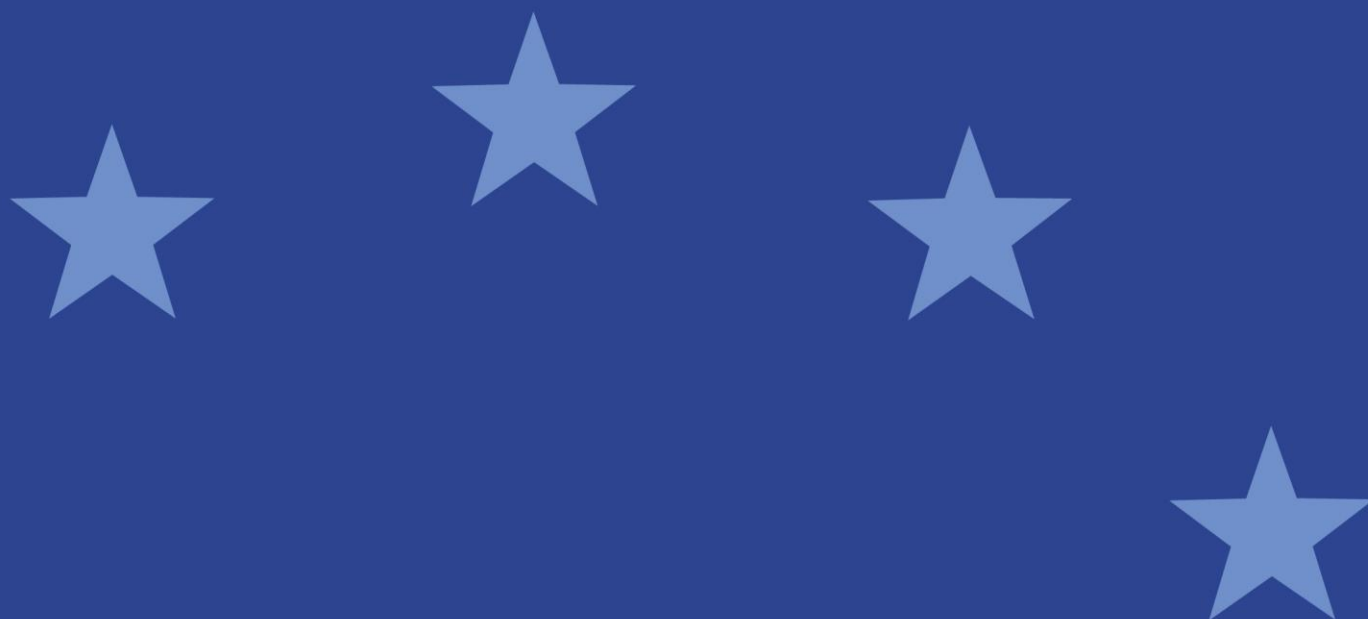


# Consultation Paper

**On the evaluation of certain elements of the Short Selling Regulation**



## Responding to this paper

ESMA invites comments on all matters in this paper and in particular on the specific questions summarised in Annex 1. Comments are most helpful if they:

respond to the question stated;

indicate the specific question to which the comment relates;

contain a clear rationale; and

describe any alternatives ESMA should consider.

ESMA will consider all comments received by **4 September 2017 COB**.

All contributions should be submitted online at [www.esma.europa.eu](http://www.esma.europa.eu) under the heading 'Your input - Consultations'.

## Publication of responses

All contributions received will be published following the close of the consultation, unless you request otherwise. Please clearly and prominently indicate in your submission any part you do not wish to be publically disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested from us in accordance with ESMA's rules on access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by ESMA's Board of Appeal and the European Ombudsman.

## Data protection

Information on data protection can be found at [www.esma.europa.eu](http://www.esma.europa.eu) under the heading [Legal Notice](#).

## Who should read this paper

This paper may be specifically of interest to investors that take short positions, hedge funds, fund managers, investment firms whose clients hold short positions or engage in CDS activity including nonfinancial actors, securities lending firms, prime brokers, market makers, custodians, national debt management agencies and issuers.

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## Acronyms used

CDS	Credit default swap
EC	European Commission
ESMA	European Securities and Markets Authority
EU	European Union
MiFID	Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on market in financial instruments <sup>1</sup>
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU <sup>2</sup>
MiFIR	Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EU) No 648/2012 <sup>3</sup>
MTF	Multilateral trading facility
OJ	The Official Journal of the European Union
OTF	Organised trading facility
RM	Regulated market
SSR	Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspect of credit default swaps <sup>4</sup>

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<sup>1</sup> OJ L145 30.4.2004 , p. 1

<sup>2</sup> OJ L173 12.6.2014 , p. 349

<sup>3</sup> OJ L173 12.6.2014 , p. 84

<sup>4</sup> OJ L86 24.3.2012, p. 1

# **1 Executive Summary**

## **Reasons for publication**

ESMA received a formal mandate from the European Commission (“Commission”) on 19 January 2017 seeking technical advice on the evaluation of certain elements of the SSR that became applicable on 1 November 2012. This ESMA advice, to be delivered by 31 December 2017, should contribute to the follow up actions announced by the Commission in its Communication on the Call for Evidence on the EU regulatory framework for financial services published on 23 November 2016.

ESMA is publishing this consultation paper to seek the views of market participants on the three main elements of the Commission mandate, on the concerns they may raise and on possible ways forward to address them.

## **Contents**

While Section 1 refers to the Executive Summary of the report, Section 2 addresses the exemption for market making activities. Section 3 covers the short term restrictions on short selling in case of a significant decline in prices under Article 23 of the SSR (“short-term bans”) and Section 4 is elaborating on the transparency of net short positions and related reporting and disclosure requirements. Annex I includes the summary of questions posed by ESMA and Annex II the Commission mandate to provide technical advice. Annex III contains the details of the economic analysis on the effectiveness of the short-term bans.

Each section summarises the relevant provisions and their objectives, identifies the main issues and concerns and often explores possible ways to address them. When available, the preliminary findings of the quantitative analysis and the views of the competent authorities are also presented.

## **Next Steps**

Responses to this consultation paper are requested to be submitted to ESMA by 4 September 2017. ESMA expect to publish its final report on the technical advice on the evaluation of certain elements of the SSR to the Commission by 31 December 2017.

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## 2 Exemption for market making activities

Extract from the Commission formal request for Technical Advice

*ESMA is asked to analyse whether the exemption for market making activities and the definition of market making activities is adequately clear, in view of current practices and as evidenced in previous reviews undertaken by ESMA in relation to its guidelines on that topic, whether the scope of such exemption is appropriate in view of its objective to safeguard the positive role of market making activities with respect to market liquidity and efficiency, and whether the notification procedure of Article 17(5) is adequate, effective and efficient.*

*In particular, ESMA is asked to assess the impact of the membership requirement featured in the definition of Article 2(1)(k) on those entities making markets on financial instruments which are only traded OTC, and to assess the consequences, if any, of the absence of alignment between the definition of 'market making activities' in Article 2(1)(k) of the Regulation and that of 'market maker' in Article 4(1)(7) of Directive 2014/65/EU.*

*[...]*

*In carrying out its analysis of the issues covered by the mandate, ESMA is encouraged to use and rely upon empirical evidence and quantitative data which it deems relevant, and to seek the views of competent authorities and market participants, including [...] i. whether the exemption for market making activities allows for liquidity provision without undue circumvention.*

### 2.1 Introduction

1. The Short Selling Regulation (SSR) provides that the requirements concerning notification or disclosure of significant net short positions in shares and sovereign debt, and the restrictions on uncovered short sales in shares or sovereign debt or on uncovered sovereign credit default swaps do not apply to transactions performed in the course of market making activities.
2. Indeed, Article 17 of the SSR provides for an exemption in favour of market makers (and primary dealers), allowing them:
  - (i) to build net short positions without being obliged to notify to the relevant competent authority and to the public;
  - (ii) to enter into short sales without having a coverage for the short sale; and
  - (iii) to enter into transactions that lead to uncovered position on a sovereign CDS.

3. ESMA was mandated by the Commission to provide technical advice in relation to the exemption for market making activities and the definition of such activities. The mandate does not cover the other type of activities exempted under Article 17 of the SSR, i.e. the primary market activities performed by authorised primary dealers.
4. The rationale for the market making activities exemption is that these activities play a crucial role in providing liquidity to markets within the EU and they need to take net short positions to perform their role. Imposing requirements on market making activities could severely inhibit market makers' ability to provide liquidity and have a significant adverse impact on the efficiency of EU markets. Market making activities are defined in the SSR and supplemented by ESMA Guidelines on the exemption for market making activities and primary market operations under the SSR (ESMA/2013/158) issued in April 2013 (the Guidelines).
5. Under the SSR regime, market making activity is determined on a financial instrument by financial instrument basis and subject to various conditions, including a requirement for membership of the trading venue on which the instrument is traded or is admitted to trading.
6. Market makers wishing to use the exemption must notify their home competent authority in advance, not less than 30 calendar days before the entity first intends to use that exemption. The competent authority may prohibit the use of the exemption within that 30-day period or later, when the conditions for the exemption are no longer met.
7. The exemption is available for market making activities in third countries provided that the other conditions are met and that the Commission has decided that the legal and supervisory framework of that third country complies with legally binding requirements equivalent to those laid down in MiFID concerning regulated markets, and in the Market Abuse and Transparency Directives. So far the Commission has not adopted any of such decisions.
8. According to point (k) of Article 2(1) of the SSR, *«'market making activities' means the activities of an investment firm, a credit institution, a third-country entity, or a firm as referred to in point (l) of Article 2(1) of Directive 2004/39/EC, which is a member of a trading venue or of a market in a third country, the legal and supervisory framework of which has been declared equivalent by the Commission pursuant to Article 17(2) where it deals as principal in a financial instrument, whether traded on or outside a trading venue, in any of the following capacities:*
  - (i) by posting firm, simultaneous two-way quotes of comparable size and at competitive prices, with the result of providing liquidity on a regular and ongoing basis to the market;*
  - (ii) as part of its usual business, by fulfilling orders initiated by clients or in response to clients' requests to trade;*
  - (iii) by hedging positions arising from the fulfilment of tasks under points (i) and (ii)».*

9. In addition to the Guidelines, ESMA also published in January 2016 a Peer Review Report on the compliance with SSR by a group of competent authorities as regards Market Making Activities (ESMA/2015/1791). The findings of the Peer Review have been taken into account in drafting this Consultation Paper.
10. Against this background, the Commission asked ESMA to analyse a number of elements related to the exemption for market making activities. The following sections deal in more details with these elements.

## 2.2 Membership requirement

11. In the request for technical advice received by ESMA, the Commission mentioned the absence of alignment between the definition of '*market making activities*' contained in Article 2(1)(k) of the SSR and that of '*market maker*' contained in Article 4(1)(7) of Directive 2014/65/EU (MiFID II).
12. According to Article 4(1)(7) of MiFID II, «*'market maker' means a person who holds himself out on the financial markets on a continuous basis as being willing to deal on own account by buying and selling financial instruments against that person's proprietary capital at prices defined by that person*».
13. It should be noted the use of "*continuous basis*" in the definition of MiFID II and the fact that the buying and selling activity should take place against the proprietary capital of the market maker is similar to the definition of the SSR, where it is stated that the market maker deals as principal.
14. However, the definition of market maker in MiFID II presents some relevant differences compared to the one in the SSR, as the definition in MiFID II:
  - does not make reference to any trading venue membership requirement as under SSR;
  - does not incorporate the three capacities specified in Article 2(1)(k) of the SSR, specifying the activities that could benefit from the exemption:
    - posting of firm, simultaneous two-way quotes of comparable size and at competitive prices, with the result of providing liquidity on a regular and ongoing basis to the market;
    - the client's facilitation capacity;
    - the hedging positions arising from the fulfilment of the two above tasks.
15. ESMA would also like to gather the opinion of market participants whether the differences between the two definitions can have negative effect on the simultaneous application of the two regimes (i.e. MiFID II and SSR) to market makers and whether the definition in the

SSR should make reference to the definition in MiFID II and, if need be, add additional requirements.

**Q1: Taking into account the different regulatory approaches and purposes of MiFID II and SSR, what are your views on the absence of alignment between the definition of 'market making activities' in each of the capacities specified in Article 2(1)(k) of SSR and that of 'market maker' in Article 4(1)(7) of MiFID II? Do you consider that this absence of alignment is not appropriate, and if so what would you suggest?**

16. The current regime of the market making activities as defined in point (k) of Article 2(1) of the SSR requires that a market maker must be member of a trading venue where it deals as principal in a financial instrument whether traded on or outside a trading venue. In the ESMA Guidelines it was clarified that membership should be considered in relation to the trading venue on which the financial instrument of the exemption is traded.
17. The Guidelines on the exemption of market making activities under the SSR state that there are three preconditions for particular activities of an entity to be exempted from the SSR provisions: (i) being a member of the market on which it (ii) deals as principal in one of the capacities listed under the definition of market making activities [see point (i) to (iii) of the definition in the previous section], (iii) in the financial instrument for which it notifies the exemption.
18. However, to benefit from the exemption according to the SSR, a market maker is not required to conduct its market making activities solely on that venue or market, nor has it to be recognised as market maker or liquidity provider under the rules of that trading venue or market. In addition, there is no requirement to have a separate contractual obligation to carry out market making activities, e.g. with the issuer of the financial instrument.
19. For instance, a person could benefit from the exemption by trading on the trading venue or market in order to hedge the positions resulting from its activities under Article 2(1)(k)(i) or Article 2(1)(k)(ii) of the SSR which it conducted outside this trading venue or market.
20. In the Guidelines, ESMA also stated that the Commission services have expressed in writing their legal analysis of the market making definition contained in Article 2(1)(k) of the SSR, which makes clear that the assessment of the membership requirement for the qualification of market making activities has to be done with respect to each individual financial instrument. In other words, being the member of an EU trading venue is not sufficient if the market making activities take place in another trading venue. According to the Commission services' analysis, market making activities on instruments that are not admitted to trading or traded on any trading venue – as it is currently the case for many sovereign CDS, some sovereign bonds and non-listed derivatives – could not qualify for the exemption under Article 17(1) of the SSR, since the membership requirement cannot be met.

21. In some jurisdictions and for some financial instruments, it is common practice to carry out market making activities outside a trading venue (OTC), including where the financial instrument concerned is tradable on a trading venue.
22. In the OTC space, market making activities relate to financial instruments which are either:
  - a. not traded on any trading venue (“pure” OTC instruments, such as many sovereign CDS); or
  - b. tradable on a trading venue (i.e. are admitted to trading or traded on a trading venue). This second category of market making activities corresponds generally to the performance of a Systematic Internaliser (SI) under the current MiFID regime or to block trades market making (large in scale).
23. As already mentioned, the Guidelines have clarified that currently the market making activities in relation to pure OTC instruments cannot benefit from the exemptions provided in Article 17(1) of the SSR.
24. For instance, Article 14 of the SSR provides for a prohibition to undertake transactions in sovereign CDS that would result in an uncovered position in these sovereign CDS. As currently these products are usually not tradable on a trading venue, this represents a material issue vis-à-vis the membership requirement provided for by the SSR to benefit from exemption for market making activities, although the situation may change with the entry into application of MiFID II. In the absence of the exemption, market makers in sovereign CDS would be unable to make two-way markets, unless they hold a corresponding long position in the concerned sovereign debt.
25. This is one of the main reasons why some Member States declared non-compliance with some parts of the Guidelines on market making activities. Five competent authorities reported that they were not complying with certain provisions of the Guidelines as they disagreed with the interpretations therein contained. This was the case in particular for (i) the “membership” requirement (covered by this section) and (ii) the “product scope” requirement, which would not allow to exempt instruments other than shares or sovereign debts or instruments creating long or short positions in shares or sovereign debt (see the next section of the CP). It is noted that the Commission specifically requested in its mandate to ESMA to assess the impact of the membership requirement featured in the definition of Article 2(1)(k) on those entities making markets in financial instruments which are only traded OTC.
26. In principle, the exemption for market making activities under the SSR could apply irrespective of whether the market maker is dealing in an pure OTC instrument or an instruments traded on a trading venue (hereinafter “exchange-traded instruments”). In this respect, ESMA is of the view that the extent of the membership requirement should be better clarified in the definition of market making activities set out in Article 2(1)(k) of the SSR.

27. In this context, the application of MiFID II/MiFIR regime next year will introduce trading obligations for certain financial instruments. In particular, certain derivatives that are both subject to clearing obligation under EMIR (a public register on the clearing obligation under EMIR is available on ESMA website<sup>5</sup>) and deemed sufficiently liquid, will have to be traded by firms on a trading venue (RM, MTF, OTF). Shares admitted to trading on a RM or traded on a MTF will have to be traded by firms on a trading venue or a systematic internaliser. It is worth noting that the new MiFID II/MiFIR regime is not imposing trading obligation on debt instruments.

28. In this new scenario, the universe of pure OTC financial instruments is set to shrink in the future as a consequence meeting the membership requirement to benefit from the SSR exemption may be less problematic.

29. Given the above ESMA would like to gather input from market participants on whether or not the membership requirement in Article 2(1)(k) of the SSR should be reconsidered in relation to pure OTC instruments.

**Q2: Considering the new regulatory framework under the MiFID II/MiFIR, how do you suggest addressing the issue of the membership requirement in relation to those instruments that will remain pure OTC instruments despite the MiFID II/MiFIR framework? Should the membership requirement not apply to those pure OTC instruments? Please provide justifications.**

30. In the case of exchange-traded financial instruments, market making activities can take place on a trading venue or OTC, as for instance in the activity of fulfilling orders initiated by clients or in response to clients' request to trade under Article 2(1)(k)(ii) of the SSR. The SSR regime in case of exchange-traded instruments requires that market making activities benefiting from the exemption should in any case take place on the trading venue of which the market maker is a member and, in addition, could also take place OTC, but cannot take place OTC only.

31. ESMA would like to hear the opinion of market participants regarding the possibility to extend the application of the exemptions also to market making activities on exchange-traded instruments that take place OTC only, and whether this change could have unintended consequences in terms of transparency, liquidity or any other element relevant for the protection of investors or consumers.

