 21.

40. Securities are defined by article 2 of the Law 964 of 2005 of the Republic of Colombia. A security is an economic right, derived from an massive emission, freely negotiable with the effect or purpose to collect resources from the public. If a financial instrument complies with the foregoing characteristics and its recognized by the Colombian Government, then it can be consider as a security.

41.(https://www.superfinanciera.gov.co/jsp/Publicaciones/publicaciones/loadContenidoPublicacion/id/61694/reAncha/1/c/00), last visited (28-10-2019).

not have alternatives to trade securities outside the only system available[42].

In consideration to the differences between both markets, it could be interesting to compare from the regulatory perspective the level of implementation of the IOSCO principle concerning trading transparency between the European Union and Colombia, since those markets are at a different stages of their development and have differences concerning the number of stock exchanges available to trade securities.

Section No. 2. IOSCO Principle "Regulation should promote transparency of trading" and the elements to assess its level of implementation.

In the first part of this section, we are going to examine the scope of the principle regarding market transparency, the criteria to assess different regulatory structures and some consideration to evaluate properly market transparency. In the second part, we are going to describe the key issues regarding the implementation of this principle. In the third part, we are going to provide the key questions established by IOSCO in order to evaluate the level of implementation of this principle. Finally, we are going to explain the benchmarks established to evaluate the level of implementation of this IOSCO principle.

2.1. Scope

2.1.1. The principle "Regulation should promote transparency of trading" is part of the secondary market principles of securities regulation

The principles concerning secondary market intend to achieve the main objectives of IOSCO agenda. Nonetheless, secondary market principles should be understood in a wide sense, it means that these principles include any facility used to trade securities, alternative trading systems, multilateral trading facilities, organized trading facilities and the platforms developed by the intermediaries. Additionally, these principles cover the trade of securities, debt and derivatives in which underlying assets are equity or commodities. Despite the foregoing, it is important to keep in mind that these principles do not apply to the initial offering of securities, nor the trade of derivatives over the counter, since those scenarios cannot be considered as secondary markets[43]. Although the broad scope, the methodology only applies to authorized stock exchanges and regulated trading venues[44], which are understood as platforms that gather a large number of investors interested to trade financial instruments[45].

IOSCO's principle concerning trading transparency aims to promote market integrity, hence this principle focuses on the analysis of the regulatory structure, in order to identify the means used by a specific jurisdiction to promote market transparency and provide trading information to market participants[46].

2.1.2. Criteria to evaluate a specific regulatory structure

In order to assess the appropriateness of the regulation to achieve the principles regarding secondary markets, it is recommendable to take into account some factors such as nature of the market, instruments traded, rights of access, degree of integration with other markets, and level of sophistication of the participants. The refereed circumstances define the characteristics of the adequate means to promote market transparency as well as an adequate price discovery process[47]. Additionally, the assessor should consider the internationalization of markets and the impact caused by technological developments[48].

Taking into account the foregoing, regulation might be different according to the characteristics referred to in the previous paragraph, thus the

42. (https://www.investopedia.com/terms/p/perfectcompetition.asp), last visited (28-10-2019).

43. See IOSCO, supra note 8, at 202.

44. As mentioned and explained in the introduction, this research focuses on the assessment of the level of implementation of IOSCO principle concerning the trading exclusively in stock exchanges, however the scope of this research has been extended just as far as necessary to answer the key questions regarding the level of trading transparency of dark orders.

45. See IOSCO, supra note 1, at 221.

46. IOSCO, Regulatory Issues Raised by the Impact of Technological Changes on Market Integrity and Efficiency, at 8 and 24 (2011).

47. See IOSCO, supra note 8, at 203.

48. See IOSCO, supra note 52, at 9.

assessment process should take into account the underlying rationale that justifies those differences. Hence, principles of securities regulation do not require a specific regulatory methodology, thus regulation can freely adopt the form of legislation, administrative rules, guidelines, equitable principles or best practices among other possibilities. Nonetheless, regulation should be enforceable in order to address properly the key questions[49].

During the assessing process, the evaluator should understand the specific differences of each jurisdiction as well as the underlying rationale of those differences, because in some cases there are some exemptions that can only be justified by the particular context of each jurisdiction. As a matter of fact, the cases in which it is possible to derogate transparency requirements, such as the large orders placed by institutional investors. Moreover, flexibility of regulation is according to the principles of securities regulation, since different regulatory methodologies are an appropriate approach to achieve the objectives across different environments[50].

2.1.3. Considerations to assess market transparency

Market transparency can be understood as the level to which trading information is made available to the public. The grade of transparency can be evaluated from the perspective of the deviation from the real-time standard, thus the assessor should evaluate the time elapsed between the occurrence of the event subject to disclosure and the revelation of the information to the public[51].

However, in jurisdictions where the gap between the occurrence of the event and the publication is reasonably short, then the evaluator should consider those facts as a probe of adequate market transparency. On the contrary, it could be considered as insufficient market transparency when there is a huge gap between the occurrence of the event and the information being made publicly available, since in those cases, investors will not be able to evaluate the trading information in order to make an investment decision. Taking into account the foregoing, regulated markets tend to provide and/or tolerate partial or total deviation from real time standards in specific circumstances[52], as we are going to elaborate in detail during the following section. For that purpose, jurisdictions implement different definitions of "*real time*", reduce the disclosure requirements for block transactions or adopt specific standards. In these cases, regulators should be certain that specific deviations are adequate to promote fairness, efficiency and transparency in each market structure[53].

Despite the foregoing, the establishment of transparency standards is not a straightforward process, since transparency levels can vary according to the particular interest of investors, for instance, investors' interest will be different if they act as market makers or on behalf of a retail investor. Furthermore, it is important to take into account that in some circumstances the implementation of transparency requirements can be considered as inconvenient for the execution of market transactions[54]. In consideration to the adverse effects derived from the inappropriate imposition of market transparency requirements, regulators should evaluate among others the particular market structure in order to determine the adequate level of market transparency requirements, otherwise the improper establishment of transparency requirements could lead to an inefficient price discovery process and market fragmentation as well as deterioration of investors' confidence[55].