**Q3: Where market making activities on exchange-traded instruments are carried out OTC only, should they be able to benefit from the exemptions? Do you consider that the application of the exemptions in those cases can be detrimental to the interest of investor and consumers? Please provide justifications.**

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<sup>5</sup> See section 3 of the register for CDS:

[https://www.esma.europa.eu/sites/default/files/library/public\\_register\\_for\\_the\\_clearing\\_obligation\\_under\\_emir.pdf](https://www.esma.europa.eu/sites/default/files/library/public_register_for_the_clearing_obligation_under_emir.pdf)

32. ESMA would also like to gather the views of market participants in relation to the possibility of deleting the membership requirement altogether for exchange-traded instruments, irrespective of whether the activity of market making is carried out on or outside a trading venue, also considering that one of the advantages of the membership requirement is that it involves an extra layer of checks on the activity of the market maker (i.e. the checks performed by the trading venues on its members). Note that such possibility will have to be considered in the context of MiFID II, as certain requirements specified in Article 17 and in the Delegated Regulation 2017/578 provide that an investment firm that engages in algorithmic trading to pursue a market making strategy should enter into a binding written agreement with the trading venue.

**Q4: Do you think that the membership requirement should be deleted where the market making activity in relation to exchange-traded instruments is carried out OTC as well as on a trading venue? Please explain.**

33. Finally, should the market membership requirement be reconsidered in relation to OTC market making activities (for pure OTC instruments or for exchanged traded instruments) and considering that some of the recent EU laws (EMIR, MiFID II/MiFIR) aim to increase market transparency, ESMA would also like to gather input from market participants on whether to improve the transparency of market making activities conducted OTC and whether, for instance, a requirement for market makers under the SSR to be a systematic internaliser<sup>6</sup> may be workable proposal.

**Q5: Do you have proposals in relation to the improvement of the transparency of market making activities conducted OTC and exempted under the SSR? Do you think that requiring a firm willing to benefit from the exemption for its market making activities conducted OTC to qualify as systematic internaliser is a viable option that would improve the transparency of their activity? Please provide justifications.**

## 2.3 Product Scope

34. In relation to the financial instruments for which the exemption of market making activities could apply, ESMA considers it is opportune to clarify in Level 1 or Level 2 which financial instruments fall within the exemption.

35. At present, in addition to shares and sovereign debt (plus CDS), the exemption can only be used for instruments which would create a long or short position in these primary products. Activities in the corresponding share or sovereign debt are then exempted to the extent that they are undertaken for the purposes of hedging market making activities in the financial instrument in question.

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<sup>6</sup> According to Article 4(1)(20) of MiFID II: (20) 'systematic internaliser' means an investment firm which, on an organised, frequent systematic and substantial basis, deals on own account when executing client orders outside a regulated market, an MTF or an OTF without operating a multilateral system.

36. This approach is confirmed in the ESMA Guidelines, which state that for the purpose of the exemption under Article 17(1) of the SSR, the financial instruments eligible, besides shares, sovereign debt and CDS in sovereign debt, are those listed financial instruments to be taken into account when calculating the net short position. Namely, for shares, the instruments listed in Part 1 of Annex I of the Commission Delegated Regulation (EU) No 918/2012 (i.e. options, covered warrants, futures, index-related instruments, contracts for difference, shares/units of ETF, swaps, spread bets, packaged retail or professional investment products, complex derivatives, certificates linked to shares, global depository receipts), and for sovereign issuers, the instruments listed in Part 2 of Annex I of the Commission Delegated Regulation (EU) No 918/2012 (i.e. options, futures, index-related instruments, contracts for difference, swaps, spread bets, complex derivatives, certificates linked to sovereign debt).
37. For example, a market maker's activities on derivatives and ETFs where, respectively, the underlying(s) of the derivative in question and the constituents of the concerned ETF are financial instruments falling within the scope of the regime, could qualify for the exemption as long as trading in the relevant underlying is conducted for the purpose of hedging market making activities in the corresponding derivatives and ETFs.
38. However, ESMA recognises that, in certain instances, shares and sovereign debt are used for hedging products other than equity and sovereign debt derivatives. It is a common strategy for market makers in corporate bonds to hedge their market making risks via trades in the relevant sovereign debt. Without a clear exemption, the corporate bond market maker would face additional costs and problems in doing so. Similar arguments apply to market making in convertible bonds and subscription rights. Denying the exemption can inhibit market makers' ability to provide liquidity in those financial instruments.
39. ESMA is of the view that the scope of the financial instruments eligible for the market making exemption should be carefully re-analysed in order to see whether an extension of the list would be beneficial for the functioning of the exemption under the SSR.
40. Some competent authorities suggest including in the scope of the exemption some additional financial instruments, such as corporate bonds, convertible bonds, subscription rights and dividend swaps. The exemption would be applicable where those instruments show high correlation with the corresponding shares in the case of convertible bonds, subscriptions rights and dividend swaps, and in the case of corporate bonds, with either sovereign debts or a combination of the corresponding shares and sovereign debts. The concept of "*high correlation*" is currently not defined for this purpose, but would the addition of such instruments be envisaged, this concept could then be better specified in due time and potentially directly in Level 1 or Level 2 text.
41. In order to provide further clarity and certainty to competent authorities and market participants, as well as to prevent abuse, ESMA considers that the financial instruments for which the exemption is available should be explicitly listed. Therefore, such list should still refer to the financial instruments identified in Parts 1 and 2 of Annex I of the

Commission Delegated Regulation (EU) No 918/2012 and, if a broader set of instruments would be eligible for the exemption, they should be added to such list.

**Q6: Do you think it would be appropriate to enlarge the set of financial instruments eligible for the exemption for market making activities? If so, which financial instrument(s) would you suggest? Please provide justifications.**

42. ESMA notes that under most, if not all, EU laws on financial markets (e.g. MIFID, MIFID II/MIFIR, CSDR, EMIR, SFT) market makers are not fully exempt from reporting requirements to the relevant competent authority of the financial instrument. Unlike the SSR, the transparency Directive (2004/109/CE) provides for a limited exemption for market makers, i.e. they are required to disclose to the relevant competent authority of the financial instrument and to the public their major holdings when they reach a greater threshold compared to all other investors.
43. It can be concluded that the scope of the SSR exemption for market making activities is not completely aligned with the other European laws on financial markets, as in the SSR there is a gap in the information available to the relevant competent authority of the financial instrument. The competent authority of the market maker can always request information about the net short positions held by that market maker under Article 17(11) of the SSR, but that is meant to cover *ad hoc* request only and not to be used to establish a general reporting requirement.
44. Therefore, also considering the proposal to extend the range of products subject to exemption in relation to market making activities, ESMA is considering whether a reporting requirement to the competent authority of the financial instrument should be introduced. Some competent authorities are of the view that the reporting requirement could be framed as to target only large net short positions held by market makers (compared to the ordinary 0.2% threshold) and/or to provide for a less stringent reporting deadline. This is in order to make significant data available to the relevant competent authority of the financial instrument yet minimising the burden on market makers. As already mentioned, as stated in Recital 26 of SSR, market makers should not be expected to take significant short positions except for very brief periods; hence the number of situations warranting a notification should be minimal.

## **2.4 Notification procedure**

45. The current regime for the notification to a competent authority of a market maker's intention to make use of the exemption requires that the market makers indicate all the single shares for which they intend to make use of the exemption.
46. ESMA is considering whether the current instrument-by-instrument approach to the exemption should be changed, as it is considered difficult and burdensome by market participants and competent authorities. In this respect, the peer review conducted by ESMA confirmed this situation: some competent authorities receive on a daily basis updates of

new instruments subject to market making activities, and this is considered an administrative burden that should be reduced.

47. For these reasons, ESMA is analysing whether the exemptions could also be capable of being granted on the basis of particular exchange indices or, potentially, sectoral categories. In order to have legal certainty, ESMA is of the view that this proposal should be clarified in the SSR or in the relevant Level 2 implementing and delegated measures.
48. However, ESMA considers that it is necessary for competent authorities to know to which financial instruments the exemption for each market maker applies and is of the view that it would not be appropriate to grant exemptions on a blanket basis (e.g. for all shares traded on a specific trading venue). Granting exemptions on the basis of indices would make the process more manageable without compromising the ability of the competent authority to monitor the exemptions. The market maker would not be required to notify a competent authority each time a new financial instrument is added to the index, and the competent authority would continue to be able to identify which financial instruments the exemption apply to and gain evidence of the market making activities in those instruments.
49. ESMA is considering whether, besides indices, some types of “*sectoral categories*” (e.g. banking sector, utilities) could potentially be also used.
50. In all cases, using an index or potentially another “*sectoral category*” of financial instruments should be only permitted to a market maker only where it is seeking exemption for its market maker activities on all the shares included in the index or sectoral category mentioned in the notification.

**Q7: Do you think that market makers should be able to notify the list of financial instruments by using indices, as long as they are market making in all the financial instruments included in the used indices? Besides indices, which other sectoral categories/ classification could be used by market makers to indicate a group of financial instruments for which the market maker is seeking exemption? Please provide justifications.**

51. A second aspect in the procedure for obtaining the market making exemption that is of concern relates to the timeframe under which the notification should be received by the competent authority. Article 17(5) of the SSR requires that the notification is made not less than 30 calendar days before the market maker’s first intended use the exemption.
52. Some competent authorities have claimed that the 30-day period should be changed. ESMA is analysing whether the 30-day period specified in Article 17 of the SSR for objecting to the use of the exemption could be made more functional to the process of exemption.
53. A first issue that could be considered in this context is whether the 30-day period should not apply to newly admitted instruments for which there is no historical trading data available. It could be argued that for instruments admitted to trading for the first time in the

EU, and where a market maker has been specifically mandated by a trading venue to undertake market making under the trading venue's rules in a financial instrument that was admitted to the trading venue for the first time, the 30-day period should not apply. ESMA is assessing this possibility in light also of the fact that the concerned competent authority can, at any time, decide to withdraw the benefits of the exemption in case there have been changes in the circumstances of the market maker so that it no longer satisfies the conditions of the exemption.

**Q8: Do you think that the 30-day period mentioned in Article 17(5) of the SSR should not apply when the notification refer to instrument admitted to trading for the first time on an EU trading venue? Please provide justifications.**

54. Another issue under consideration is whether to reduce the 30-day period before the market maker can make use of the exemption, so that market makers could take advantage of the exemption in faster. Indeed, market participants have expressed to competent authorities the fact that they believe that a 30-day period is too long and they would prefer a more effective and rapid process.
55. On the one hand reducing the time available to competent authorities for assessing the notification could be demanding from a competent authority standpoint, especially when market making activities are conducted in financial instruments for which the notified authority is not the relevant authority of the instrument and, thus, additional checks may be needed. On the other hand it may not represent a major issue, provided that the competent authority have the power to prohibit the use of the exemption at any time, thus also after the end of the notification period.
56. Under the SSR regime, competent authorities do not have to react before the end of the 30-day period. In practice, in order to make the long notice period shorter, competent authorities tend to react and inform the notifying entity that the notification meets the conditions for the exemption before the end of the 30-day period, which is very burdensome for those competent authorities that receive a high number of notifications.
57. In relation to the situation where market makers have already entered into a market making agreement/scheme with a trading venue or the issuer of the financial instrument himself, in order to be a "recognised" marker maker in such venue, ESMA would like to gather the views of market participants on whether a simplified approach could apply in these circumstances. Under that simplified approach the 30 day-period can be further reduced or simply be deleted (i.e. the mere notification would be sufficient). This could also apply to market makers carrying out algorithmic trading on trading venues pursuant to Article 17(3) of MiFID II, provided that they have entered into a market making agreement/scheme with the trading venue. The trading venue will also be required to make public the name of the market maker and the list of financial instruments on which the activity is carried out. This could lead, *inter alia*, to a large increase in the number of notifications for such on-market activities.

**Q9: What would you suggest to reduce the 30-day period mentioned in Article 17(5) of the SSR to provide for a faster process? What are your views on a quicker procedure for market makers that have already entered into a market making agreement/scheme with a trading venue or the issuer to classify as market maker in such venue? Please explain.**

### 3 Short term restrictions on short selling in case of a significant decline in prices: Article 23 of SSR

Extract from the Commission formal request for Technical Advice

*ESMA is asked to analyse whether the procedure for imposing short-term restrictions on short selling in case of a significant decline in price is efficient, effective and relevant and fosters consistent approaches across the Union, and whether and how it could be simplified.*

*[...]*

*In carrying out its analysis of the issues covered by the mandate, ESMA is encouraged to use and rely upon empirical evidence and quantitative data which it deems relevant, and to seek the views of competent authorities and market participants, including [...] ii. whether the thresholds set to identify a significant drop in the price of financial instruments are appropriate for all instruments.*

#### 3.1 Introduction

58. ESMA was mandated by the Commission to provide technical advice in relation to the procedure for imposing short-term restrictions under Article 23 of the SSR. Note that the mandate did not cover the power of competent authorities to adopt long term measures or restrictions in exceptional circumstances, under Articles 18 to 21 of the SSR.
59. Article 23(1) of the SSR provides the competent authorities with the power to temporarily restrict the short selling of a financial instrument on a trading venue where the price of the financial instrument on that trading venue has fallen significantly during a single trading day from the closing price of the previous trading day.
60. The SSR and Commission Delegated Regulation (EU) No 918/2012 set the thresholds to identify a significant drop in the price falls for shares and other types of financial instruments.
61. The measures under Article 23(1) of the SSR apply for a period not exceeding the end of the trading day following the trading day on which the fall in price occurs. If at the end of the trading day following the trading day on which the fall in price occurs there is, despite the measure being imposed, a further significant fall in value of at least half of the amount required to initially activate the measure, the competent authority may extend the measure for a further period not exceeding two trading days.
62. According to Article 23(4) of the SSR, where a competent authority intends to activate a measure under Article 23(1) of the SSR, it has to notify ESMA about its decision at the latest two hours after the end of the trading day. ESMA then immediately informs the competent authorities of the trading venues that trade the same financial instrument.

63. If a competent authority disagrees with the action taken by another competent authority on a financial instrument traded on different venues regulated by different competent authorities, ESMA may assist those authorities in reaching an agreement in accordance with Article 19 of Regulation (EU) No 1095/2010 (ESMA Regulation).
64. The conciliation should be completed before midnight of the same trading day. If the competent authorities concerned fail to reach an agreement within the conciliation phase, ESMA may take a decision in accordance with Article 19(3) of the ESMA Regulation. In any case, the decision has to be taken before the opening of the following trading day.
65. ESMA has adopted a procedure to regulate the details of the notification process in order to ensure that, in case of disagreement between competent authorities, the conciliation process come to a conclusion in accordance to the schedule laid down in Article 23(4) of the SSR.

## 3.2 Quantitative analysis

### 3.2.1 Empirical evidence on the crossing of the thresholds set to identify a significant drop in the price falls

66. To assess «*whether the thresholds set to identify a significant drop in the price of financial instruments are appropriate for all instruments*», ESMA carried out an empirical analysis based on five years of daily data. The analysis includes instruments as identified in the SSR, for which historical data from commercial databases were available<sup>7</sup>.
67. The empirical evidence for each type of instrument, based on current SSR thresholds, is summarised in Table 1. The table displays the number of instruments and daily observations available, as well as the number and share of observations that have crossed the relevant threshold<sup>8</sup>.
68. For example, using data on 966 liquid shares, percentage changes between the previous day's closing price and the lowest price of the day were computed, resulting in more than 1.1 million observations over the period 2012 to 2016<sup>9</sup>. Around 3,500 observations (i.e. 0.3% of the total) are below the -10% SSR threshold, or on average three observations per day<sup>10</sup>.

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<sup>7</sup> Money market instruments were not included in the analysis due to data limitations.

<sup>8</sup> The analysis is based on one observation per instrument per day.

<sup>9</sup> ISINs for which no data is available are excluded from the analysis.

<sup>10</sup> For simplicity, daily averages are calculated based on the number of week days over the entire period, rather than the number of trading days which differs from one country to another.

Table 1: Overview of SSR thresholds and significant price falls

Instrument type	Number of instruments	Number of observations	SSR threshold	Observations crossing the threshold	Share <sup>d</sup>	Daily average <sup>e</sup>
Liquid shares <sup>a</sup>	966	1,145,722	-10%	3,580	0.3%	3
Semi-liquid shares <sup>a</sup>	203	188,862	-10%	1,741	0.9%	1
Illiquid shares <sup>a</sup>	3,204	2,926,202	-20%	4,669	0.2%	4
Very illiquid shares <sup>a</sup>	890	654,150	-40%	3,809	0.6%	3
Sovereign bonds <sup>b</sup>	499	344,060	+7%	33,212	9.7%	28
Corporate bonds <sup>b</sup>	3,081	1,763,730	+10%	20,862	1.2%	18
Exchange-traded funds <sup>c</sup>	1,917	1,347,246	-10%	1,297	0.1%	1

Notes: Overview of price changes that crossed the SSR thresholds for significant price falls, by type of instrument. The calculations are based on one observation per instrument per day. Daily data from 1 January 2012 to 31 December 2016.

<sup>a</sup> Daily observations for shares calculated as daily low price to previous day's closing price, in %. Liquid shares are shares trading on EU regulated markets (MiFID definition). Semi-liquid shares are non-liquid shares (MiFID definition) that were constituents of a main national equity index, as of January 2017; the sample may change over time due to shares being added to or dropped out of equity indices. Illiquid and very illiquid shares are non-liquid shares (MiFID definition) that are not constituents of a main national equity index; illiquid shares have a euro-equivalent price greater than or equal to EUR 0.5 per share as of end-2016; very illiquid shares have a euro-equivalent price smaller than EUR 0.5 per share as of end-2016.

<sup>b</sup> Daily observations for bonds calculated as percent change in annual yields based on bid prices, in %, for EUR-denominated sovereign and corporate bonds that are constituents of the Markit iBoxx EUR sovereigns index and Markit iBoxx EUR corporates index. Sovereign bonds exclude sub-sovereign and local government issuers. Corporate bonds exclude covered bonds and collateralised bonds.