The establishment of a derogation does not necessarily represent the obtaining of a lower benchmark, nonetheless it is required to document clearly the cases in which the derogation applies. The foregoing, in order to be transparent regarding the conditions and requirements set for the application of the derogation. As a matter of fact, when institutional investors are the most important participants in a specific market, the regulator should design transparency standards taking into account the impact of the large orders

49. See IOSCO, supra note 1, at 222.

50. See IOSCO, supra note 1, at 221.

51. See IOSCO, supra note 8, at 216.

52. See IOSCO, supra note 1, at 238.

53. See IOSCO, supra note 8, at 218.

54. IOSCO, Issues Raised by Dark Liquidity, at 11, 21 and 26 (2010).

55. IOSCO, Transparency and Market Fragmentation, at 4 and 5 (2001).

placed by those investors, since inappropriate treatment could lead to lower liquidity levels and an inefficient price formation process among other negative side effects[56].

However, the assessment process should take into account the structure of the markets assessed and the particular manner to address transparency in each jurisdiction[57]. Hence, the level of transparency and its derogation constitute a policy decision, since regulator needs to evaluate conflicts of interest among market participants and the best strategies to promote market transparency in those specific circumstances[58].

The bids and offers made by firms or non-firm quotes given by dealers are considered as part of pre-trade information subject to disclosure. However, the details about the scope of pre-trade information are defined by the regulator of each jurisdiction, since regulation must take into account particular circumstances of each market and jurisdiction[59]. In most of cases, pre-trade information is given to the public when securities are listed and traded on regulated markets, since requirements seem to be standard for the products traded on an specific stock exchange. Nonetheless, each jurisdiction has its own set of applicable rules concerning the provision of pre-trade information, thus trading information might be available with some particularities to members of a stock exchange or data subscribers, it all depends on the existing arrangements of each regulated market. Despite the differences among stock exchanges and jurisdictions, in most cases pre-trade information includes the price, size of orders, products identification and details of orders[60].

In relation with post-trade information, this kind of information is helpful to monitor the trade of securities as well as appropriate to identify market trends. If post-trade information is adequate, then the regulator should be able to assess the level of liquidity, volumes traded, risk concentrated by each market participant among other statistics. The data mentioned allows regulators to understand the particular conditions of each market, to spot the potential risks and to evaluate whether existing regulation requires some adjustments in order to achieve the desired objectives. Taking into account the foregoing, post-trade information requirements should include identification of the financial instrument, volume traded, indicator and the term provided for the clearance and settlement of the transaction[61].

2.2. Key issues

The key issues of the principle concerning "*Regulation should promote transparency of trading*" represent the objectives of regulation regarding trading transparency[62]. In particular, the key issues that we are going to assess are the following[63]:

2.2.1. Regulation of secondary markets should ensure prompt access to trading information. The provision of trading information concerning proposed or executed transactions in secondary markets allows investors to assess the possibilities and/or conditions in which they can trade a specific financial instrument. Furthermore, the provision of trading information reduces risks of manipulation and other manipulative behaviors, since trading transparency reduces the chances to manipulate the trading information provided to the public[64].

2.2.2. When regulation contains exemptions or derogation to the duties to provide trading information on a real time basis, it means as close to the real time standard. In those particular circumstances, the conditions or requirements to apply derogation should be transparent and objective. Despite the existence of derogation, regulation should ensure that regulators have access to trading information on a regular basis and by special request[65].

56. See IOSCO, supra note 1, at 239.

57. See IOSCO, supra note 1, at 239.

58. IOSCO, Transparency on Secondary Markets: A Synthesis of the IOSCO Debate, at 23 and 30 (1992).

59. See IOSCO, supra note 32, at 11.

60. See IOSCO, supra note 32, at 18 and 19.

61. See IOSCO, supra note 32, at 13.

62. See IOSCO, supra note 1, at 18.

63. See IOSCO, supra note 1, at 237.

64. See IOSCO, supra note 73, at 48.

65. IOSCO, Transparency of Structured Finance Products, at 25 (2009).

2.2.3. Regulation should promote market transparency by giving priority to transparent orders over dark orders[66]. Regulation should grant to the regulators the powers needed to monitor dark pools[67] and dark orders, since eventually those transactions can represent a threat to market transparency and stability[68].

2.2.4. Post-trade information must be made publicly available in equitable conditions to all market participants. The foregoing intends to give the same opportunities to investors to assess the information given so as to make an informed investment decision.

2.2.5. Taking into account the potential impact of dark pools and dark orders, regulators should have the powers needed to monitor the transactions executed in dark pool and derived from dark orders. Additionally, regulator should have the powers required to take action, if any is needed to prevent any bias or threat to market transparency or stability.

The key issues are useful to obtain a general appreciation of the existing regulation and its appropriateness to address the core concerns of the principle concerning trading transparency. Hence, the key issues referred to will be used as ancillary criteria to assess the level of implementation of the principle, since the main criteria are the key questions.

2.3. Key questions

The key questions are focus on the assessment of concrete aspects that are relevant in addressing the key issues in a specific jurisdiction. The key questions provided by IOSCO to assess the level of implementation of the principle "*Regulation should promote transparency of trading*", are the following:

"*1. Does the regulatory framework include:*

a. Requirements or arrangements for providing pre-trade (e.g., posting of orders) information to market participants?
b. Requirements or arrangements for providing post-trade information (e.g., last sale price and volume of transaction) to market participants on a timely basis?
c. Requirements or arrangements that information on completed transactions be provided on an equitable basis to all market participants?

2. Where derogation from the objective of real-time transparency is permitted:

a. Are the conditions clearly defined?
b. Does the market authority (being either, or both, the exchange operator and the regulator) have access to the complete information to be able to assess the need for derogation and, if necessary, to prescribe alternatives?
c. Does the regulator have access to adequate information to monitor the development of dark trading and dark orders?
d. Do transparent orders have priority over dark orders?
e. Do dark pools, and transparent markets that offer dark orders, provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed?[69]*"*

During the assessment process the evaluator must provide a "yes" or "no" answer to the key question[70]. Moreover, the answers will be narrowed to secondary market transactions executed at authorized stock exchanges, hence other trading venues are excluded as well as financial instruments that cannot be trade in stock exchanges[71]. Additionally, the assessment will be executed from the regulatory perspective, thus the conclusions of the research do not cover the assessment of the practical implementation of the principle concerning trading transparency.

66. See IOSCO, supra note 61, at 5 "A dark order refers to an electronic order that can be automatically executed and for which there is no pre-trade transparency"

67. See IOSCO, supra note 61, at 4 "A dark pool refers to any pool of liquidity that can be accessed electronically and provides no pre-trade transparency regarding the orders that are received by (i.e. reside in) the pool".

68. See IOSCO, supra note 1, at 238.

69. See IOSCO, supra note 1, at 238.

70. See IOSCO, supra note 1, at 16.

71. See IOSCO, supra note 1, at 221.

2.4. Specific benchmarks

After the provision of answers to the said key questions, the assessor will be in position to determine the assessment rating according to the benchmark specifically provided for by the principle regarding trading transparency. According to IOSCO the applicable benchmarks are[72]:

2.4.1. Fully implemented: the assessor can grant this benchmark when all the answers are positive.

2.4.2. Broadly implemented: this benchmark can be granted when most answers are positive except for question 2(c) (i.e. monitoring of dark trading or dark orders) and/or question 1(a) (i.e. requirements or arrangements for the provision of pre-trade information).

2.4.3. Partly implemented: the evaluator can grant this benchmark when most answers are affirmative, except for questions 1(a) (i.e. requirements or arrangements for the provision of pre-trade information), 2(c) (i.e. monitoring of dark trading or dark orders), 2(d) (i.e. priority of transparent orders) and 2 (e) (i.e. provision of information regarding dark pools and dark orders). Additionally, it requires negative answer to questions 1(b) (i.e. requirements or arrangements for the provision of post-trade information) and 1(c) (i.e. equitable provision of data), since post-trade information is not provided in the same conditions to all market participants.

2.4.4. Not implemented: assessor must provide this benchmark when it is not possible to answer affirmatively to questions 1(a) (i.e. requirements or arrangements for the provision of pre-trade information), 1(b) (i.e. requirements or arrangements for the provision of post-trade information), 1(c) (i.e. equitable provision of data), 2(a) (i.e conditions for the application of derogation) and 2(b) (authority access to information).

72. See IOSCO, supra note 1, at 240.

Section No. 3. Application of the methodology to assess the level of implementation of the principles of securities regulation in the European Union and Colombia

In this section we are going to answer the key questions concerning the level of implementation of the principle "*Regulation should promote transparency of trading*", for that purpose, we are going to describe and analyze the regulatory framework of the European Union and Colombia. Additionally, we are going to determine the resulting benchmark according to the answers to the key questions.

3.1. Assessment of the European Union

3.1.1. Answers to the key questions

3.1.1.1. Does the regulatory framework includes:

3.1.1.1.1. Requirements or arrangements for providing pre-trade information to market participants?

The answer is yes. Regulation of the European Union grants to the market participants access to appropriate pre-trade information concerning orders placed by market participants. Additionally, investment firms and stock exchanges keep extensive records[73] of data regarding orders and transactions executed, as we will explain in the following paragraphs.

In relation to the trade of shares, depositary receipts, exchange-traded funds, certificates and other similar financial instruments (Equity Instruments), stock exchanges shall make publicly available the current bid and offer prices as well as the depth of trading interest concerning mentioned prices. The information referred to must be published through the negotiation system

73. The records must be maintained according to the parameters set by: i.) Commission Delegated Regulation (EU) 2017/580 "Supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments"; and ii.) the "Guidelines Transaction reporting, order record keeping and clock synchronisation under MiFID II".

on a continuous basis during trading hours. Additionally, stock exchanges shall give access, on prudent commercial terms and on equal conditions, to the arrangements implemented to make publicly available the information mentioned[74].

Regarding the trade of bonds, structured finance products, emission allowances and derivatives (Non-equity Instruments); stock exchanges shall make publicly available the current bid and offer prices as well as the depth of trading interest of the prices mentioned. Nonetheless, the publication of pre-trade information does not apply to derivative transactions of non-financial counterparties, since those transactions are oriented to reduce risk derived from commercial activities[75].

Moreover, stock exchanges shall give access, on prudent commercial terms and on equal conditions, to the arrangements implemented to be made publicly available. Nonetheless, in the cases in which a waiver is granted according to Article 9(1)(b) of Regulation (EU) No 600/2014 (MIFIR)[76], it is important to make publicly available the indicative pre-trade bid and offer prices that are close to the price of the trading interest published through the trading system[77].

3.1.1.1.2. Requirements or arrangements for providing post-trade information to market participants on a timely basis?

The answer is yes. Applicable regulation provides that market participants should have access to appropriate post-trade information concerning transactions executed. Additionally, stock exchanges keep extensive records[78] of data regarding transactions executed, as we will explain in detail during the next paragraphs.

Concerning post-trade transparency stock exchanges shall make publicly available, as close to real-time as is possible, some details of the transactions executed, such details are price, volume and time of the transactions executed at a stock exchange[79]. Moreover, investment firms and systematic internalisers that conclude transactions on their own account and/or on behalf of their clients, should make publicly available the information of each transaction trough the Approved Publication Arrangement (APA), the publication shall include volume and price of the transactions as well as time of execution. Furthermore, investment firms directly (self-reporting)[80] or indirectly (assisted reporting)[81] have the duty to report[82] to the competent authority complete and accurate information concerning the details of the transactions concluded, this report should be transmitted as soon as possible, but no later than the end of the following business day.

The reports submitted by investment firms to competent authorities shall contain the following information: i.) names and numbers of the financial instruments, ii.) the quantity traded, iii.) dates and time of execution, iv.) transaction prices, v.) information of the client on whose behalf the order was executed, vi.) information necessary to identify the person and the computer algorithms responsible for the investment decision and the execution of the order, vii.) information needed to identity the waiver applicable to the transaction, viii.) data to identify the investment firm, and ix.)

74. European Parliament and Council, REG (EU) No 600 (2014) (MIFIR), Art. 3(1)(2).
European Parliament and Council, DIRECTIVE 2004/39/EC (MIFID I), Art. 44, 27 and 29.

75. MIFIR, Art. 8(1).

76. This waiver refers to actionable indications of interest in request for quote and voice trading systems that are above a size specific to the financial instrument.

77. MIFIR, Art. 8(3)(4).

78. The records must be maintained according to the parameters set by: i.) Commission Delegated Regulation (EU) 2017/580 "Supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments"; and ii.) the "Guidelines Transaction reporting, order record keeping and clock synchronisation under MiFID II".

79. MIFIR, Art. 6(1) and 10(1).

80. Association for Financial Markets in Europe and KPM, MiFID II / MiFIR post-trade reporting requirements, (2017), at 22 and 23.

81. MIFIR, Art. 26(7) "The reports shall be made to the competent authority either by the investment firm itself, an ARM acting on its behalf or by the trading venue through whose system the transaction was completed".

82. The reports must be presented according to the parameters established by: i.) the Commission Delegated Regulation (EU) 2017/590 "Supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the reporting of transactions to competent authorities"; and ii.) the "Guidelines Transaction reporting, order record keeping and clock synchronisation under MiFID II".

designation to spot a short sale[83]. Moreover, stock exchanges have the duty to report the transactions executed by firms that are exonerated from the duty to report[84].