<sup>c</sup> Daily observations for EU-domiciled exchange-traded funds calculated as daily low price to previous day's closing price, in %. Data including UCITS and non-UCITS exchange-traded funds.

<sup>d</sup> Share of observations that have crossed the relevant SSR threshold during the sample period.

<sup>e</sup> Average number of observations per day that have crossed the relevant SSR threshold during the sample period.

Sources: Shares: ESMA MiFID Register, Thomson Reuters Datastream; Sovereign and corporate bonds: Markit iBoxx; Exchange-traded funds: Thomson Reuters Eikon and Thomson Reuters Lipper; ESMA calculations.

69. Below are described the main findings based on the summary of empirical evidence. The details and problems identified for shares, bonds and exchange-traded funds are spelled out in the next sections.

70. Shares: The proportion of observations that crossed the relevant SSR thresholds is below 1% for each category of shares, i.e. an average 11 observations per day across all categories of shares and EU countries. The number of significant price falls amounts to only a small part of the returns distribution, suggesting that SSR thresholds for shares mainly cover unusual market events (i.e. the 99<sup>th</sup> percentile).

71. Exchange-traded funds (ETFs): Compared to shares, an even smaller part of the returns distribution (0.096%) crossed the relevant SSR threshold, suggesting that the threshold for ETFs mainly covers extreme market events (i.e. the 99.9<sup>th</sup> percentile). This may reflect the

index-tracking nature of ETFs, which can be prone to smaller price changes due to offsetting price movements of individual securities that their reference indices comprise.

72. Bonds: The large share of observations that crossed the relevant SSR thresholds, in particular for sovereign bonds, reflects the use of thresholds based on yields. Due to very low to negative interest rates, small nominal changes in basis points can result in large relative percentage changes. The definition and calibration of SSR thresholds for bonds likely needs to be revisited to adequately capture significant price falls.
73. Money market instruments: Money market instruments were not included in the analysis due to data limitations. These instruments include a variety of short-term assets, such as government T-bills, certificates of deposits and short-term corporate bonds. This makes the assessment and calibration of a single threshold based on prices a challenging exercise for public authorities.

#### 3.2.1.1 Thresholds for shares

74. A sample of 966 Liquid shares<sup>11</sup> was used for the analysis, with prices retrieved using ISINs. For each day, the percentage change between the previous day's closing price and the daily low price is calculated, resulting in 1,145,722 observations from 2012 to 2016. Around 3,600 observations (0.3% of the total) crossed the -10% SSR threshold, or on average three observations per day (Table 2)<sup>12</sup>.
75. Using the same calculation method, a sample of 203 Semi-liquid shares was used, resulting in 188,862 observations. Semi-liquid shares are defined as non-liquid shares (MiFID definition) that were constituents of a main national equity index, as of January 2017.<sup>13</sup> More than 1,700 observations (0.9% of the total) crossed the -10% SSR threshold, or on average one observation per day (Table 2).
76. A sample of 3,204 illiquid shares yielded 2,926,202 observations for the period 2012-2016. Illiquid shares are non-liquid shares (MiFID definition) that are not constituents of a main national equity index and have a euro-equivalent price greater than or equal to EUR 0.5 per share (as of end-2016). Around 4,700 observations (0.16% of the total) crossed the -20% SSR threshold, or on average four observations per day (Table 3).
77. Lastly, a sample of 890 very illiquid shares resulted in 654,150 observations for the period 2012-2016. Very illiquid shares are non-liquid shares (MiFID definition) that are not constituents of a main national equity index and have a euro-equivalent price smaller than EUR 0.5 per share (as of end-2016). As shown in Table 3, around 3,800 observations

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<sup>11</sup> Liquid and non-liquid shares were retrieved from the ESMA MiFID register:

[https://registers.esma.europa.eu/publication/searchRegister?core=esma\\_registers\\_mifid\\_shares](https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_mifid_shares)

<sup>12</sup> Daily averages are calculated based on the number of trading days over the sample period.

<sup>13</sup> In the SSR, Semi-liquid shares should also be the underlying of a listed derivative. For simplicity, ESMA focused exclusively on the requirement for shares to be part of a main equity index.

(0.58% of the total) crossed the -40% SSR threshold, or on average three observations per day (Table 3).

Table 2: Significant price falls for Liquid and Semi-liquid shares, by threshold

Liquid shares				Semi-liquid shares			
Threshold	Observations below threshold <sup>a</sup>	Share <sup>b</sup>	Daily average <sup>c</sup>	Threshold	Observations below threshold <sup>a</sup>	Share <sup>b</sup>	Daily average <sup>c</sup>
<b>-10%</b>	<b>3,580</b>	<b>0.31%</b>	<b>3</b>	<b>-10%</b>	<b>1,741</b>	<b>0.92%</b>	<b>1</b>
-9%	5,069	0.44%	4	-9%	2,588	1.37%	2
-8%	7,265	0.63%	6	-8%	3,492	1.85%	3
-7%	10,915	0.95%	8	-7%	4,881	2.58%	4
-6%	17,144	1.5%	13	-6%	6,884	3.64%	5
-5%	29,146	2.54%	22	-5%	10,103	5.35%	8
-4%	54,270	4.74%	42	-4%	15,911	8.42%	12
-3%	108,223	9.45%	83	-3%	26,260	13.90%	20
-2%	232,781	20.32%	178	-2%	45,032	23.84%	35

Notes: Number and share of observations above thresholds in 1% increments, and daily average, for Liquid and Semi-liquid shares. Current SSR thresholds in bold. Liquid shares are shares traded on EU regulated markets (MiFID definition). Semi-liquid shares are Non-liquid shares (MiFID definition) that are constituents of a main national equity index, as of January 2017; the sample may change over time due to shares being added to or dropped out of equity indices. The calculations are based on one observation per share per day (1,145,722 observations for 966 Liquid shares, and 188,862 observations for 203 Semi-liquid shares). Daily data from 1 January 2012 to 31 December 2016.

<sup>a</sup> Daily observations for shares calculated as daily low price to previous day's closing price, in %.

<sup>b</sup> Share of observations that have crossed the corresponding threshold during the sample period.

<sup>c</sup> Average number of observations per day that have crossed the corresponding threshold during the sample period.

Sources: Thomson Reuters Datastream, ESMA Registers, ESMA calculations.

Table 3: Significant price falls for Illiquid and Very illiquid shares, by threshold

Illiquid shares				Very illiquid shares			
Threshold	Observations below threshold <sup>a</sup>	Share <sup>b</sup>	Daily average <sup>c</sup>	Threshold	Observations below threshold <sup>a</sup>	Share <sup>b</sup>	Daily average <sup>c</sup>
-45%	512	0.02%	0	-45%	3,365	0.51%	3
-35%	958	0.03%	1	<b>-40%</b>	<b>3,809</b>	<b>0.58%</b>	<b>3</b>
-25%	2,605	0.09%	2	-35%	4,636	0.71%	4
<b>-20%</b>	<b>4,669</b>	<b>0.16%</b>	<b>4</b>	-30%	6,674	1.02%	5
-15%	11,065	0.38%	8	-25%	9,123	1.39%	7
-10%	30,914	1.06%	24	-20%	14,291	2.18%	11
-5%	170,015	5.81%	134	-15%	26,425	4.04%	20

Notes: Number and share of observations above thresholds in 1% increments, and daily average, for Illiquid and Very illiquid shares. Current SSR thresholds in bold. Illiquid and very illiquid shares are Non-liquid shares (MiFID definition) that are not constituents of a main national equity index; illiquid shares have a euro-equivalent price greater than or equal to EUR 0.5 per share as of end-2016; very illiquid shares have a euro-equivalent price smaller than EUR 0.5 per share as of end-2016. The calculations are based on one

observation per share per day (2,926,202 observations for 3,204 Illiquid shares, and 654,150 observations for 890 Very illiquid shares). Daily data from 1 January 2012 to 31 December 2016.

<sup>a</sup> Daily observations for shares calculated as daily low price to previous day's closing price, in %.

<sup>b</sup> Share of observations that have crossed the corresponding threshold during the sample period.

<sup>c</sup> Average number of observations per day that have crossed the corresponding threshold during the sample period.

Sources: Thomson Reuters Datastream, ESMA Registers, ESMA calculations.

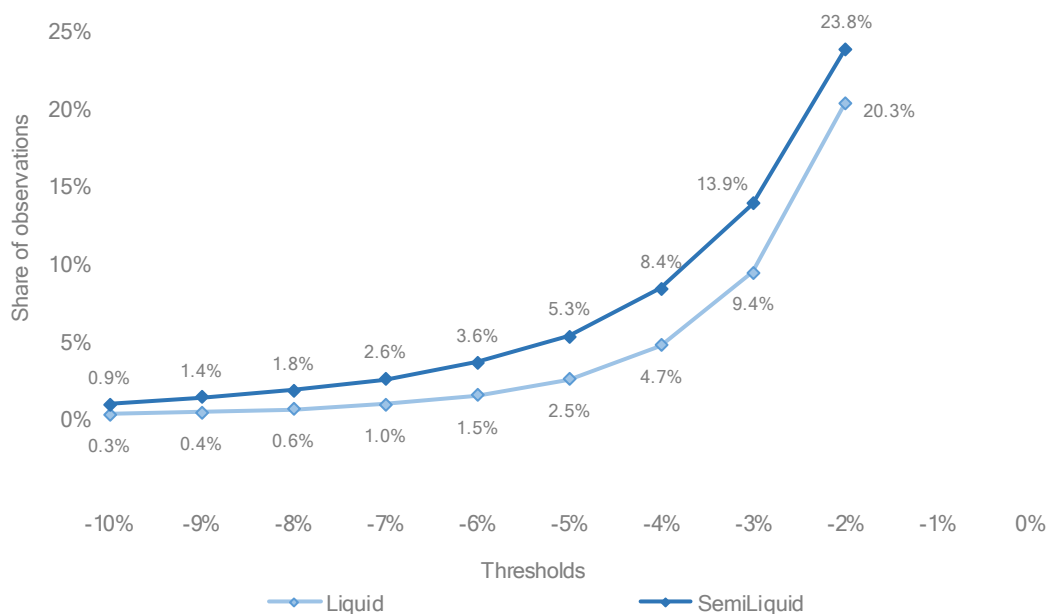
## Findings

78. The number of significant price falls amounts to only a small part of the returns distribution, suggesting that SSR thresholds for shares mainly cover unusual market events (i.e. the 99<sup>th</sup> percentile).

79. Depending on the objectives, adjustments to the current thresholds may be warranted. If the objective is to set SSR thresholds that cover the same share of the returns distribution across the four categories of shares (e.g. closer to 0.5%), a decrease in the threshold for illiquid shares and an increase in threshold for semi-liquid shares would be appropriate. However, if the objective is to set SSR thresholds that would result in a similar daily average (i.e. average number of alerts received by competent authorities) across the four categories of shares, then a decrease in the threshold for semi-liquid shares would be appropriate.

80. Charts 1 and 2 provide a graphical distribution of the left tail of the returns distributions for the four categories of shares, based on various thresholds.

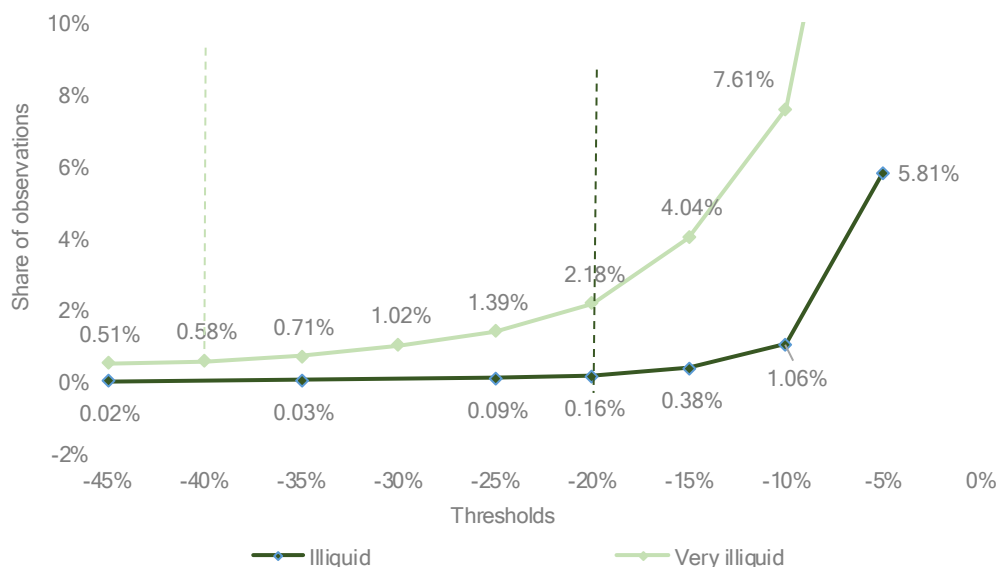
Chart 1: Portion of observations below thresholds for Liquid and Semi-liquid shares



Notes: Share of observations below thresholds in 1% increments, for liquid and semi-liquid shares. The dashed line indicates the current SSR threshold of -10% for both types of shares. Calculations are based on one observation per share per day (liquid shares: 1,145,722 observations for 966 securities; semi-liquid shares: 188,862 observations for 203 securities). Daily data from 1 January 2012 to 31 December 2016.

Sources: Thomson Reuters Datastream, ESMA Registers, ESMA calculations.

Chart 2: Portion of observations below thresholds for Illiquid and Very illiquid shares



Notes: Share of observations below thresholds in 1% increments, for illiquid and very illiquid shares. The dashed lines indicate the current SSR thresholds of -20% and -40%, respectively, for illiquid and very illiquid shares. Calculations are based on one observation per share per day (illiquid shares: 2,926,000 for 3,204 securities; very illiquid shares: 654,150 observations for 890 securities). Daily data from 1 January 2012 to 31 December 2016.

Sources: Thomson Reuters Datastream, ESMA Registers, ESMA calculations.

### 3.2.1.2 Thresholds for bonds

81. SSR thresholds for sovereign and corporate bonds are based on yields. Daily percentage changes in annual yield were computed using bid prices (which are more frequently available than mid prices or ask prices).<sup>14</sup>

82. Out of a sample of 499 sovereign bonds and 3,081 corporate bonds, respectively 9.7% and 1.2% of observations crossed the +7% (for sovereign bonds) and +10% (for corporate bonds) SSR thresholds, i.e. on average 28 and 18 observations per day (Table 4).<sup>15</sup>

<sup>14</sup> While daily low prices based on actual transaction prices were used for shares, the reliance on *bid* prices for bonds precludes a similar approach, due to the greater probability of outliers.

<sup>15</sup> As yields and bond prices have an inverse relationship, SSR thresholds based on bond yields imply that significant price falls occur *above* the corresponding SSR threshold, not below.

Table 4: Significant price falls for bonds, by threshold

Sovereign bonds				Corporate bonds			
Threshold d	Observations above threshold <sup>a</sup>	Share <sub>b</sub>	Daily average <sub>c</sub>	Threshold d	Observations above threshold <sup>a</sup>	Share <sub>b</sub>	Daily average <sub>c</sub>
10%	23,897	6.9%	20	<b>10%</b>	<b>20,862</b>	<b>1.2%</b>	<b>18</b>
9%	26,332	7.7%	22	9%	24,929	1.4%	21
8%	29,443	8.6%	25	8%	30,364	1.7%	25
<b>7%</b>	<b>33,212</b>	<b>9.7%</b>	<b>28</b>	7%	38,172	2.2%	32
6%	37,995	11.0%	32	6%	50,009	2.8%	42
5%	44,295	12.9%	37	5%	68,667	3.9%	58
4%	52,838	15.4%	44	4%	98,426	5.6%	83
3%	64,925	18.9%	55	3%	150,476	8.5%	126
2%	82,663	24.0%	69	2%	249,936	14.2%	210

Notes: Number and share of observations above thresholds in 1% increments, and daily average, for sovereign bonds and corporate bonds. Current SSR thresholds in bold. The calculations are based on one observation per bond per day (344,460 observations for 499 sovereign bonds, and 1,763,370 observations for 3,081 corporate bonds). Daily data from 1 January 2012 to 31 December 2016.

<sup>a</sup> Daily observations calculated as percent change in annual yields based on bid prices, in %, for EUR-denominated sovereign and corporate bonds that are constituents of the Markit iBoxx EUR sovereigns index and Markit iBoxx EUR corporates index. Sovereign bonds exclude sub-sovereign and local government issuers. Corporate bonds exclude covered bonds and collateralised bonds.

<sup>b</sup> Share of observations that have crossed the corresponding threshold during the sample period.

<sup>c</sup> Average number of observations per day that have crossed the corresponding threshold during the sample period.

Sources: Markit iBoxx, ESMA calculations.

## Findings

83. The main finding is that the current SSR thresholds result in a very large number and share of observations that fall within the “significant price falls” category. This mainly reflects the reliance on yields, which creates two issues.
84. First, due to very low interest rates, small nominal changes in basis points result in large relative percentage changes. The issue gets worse as yields move closer to zero. As an illustration, more than 99% of observations for corporate bonds that are above the 10% SSR threshold were registered in 2015 and 2016, and less than 1% between 2012 and 2014.
85. Second, yield-based thresholds become even more problematic with negative yields. For example, a direct application of the formula used to calculate the returns of bond, for which the yield changes from -0.01% to 0.01% overnight, results in a 200% increase. Although absolute values might partially address this issue, the corresponding changes from negative to positive yields (or from positive to negative yields) would remain of limited information for the identification of significant price falls.
86. Given these issues, the current distribution of returns cannot be used to provide reliable alternative SSR thresholds, and consideration should be given to the use of different reference values, such as prices.

### 3.2.1.3 Thresholds for exchange-traded funds

87. A sample of 1,917 ETFs was used, and prices were retrieved using their ISINs, resulting in 1,347,246 observations from 2012 to 2016. As with shares, daily returns are calculated as daily low price to previous day's closing price.