Despite the foregoing, in special circumstances investment firms are authorized to: i.) omit the publication of post-trade information, ii.) defer the publication of information[85], iii.) provide just limited details of executed transactions, iv.) publish details of various transactions as a whole, or v.) a combination of the previous strategies to comply with the duty to make post-trade information publicly available[86].

Finally, ESMA has amplified the scope of the duty to provide post-trade information, for instance this authority considers that some derivatives transactions must comply with the requirements regarding the provision of post-trade information, even if those transaction are concluded outside the traditional trading venues[87].

3.1.1.1.3. Requirements or arrangements that information on completed transactions be provided on an equitable basis to all market participants[88]?

The answer is yes. In the first place, stock exchanges have the duty to ensure non-discriminatory access to trading information, free of charge and available within fifteen minutes after publication[89]. The previous duties ensure that stock exchanges will provide post-trade information on an equitable basis to market participants.

Moreover, stock exchanges shall develop arrangements to monitor the compliance of the rules by members, participants or users of that regulated market. The purpose of the monitoring procedure is to identify infringements of applicable rules, in order to inform the competent authorities of each member state of the situation[90].

In the same way, stock exchanges have transparent and non-discretionary systems in order to ensure orderly trading and the establishment of objective criteria for the efficient conclusion of transactions[91]. The foregoing promotes the establishment of arrangements that ensure equal treatment and fair access to post-trade information for all market participants.

Furthermore, stock exchanges shall make publicly available pre-trade and post-trade information separately[92]. This separation ensures that the publication of post-trade information will not be affected by the publication of pre-trade information, since the publication of post-trade information is independent and must be made under equal conditions to the public in general.

Finally, it is important to remember that stock exchanges have the duty to make publicly available the price, volume and time of execution of transactions. Moreover, stock exchanges shall grant access, on prudent commercial terms and on equal conditions, to the arrangements implemented to make post-trade information publicly available[93].

3.1.1.2. Where derogation from the objective of real-time transparency is permitted:

3.1.1.2.1. Are the conditions clearly defined?

The answer is yes. The European Union has a common legal framework for waivers concerning the disclosure of trading information, in the following paragraphs we are going to explore the waivers regarding pre-trade and post-trade information[94].

83. European Parliament and Council, Regulation (EU) No 236/2012 (Regulation on short selling), Art. 2(1)(b).

84. MIFIR, Art. 26(3)(5).

85. Waivers regarding the revelation of post-trade information are described in section 3.1.1.2., infra.

86. MIFIR, Art. 21(4).

87. ESMA, OPINION OTC derivatives traded on a trading venue, (2017), at 3.

88. See section 2.2.4 of this research.

89. MIFIR, Art. 13(1).

90. MIFID II, Art. 31(1)(2)(3).
MIFID I, Art. 26 and 39.

91. MIFID II, Art. 47(d).

92. MIFIR, Art. 12(1).

93. MIFIR, Art. 6(2) and 10(2).

94. Financial Conduct Authority, Markets in Financial Instruments Directive II Implementation - Consultation Paper I, (2015) at 20.

In relation to the publication of pre-trade information regarding Equity Instruments, competent authorities are allowed to waive the publication of information for: i.) systems that match orders based on a reference price[95]; ii.) systems that formalise negotiated transactions, iii.) orders that are large in comparison with market size; iv.) orders pending disclosure that are held by an order management facility of a trading venue[96]. Before the implementation of a waiver competent authorities must notify ESMA and any other competent authorities involved about the use and functioning of the waiver.

Moreover, competent authorities are allowed to withdraw or suspend the implementation of a waiver when it is: i.) used with a different purpose; ii.) the waiver is implemented to avoid the compliance of existing regulation; or iii.) the amount traded under the waiver exceeds the caps established by the regulator, in these cases competent authorities must notify ESMA and any other competent authorities[97].

However, the regulator establishes caps for the use of waivers granted to systems that match orders based on a reference price, and systems that formalise negotiated transactions, in order to prevent unduly harmful price formation. Hence, the percentage of a financial instrument traded in a trading venue under a waiver cannot exceed 4% of the aggregate volume traded of that specific financial instrument in the entire European Union within the previous twelve months. At the same time, the aggregate of a financial instrument in the European Union traded under the waivers cannot exceed 8% of the overall volume of the trading in that specific financial instrument across the European Union during the previous twelve months[98].

Regarding the publication of pre-trade information concerning Non-equity Instruments, competent authorities are allowed to grant waivers for: i.) large orders in comparison with market size, ii.) orders pending disclosure that are held by a management facility of a trading venue, iii.) derivatives that are excluded from the trading obligation, iv.) voice trading systems, and v.) actionable indications of interest in request-for-quote. In these cases, the competent authority shall notify ESMA and other competent authorities involved about the functioning of the waiver at least four months before its implementation[99].

From the perspective of post-trade information, competent authorities are able to authorize investment firms and stock exchanges to defer the publication of post-trade information concerning the trade of Equity Instruments[100], specially for transactions that are large in comparison with market size. In this case, investment firms and stock exchanges should obtain previous approval from the competent authorities and disclose those arrangements to the public and market participants[101].

In relation with the publication of post-trade information regarding transactions that involve Non-equity Instruments, competent authorities are allowed to authorize the deferred publication of information for: i.) transactions that are large in scale in comparison with market size; ii.) transactions concerning Non-equity Instruments for which there is not a liquid market; iii.) transactions that exceed the size for a specific Non-equity Instrument; and iv.) transactions that involve instruments with potential to expose liquidity providers to unnecessary risk. In these circumstances, investment firms and stock exchanges should obtain the approval for deferred publication beforehand and should disclose those arrangements to the market participants. Despite the foregoing, the competent authorities are able to suspend the waiver when the levels of liquidity of that financial instrument fall beneath the defined threshold[102].

ESMA considers that it is necessary to calibrate the level of trading transparency according to the different types of financial instruments, trading venues and types of trading (order-book/ quote-driven/ hybrid/ periodic auction)[103]. In consequence, the waivers granted by the

95. MIFIR, Art. 4(2).

96. MIFIR, Art. 4(1).

97. MIFIR, Art. 4(4)(5) and 5(2)(3).

98. MIFIR, Art. 5(1).

99. MIFIR, Art. 9(1)(2).

100. Financial Conduct Authority, Markets in Financial Instruments Directive II Implementation - Consultation Paper I, (2015) at 23.

101. MIFIR, Art. 9(1)..

102. MIFIR, Art. 11(1)(2).

103. ESMA, Discussion Paper MiFID II/MiFIR, (2014), at 48.

regulation are part of the measures implemented to calibrate adequately the level of trading transparency according to the type of financial instrument. Moreover, these waivers prevent the appearance of some of the negative effects of trading transparency.

3.1.1.2.2. Does the market authority (being either, or both, the exchange operator and the regulator) have access to the complete information to be able to assess the need for derogation and, if necessary, to prescribe alternatives?

The answer is yes. As a matter of fact, competent authorities shall notify ESMA and other competent authorities before the implementation of a waiver. After the notification, ESMA has two months to provide a non-binding opinion concerning the applicability of the waiver. Nonetheless, if a competent authority does not agree with the implementation of the waiver and the opinion given by ESMA, that competent authority shall refer the question back to ESMA, which may settle the disagreements between competent authorities in cross-border situations according to the provisions set in article 19 of Regulation (EU) No 1095/2010. The regulator established the same procedure for disagreements regarding the authorization for the deferred publication of information[104].

3.1.1.2.3. Does the regulator have access to adequate information to monitor the development of dark trading and dark orders?

The answer is yes. The regulator has access to the information needed to monitor the development of dark trading and dark orders, since obligations concerning the provision of trading information are applicable to all kinds of orders and there are special provisions regarding high-frequency algorithmic trading (used to place dark orders)[105]. Additionally, investment firms have the duty to keep at the disposal of competent authorities the relevant data concerning orders executed during the last five years. Hence, competent authorities have access to all the information including dark orders and dark trading[106].

In addition, investment firms have the duty to report to the competent authority all the details concerning the transactions executed, the report shall be made no later than the end of the following business day. This information can be shared with ESMA by request[107]. In particular, reports should include the identification of the financial instrument, quantity traded, dates and times of execution, price of the transaction, identification of the client, the data needed to identify the person and the computer algorithms responsible for the investment decision and the execution of the transactions[108].

3.1.1.2.4. Do transparent orders have priority over dark orders?

The answer is yes. Transparent orders have priority in terms of applicable fees (execution and ancillary). As a matter of fact, regulated markets are allowed to impose higher fees for market participants that place an order and then cancel the order. Additionally, regulated markets are able to impose a higher fee to market participants that operate a high-frequency algorithmic trading (use to place dark orders), since it represents an additional effort of the trading platform for the processing of a high number of orders[109].

3.1.1.2.5. Do dark pools, and transparent markets that offer dark orders, provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed?

The answer is yes. Investment firms have the duty to provide investors and potential clients with fair, clear and unmisleading information.

104. MIFIR, Art. 4(4), 7(1) and 9(2).

105. The high-frequency algorithmic trading is closely related to the placement of dark orders, since it is commonly used to implement some trading strategies that involves dark orders, such as pinging (the placement of small orders in order to discover hidden large orders) or predatory trading (placing orders ahead of the large orders placed on stock exchanges) among others. This information is available in (https://www.investopedia.com/articles/active-trading/042414/youd-better-know-your-highfrequency-trading-terminology.asp), last visited (28-10-2019).

106. MIFIR, Art. 25(1)(2).

107. MIFIR, Art. 26(1)(2).

108. MIFIR, Art. 26(3).

109. MIFID II, Art. 48(9).

Hence, provision of information includes the supply of detailed information about the intermediary, services provided[110], trading venue and related charges[111].

Furthermore, it is important to remember that investment firms engaged in high-frequency algorithmic trading (used to place dark orders) have to provide a periodical description of their algorithmic trading strategies, limits of the system, risk controls and trading parameters[112]. Moreover, competent authorities are able to request information related to algorithm trading when they consider that is necessary[113].

3.1.2. Benchmark obtained

Taking into account that all the answers were positive and the information provided in section 2.4.1 was completed, the benchmark obtained is *Fully Implemented*. Despite the relevance of existing regulation, it is important to take into account that the material level of trading transparency depends among others on the appropriateness of the regulation implemented by each member state of the European Union. Hence, the consequences of trading transparency might be uncertain before the implementation and enforcement of European regulation in each member state[114].

3.2. Assessment of Colombia

3.2.1. Answers to the key questions

3.2.1.1. Does the regulatory framework includes:

3.2.1.1.1. Requirements or arrangements for providing pre-trade information to market participants?

The answer is yes. The Colombian regulator establishes some requirements prior to the negotiation of securities[115]. As a matter of fact, before and during the negotiation of securities, the stock exchanges should reveal to investment firms and market participants the amounts, prices of trade, bids, current orders and time of receipt of orders. At the same time, stock exchanges should implement the use of electronic devices[116] to make publicly available all the information related with securities, amounts, prices, transactions, best bids for sale or purchase[117].

Furthermore, the provision of pre-trade information applies in the same conditions to Equity Instruments and Non-equity Instruments, since the duty to disclose pre-trade information is binding for all the securities traded in stock exchanges. However, pre-trade information is anonymous for participants of the trading platform of the stock exchange, but not for competent authorities, since the supervisor should have access to all the information needed to monitor properly the market and prevent any possible risk or distortion[118].

3.2.1.1.2. Requirements or arrangements for providing post-trade information to market participants on a timely basis[119]?

The answer is yes. After the execution[120] of a transaction that involves securities, stock exchanges should inform immediately investment firms, self-regulated entities, investors and the public in general about the price, size of the transaction, time of execution and securities

110. E.g. mechanisms and procedures established to execute orders.

111. MIFID II, Art. 24(3)(4).

112. MIFID II, Art. 28.

113. MIFID II, Art. 17(2).

114. Jesper Ulriksen Thuesen, Transparency in Capital Markets, (2004), at 75.

115. Congress of Colombia, Law 964 of 2005 (Capital Markets Law), Art. 2. This article contains the definition of securities.

116. The stock exchange has freedom to select the electronic device or devices that will use to provide the information to market participants. Nonetheless, the device or devices must be adequate to reveal the information to market participants. In most of cases, the stock exchange upload the reports in its webpage. The link is the following: (https://www.bvc.com.co/pps/tibco/portalbvc/Home/Mercados/boletines?action=dummy), last visited (28-10-2019).

117. Government of Colombia, Decree 2555 of 2010 (Unique Decree), Art. 2.10.5.2.14.

118. (http://pubdocs.worldbank.org/en/663201442255954397/FS-Gemloc-PGD-May32011-E-tradingComparisonTables-final.pdf), last visited (28-10-2019).