88. The -10% SSR threshold yielded only 1,297 observations below the threshold (less than 0.1% of the total), i.e. on average one observation per day (Table 5).

Table 5: Significant price falls for ETFs, by threshold

Threshold	Observations above threshold <sup>a</sup>	Share <sup>b</sup>	Daily average <sup>c</sup>
<b>-10%</b>	<b>1,297</b>	<b>0.1%</b>	<b>1</b>
-9%	1,841	0.1%	1
-8%	2,857	0.2%	2
-7%	3,770	0.3%	3
-6%	5,523	0.4%	4
-5%	8,687	0.6%	7
-4%	15,359	1.1%	12
-3%	32,995	2.5%	26
-2%	82,772	6.1%	64

Notes: Number and share of observations below thresholds in 1% increments, and daily average, for exchange-traded funds (ETFs). Current SSR threshold in bold. The calculations are based on one observation per ETF per day (1,347,246 observations for 1,917 EU-domiciled ETFs). Daily data from 1 January 2012 to 31 December 2016.

<sup>a</sup> Daily observations for EU-domiciled exchange-traded funds calculated as daily low price to previous day's closing price, in %. Data including UCITS and non-UCITS exchange-traded funds.

<sup>b</sup> Share of observations that have crossed the corresponding threshold during the sample period.

<sup>c</sup> Average number of observations per day that have crossed the corresponding threshold during the sample period.

Sources: Thomson Reuters Lipper, Thomson Reuters Eikon, ESMA calculations.

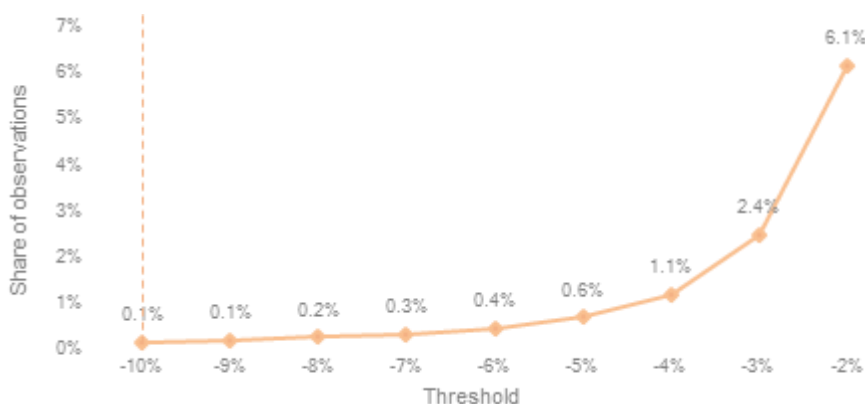
### Findings

89. Compared to other SSR thresholds, only a very small share of the distribution of ETF price returns (0.096%) is below the ETF threshold. This may reflect the index-tracking nature of ETFs, which are possibly prone to smaller price changes due to offsetting price movements of individual securities that their reference indices comprise.

90. Most ETFs in the EU track equity benchmarks.<sup>16</sup> Alignment with the SSR threshold for e.g. liquid shares would require lowering the ETF threshold to -7% (Chart 3). However, the relative share of non-equity ETFs (mainly bond ETFs) has been growing in recent years. As ETF prices seek to reproduce the performance of the underlying benchmark, consideration may need to be given in the future to SSR thresholds based on the type of benchmark tracked by the ETF.

<sup>16</sup> See ESMA Report on Trends, Risks and Vulnerabilities, No. 1, 2017.

Chart 3: Share of observations above thresholds for ETFs



Notes: Share of observations below thresholds in 1% increments, for exchange-traded funds. The dashed orange line indicates the current SSR threshold of -10%. The calculations are based on one observation per ETF per day (1,347,246 observations for 1,917 EU-domiciled ETFs). Daily data from 1 January 2012 to 31 December 2016.

Sources: Thomson Reuters Lipper, Thomson Reuters Eikon, ESMA calculations.

### 3.2.2 Effectiveness of the measures adopted under Article 23 of the SSR

91. Since the entry into force of the SSR, only two countries have initiated temporary prohibitions on short selling in shares: until the end of 2016, a total of 46 bans were imposed, including 28 in Italy and 18 in Portugal. Bans are imposed with immediate effect, either during the day or after markets close, until the end of the next trading day. In five instances, the bans introduced were extended for two additional trading days.

92. The preliminary economic analysis has been carried out from 2013 to 2016<sup>17</sup>. Due to data availability, it has been conducted on 38 bans out of 46, corresponding to 20 different issuers (i.e. ISIN) with the aim to assess the effects on prices, volatility and liquidity. The analysis has been conducted separately for Italy and Portugal to take into account any country specificities though using the same approach. The details of the analysis are included in Annex III.

93. The event study using abnormal price returns evidenced that the SSR temporary short-selling restrictions do not have a statistically significant impact on stock price returns. Although the positive sign of mean abnormal returns during the short-selling bans is in line with findings in the economic literature, the mean is not significantly different from 0. This result holds across countries and the equity benchmarks selected to proxy the returns. Similarly, the lifting of the bans does not seem to have a significant impact on stock price returns.

94. The volatility analysis based on two different measures (historical volatility and intraday volatility/high-low range volatility) shows that volatility declines when the ban is introduced,

<sup>17</sup> No ban was introduced since the SSR entered into application in November 2012 until the end of 2012.

and continues to do so after it is lifted, therefore the existence of a causality is unclear and needs to be further investigated.

95. The liquidity analysis based on bid-ask spread measures suggests that the introduction and lifting of a temporary short-selling ban do not have an impact on the liquidity of the shares affected by the ban.
96. These preliminary results may reflect the specificities of SSR bans. The weakness of the constraint imposed on short-selling activities, due to the short-term and temporary nature of the bans, the market making exemption, and the ability to enter into short positions in the securities subject to the ban using derivatives, may explain their limited effects. However, the analysis presents some caveats, given the nature of the events tested using statistical methods that are usually better suited to long-term policy changes.
97. Short selling bans also vary in their use and applications. Only two competent authorities have made use so far of this instrument since the end of 2012, and bans are not systematically imposed when the relevant threshold for significant price falls were crossed.

### 3.3 Qualitative analysis and proposed changes to the existing regime

98. Between November 2012 and December 2016, the power to temporarily restrict short selling in a financial instrument has been exercised by two competent authorities only (the Italian CONSOB and the Portuguese CMVM). The other EU competent authorities have either taken similar actions following the measure adopted by CONSOB and CMVM or have taken no action. No competent authority has opposed the restrictions.
99. Competent authorities have explained that, in the majority of the cases, they have not opposed other authorities' restrictive measures because of the absence of dual listing of the instruments subject to the measure.
100. Despite the number of instances where the relevant levels of intraday price falls were crossed (see section 3.2.1), the restrictive measures under Article 23 of the SSR have been adopted 46 times only, exclusively in relation to shares and mostly in respect of liquid shares traded on regulated markets. The restrictions have been extended in five instances.

Article 23 bans adopted from 1 Nov 2012 till 31 Dec 2016 (starting authority only)					
Article 23 bans	threshold	status		entering into force of the restrictions	
		first adoption	renewal	intraday ban	start of the next day
shares included in the main national equity index	-10%	40	5	13	32
other liquid shares	-10%	5	0	2	3
non liquid shares with price > 0.5	-20%	0	0	0	0
non liquid shares with price < 0.5	-40%	1	0	0	1
TOTAL		46	5	15	36

101. Competent authorities have pointed out that they did not activate any restrictive measures in all those instances where they identified reasons for justifying the drop in the

price (e.g. unexpected bad financial results, negative tests for biotech companies) or where there was no evidence of disorderly decline in the price.

102. In relation to other financial instruments, such as corporate bonds, sovereign bonds, money market instruments, ETF/ETC, despite the huge number of instances where the relevant levels of intraday price falls were crossed (around 33,212 for sovereign bonds, 20,862 for corporate bonds and 1,297 for ETF/ETC in the period between November 2012 and December 2016 – see section 3.2.1) no competent authority has ever adopted a ban. For some financial instruments, this may be due to the fact that competent authorities were aware of the fact that falls in the prices of such instruments can be explained by their low liquidity and/or other reasons such as, for fixed income instruments, the low level of interest rates.
103. The procedure that a competent authority intending to introduce a short term ban has to follow is burdensome, complex and resource intensive. First, Article 26 of the SSR requires the competent authority intending to introduce a short term ban to notify ESMA and the other competent authorities of its intention to adopt a short term ban, then Article 23 of the SSR requires the same competent authority to notify ESMA about the decision taken. ESMA should then inform of such decision the competent authorities of the trading venues where the concerned financial instrument is traded.
104. Moreover, as summarised in section 3.2.2 and explained in details in Annex III, there is little if not any evidence of the effectiveness of the bans under Article 23 of the SSR. This somehow confirms the findings and the conclusions previously drawn on this very subject.
105. In its first review of the SSR conducted in 2013 (ESMA/2013/614), after analysing the few bans adopted by that time, ESMA found out that short terms bans seemed to have a limited negative effect on trading volumes and a small positive impact on returns of the shares under restriction, but did not seem to have a significant impact on price volatility.
106. That was already highlighted by some respondents to the consultation on the ESMA Technical Advice transmitted to the Commission in June 2013 (ESMA/2013/614), as they pointed out that *«there is no evidence to suggest that the Article 23 bans had an effect and are considered ineffective if imposed only on a national trading venue without the other EU venues concerned imposing similar ban. Others stated that the bans created confusion and uncertainty for participants and led to immediate impact on liquidity and price efficiency, including also on other instruments than the ones targeted. Furthermore the measure caused investigative costs for market participants to seek the information due to differences in content (e.g. market making exemptions), in timing of the releases during the trading day in the concerned countries and due to lack of clarity about the scope of instruments»*.
107. On the same line, the Commission observed in its 2013 report on the evaluation of the SSR (COM2013 885 final) that *«it has come to the attention of the Commission that in cases where a competent authority imposed a temporary “significant price fall” short selling*

*ban on certain shares, similar bans on the same shares were not imposed by competent authorities of other Member States in which those shares were also traded, or they adopted divergent measures. This resulted in the ban being in force in some Member States and not being applied in other Member States. In certain other cases, even different competent authorities within one Member State have acted differently in deciding whether or not to impose a short selling ban applied by a Member State».*

108. In the Technical Advice that ESMA transmitted to the Commission in June 2013 (ESMA/2013/614), taking into account its findings and the feedback from market participants and competent authorities, it was proposed to simplify the procedure for adopting bans by assigning a more relevant role to the competent authority of the concerned financial instrument, and suggested to reconsider the scope of Article 23 of the SSR, keeping the -10% threshold for liquid shares and increasing the thresholds for other instruments, or removing them from the scope of the rule.

109. After more than four years of the entry into application of the SSR, given the increased competent authorities' experience on the subject and the bigger database available, ESMA would like to suggest the following options aimed at amending the short term ban regime provided by the SSR.

### **3.3.1 Proposal to modify the procedure for competent authorities to adopt a short term ban on short selling under Article 23 of the SSR**

110. Under the current legal framework, a ban on short selling under Article 23 of the SSR can be adopted by the competent authority of the trading venue where the fall in price of the financial instrument has taken place. That competent authority may not be the competent authority of the concerned financial instrument, e.g. in the case of shares, the competent authority of the most relevant market in terms of liquidity for that share.

111. The measure directly applies to the jurisdiction of the proposing competent authority only. The other competent authorities may:

- a. agree with the measure and adopt similar restrictions in their own jurisdictions;
- b. not to disagree with the measure but take no action in their own jurisdictions; or
- c. oppose the measure.

The latter instance is particularly relevant where the opposing competent authority is the relevant competent authority of the share affected by the measure.

112. In order to ensure that competent authorities are given proper notice about incoming short term bans on short selling, current Article 23 of the SSR provides for the competent authority proposing the measure to notify ESMA at the latest two hours after the end of trading day. ESMA then immediately informs the competent authorities of the trading venues which trade the same financial instrument.

113. Where a competent authority disagrees with the action taken by another competent authority on a financial instrument traded on different venues regulated by different competent authorities, ESMA may assist those authorities in reaching an agreement in accordance with Article 19 of the ESMA Regulation.
114. The conciliation should be completed before midnight of the same trading day. If the competent authorities concerned fail to reach an agreement within the conciliation phase, ESMA may take a decision in accordance with Article 19(3) of the ESMA Regulation. In any case, the decision has to be taken before the opening of the following trading day.
115. The vast majority of competent authorities pointed out that the procedure described in Article 23 of the SSR, complemented with the procedure adopted by ESMA to regulate the details of the notification process, has proven to be burdensome. Therefore, ESMA is contemplating possible ways to simplify the procedure to activate the prohibition.
116. In particular, the fact that the competent authority proposing the measure has to notify ESMA at the latest two hours after the end of trading day, together with the short timeframe given to the other competent authorities to react, implies that ESMA and all competent authorities should have personnel available until the evening, in order to handle potential notifications from other competent authorities and potentially take proper actions (i.e. adopt a similar measures or oppose).
117. Therefore, ESMA is contemplating proposing to change the procedure under Article 23 of the SSR, in order to provide that only the competent authority of the financial instruments concerned (e.g. in the case of shares, the competent authority of the most relevant market in terms of liquidity for that share) can adopt a ban on that instrument.
118. According to the proposed revised procedure, the relevant competent authority should inform ESMA and all other competent authorities of its intention to adopt a ban and publish it on its website. By that time, the ban should be effective in all Member States.
119. ESMA is considering whether to propose that other competent authorities should have any power to oppose the measure. Such power is not granted to competent authorities under Article 20 of the SSR (which entrusts the relevant competent authority to adopt a long term measure across the Union), according to which the relevant competent authority can adopt the restrictions even where ESMA has provided a negative opinion. The vast majority of competent authorities do not support the power to oppose other competent authority's measure under Article 23 of the SSR.
120. Given the very short duration of the ban under Article 23 of the SSR, any power given to other competent authorities to oppose the measure would add an additional layer of complexity to the procedure.
121. Where a power to oppose the measure is to be given to competent authorities, it should be activated only where the application of the short term measure would represent a threat to the investors or the market integrity. In such cases, the measure would not affect the

trading activities executed in the trading venues located in the Member State of the competent authority opposing the measure. The opposing competent authority should publish on its website a notice explaining its decision and the reasons therefor.

122. ESMA is also examining the possibility to change the procedure contained in Article 23 of the SSR with reference to the price to be used to calculate the crossing of the thresholds to identify a significant drop in the price falls of financial instruments.

123. With particular reference to shares, ESMA is contemplating proposing the possibility for competent authorities to adopt a ban under Article 23 of the SSR also where the trading of the share is halted on a trading venue, and the share's indicative/theoretical price calculated by the trading venue shows a significant fall (i.e. at least -10%, -20% or -40% depending on the liquidity of the share) in relation to the closing price on that venue on the previous trading day.

124. The rationale for such proposal is allowing a competent authority to take action in situations where trading cannot take place on a trading venue because a significant sale pressure has activated circuit breakers, trading halts and/or any other mechanism provided for in Article 48(5) of Directive (EU) No 2014/65/EU (MIFID 2), aimed at halting trading in case of volatility episodes.

**Q10: What are your views on the proposal to change the procedure to adopt short term bans under Article 23 of the SSR? Please elaborate.**

### **3.3.2 Further considerations on the short term ban under Article 23 of the SSR**

125. The evidence gathered regarding the use by competent authorities of the short term ban on short selling under Article 23 of the SSR highlighted the absence of a systematic application of it throughout the Union.

126. First of all, as highlighted by the analysis of the empirical evidence contained in section 3.2.1, short term bans under Article 23 of the SSR were activated in a small fraction of the instances where the relevant levels of intraday price falls were crossed.

127. Second, only two competent authorities made use of the power to activate short term bans, and even those two authorities adopted the measure in a few instances compared to the number of situations where the relevant levels of intraday price falls were crossed.

128. Lastly, a reason for the unlevelled and seldom use of the short term bans under Article 23 of the SSR could be linked to the lack of evidence of its effectiveness. That was already highlighted by ESMA in the Technical Advice transmitted to the Commission in June 2013 (ESMA/2013/614) and is backed up by the economic analysis conducted by ESMA in relation to the period from 2013 to 2016, as summarised in section 3.2.2 and explained in details in Annex III.

129. In this context, ESMA is contemplating proposing a change in the scope of the measure that may contribute to its effectiveness. This proposal is compatible with the proposed changes in the procedure explained in section 3.3.1.
130. Currently, the measures adopted under current Article 23 of the SSR do not affect OTC trading and can be easily circumvented by trading in derivatives.
131. Firstly, in order to avoid the circumvention of the ban (e.g. through the use of derivatives) the scope of Article 23 of the SSR could be changed from a ban on short selling into a ban on taking or increasing net short positions. The definition of net short positions is comprehensive, as it includes short selling and also short positions obtained through derivatives. OTC trading should be also captured by the ban.
132. However, ESMA is of the view that the extended scope should not include index trading (trading in index instruments is considered when calculating the net short positions), in order to avoid that the restrictive measure have a major negative impact on market liquidity.
133. Secondly, ESMA is contemplating restricting the scope of the short-term measures to shares traded on a trading venue, given that other financial instruments have not so far been subject to any bans under Article 23 of the SSR.
134. ESMA is of the view that the current thresholds set to identify a significant drop in the price falls for shares traded on a trading venue (i.e. -10%, -20% or -40% depending on the liquidity of the shares) should be kept as they ensure a valid and consistent approach among competent authorities. This approach is supported by the vast majority of the competent authorities.
135. However, where the power to impose short term bans on other financial instruments other than shares traded on regulated markets is to be kept, ESMA is considering changing or even removing the relevant current thresholds and/or modifying the way the thresholds are calculated (e.g. moving from a yield calculation for bonds to a price calculation).

**Q11: What are your views on the proposal to change the scope of short term bans under Article 23 of the SSR? Please elaborate.**

136. Finally, an alternative to the proposals to modify the current regime under Article 23 of the SSR described in sections 3.3.1 and 3.3.2 might be to consider proposing to the Commission to eliminate altogether the power for competent authorities to activate the type of short-term bans on short selling set out under Article 23 of the SSR.