119. See page 16 of this research.

120. The stock exchange provides the information after the execution of the transaction, which is reasonable close to the referred real time standard.

involved. Additionally, stock exchanges shall provide information to the public concerning the opening price, average price, maximum price, closing price, reference price, size of the transactions, and number of transactions of each financial instrument, the aforementioned information must be provided on a daily basis and individually concerning each financial instrument listed in the stock exchange[121].

Furthermore, investment firms and market intermediaries should include in their internal policies and procedures that the provision of information concerning transactions executed must be transmitted to stock exchanges and systems incharge of the registration of transactions[122].

3.2.1.1.3. Requirements or arrangements that information on completed transactions be provided on an equitable basis to all market participants?

The answer is yes. Since pre-trade and post-trade information must be provided under the same terms and conditions to market participants. Hence, omissions or the inadequate publication of pre-trade and post-trade information might be considered as a breach of the rules concerning the publication of trading information[123].

Furthermore, the publication of trading information is considered by regulation as a requirement to ensure market transparency. Thus, information concerning prices, amounts and transactions executed must be made publicly available[124] in order to promote informed decision making[125]. Additionally, stock exchange has the duty to implement transparent procedures for the execution of transactions, as well as the use of methods adequate to ensure the publicity of bids and offers received by the stock exchange[126].

Moreover, the stock exchange bylaw provides that the market operator shall publish on a daily basis a report of transactions executed, the prices and bids presented for the sale or purchase of securities. In addition, the reports published by the stock exchange should contain all the information that is relevant for market participants[127].

3.2.1.2. Where derogation from the objective of real-time transparency is permitted:

There is no derogation regarding the publication of trading information, as we are going to explain in the following section.

3.2.1.2.1. Are the conditions clearly defined?

Before the execution of orders, there is a derogation concerning the inclusion of specific orders in the internal record of the investment firm (*Libro Electrónico de Órdeness - LEO*)[128]. The derogation provides that intermediaries have the discretion to include some orders before or afterwards the trade depending on the type of client[129], the size of the transaction and the method used to verify the transmission of orders[130].

Despite the foregoing, the derogation concerning the inclusion of orders in the internal record of investment firms, does not constitute a derogation of the duty of the stock exchanges to provide pre-trade and post-trade information to the public in general, since the stock exchange will divulge all the trading information available before and after the execution of orders. Thus, the stock exchange will make publicly available all the information concerning the orders that were not included initially in the records of the investment firm[131].

3.2.1.2.1. Does the market authority (being either, or both, the exchange operator and the regulator) have access to the complete information

121. Unique Decree, Art. 2.10.5.2.15.

122. Financial Superintendence of Colombia, External Circular No. 029 of 2014 (Supervisor Legal Circular), pt. III, title III, ch. 2, No. 2.8.

123. Unique Decree, Art. 2.10.5.2.14 and 2.10.5.2.15.

124. See section 3.2.1.1.2 of this research.

125. Unique Decree, Art. 2.10.5.2.13 and 2.10.5.2.14.

126. Unique Decree, Art. 2.10.5.2.4(B).

127. Stock Exchange of Colombia, Bylaws, Art. 1.2.1.2 (2019).

128. Supervisor Legal Circular, pt. III, title III, ch. 2, No. 2.2.

129. E.g. institutional investor, professional investor or retail investor

130. Supervisor Legal Circular, pt. III, title III, ch. 2, No. 2.7.

131. Unique Decree, Art. 2.10.5.2.14 and 2.10.5.2.15.

to be able to assess the need for derogation and, if necessary, to prescribe alternatives?

This question is not applicable, since there is not derogation regarding the publication of pre-trade and post-trade information.

3.2.1.2.3. Does the regulator have access to adequate information to monitor the development of dark trading and dark orders?

The answer is yes. It is important to take into account that there is no derogation concerning the provision of pre-trade or post-trade information, hence there is no room for dark orders nor dark pools. Nonetheless, existing regulation is adequate to address the key question, since it already provides the supervisor with the powers required to monitor the adequate development of possible dark trading and dark orders[132].

The foregoing is possible taking into account that investment firms and intermediaries among others have the obligation to keep records regarding the orders and transactions executed, since the documents that support those orders and transactions can be required at any time by the supervisor, self-regulatory entities and/or investors[133].

3.2.1.2.4. Do transparent orders have priority over dark orders?

The answer is yes. The regulation of Colombia doesn't provide derogation concerning the provision of pre-trade and post-trade information, hence there is no room for dark orders nor dark pools. However, current regulation is appropriate to address properly the key question, as we are going to explain.

Existing regulation provides certain limits regarding the number of orders that can be placed by market participants using high-frequency algorithmic trading (used to place dark orders). In consequence, market participants are not allowed to place as many dark orders as wanted using high-frequency algorithmic trading.

As a matter of fact, investment firms and intermediaries using high-frequency algorithmic trading are allowed to place between five and fifty orders per second. In consequence, if investment firms or intermediaries ignore the limit of the number of orders that can be transmitted per second, then the administrator of the trading platform will disconnect that intermediary or investment firm from the trading platform and the orders will not be processed[134].

According to the internal regulation, the market operator can ignore orders that trespass the number of orders that can be transmitted per second by intermediaries or investment firms. In these circumstances, transparent orders would have prevalence over possible dark orders placed by investment firms or intermediaries using high-frequency algorithmic trading, since in most of cases transparent orders would not trespass the limit established.

3.2.1.2.5. Do dark pools, and transparent markets that offer dark orders, provide market participants with sufficient information so that they are able to understand the manner in which their orders are handled and executed?

The answer is yes. The regulation of Colombia doesn't provide derogation concerning the provision of pre-trade or post-trade information, thus there is no room for dark orders nor dark pools. Notwithstanding, existing regulation is adequate to address the key question, because the regulator and market participants have access to the information needed to understand adequately the manner in which possible dark orders could be handled and executed.

Furthermore, it is important to point out that investment firms and intermediaries have the duty to provide investors with all the information regarding the procedure established to handle orders, including orders placed using high-frequency algorithmic trading (used to place dark orders)[135]. Moreover, investment firms and

132. The Government of Colombia, Organic Statute of the Financial System of 1993, Art. 96.

133. Unique Decree, Art. 7.3.1.1.2.

134. Stock Exchange of Colombia, Legal Circular (Stock Exchange Circular), at 387, 392 and 397 (2019).

135. Supervisor Legal Circular, pt. III, title III, ch. 2, No. 1.3.

intermediaries have the duty to keep records of the orders and transactions executed, since the documents that support those orders can be required at any time by investors and competent authorities[136].