## 4 Transparency of net short positions and reporting requirements

Extract from the Commission formal request for Technical Advice

*ESMA is asked to analyse whether the method of notification and disclosure of net short positions is appropriate, effective and efficient, whether it could be made less burdensome and costly for notifying entities while still providing competent authorities with the information needed for proper supervision, whether further harmonisation of the notification process is needed, and whether public disclosure of net short positions in shares are efficient, effective and relevant in view of their effects on trading behaviours, market efficiency and volatility.*

*In carrying out its analysis of the issues covered by the mandate, ESMA is encouraged to use and rely upon empirical evidence and quantitative data which it deems relevant, and to seek the views of competent authorities and market participants, including as regards the following questions:*

- i. [...]
- ii. [...]
- iii. *whether reporting mechanisms are operating efficiently.*

### 4.1 Introduction

137. Chapter II of the SSR provides for transparency requirements in relation to net short positions. In particular, significant short positions in shares must be notified to competent authorities at or above a threshold of 0.2% and disclosed to the public at or above a higher threshold of 0.5%. Significant short positions in EU sovereign debt should also be notified to competent authorities. ESMA is requested to assess the method and mechanisms of notification and disclosure of net short positions in three different areas: (i) the appropriateness, effectiveness and efficiency of notifications, (ii) possible simplification while maintaining a sufficient level of information to the authorities for their supervision, and, (iii) harmonisation of the process. Besides, ESMA is also expected to report on the market impacts of public disclosure of net short positions in shares in terms of market efficiency, volatility and trading behaviours.

138. The SSR lays down various requirements concerning the reporting by market participants of significant net short positions in shares and sovereign debt. The purpose of the enhanced transparency is to benefit both regulators and market participants. For regulators, the objective is to enable them to monitor and, where necessary, investigate short selling that could create systemic risks, be abusive or create disorderly markets. Public disclosure is intended to provide useful information to other market participants about significant individual net short positions in shares.

## 4.2 Overview of the individual net short positions reported to national competent authorities and consolidated net short positions reported to ESMA

### 4.2.1 Individual net short positions on shares reported to competent authorities

139. ESMA has requested data on net short positions from competent authorities to perform empirical analysis on the data reported to competent authorities. Below are presented some preliminary findings.

140. The preliminary analysis in this section is based on an ad-hoc data request from ESMA to competent authorities. The figures used in this section may be revised in the future following data consistency checks.

141. Since the entry into force of the SSR, competent authorities have received 6,576 distinct net short positions, defined as a pair between one position holder and one security (NSPs). Table 1 shows the distribution by domicile of the competent authority to which NSPs were reported: the largest numbers of distinct NSPs were received by the UK (2,213) and Germany (1,184).

**Table 1: Number of net short positions on shares, by competent authority (NCA) location**

Reporting NCA	Number of distinct NSPs	Reporting NCA	Number of distinct NSPs
AT	102	GR	24
BE	134	HU	19
CZ	7	IE	85
DE	1,184	IT	675
DK	164	LU	3
ES	404	NL	324
FI	247	PL	137
FR	788	PT	64
GB	2,213	RO	2
<b>Total</b>			<b>6,576</b>

Note: Number of distinct net short positions on shares received, by NCA. A distinct net short position is defined as a pair between one position holder and one ISIN.

Sources: National Competent Authorities, ESMA.

142. Table 2 shows the distribution of distinct NSPs by country of the position holder: 50% of NSPs were held by entities located in the US (1,668) and in the UK (1,629). In total, 3,017 NSPs were held by entities located in the EU, led by the UK, France (608), and the Netherlands (206).

**Table 2: Number of net short positions on shares, by location of the position holder**

Position holder country	Number of distinct NSPs	Position holder country	Number of distinct NSPs
AE	1	IM	18
AN	1	IN	1
AU	14	IT	76
BM	197	JE	202
BR	10	JP	4
BS	2	KR	1
CA	166	KY	237
CH	390	LU	95
CI	3	MC	16
CN	37	MT	13
CY	3	NL	206
DE	86	NO	15
DK	40	PL	21
ES	12	PT	7
FI	10	QA	1
FR	608	SE	62
GB	1,629	SG	32
GC	1	SK	1
GG	196	US	1,668
GI	3	VG	92
HK	250	ZA	1
IE	148		
<b>Total</b>			<b>6,576</b>

Note: Number of distinct net short positions on shares received, by position holder country. A distinct net short position is defined as a pair between one position holder and one ISIN.

Sources: National Competent Authorities, ESMA.

143. Table 3 shows the distribution of unique ISINs by country of issuance of the securities on which the net short positions were reported.

**Table 3: Number of ISINs on which net short positions were reported**

Position holder country	Number of distinct NSPs	Position holder country	Number of distinct NSPs
AT	32	GR	12
BE	52	HU	4
CY	3	IE	71
CZ	4	IT	192
DE	241	LU	27
DK	52	MT	1
ES	92	NL	93

FI	58	PL	42
FR	214	PT	17
GB	645	RO	1
GG	30	SE	258
<b>Total</b>			<b>2,141</b>

Note: Number of unique ISINs on which net short positions were reported, by country of issuance of the security.

Sources: National Competent Authorities, ESMA.

## 4.2.2 Consolidated net short positions reported to ESMA

144. The preliminary analysis in this section is based on the daily data received by ESMA from competent authorities on a quarterly basis, which is aggregated at ISIN level. These data do not include information on the NSP holders.

### *Consolidated net short positions on EU shares*

145. The average daily value of net short positions on shares reported to competent authorities, consolidated by ISIN, has been relatively stable over time at 2.05% of issued share capital (Table 4). The average value is also broadly stable over time within each country.

**Table 4: Consolidated net short positions on EU shares**

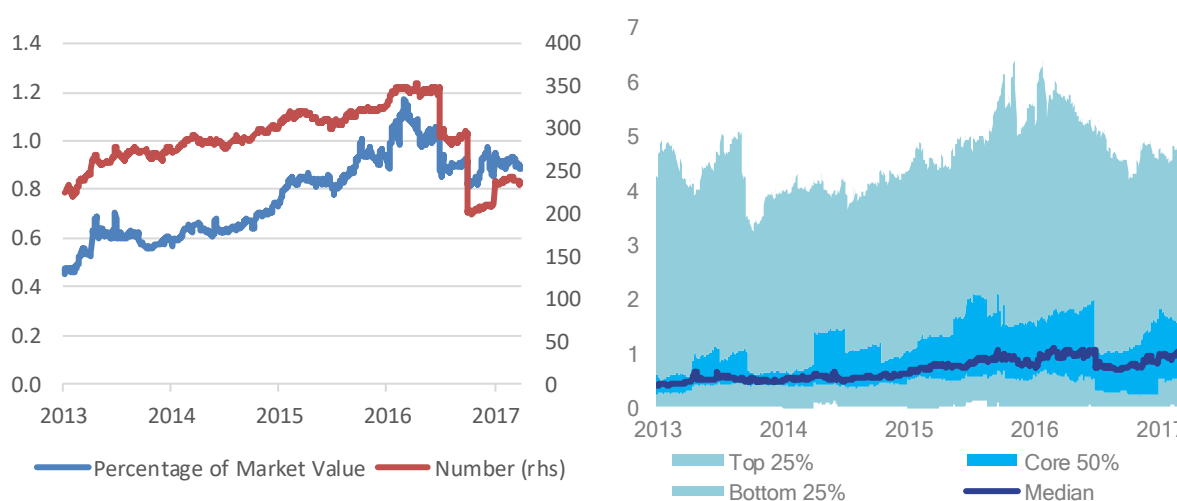
Reporting period		Daily net short position values (in %)		
		Mean	Standard deviation	Max
<b>2013</b>	Q1	1.9	2.6	20.3
	Q2	2.0	2.6	17.4
	Q3	1.9	2.5	26.4
	Q4	1.8	2.3	19.6
<b>2014</b>	Q1	1.8	2.3	16.1
	Q2	1.8	2.3	31.0
	Q3	1.8	2.3	17.2
	Q4	2.0	2.5	17.1
<b>2015</b>	Q1	2.2	2.8	18.7
	Q2	2.1	2.7	18.2
	Q3	2.3	2.8	19.8
	Q4	2.4	2.9	19.2
<b>2016</b>	Q1	2.4	2.9	21.0
	Q2	2.3	2.7	20.3
	Q3	2.2	2.7	21.6
	Q4	2.0	2.5	20.7
<b>2017</b>	Q1	1.9	2.3	17.0

Note: Mean value, standard deviation and maximum value of daily net short positions on EU shares consolidated by ISIN, by quarter, in % of issued share capital.

Sources: National Competent Authorities, ESMA.

146. As a percentage of total market value of EU shares, the consolidated value of net short positions reported has fluctuated just below 1% (Chart 1). The maximum number of unique ISINs reported by competent authorities was 354 in April 2016<sup>18</sup>. The dispersion of average net short positions between EU countries is high, reflecting to some extent the varying number of ISINs reported by each competent authority (Chart 2).

### Charts 1 and 2: Value and dispersion of consolidated net short positions on EU shares



Note: Left chart = Market value of short selling positions on EU shares as percentage of total market value in the EU (left axis). Number of listed shares on which short positions were reported by NCAs (right axis). Right chart = Dispersion of net short positions by country as percentage of market value of those positions relative to each country's blue chip index market value.

Sources: National Competent Authorities, ESMA.

### Consolidated net short positions on EU sovereign debts

147. The average daily value of net short positions on EU sovereign debts reported to competent authorities has increased over time, from around EUR 25bn in 2013 to EUR 140bn in 2017Q1 (Table 5). The standard deviation and sum of daily short positions has increased in line, with the latter reaching an all-time high of EUR936bn on 28 February 2017.

**Table 5: Consolidated net short positions on EU sovereign debts**

Reporting period		Daily net short position value (in EUR bn)		
		Mean	Standard deviation	Sum
2013	Q1	21.0	51.2	207.3
	Q2	21.4	58.2	194.8
	Q2	26.7	66.7	286.0

<sup>18</sup> The sharp declines in the number of unique ISINs reported take place on 1/7/2016 and 1/10/2016, reflecting data reporting issues.

	Q4	24.8	63.7	286.4
2014	Q1	26.9	70.6	318.7
	Q2	26.7	70.2	326.4
	Q2	26.9	70.0	330.1
	Q4	27.6	68.4	306.2
2015	Q1	33.8	72.0	397.8
	Q2	54.7	123.8	660.6
	Q2	45.3	92.2	539.0
	Q4	49.4	90.8	513.7
2016	Q1	55.9	97.8	510.7
	Q2	62.4	117.2	568.6
	Q2	79.8	150.7	647.8
	Q4	89.4	176.5	639.0
2017	Q1	140.4	228.5	903.2

Note: Mean value, standard deviation and sum of daily of net short positions on EU sovereign debt, by quarter, in billion euros.

Sources: National Competent Authorities, ESMA.

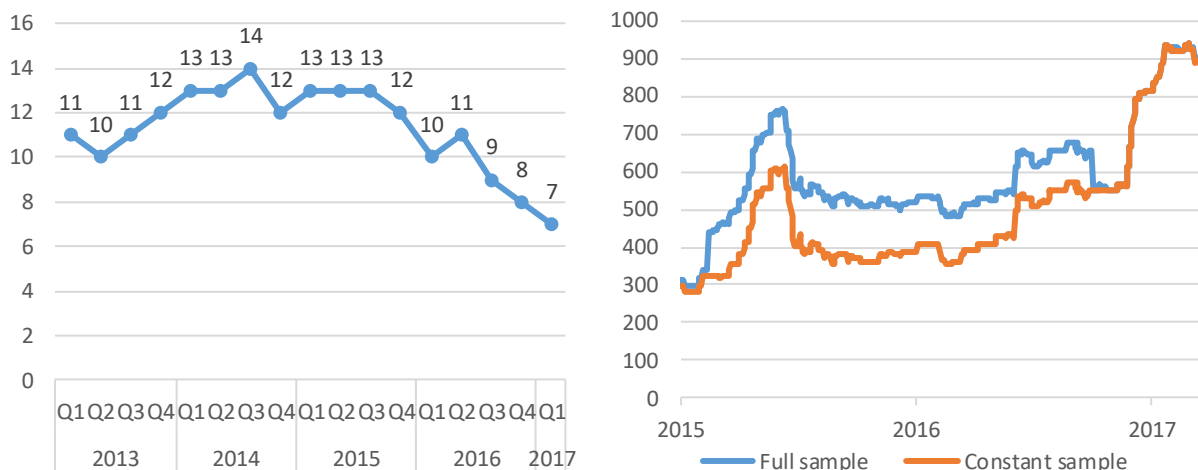
148. However, due to the value of the reporting thresholds and the method of calculation, it is not possible to say whether this corresponds to increased short-selling activities on EU sovereign debts.

149. Since the beginning, ESMA has received NSP data from 16 competent authorities out of the 28, presumably due to the high reporting thresholds. The number of competent authorities reporting NSPs on sovereign debt during a single quarter has never exceeded 14 and changes every quarter, reflecting the irregular notifications received as market participants go above or below the reporting threshold (Chart 3)<sup>19</sup>.

150. To illustrate the challenge this means in terms of data analysis at EU level, Chart 4 provides a comparison of the full set of NSP data received on EU sovereign debt, versus a sum of NSPs only including the six competent authorities that have reported data every quarter since 2015Q1 (Chart 4). Changes in the full sample of NSPs can be misinterpreted as EU-wide market developments, when they only reflect changes in the sample composition.

<sup>19</sup> The decreasing number of competent authorities in recent quarters reflects technical issues related to the submission of quarterly reports by competent authorities.

**Chart 3 and 4: Number of competent authorities (NCAs) reporting and sum of net short positions on EU sovereign debts**



Note: Left chart = Number of NCAs from which net short position data on sovereign debt was received, by quarter. Right chart = Sum of daily net short positions on EU sovereign debts, in billion euros; Full sample means all data received, constant sample means data received only from NCAs that have reported data every quarter from 2015Q1 to 2017Q1.

Sources: National Competent Authorities, ESMA.

151. Moreover, NSPs on sovereign debt are calculated as the net sum of duration-adjusted cash positions and of the delta-adjusted nominal derivatives position. The implication is that, all other things equal, a change in a net cash short position from a two-year security to a ten-year security will automatically result in a higher NSP value. Therefore, the trend in Chart 4 may reflect the longer duration of securities being shorted, rather than an increase in the amount of short selling activity.

152. While information about the average maturity of debt shorted by market participants might be useful to authorities when provided separately, the monitoring of short selling activities for financial stability purposes requires the ability to monitor changes in the total value of net short positions driven by economic reasons, without duration effect.

## 4.3 Qualitative analysis and proposed changes to the current regime

### 4.3.1 Notification to competent authorities and public disclosure of significant net short positions in shares

153. The SSR requires the holder of a net short position in a share at or above 0.2% of the issued share capital of the company to make an initial private notification to the relevant competent authority, with subsequent notifications required for each incremental 0.1% threshold crossed (upwards and downwards) above 0.2%. A final notification is required once the position has fallen below 0.2%.

154. For net short positions in shares at or above 0.5% of the issued share capital of the company, a public disclosure is required, with further disclosures when the position

reaches or falls below increments of each 0.1% above that level. A final disclosure is required once the position has fallen below 0.5%.

155. ESMA has conducted a preliminary analysis of the costs and benefits of changing the above-mentioned initial and incremental thresholds and considers that the current levels provide meaningful information to both the regulators for supervisory purposes and the market for transparency purposes. Almost all competent authorities agree with ESMA's view. In addition, a change in the level of the thresholds would increase costs for all position holders that will need to update their systems to take into account the new level of the threshold. ESMA is also conducting a quantitative analysis on these different thresholds in order to confirm this view.

**Q12: Do you see any reasons to change the current levels of the thresholds regarding the notification to competent authorities and the public disclosure of significant net short positions in shares? Please elaborate.**

156. Article 11 of the SSR requires competent authorities to provide on quarterly basis information in summary form to ESMA on aggregated net short positions without any requirement of publication of such information.

157. ESMA notes that some competent authorities are publishing on regular basis, though not daily, aggregated net short positions in the shares of issuers under their competence, based on the public and non-public notifications received and without mentioning the name of the notifying entities for confidentiality reasons. Further, approximately half of competent authorities do not think that it is useful to disclose such data on a daily basis. Although not required by the SSR, ESMA considers that a competent authority can publish such data on voluntarily basis. In particular, Recital 40 fosters transparency of net short position with the aim of reducing information asymmetries, ensuring that all market participants are adequately informed about the extent to which short selling is affecting prices. ESMA can see merits in such publication that enhances transparency in the market and spreads good information to the market reducing market asymmetry between investors. However, this proposal of new requirement would increase costs for competent authorities mainly in relation to resources and publication.

**Q13: Do you see benefits in the introduction of a new requirement to publish anonymised aggregated net short positions by issuer on a regular basis? Can you provide a quantification of the benefit of such new requirement to your activity? Please elaborate.**

#### **4.3.2 Method of notification and disclosure**

158. Articles 5 and 7 of the SSR require that investors notify their net short positions of shares and sovereign debt to the competent authority. Further, a public disclosure of significant net short positions in shares has to be posted on a central website operated or supervised by the relevant competent authority. Article 9 of the SSR includes requirements in relation to the timing of the notifications or disclosure that should be made no later than

15.30 of the trading day following the trading day on which the threshold was reached. The 15.30 deadline has to be calculated according to the local time of the Member State of the relevant competent authority. The content of the information to be notified to the relevant competent authority and to be published has been standardised across the Union through Regulation (EU) No 826/2012<sup>20</sup>.

#### 4.3.2.1 Timing for notification and disclosure

159. In ESMA's view, the analysis to be provided in this technical advice on the issue of the timing of the notification and of the disclosure of the net short positions notified when exceeding the disclosure threshold is twofold.

160. First, the SSR provides for a flexible approach, allowing for the publication of net short positions during the trading day and until 15:30. This means that this information published during trading hours was considered as non-sensitive, having no impact on trading activities. Further, ESMA highlights that it has not found evidence of an impact on trading activity of the public disclosure of net short positions in shares during trading hours.