Moreover, the regulator established that the investor should have the powers needed to control the information used by traders that use high-frequency algorithmic trading to place orders on their behalf, since transactions executed by algorithms must be consistent with the boundaries set before by investors. The foregoing in order to prevent the placement of orders that are inconsistent in relation with the parameters and boundaries established by investors[137].

3.2.2. Benchmark obtained

Taking into account that all the answers were positive and the information provided in section 2.4.1 was complete, the benchmark obtained is *Fully Implemented*. Nonetheless, it is desirable to consider the possibility to improve even more the level of market transparency, since in the past it has been identified as an obstacle for the adequate development of capital markets in Colombia[138].

Section No. 4. Conclusions:

The assessment process is considered to be a tool to identify gaps, inconsistencies, weaknesses and specific issues in which it could be required to extend or modify the regulation concerning the powers of the supervisors of capital markets. Despite the fact that new topics could have been developed during the assessment[139], the evaluation process was narrowed to the scope of the principle concerning "*Regulation should promote transparency of trading*" plus the specific point at the time of the evaluation.

Furthermore, the key questions were answered as "Yes" or "No" question. Moreover, the answers given elaborated the underlying reasons that support the final answer based on the existing legal framework of the European Union and Colombia. In most cases, assessor exercised judgement in order to evaluate the materiality of any weakness. As a matter of fact, in this research the assessor was required to exercise judgement so as to determine the existence of derogations concerning trading transparency in Colombia and the priority of transparent orders over dark orders among others[140].

After the analysis, it is important to point out that there is no difference regarding the level of implementation of IOSCO's principle "*Regulation should promote transparency of trading*", since this principle has been *Fully Implemented* in the European Union and Colombia. The assessment of the level of implementation was made taking into account the differences related to the level of development of capital markets as well as the legal structure of the European Union and Colombia. Moreover, the determination of the benchmarks obtained is based on the general appreciation of existing regulation, since the exercise of judgement was required to give an answer to some of the key questions.

As part of the conclusion it is possible to elaborate some recommendations to re-calibrate, prevent the appearance of the negative effects of trading transparency or improve even more the already satisfactory level of implementation of the principle regarding trading transparency.

The recommendations and conclusions are as follows:

4.1. Recommendations and conclusions regarding the publication of pre-trade information:

The regulator of each jurisdiction should define the details about the scope of pre-trade information, since regulation should be consistent with the particular circumstances of each market and jurisdiction.

On the one hand, European Union regulation grants access to appropriate pre-trade information concerning orders placed by market participants.

136. Unique Decree, Art. 7.3.1.1.2.

137. Stock Exchange Circular, at 398.

138. Rojas, Carlos and Gonzales, Alejandro, Mercado de Capitales en Colombia: Diagnostico y Perspectivas de su Marco Regulatorio, (2008), at 10.

139. E.g. dark pools, market fragmentation, and practical effectiveness of existing regulation among others.

140. See sections 3.2.1.2.1., 3.2.1.2.2. and 3.2.1.2.4, supra.

Moreover, existing regulation differentiates between the publication of pre-trade information depending on the financial instrument[141], which is appropriate to fulfill IOSCO's objectives[142], since it takes into account the environment, type of financial instrument and the level of development of European markets.

On the other hand, the stock exchange of Colombia has the duty to reveal to investment firms and market participants the amounts, prices of trade, bids, current orders and time of receipt of orders. Nonetheless, the regulator of Colombia does not differentiate the characteristics of the publication of trading information according to the financial instrument traded (e.g. Equity Instruments and Non-equity Instruments), which could lead to some of the negative consequences of inadequate trading transparency. For instance, the increase of trading costs, the lack of incentives to enter into capital markets transactions or a decrease of the number of transactions among others[143].

Taking into account the foregoing, it may well be that the Colombian regulator should consider the possibility to commissioning a report in order to determine if it is necessary to establish different regimes concerning the publication of pre-trade information, since the publication of trading information should be tailor made for Equity Instruments and Non-equity Instruments. Moreover, the European Union and Colombia should consider the possibility to evaluate from an empirical perspective the appropriateness of the information provided to market participants, since regulation must strive to promote the provision of complete and useful information to make investment decisions.

4.2. Recommendations and conclusions concerning the publication of post-trade information:

IOSCO recommends the implementation of post-trade transparency requirements according to the particular conditions of each market and jurisdiction. However, the publication of post-trade information should include identification of the financial instrument, volume traded, indicator and the term provided for the clearance and settlement of the transaction. As we described before, both the European Union and Colombia comply with the requirements regarding the publication of post-trade according to IOSCO's parameters[144]. Indeed, it is important to point out that applicable regulation concerning the publication of post-trade information is quite similar in the European Union and Colombia, despite the differences between the levels of development of the trading environments.

However, the European Union and Colombia should consider the possibility to commissioning a report in order to determine if the quality and the quantity of the information is appropriate to make informed investment choices, since there is some evidence that market participants require more information in order to make informed decisions. Additionally, the European Union should consider the possibility to improve the procedures to promote the timely exchange information among competent authorities, since this exchange is essential for the adequate monitoring of capital markets[145].

4.3. Recommendation and conclusions in relation with the provision of information regarding completed transactions on an equitable basis to all market participants:

In the European Union, stock exchanges have the duty to make publicly available the price, volume and time of execution of transactions. Additionally, stock exchanges shall grant access to market participants concerning the arrangements implemented to make post-trade information publicly available[146].

In Colombia pre-trade and post-trade information must be provided to the public under the same terms and conditions to all market participants. Thus, omissions or the inadequate publication of pre-trade and post-trade information might be consider as a breach of the

141. E.g. equity and non-equity instruments
142. See section 3.1.1.1.1, supra.
143. See section 3.2.1.1.1, supra.
144. See sections 3.1.1.1.2 and 3.2.1.1.2, supra.
145. See section 3.1.1.1.2., supra.
146. See section 3.1.1.1.3, supra.

dispositions concerning the provisions of trading information[147].

In this case, Colombian regulation seems to be stringent, which is a good sign taking into account that mandatory transparency may have a stronger impact in less liquid markets. Hence, the provision of pre-trade and post-trade information may reduce uncertainty and price dispersion especially in Colombia, since its capital market is considerably less liquid in comparison with the market of the European Union.

4.4. Recommendation and conclusions concerning the implementation of waivers:

The implementation of a derogation by the regulator of the European Union does not necessarily represent the obtaining of a lower benchmark, since the regulator documented the cases in which the derogation applies, clarified the exemption as well as the procedure to benefit from the exemption. Additionally, the European regulator has access to the information that is needed to evaluate the convenience of the derogation and competent authorities are able to formulate alternatives concerning the application of a waiver[148]. Taking into account the foregoing, the regulator of the European Union encourages equal treatment among market participants, since the exemptions are granted in a transparent and fair way to individuals in similar conditions, thus the conditions have been clearly an objectively defined.

On the other hand, the regulator of Colombia does not contemplate the implementation of waivers concerning the provision of trading information[149], which can be considered as inconvenient for the execution of market transactions. As a matter of fact, the imposition of pre-trade information requirements to qualified institutional buyers such as pension funds might have a considerable negative impact on the price formation process in Colombia, because the early disclosure of large orders might lead to speculation among investors as well as a rise of volatility and market uncertainty.

Taking into consideration the foregoing, the Colombian regulator should consider the possibility of establishing waivers regarding trading transparency for transactions that could lead to speculation, rise of volatility and uncertainty among market participants, such as the large orders placed by institutional investors. Otherwise, large orders in comparison with the normal size of the market could jeopardize market stability and/or provoke some of the negative consequences derived from the implementation of inadequate levels of trading transparency. Additionally, the regulator of Colombia should take into account that the implementation of waivers and the adequate calibration of transparency promote an efficient price formation process, higher levels of liquidity, and provide the information needed by investors to make informed trading decisions.

4.5. Recommendation concerning the monitoring of dark orders

In consideration to the potential impact of dark pools and dark orders, regulators should have the powers needed to monitor the transactions executed in the dark pool and derived from dark orders. The monitoring of dark pools and dark orders is considered as a strategy to prevent any adverse effect on market efficiency and/or transparency of the price formation process.

In the European Union the regulator has access to the information needed to monitor the development of dark trading and dark orders, since obligations concerning the record of trading information are applicable to all kinds of orders and there are special provisions regarding high-frequency algorithmic trading (used to place dark orders). Additionally, investment firms and market operators have the duty to keep at the disposal of competent authorities the relevant data concerning orders executed.

Furthermore, investment firms engaged in high-frequency algorithmic trading have to notify the competent authorities about their intention to implement that kind of trading. Afterwards, investment firms must provide periodically a description among other things, of algorithmic

147. See section 3.2.1.1.3, supra.

148. See sections 3.1.1.2.1. and 3.1.1.2.2, supra.

149. See sections 3.2.1.2.1. and 3.2.1.2.2, supra.

trading strategies, limits of the system, risk controls and trading parameters[150].

Despite that in Colombia there is no room for dark orders; existing regulation already provides the supervisor with the powers needed to monitor the adequate development of possible dark trading and dark orders. The foregoing is possible, taking into account that investment firms have the duty to preserve the record of the transactions executed[151]. Nonetheless, the Colombian regulator should consider the possibility to implement special requirements regarding the operation of high frequency algorithm trading, since this kind of trading is used to place dark orders and requires more stringent measures to monitor properly the placement and execution of orders.

4.6. Recommendation concerning the priority of transparent orders over dark orders:

According to IOSCO, regulators may consider the possibility of imposing limitations or restrictions to dark orders, in order to encourage market participants placing transparent orders. Some of the restrictions that can be considered by the regulator are execution priority to transparent orders and limited scope for pre-trade transparency exemptions.

The European Union gives preference to transparent order in terms of the applicable fee, since the fee charged for transparent orders is lower in comparison with the fee charged for the placement of dark orders. In Addition, the European Union has established some caps concerning the volume of the transactions executed under the waivers regarding pre-trade information, the foregoing in order to prevent the trade of volumes that have the potential to jeopardize the market stability and integrity[152].

In contrast, in Colombia there is no room for dark orders, but transparent orders might have priority in terms of the number of orders that can be placed on a trading platform. The foregoing is enough to control the volume of possible dark orders that are placed, since the aggregate volume of dark orders may not exceed the limits established[153]. Nonetheless, existing regulation does not have persuasive tools to discourage the placement of dark orders nor specific regulation concerning this type of orders. Hence, the regulator of Colombia should consider the possibility to regulate dark orders as well as implementing tools that discourage market participants to place dark orders, for instance the imposition of higher fees or additional requirements to operate robots or algorithms that place the dark orders.

4.7. Recommendation and conclusions regarding the provision to market participants with sufficient information so that they are able to understand the manner in which dark orders are handled and executed

In the case of the European Union, market participants are provided with sufficient information, since investment firms have the duty to provide clear and complete information concerning the handling and execution of orders. Moreover, competent authorities and the public in general have access to adequate information concerning the execution of dark orders. However, the regulator should consider the possibility to implement additional rules concerning investor protection, the foregoing in order to provide the investor with tools adequate to exercise control over the orders placed using high-frequency algorithmic trading[154].

In contrast, Colombian regulation provides that market participants have access to the information needed to understand the procedures related to the handling and execution of all types of orders. Moreover, investors have the tools to control the information processed by traders that use high-frequency algorithmic trading, reducing the execution risk[155]. Nonetheless, the regulator of Colombia should consider the possibility of implementing additional disclosures or periodical reports in order to monitor the placement of orders using high-frequency algorithmic trading,

150. See section 3.1.1.2.3, supra.

151. See section 3.2.1.2.3, supra.

152. See section 3.1.1.2.4, supra.

153. See section 3.2.1.2.4, supra.

154. See section 3.1.1.2.5, supra.

155. See section 3.2.1.2.5, supra.

since this kind of trading is used to place possible dark orders.

The foregoing recommendations should be consider to improve even more the levels of trading transparency. Nonetheless, it is important to complement these recommendations with empirical research, since empirical data is required to establish the optimal levels of trading transparency for a specific trading environment or a type of financial instrument.

Finally, it is important to bear in mind that the European Union and Colombia obtained the benchmark fully implemented regarding the implementation of IOSCO's principle "*Regulation should promote transparency of trading*". Hence, from a regulatory perspective and according to IOSCO's methodology, we can consider that the level of market transparency is adequate. In consequence, the provision of trading information may be consider as adequate to facilitate the price discovery, enabling investors to make informed investment decisions. Hence, the current provision of trading information makes feasible the adequate assessment of the performance of investments, as well as to evaluate the transactions concluded by other market participants.

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