161. Second, the 15:30 deadline applies to both the notification and the disclosure. Therefore, competent authorities can receive notifications at 15:30 and according to the SSR they should publish this notification immediately at 15:30. According to competent authorities, this timing for receiving the notification has not raised particular concerns. However, the publication by 15:30 has proven difficult for approximately half of the competent authorities that are not able to conduct basic checks on the notifications received around the deadline before publication thus taking the risk of providing erroneous information to the market. In addition, it is challenging from an operational perspective to publish at 15:30 a notification received at the same time.

162. ESMA therefore supports the view that the publication time of the notifications received should be made after the notification time. This timeframe should allow competent authorities to perform consistent basic checks on the coherence of the notification received before its publication. Therefore, ESMA is considering proposing that the timeframe needed for the publication should be of two hours after the notification is received, which means a publication time no later than 17:30 on the following trading day.

163. As a general rule, notifying entities remain responsible for the accuracy of the notified information and the publication of the notified information will be made without prejudice to potential enforcement actions that competent authorities may carry out where the notification proved to be inaccurate at a later stage.

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<sup>20</sup> COMMISSION DELEGATED REGULATION (EU) No 826/2012 of 29 June 2012 supplementing Regulation (EU) No 236/2012 of the European Parliament and of the Council with regard to regulatory technical standards on notification and disclosure requirements with regard to net short positions, the details of the information to be provided to the European Securities and Markets Authority in relation to net short positions and the method for calculating turnover to determine exempted shares <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:251:0001:0010:en:PDF>

164. However, ESMA recognises that where a competent authority considers that the notification received requires further investigation before publication, it will not be able to perform more substantial and in-depths checks within this timeframe and therefore publication may be delayed.

**Q14: Do you agree that the notification time should be kept at no later than 15:30 on the following trading day? If not, please explain.**

**Q15: Do you agree that the publication time should be changed at no later than 17:30 on the following trading day? Please elaborate.**

#### 4.3.2.2 Reporting and disclosure mechanisms

165. Article 9(4) of the SSR requires that the public disclosure of significant net short position should be posted on a central website operated or supervised by the relevant competent authority. Therefore, a position holder holding a net short position in different Member States should register to the reporting systems of the various competent authorities. The process for registration and for submitting notifications is not harmonised across the Union creating administrative burden and costs for position holders. The same problem exists with reference to the process for publication of data and for accessing published information. This is not fully fulfilling the overall aim of the SSR as mentioned in Recital 3, according to which the SSR should *«ensure that provisions directly imposing obligations on private parties to notify and disclose net short positions relating to certain instruments and regarding uncovered short selling are applied in a uniform manner throughout the Union»*.

166. ESMA acknowledges the costs incurred by investors regarding this fragmentation of the information throughout the Union and has analysed the merits and drawbacks of a centralised reporting system at Union level for market participants. A centralised notification and publication system at Union level would lead to a more harmonised reporting mechanism and would allow those investors currently reporting in different Member States to have a unique process for registration reducing the administrative burden and costs that position holders currently incur when submitting notifications to multiple reporting systems. Moreover, in order to ensure that competent authorities are still able to perform an efficient national monitoring and enforcement, such an EU-wide system would need to grant competent authorities the access on a real-time basis to the information on net short positions of their competence, in order for them to carry out their supervisory duties and to perform the checks on the relevant notifications. However, ESMA also notes that 60% of competent authorities would not prefer an EU-wide system, since the national reporting systems are adequate and a new system would raise additional costs. Re-designing and implementing a centralised EU-wide system would make redundant the costs and resources already incurred at national level to build the reporting and disclosure systems and would generate new set-up and operational costs, though that could be partially balanced by setting up a fee for position holders to have access to and report through such EU-wide system.

**Q16: What are your views on a centralised notification and publication system at Union level? Can you provide a quantification of the benefit of such centralised notification to your activity? What are your views on levying a fee on position holders to have access to and report through such a centralised system? Please elaborate.**

**Q17: Which other amendments, if any, would you suggest to make the notification less burdensome?**

#### 4.3.2.3 Content of the notifications

167. Regulation (EU) No 826/2012 harmonises the content of the information to be notified to the relevant competent authority and to be published across the Union. Table 1 of Annex 1 of that Regulation includes the list of fields for notification purpose of net short positions in shares, sovereign debt and uncovered sovereign credit default swaps to competent authorities. When the position holder is a legal person, an identification code has been set to the Bank Identifier Code (BIC), if available.

168. The issue with this identification code is twofold. First, ESMA notes that The Financial Stability Board promotes the Legal Entity Identifier (LEI) system for financial markets<sup>21</sup>. In Recommendation 8, it establishes the scope of coverage of the LEI as the *«Eligibility of 'legal entities' to apply for an LEI should be broadly defined, in order to identify the legal entities relevant to any financial transaction. No more than one LEI shall be assigned to any legal entity»*. Therefore, in ESMA's view, the LEI is an internationally established code for financial markets that should replace the BIC code currently in place.

169. Most of the competent authorities are supportive of the use of the LEI. Some of them consider that the possession of an LEI by any position holder should be voluntary rather than mandatory: this would be in line with the current approach under the SSR under which the BIC code should be used "if available".

170. However, ESMA considers that providing the LEI in the notification in order to identify the position holder should be mandatory for legal entities, while the requirement should not apply to physical persons nor groups that cannot be assigned an LEI. For legal entities, this would allow for further checks to the quality of the information received throughout the Union. It would be beneficial for both competent authorities and market participants as both will be able to have access in an easy manner to the positions held or published by one holder without relying on the name of that position holder, which is a text field with no identified rules and prone to errors.

**Q18: Do you agree that the identification code of the position holder should be the LEI and that such code should be mandatory for legal entities? Please elaborate.**

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<sup>21</sup>A Global Legal Entity Identifier for Financial Markets [https://www.lei.org/publications/gls/roc\\_20120608.pdf](https://www.lei.org/publications/gls/roc_20120608.pdf).

### **4.3.3 Notification to competent authorities of significant net short positions in sovereign debt**

171. As stated in Recital 8 of the SSR, the requirement to notify regulators of significant net short positions relating to sovereign debt in the Union aims at assisting regulators in monitoring whether such positions are creating systemic risks or are being used for abusive purposes.
172. Since the entry into application of the SSR, most competent authorities have received less than 25 notifications relating to sovereign debt between 1 November 2012 and 31 December 2016. Although two competent authorities have received approximately 200 notifications, ESMA considers that this figure is still low compared to the overall number of trades and positions in sovereign debt. ESMA is of the view that the relative low number of short position notification in sovereign debt received by the majority of the competent authorities may be due to several reasons: firstly because of high initial thresholds and incremental levels for the notification; secondly due to the current and persistent environment of decreasing and low interest rates; finally, because of inconsistent calculation rules.
173. ESMA acknowledges that the mandate for technical advice on sovereign debt focuses on the method for notification of net short position and the reporting mechanism. However, for the reasons exposed above, ESMA deems it necessary to evaluate first the calculation methodology of net short position in sovereign debt before giving any consideration to the levels of the thresholds, as those levels are dependent on the methodology used.
174. ESMA highlights the inconsistencies in the method of calculation of net short position in sovereign debt between cash positions that are duration adjusted and options and other derivative instruments that are only delta adjusted. In this respect, the sensitivity adjusted method (modified duration) is chosen as it seems to offer a comparison between relative and absolute price changes and it is frequently used by the industry to know the sensitivity of a bond price to a yield change. However, the views of competent authorities are split regarding the method of calculation to be applied for both cash and derivatives positions.
175. ESMA notes that the reporting thresholds currently in use were set together with the nominal method of calculation, as proposed in the ESMA Technical Advice to the Commission on possible delegated acts (ESMA/2012/263). However, as mentioned above, Commission Delegated Regulation (EU) No 918/2012 requires to follow a duration adjusted approach for calculating the net short position regarding the cash positions.
176. ESMA considers that the method of calculation of the net short position in debts needs to be adapted, including through the alignment of the treatment of positions in cash and positions in derivatives. To this end, two options are presented:
- a. the “nominal method”, where cash and derivatives shall be taken into account using their nominal amount and derivative instruments adjusted only by their delta, which offers great simplicity for calculation and might prove very useful when the market

in debt instruments is mostly led by events other than interest rate risk (credit risk or distress situation);

- b. the existing “duration adjusted method” with an explicit mention to the fact that derivatives should also be adjusted by the duration of the underlying in order to have a consistent approach between cash positions and derivative instruments. This methodology takes into account the interest rate risk which is the main risk linked to a debt instrument.

**Q19: What are your views on the method that should be favoured, the nominal method or the duration-adjusted method as described above? In the latter case, do you think that the thresholds should be changed? Please elaborate.**

## 5 Annexes

### 5.1 Annex I - Summary of questions

#### Exemption for market making activities

- Q1: Taking into account the different regulatory approaches and purposes of MiFID II and SSR, what are your views on the absence of alignment between the definition of 'market making activities' in each of the capacities specified in Article 2(1)(k) of SSR and that of 'market maker' in Article 4(1)(7) of MiFID II ? Do you consider that this absence of alignment is not appropriate, and if so what would you suggest?**
- Q2: Considering the new regulatory framework under the MiFID II/MiFIR, how do you suggest addressing the issue of the membership requirement in relation to those instruments that will remain pure OTC instruments despite the MiFID II/MiFIR framework? Should the membership requirement not apply to those pure OTC instruments? Please provide justifications.**
- Q3: Where market making activities on exchange-traded instruments are carried out OTC only, should they be able to benefit from the exemptions? Do you consider that the application of the exemptions in those cases can be detrimental to the interest of investor and consumers? Please provide justifications.**
- Q4: Do you think that the membership requirement should be deleted where the market making activity in relation to exchange-traded instruments is carried out OTC as well as on a trading venue? Please explain.**
- Q5: Do you have proposals in relation to the improvement of the transparency of market making activities conducted OTC and exempted under the SSR? Do you think that requiring a firm willing to benefit from the exemption for its market making activities conducted OTC to qualify as systematic internaliser is a viable option that would improve the transparency of their activity? Please provide justifications.**
- Q6: Do you think it would be appropriate to enlarge the set of financial instruments eligible for the exemption for market making activities? If so, which financial instrument(s) would you suggest? Please provide justifications.**
- Q7: Do you think that market makers should be able to notify the list of financial instruments by using indices, as long as they are market making in all the financial instruments included in the used indices? Besides indices, which other sectoral categories/ classification could be used by market makers to indicate a group of financial instruments for which the market maker is seeking exemption? Please provide justifications.**

**Q8: Do you think that the 30-day period mentioned in Article 17(5) of the SSR should not apply when the notification refer to instrument admitted to trading for the first time on an EU trading venue? Please provide justifications.**

**Q9: What would you suggest to reduce the 30-day period mentioned in Article 17(5) of the SSR to provide for a faster process? What are your views on a quicker procedure for market makers that have already entered into a market making agreement/scheme with a trading venue or the issuer to classify as market maker in such venue? Please explain.**

**Short term restrictions on short selling in case of a significant decline in prices: Article 23 of SSR**

**Q10: What are your views on the proposal to change the procedure to adopt short term bans under Article 23 of the SSR? Please elaborate.**

**Q11: What are your views on the proposal to change the scope of short term bans under Article 23 of the SSR? Please elaborate.**

**Transparency of net short positions and reporting requirements**

**Q12: Do you see any reasons to change the current levels of the thresholds regarding the notification to competent authorities and the public disclosure of significant net short positions in shares? Please elaborate.**

**Q13: Do you see benefits in the introduction of a new requirement to publish anonymised aggregated net short positions by issuer on a regular basis? Can you provide a quantification of the benefit of such new requirement to your activity? Please elaborate.**

**Q14: Do you agree that the notification time should be kept at no later than 15:30 on the following trading day? If not, please explain.**

**Q15: Do you agree that the publication time should be changed at no later than 17:30 on the following trading day? Please elaborate.**

**Q16: What are your views on a centralised notification and publication system at Union level? Can you provide a quantification of the benefit of such centralised notification to your activity? What are your views on levying a fee on position holders to have access to and report through such a centralised system? Please elaborate.**

**Q17: Which other amendments, if any, would you suggest to make the notification less burdensome?**

**Q18: Do you agree that the identification code of the position holder should be the LEI and that such code should be mandatory for legal entities? Please elaborate.**

**Q19: What are your views on the method that should be favoured, the nominal method or the duration-adjusted method as described above? In the latter case, do you think that the thresholds should be changed? Please elaborate.**

## 5.2 Annex II - Commission mandate to provide technical advice

### FORMAL REQUEST TO ESMA FOR TECHNICAL ADVICE ON THE EVALUATION OF REGULATION (EU) N° 236/2012 ON SHORT SELLING AND CERTAIN ASPECTS OF CREDIT DEFAULT SWAPS

With this formal mandate to ESMA, the Commission seeks ESMA's technical advice on the evaluation of the Regulation (EU) No 236/2012 on Short Selling and certain aspects of Credit Default Swaps (the "Regulation")<sup>22</sup>.

The Commission reserves the right to revise and/or supplement this formal mandate. The technical advice received on the basis of this mandate should not prejudice the Commission's final policy decision.

This request for technical advice will be made available on DG FISMA's website once it has been sent to ESMA.

The formal mandate focuses on technical issues stemming from the Regulation.

The Commission was originally under the obligation to report to the European Parliament and the Council in 2013 on a number of issues pertaining to the functioning of the Regulation, in accordance with Article 45 of the Regulation. In particular, the Commission assessed the appropriateness of the notification and disclosure thresholds, the operation of the restrictions and requirements relating to the transparency of net short positions and to uncovered short sales, and whether any other restrictions or conditions on short selling or credit default swaps were appropriate.

In December 2013 the Commission published an evaluation on the functioning of the Regulation<sup>23</sup>. This report was based on ESMA's technical advice published in May 2013<sup>24</sup>.

Overall, the Commission could not draw robust conclusions on the overall impact of the framework put in place by the Regulation. This was largely due to the fact that at the time of the assessment the Regulation had been in application for only a few months, thus limiting the set of available data for the evaluation. The Commission concluded that it could not identify evidence suggesting that a revision of the Regulation was warranted at that stage.

The Commission also indicated that a new evaluation of the appropriateness and impact of the Regulation, similar in scope to that specified in Article 45 of the Regulation, could be carried out based on more empirical data and evidence and once the competent authorities have accumulated sufficient regulatory experience of applying the Regulation. The

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<sup>22</sup> Regulation (EU) No 236/2012 of the European Parliament and of the Council of 14 March 2012 on short selling and certain aspects of credit default swaps (OJ L 86, 24.3.2012, p. 1), as amended.

<sup>23</sup> COM(2013) 885 final.

<sup>24</sup> ESMA/2013/614.

Commission stated that the input of ESMA would then be sought again, as well as the feedback of competent authorities and market participants.

More recently, in its Communication on the Call for evidence, published on 23 November 2016, the Commission announced its intention to assess the definition of the exemption for 'market making activities' and the possibility of introducing a single reporting platform for net short positions and to examine ways to reduce burdens on the reporting of net short positions.

The European Parliament and the Council have been duly informed about this mandate.

## **1. Context**

### **1.1 Scope**

Regulation (EU) No 236/2012 on short selling and certain aspects of credit default swaps (the "Regulation") lays down a common regulatory framework with regard to the requirements and powers relating to short selling and credit default swaps (CDS) and seeks to ensure greater coordination and consistency between Member States. It pursues the following objectives:

- to increase the transparency of short positions held by investors in certain EU securities (shares and sovereign debts),
- to reduce settlement risks and other risks linked with uncovered or naked short selling of shares and sovereign debts,
- to reduce risks to the stability of sovereign debt markets posed by uncovered sovereign CDS positions, and
- to ensure that Member States have clear powers to intervene in exceptional situations to reduce systemic risks and risks to financial stability and market confidence arising from short selling and credit default swaps, while ensuring co-ordination between Member States and ESMA in such exceptional situations.

In order to address these objectives, the Regulation contains the following measures:

- **Transparency:** Significant net short positions in shares must be reported to the relevant competent authorities when they equal to at least 0.2% of a company's issued share capital and every 0.1% above that. They must be disclosed to the public when they at least equal to 0.5% of a company's issued share capital and every 0.1% above that. Significant net short positions in sovereign debt should be reported to the relevant competent authorities when crossing one of the thresholds published by ESMA for sovereign issuers.
- **Settlement:** Restrictions on naked short selling are introduced through a "locate" rule for short sales. Any person entering into a short sale of shares or sovereign debt securities must be covered by either having borrowed the instruments concerned, having arranged to borrow them, or having an arrangement with a third party (e.g. a prime broker) who has confirmed that the share or the sovereign debt security has been located.

- A ban on naked sovereign CDS is introduced: Any person entering into credit default swaps positions related to a sovereign issuer must have an underlying exposure to the risk of default of that sovereign issuer or of a decline in the value of the sovereign debt of that issuer. Regulators may however suspend the ban if the liquidity of their sovereign debt market falls significantly.
- Intervention powers: The Regulation gives national regulators and ESMA the power to adopt measures in exceptional situations to mitigate threats to financial stability.

Exemptions are available for market making activities and operations by authorised primary dealers.

## **1.2 Principles that ESMA should take into account**

On the working approach, ESMA is invited to take account of the following principles:

- The proper functioning of the internal market and to improve the conditions of its functioning, in particular with regard to the financial markets, which are among the objectives of this Regulation.
- The principle of proportionality: the technical advice should not go beyond what is necessary to achieve the objectives of the Regulation. It should be simple and avoid creating divergent practices by national competent authorities in the application of the Regulation.
- ESMA should respond efficiently by providing comprehensive advice on all subject matters covered by the mandate.
- While preparing its advice, ESMA should seek coherence within the regulatory framework of the Union.
- In accordance with the ESMA Regulation, ESMA should not feel confined in its reflection to elements that it considers should be addressed, if it finds it appropriate, it may indicate guidelines and recommendations.
- ESMA will determine its own working methods, including the roles of ESMA staff or internal committees. Nevertheless, horizontal questions should be dealt with in such a way as to ensure coherence between different works being carried out by ESMA.
- In accordance with the ESMA Regulation, ESMA is invited to widely consult market participants and stakeholders in an open and transparent manner. In doing so, ESMA's advice should take account of different opinions expressed by the market participants and stakeholders during their consultation.
- The technical advice carried out should contain sufficient and detailed explanations for the assessment done, and be presented in an easily understandable language respecting current legal terminology used in the field of securities markets and company law at European level.
- ESMA is invited to provide sufficient empirical evidence and factual data backing the analyses and gathered during its assessment. To meet the objectives of this mandate, it is important that the presentation of the advice produced by ESMA makes maximum use of the data gathered.
- ESMA should provide comprehensive technical analysis on the subject matters described below covered by the relevant Commission's request included in this mandate.

## **2. Areas on which ESMA's technical advice is sought**

ESMA should focus its analysis on the three following topics relating to the Regulation, with the overarching objective to evaluate to what extent the corresponding provisions of the Regulation have achieved their original objectives in terms of relevance, effectiveness, coherence, efficiency and EU added value.

- i. ESMA is asked to analyse whether the exemption for market making activities and the definition of market making activities is adequately clear, in view of current practices and as evidenced in previous reviews undertaken by ESMA in relation to its guidelines on that topic, whether the scope of such exemption is appropriate in view of its objective to safeguard the positive role of market making activities with respect to market liquidity and efficiency, and whether the notification procedure of Article 17(5) is adequate, effective and efficient.

In particular, ESMA is asked to assess the impact of the membership requirement featured in the definition of Article 2(1)(k) on those entities making markets on financial instruments which are only traded OTC, and to assess the consequences, if any, of the absence of alignment between the definition of 'market making activities' in Article 2(1)(k) of the Regulation and that of 'market maker' in Article 4(1)(7) of Directive 2014/65/EU.

- ii. ESMA is asked to analyse whether the procedure for imposing short term restrictions on short selling in case of a significant decline in price is efficient, effective and relevant and fosters consistent approaches across the Union, and whether and how it could be simplified.
- iii. ESMA is asked to analyse whether the method of notification and disclosure of net short positions is appropriate, effective and efficient, whether it could be made less burdensome and costly for notifying entities while still providing competent authorities with the information needed for proper supervision, whether further harmonisation of the notification process is needed, and whether public disclosure of net short positions in shares are efficient, effective and relevant in view of their effects on trading behaviours, market efficiency and volatility.

In carrying out its analysis of the issues covered by the mandate, ESMA is encouraged to use and rely upon empirical evidence and quantitative data which it deems relevant, and to seek the views of competent authorities and market participants, including as regards the following questions:

- iv. whether the exemption for market making activities allows for liquidity provision without undue circumvention,
- v. whether the thresholds set to identify a significant drop in the price of financial instruments are appropriate for all instruments,
- vi. whether reporting mechanisms are operating efficiently.

## **3. Indicative timetable**

ESMA is requested to deliver the technical advice by **31 July 2017**.

## 5.3 Annex III - Economic analysis on the effectiveness of bans

### 1. Temporary short-selling restrictions: Introduction

1. In accordance with Article 23 of the SSR, when the threshold for significant price fall of an instrument (compared to the previous day's closing price) is crossed, authorities may decide to prohibit short selling of the instrument. The restrictions adopted so far did not apply to market making activities nor did they apply to derivatives instruments.
2. The analysis below is preliminary and is likely to be revised as the results are checked and additional robustness tests performed, in particular regarding volatility and liquidity.
  - a. Overview of temporary restrictions on short-selling
3. Since the entry into force of the SSR, only two countries have initiated temporary prohibitions on short selling in shares: from 2013 to 2016, a total of 46 bans were imposed, including 28 in Italy and 18 in Portugal (Table 1). Bans are imposed with immediate effect, either during the day or after markets close, until the end of the next trading day, and may in some cases be extended up to two days.

**Table 1: List of temporary short-selling restrictions**

	2013	2014	2015	2016
<b>Italy</b>	<b>9</b>	<b>10</b>	<b>2</b>	<b>7</b>
Seat PG	30 January 2013			
Saipem	31 January 17 June		12-13 January 5 June	
Finmeccanica	12-13 February			
Banca Carige	26-27 February			
Intesa San Paolo	26-27 February			
Banco Popolare	27-28 February	28 January		21 January 18 March
Banca Mediolanum	27 February			
Banca Monte dei Paschi	2-3 April	15-16 April 8-11 August 17 October 27-28 October		12 January 18-21 January* 6 July
Banca Popolare di Milano		14-15 April		
Fiat		8 May		
BPER		8 August		
Tod'S		8-11 August		
Safilo Group		4 September		
Credito Valtellinese				7 July

Telecom Italia				7 July
<b>Portugal</b>	<b>4</b>	<b>10</b>	<b>1</b>	<b>3</b>
Banif	4 July			
Banco Comercial Portugues	4 July	7 August		2 June 6 - 8 June*
Banco Espirito Santo	4 July	1 July 11-15 July* 16 July 31 July - 4 Aug*		
Sonae Industria	4 July			
Espirito Santo Financial Group		1 July		
Jeronimo Martins		31 July		
Portugal Telecom		21-23 October* 5 November	8 January	
Banco BPI		18 December		
Mota-Engil				19 January
<b>Total</b>	<b>13</b>	<b>20</b>	<b>3</b>	<b>10</b>

Note: Number and dates of temporary short-selling bans initiated in the EU from 2013 to 2016, by country and company. Bans spanning two business days were introduced before market close on the first day.

\* Bans extended for two additional days.

Source: ESMA.

#### b. Literature review

4. In a seminal paper, Miller (1977) formulated a major hypothesis that laid the ground for a large part of the theoretical thinking around short-selling restrictions: binding short selling constraints and differences of opinion among investors should lead to overpricing, as bearish investors are prevented from acting on their beliefs.
5. Short-selling constraints may take different forms, including for example unavailability or excessive borrowing cost of a stock in securities lending markets, but also legal and institutional restrictions introduced by regulatory authorities. This supported the view that short selling restrictions may help to prevent market panics and improve financial stability.<sup>25</sup>
6. Empirical researchers have tested this hypothesis using a variety of approaches and stock markets, and several studies have confirmed Miller's intuition. Bris et al. (2003) find that the lifting of short-sales restrictions are associated with increased negative skewness in individual stock returns, but also find little evidence that short-sales constraints prevent or mitigate severe price declines, and that they do not prevent market crashes. According to Jones et al. (2002), stocks that are expensive to short have high valuations and low

<sup>25</sup> The SSR highlights that "due to concerns that at a time of considerable financial instability, short selling could aggravate the downward spiral in the price of shares, notably in financial institutions"

subsequent returns. Using abnormal returns, Chang et al. (2007) find that short-selling restrictions tend to cause stock overvaluation. Lastly, Boehmer et al. (2009) find that the introduction in of a ban on 1,000 US financial stocks in September 2008 is associated with a sharp increase in share prices.

7. One exception seems to nuance these findings: in one of the most comprehensive study to date, Beber and Pagano (2013) find that bans on short-selling have mixed effects on stock prices across 30 different countries: bans are not significantly correlated with excess returns in countries with short-selling bans on financials, except in the US. Kolasinski et al. (2013) also highlight that short-selling restrictions may have complex effects: to circumvent borrowing constraints from the bans, sophisticated traders obtain short exposures by using options to create synthetic short positions. This increases the proportion of informed short sellers and the negative price effect of short interest announcements for affected stocks during the ban.
8. The literature also investigates other aspects of short-selling constraints with most of the recent studies concluding that short-selling activities are generally beneficial to market quality, reflected in higher liquidity and improved price discovery (e.g. Bris et al. (2003). Boehmer et al (2009), Beber et al. (2012)). Consequently, short-selling constraints may thus be disruptive to the normal functioning of financial markets.

#### c. Methodology and data

9. The short-selling bans analysed in this report differ in several respects from the bans investigated in the literature. As a result, the findings presented in this report may not be fully aligned with those of the literature without necessarily contradicting them.
10. First, SSR Article 23 bans are of very short nature, with 40 out of 44 bans introduced for just one full day, and four bans extended to three full days. In contrast, 16 out of the 20 bans analysed by Beber and Pagano (2013) last more than 234 days. The main implication is that the effects from the introduction of a short selling restriction are likely to be short-lived, especially since traders know that the restriction will be lifted almost immediately and are able to adapt their behaviour accordingly.
11. Moreover, several of the SSR bans were introduced during trading hours. As highlighted in ESMA's 2013 SSR Review, short selling bans introduced during trading hours (until the end of the next trading day) "tend to be imposed with a non-trivial delay relative to the relevant deterioration of market conditions. (...) Prices have stabilised or rebounded and transaction volumes have started to normalise". Therefore, to circumvent this problem and analyse the impact of SSR bans using daily data, ESMA focuses only on days where the ban is in place during the full trading session.
12. Finally, the market making exemption usually applied implies that a number of market participants (mainly large banks) are still allowed to take short positions. While bans may effectively curtail speculative short-selling behaviours, this means that the ban does not constitute a full constraint on short sales, an assumption on which most of the empirical

literature is based. Moreover, as in Kolasinski et al. (2013) traders can also rely on derivatives instruments as an alternative to take short positions.

13. The analysis is based on daily data on prices, bid-ask spreads and turnover from Thomson Reuters Datastream, for each of the relevant ISINs traded on the main trading venues in Italy and Portugal (Milan Stock Exchange and Euronext Lisbon). Due to limited data availability, out of the 46 bans in Table 1 we analysed 38 bans corresponding to 20 different ISINs, with the number of bans per ISIN ranging from one to eight. Historical data are not available for seven bans corresponding to three ISINs: Banif, which was absorbed by Banco Santander in 2015; and Banco Espirito Santo and Espirito Santo Financial Group, which both filed for bankruptcy in 2014.
14. We investigate for each of these 38 events the effects of the short-selling bans on prices, liquidity and volatility in the following sections. The analysis is conducted separately for Italy and Portugal to take into account any country specificities, using the same approach.

## 2. Prices

### a. Methodology

15. To analyse the effect of short-selling bans on stock prices, we conduct an event study using abnormal returns.
16. For each ISIN, we calculate daily log returns using closing prices and pick two equity benchmarks to proxy market returns: one of the country's main equity benchmark, and the relevant Euro area-wide sectoral benchmark. This selection offers several advantages: the national equity index returns tend to be highly correlated with individual ISIN returns, and reflect local dynamics; the sectoral index returns reflect broader economic developments in each sector, and partly address the risk that large companies may move the national index due to their weight in the index composition. The selection of benchmarks and the correlations between benchmark and company returns are displayed in Table 2.

**Table 2: Equity benchmarks, and correlations of benchmark and company returns**

Italy	Benchmark 1	Correlation	Benchmark 2	Correlation
Saipem	FTSE MIB	0.48	Euro Stoxx Oil & Gas	0.51
Finmeccanica	FTSE MIB	0.64	Stoxx Europe Aerospace & Defense	0.54
Banca Carige	FTSE Italia Mid Cap	0.50	Euro Stoxx Banks	0.50
Intesa San Paolo	FTSE MIB	0.90	Euro Stoxx Banks	0.90
Banco Popolare	FTSE MIB	0.75	Euro Stoxx Banks	0.75
Banca Popolare di Milano	FTSE MIB	0.71	Euro Stoxx Banks	0.71
Banca Mediolanum	FTSE MIB	0.80	Euro Stoxx Insurance	0.73
Banca Monte dei Paschi di Siena	FTSE MIB	0.56	Euro Stoxx Banks	0.58

Fiat	FTSE MIB	0.70	Euro Stoxx Automobiles & Parts	0.73
BPER	FTSE MIB	0.77	Euro Stoxx Banks	0.76
Tod'S	FTSE Italia Mid Cap	0.51	Euro Stoxx Personal & Household Goods	0.60
Safilo Group	FTSE Italia Mid Cap	0.47	Euro Stoxx Personal & Household Goods	0.43
Credito Valtellinese	FTSE MIB	0.62	Euro Stoxx Banks	0.62
Telecom Italia	FTSE MIB	0.68	Euro Stoxx Telecommunications	0.72
<b>Portugal</b>	<b>Benchmark 1</b>	<b>Correlation</b>	<b>Benchmark 2</b>	<b>Correlation</b>
Banco Comercial Portugues	PSI 20	0.64	Euro Stoxx Banks	0.50
Sonae Industria	PSI 20	0.17	Stoxx Europe Retail	0.09
Jeronimo Martins	PSI 20	0.61	Stoxx Europe Retail	0.51
Portugal Telecom	PSI 20	0.43	Euro Stoxx Telecommunications	0.32
Banco BPI	PSI 20	0.63	Euro Stoxx Banks	0.51
Mota-Engil	PSI 20	0.55	Euro Stoxx Construction & Mats	0.40

Note: Benchmarks and correlation of benchmark vs. company returns from 2012 to 2016, by country and company in the sample. For the second benchmark, Stoxx Europe indices used where no Euro area sectoral index is available.

Source: Thomson Reuters Datastream, ESMA.

17. The estimation window includes data from 300 trading days to five trading days before each ban  $([-300, -5])$ . There is broad agreement in the literature that a one-year estimation window is sufficient, while stopping five days before the event ensures that the sell-off leading to the event is excluded.
18. When the estimation windows overlap with other bans on the same company, we reduce the window to  $[-200, -5]$  where possible, otherwise we rely on the same estimation window for multiple bans that are close in time. For example, we use one estimation window for the two bans on Saipem in 2013, one estimation window for the two bans on Banco Popolare in 2016, etc.
19. For each estimation window, we then regress company returns on benchmark returns (one regression per benchmark) using a simple specification<sup>26</sup>:

$$R_t = \alpha + \beta R_t^{ben} + \varepsilon_t \quad \text{for } t = -300, \dots, -5$$

where  $\beta$  is the market beta,  $R_t$  are the log returns of the stock, and  $R_t^{ben}$  are the log returns of the benchmark.

<sup>26</sup> OLS regression with robust standard errors. As a robustness check, OLS panel regressions with company fixed effects were also used.

20. Using the coefficients obtained (two per estimation window) we calculate abnormal returns (AR) for each company around the event(s) using on the predicted returns based on the coefficients estimated from the regressions:

$$AR_t = R_t - \hat{\alpha} - \hat{\beta}R_t^{ben} \quad for \ t = -2, \dots, 10$$

21. To analyse the behaviour of stock prices before, during and after the short-selling ban, we choose four main event windows, with T=0 the event date (i.e. the full trading day where the ban is in place): {-2, -1, 0, [1, 5]}. For the [1, 5] window, we rely on cumulated abnormal returns (CAR) calculated as

$$CAR_{[1,5]} = \sum_{t=1}^5 AR_t$$

22. For consistency of the dataset, and to avoid overlap of the event windows, we make several adjustments due to multiple bans on a single company that are very close in time. In particular, we drop bans that take place less than ten trading days after the introduction of first ban:

- For Banca Monte dei Paschi di Siena, we drop the 27-28 October 2014 ban, the [1, 5] event window of the 12 January 2016 ban, and the 18-21 January 2016 ban.
- For Banco Comercial Portugues, we drop the [1, 5] event window of the 2 June 2016 ban and, the 6 June 2016 ban.

23. Moreover, due to several events around the 30 January 2013 ban on SEAT PG (company announcements and credit rating downgrade to selective default) that make it impossible to isolate the impact of the ban, we exclude SEAT PG from the sample.

24. Due to extension of one of the short-selling bans on Portugal Telecom, we compute CARs over three days for the 21-23 October 2014 ban in order to obtain one single observation on event date T, with T+1 corresponding to 24 October (when the ban is lifted), T+2 to 25 October, etc. The shares of Portugal Telecom were suspended from trading on 9 January 2015, therefore there is no data for the [1, 5] event of the 8 January 2015 ban.

25. Finally, we perform a mean test of each event window for the remaining 25 bans in Italy, then for the 10 bans in Portugal, in order to assess whether abnormal returns are statistically significantly different from 0 around the short-selling bans.

#### b. Descriptive analysis

26. The analysis of the estimation windows already provides useful pieces of information (Table 3).
27. Daily log returns are on average negative (-0.02% for Italy and -0.09% for Portugal), highlighting that at least some of the stock prices had lost value and investors' perception of these companies' fundamentals had deteriorated for some time before a sell-off took place and a short-selling ban was imposed. This view is reinforced by high historical

volatility of returns (2.9% for both countries), relative to the FTSE MIB and the PSI-20 between 2012 and 2016 (2.1% and 1.3%, respectively) based on 12-month rolling standard deviations.

28. A second important observation is that, looking at minimum returns, several stocks have breached the threshold for significant price falls during the estimation window without being followed by a short-selling ban.<sup>27</sup> For example, on 2 June 2014 the stock price of Saipem declined by 11.5% and on 24 June 2016 the stock price of Telecom Italia declined by 18%. The same is true of Portugal, with e.g. Portugal Telecom down 13.8% on 9 October 2014 or Banco Comercial Portugues down 11.5% on 14 May 2014. The implication is that the use of temporary short-selling restrictions by authorities is discretionary, which may create uncertainty for market participants. On the other hand, this also implies that market participants may not have changed their behaviour in anticipation of a short-selling ban when price returns approach the relevant threshold, which could reinforce the price decline and market volatility.

**Table 3: Log returns of prices during estimation windows**

Italy	Mean	Std Dev	Min	Max
Saipem 1-2	-0.0011	0.0310	-0.4199	0.0665
Saipem 3-4	-0.0021	0.0233	-0.1148	0.0640
Finmeccanica	0.0008	0.0328	-0.0984	0.1475
Banca Carige	-0.0020	0.0292	-0.1148	0.1197
Intesa San Paolo	0.0004	0.0303	-0.1013	0.1185
Banco Popolare 1-2	0.0010	0.0359	-0.1084	0.1735
Banco Popolare 3-4	0.0004	0.0252	-0.0777	0.0937
Banca Popolare di Milano	0.0013	0.0288	-0.0935	0.1054
Banca Mediolanum	0.0014	0.0287	-0.0721	0.1485
Banca Monte dei Paschi di Siena 1	-0.0005	0.0406	-0.1162	0.1620
Banca Monte dei Paschi di Siena 2-3-4	0.0018	0.0274	-0.0782	0.1760
Banca Monte dei Paschi di Siena 6-8	-0.0029	0.0357	-0.1842	0.1222
Fiat	0.0026	0.0243	-0.0670	0.1519
BPER	0.0002	0.0288	-0.0841	0.0882
Tod'S	-0.0010	0.0158	-0.0843	0.0598
Safilo Group	0.0003	0.0221	-0.0674	0.1456
Credito Valtellinese	-0.0033	0.0326	-0.1704	0.1117
Telecom Italia	-0.0011	0.0285	-0.1817	0.0834

<sup>27</sup> However, for several windows the minimum values were recorded before the entry into force of the SSR (e.g. Saipem 1-2, Banca Carige, etc.)

<b>Portugal</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>
Banco Comercial Portugues 1	0.0010	0.0325	-0.0920	0.1721
Banco Comercial Portugues 2	0.0030	0.0378	-0.1147	0.2386
Banco Comercial Portugues 3	-0.0036	0.0383	-0.1178	0.1229
Sonae Industria	-0.0004	0.0242	-0.0855	0.1083
Jeronimo Martins	-0.0013	0.0151	-0.0667	0.0428
Portugal Telecom	-0.0024	0.0256	-0.1383	0.0866
Banco BPI	0.0008	0.0245	-0.0924	0.0684
Mota-Engil	-0.0029	0.0339	-0.1134	0.1675

Note: Averages, standard deviations, minima and maxima of stock price daily log returns, by estimation window. Due to overlap between estimation windows and bans on the same company, some windows are used for multiple events. For example, Saipem 1-2 = estimation window used for the 31 January and 17 June 2013 short-selling bans on Saipem. As explained in the previous subsection, two short-selling bans on Banca Monte dei Paschi and one on Banco Comercial Portugues were excluded due to overlapping events.

Source: Thomson Reuters Datastream, ESMA.

### c. Analysis of abnormal returns

29. Abnormal returns (ARs) display a clear trend around sell-offs, as one might expect (Charts 1 and 2). The sell-off seems to begin on average two days before bans are imposed (T-2), with ARs of around -1.5% in Italy and -2.5% in Portugal. On T-1, when the price declines cross the SSR thresholds for significant price falls, abnormal returns average -12% in both countries.
30. On date T, i.e. the days where the bans are in place during the fully trading session, ARs become marginally positive (0.4% in both countries). Following the lifting of the ban, cumulated ARs over the [1, 5] event window amount to close to 0% in Italy, but more than 4% in Portugal.
31. Differences between Italy and Portugal may reflect differences in the composition of the samples, with a larger share of financial sector stocks in Italy, and smaller average correlations between company and benchmark returns in Portugal, which may result in larger ARs. In other words, a larger part of stock returns in Portugal remains unexplained, and differences between the two countries should be interpreted cautiously.

## Charts 1 and 2: Abnormal returns around short-selling bans



Note: Mean and median abnormal returns around short-selling bans, by country and benchmark. T= date where ban is in place during the full trading day.

Source: ESMA.

32. Median ARs tend to be smaller in absolute terms than the mean ARs, albeit not by a large amount, suggesting that some individual companies are to an extent exaggerating the trends highlighted above (e.g. ARs for the two bans on Saipem in T-1 are -39% and -35%).
33. There are also some noteworthy differences between ARs based on the first and the second benchmark, in particular in Portugal where individual stock returns may drive the means to a greater extent due to the smaller number of events and lower stock-to-

benchmark correlations. Nonetheless, these differences remain limited across the four event windows.

34. Finally, we perform standard t-tests to assess whether ARs are statistically significantly different from 0 for the four event windows. The results of the tests confirm the trends in ARs during the sell-offs, but highlights that ARs are not statistically significant during the ban, and that cumulated ARs are not statistically significant for the days following the lifting of the ban. (Table 4)

**Table 4: Abnormal returns – Mean tests**

<i>Italy: Benchmark 1</i>			<i>Italy: Benchmark 2</i>		
Event window	Mean	Standard Error	Event window	Mean	Standard Error
-2	-0.0150**	0.0069	-2	-0.0152**	0.0068
-1	-0.1214***	0.0190	-1	-0.1222***	0.0185
T	0.0026	0.0075	T	0.0046	0.0078
[1,5]	0.0028	0.0135	[1,5]	-0.0034	0.0136

<i>Portugal: Benchmark 1</i>			<i>Portugal: Benchmark 2</i>		
Event window	Mean	Standard Error	Event window	Mean	Standard Error
-2	-0.0248*	0.0138	-2	-0.0287**	0.0140
-1	-0.1110***	0.0146	-1	-0.1377***	0.0135
T	0.0012	0.0128	T	0.0061	0.0132
[1,5]	0.0453	0.0332	[1,5]	0.0401	0.0295

Note: Mean abnormal returns and standard errors around short-selling bans, by country and benchmark. T= date where ban is in place during the full trading day. Stars indicate statistical significance at the 10% (\*), 5% (\*\*) and 1% (\*\*\*) levels.

Source: ESMA.

### 3. Volatility

#### a. Methodology

35. To analyse the effects of short-selling bans on volatility, we rely on a similar approach as with prices. We average volatility estimates over the estimation windows (see section 2), and statistical differences with the event windows are assessed using t-tests.
36. In order to increase the robustness of the analysis, we use two different measures of volatility: first, we compute historical volatility (HV) as the standard deviation of a stock's log returns over two days.
37. Second, we calculate so-called high-low range volatility, or intraday volatility (IV), based on daily high and low trading prices, using Parkinson's (1980) approach:

$$IV = \sqrt{\frac{1}{4 \ln 2} \left( \ln \left( \frac{S_{Ht}}{S_{Lt}} \right)^2 \right)^2}$$

where  $S_{Ht}$  is the stock's highest trading price on day  $t$ , and  $S_{Lt}$  is low stock's trading price.

38. Then we perform for both HV and IVs t-tests of the differences between the estimation windows and the following event windows, with  $T=0$  the event date (i.e. the full trading day where the ban is in place):

- HV:  $\{-1, 0, 1, 2, [2, 5]\}$
- IV:  $\{-1, 0, 1, [1, 5]\}$

39. The different event windows tested reflect the fact that HV is calculated over two days, whereas IV is calculated on a single day. These different event windows allow us to observe changes in volatility, before the ban, around the introduction of the short-selling ban, and after the ban is lifted.

40. The same adjustments as in the analysis of abnormal returns are made (bans and event windows dropped) reflecting similar issues with the overlapping windows. For the 21-23 October ban on Portugal Telecom, averages are used (instead of sums).

#### b. Descriptive statistics

41. The data in Table 5 describe the mean and maximum values of our volatility measures during the estimation windows. The HV and IV measures are on average equal for Italy and Portugal. Mean value levels are relatively identical, although intraday volatility is on average slightly higher, but maximum values are usually much larger for historical volatility.

**Table 5: Volatility of returns during estimation windows**

Italy	HV mean	HV max	IV mean	IV max
Saipem 1-2	0.0153	0.0576	0.0146	0.0632
Saipem 3-4	0.0168	0.0798	0.0169	0.0716
Finmeccanica	0.0251	0.1271	0.0260	0.0873
Banca Carige	0.0212	0.1440	0.0233	0.0945
Intesa San Paolo	0.0234	0.1554	0.0247	0.0869
Banco Popolare 1-2	0.0266	0.1347	0.0291	0.0870
Banco Popolare 3-4	0.0191	0.0909	0.0192	0.0472
Banca Popolare di Milano	0.0225	0.1108	0.0240	0.0680
Banca Mediolanum	0.0214	0.1526	0.0230	0.1026
Banca Monte dei Paschi di Siena 1	0.0302	0.1365	0.0324	0.0977
Banca Monte dei Paschi di Siena 2-3-4	0.0182	0.1371	0.0231	0.1159
Banca Monte dei Paschi di Siena 6-8	0.0256	0.2059	0.0272	0.1404

Fiat	0.0189	0.1239	0.0190	0.0630
BPER	0.0225	0.0957	0.0232	0.0545
Tod'S	0.0121	0.0603	0.0122	0.0432
Safilo Group	0.0155	0.1223	0.0184	0.0635
Credito Valtellinese	0.0226	0.1461	0.0265	0.0909
Telecom Italia	0.0217	0.1613	0.0204	0.0672
<b>Portugal</b>	<b>HV mean</b>	<b>HV max</b>	<b>IV mean</b>	<b>IV max</b>
Banco Comercial Portugues 1	0.0227	0.1614	0.0247	0.1521
Banco Comercial Portugues 2	0.0246	0.2133	0.0271	0.1543
Banco Comercial Portugues 3	0.0281	0.1154	0.0307	0.0979
Sonae Industria	0.0169	0.1035	0.0213	0.0710
Jeronimo Martins	0.0111	0.0587	0.0120	0.0693
Portugal Telecom	0.0175	0.0887	0.0214	0.1020
Banco BPI	0.0178	0.0887	0.0226	0.0859
Mota-Engil	0.0233	0.1379	0.0285	0.1064

Note: Mean and maximum volatility of stock price daily log returns, by estimation window. HV= historical volatility computed as two-day standard deviations; IV= Intraday volatility based on high-low returns. Due to overlap between estimation windows and bans on the same company, some windows are used for multiple events. For example, Saipem 1-2 = estimation window used for the 31 January and 17 June 2013 short-selling bans on Saipem.

Source: Thomson Reuters Datastream, ESMA.

### c. Results

42. In both countries, volatility measures are much higher around the short-selling ban, across all event windows, than during the estimation windows. Most of the differences are statistically significant.
43. This is due to the volatility peak on the day of the sell-off. Indeed, we observe a peak in HV and IV a on the day before the ban, followed by a gradual decrease in both volatility measures over the next few days (Table 6). For HV, the higher values on the day of the ban (T) simply reflect the fact that historical volatility is computed over two days.

**Table 6: Volatility – Mean tests**

#### *Italy: Historical volatility*

Event window	Mean	Standard Error
-1	-0.0494***	0.0120
T	-0.0822***	0.0157
1	-0.0273**	0.0100
2	-0.0000	0.0037
[2, 5]	-0.0044	0.0027

#### *Portugal: Historical volatility*

Event window	Mean	Standard Error
-1	-0.0597***	0.0108
T	-0.0978***	0.0167
1	-0.0200**	0.0074
2	-0.0116	0.0062
[2, 5]	-0.0116**	0.0045

#### Italy: Intraday volatility

Event window	Mean	Standard Error
-2	-0.0127***	0.0040
-1	-0.0371***	0.0056
T	-0.0192***	0.0042
1	-0.0131***	0.0033
[1, 5]	-0.0084**	0.0030

#### Portugal: Intraday volatility

Event window	Mean	Standard Error
-2	-0.0164***	0.0050
-1	-0.0859***	0.0130
T	-0.0447***	0.0132
1	-0.0318***	0.0085
[1, 5]	-0.0198***	0.0069

Note: Mean volatility and standard errors around short-selling bans, by country and volatility measure. The difference tested is (Estimation – Event), therefore a negative value indicates higher volatility during the event. Historical volatility calculated over two days, i.e. for date T: StandardDev(T-1, T). T= date where ban is in place during the full trading day. Stars indicate statistical significance at the 10% (\*), 5% (\*\*) and 1% (\*\*\*) levels.

Source: ESMA.

## 4. Liquidity

### a. Methodology

44. To analyse the effect of short-selling bans on liquidity, use the same approach as for volatility.

45. First we compute the bid-ask spreads using the closing ask and bid prices for each ISIN. Daily bid-ask spreads are normalised using the following formula to correct for nominal levels and make reliable comparisons of spreads across companies and countries:

$$Spread = \frac{(Ask\ price - Bid\ price)}{(Ask\ price + Bid\ price)/2}$$

46. Then t-tests of the differences between the estimation windows and the following event windows: {-1, 0, 1, [1, 5]} with T=0 the event date (i.e. the full trading day where the ban is in place).

47. The same adjustments are made as in the analysis of volatility. In addition, for the estimation windows, we observe a structural break in bid-ask spreads for Italian shares following ECB President Draghi's speech on 26 July 2012. To avoid introducing a bias in the analysis, we rely on shorter estimation windows for nine different bans on Italian shares.<sup>28</sup>

### b. Descriptive statistics

48. Table 7 provides descriptive statistics of liquidity over the estimation windows. Bid-ask spreads are higher on average, i.e. liquidity is lower, for shares in Portugal: 0.45, compared to 18 in Italy.

<sup>28</sup> This adjustment concerns all of the 2013 bans: Saipem 1&2, Finmeccanica, Banca Carige, Intesa San Paolo, Banco Popolare, Banca Mediolanum, Banca Monte dei Paschi.

**Table 7: Liquidity shares during estimation windows**

<b>Italy</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>
Saipem 1-2	0.0537	0.0399	0.0251	0.2575
Saipem 3-4	0.0873	0.0499	0.0480	0.4097
Finmeccanica	0.0668	0.0367	0.0401	0.2670
Banca Carige	1.1188	1.1598	0.0584	6.1856
Intesa San Paolo	0.0911	0.0444	0.0656	0.3356
Banco Popolare 1-2	0.1237	0.0932	0.0503	0.4850
Banco Popolare 3-4	0.1090	0.0709	0.0502	0.4673
Banca Popolare di Milano	0.1060	0.1051	0.0201	0.8929
Banca Mediolanum	0.0981	0.0788	0.0424	0.5128
Banca Monte dei Paschi di Siena 1	0.1166	0.1014	0.0335	0.6146
Banca Monte dei Paschi di Siena 2-3-4	0.1364	0.1442	0.0353	1.3319
Banca Monte dei Paschi di Siena 6-8	0.0995	0.0682	0.0201	0.5950
Fiat	0.1004	0.0540	0.0413	0.4979
BPER	0.1220	0.0805	0.0403	0.5215
Tod'S	0.1164	0.0768	0.0500	0.5718
Safilo Group	0.3491	0.2337	0.0548	1.1392
Credito Valtellinese	0.2727	0.2084	0.0209	1.0856
Telecom Italia	0.1048	0.0615	0.0500	0.5975
<b>Portugal</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Min</b>	<b>Max</b>
Banco Comercial Portugues 1	1.1294	0.2208	0.8658	2.8986
Banco Comercial Portugues 2	0.1831	0.1614	0.0427	0.9662
Banco Comercial Portugues 3	0.2933	0.1783	0.1045	1.1662
Sonae Industria	1.0061	0.7356	0.1601	4.5249
Jeronimo Martins	0.1830	0.1389	0.0306	1.0804
Portugal Telecom	0.1851	0.1346	0.0270	0.6704
Banco BPI	0.2905	0.1992	0.0505	1.6125
Mota-Engil	0.3291	0.2499	0.0254	1.3559

Note: Liquidity of shares, by estimation window, based on bid ask-ask spreads and computed as  $(Ask - Bid) / [(Ask + Bid) / 2] * 100$ .  
 Due to overlap between estimation windows and bans on the same company, some windows are used for multiple events.  
 For example, Saipem 1-2 = estimation window used for the 31 January and 17 June 2013 short-selling bans on Saipem.

Source: Thomson Reuters Datastream, ESMA.

### c. Results

49. Contrary to volatility, liquidity differences between the estimation and event windows are not statistically significant in Italy nor Portugal. Moreover, the sign of the mean difference are of opposite signs for the two countries, which is confirmed by median values (Table 8).

**Table 8: Liquidity – Mean tests**

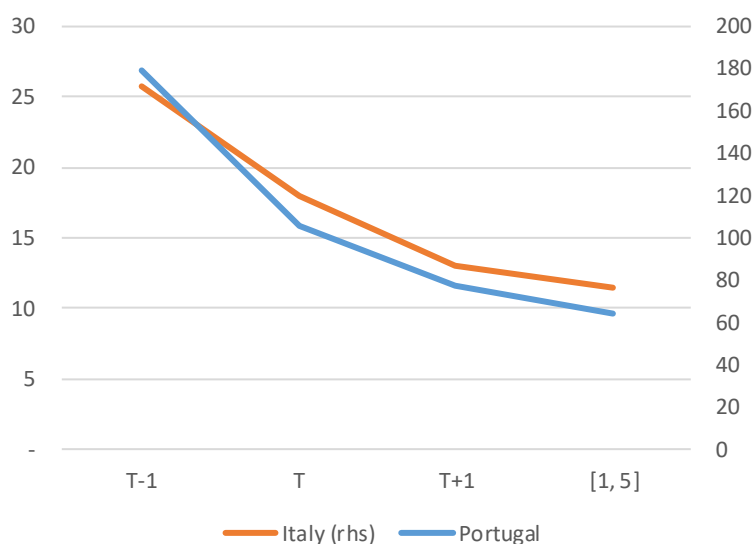
<i>Italy</i>			<i>Portugal</i>		
Event window	Mean	Standard Error	Event window	Mean	Standard Error
-1	0.0125	0.0689	-1	-0.2846	0.1634
T	0.0499	0.0374	T	-0.3193	0.2262
1	0.0418	0.0454	1	-0.5415	0.4039
[1, 5]	0.0085	0.0467	[1, 5]	-0.1260	0.1205

Note: Mean liquidity and standard errors around short-selling bans, by country. T= date where ban is in place during the full trading day. Stars indicate statistical significance at the 10% (\*), 5% (\*\*) and 1% (\*\*\*) levels.

Source: ESMA.

50. We complement these results with developments of average daily turnover in Italian and Portuguese shares in the sample around the short-selling bans. Reflecting the pattern in volatility estimates, average turnover peaks on the day before the ban, and gradually recedes during the following days (Chart 3). The introduction and lifting of the ban does not seem to have an impact on the level or the evolution on average turnover.

**Chart 3: Share turnover during event windows (million euros)**



Note: Average daily turnover around short-selling bans in million euros, by country. T= date where ban is in place during the full trading day.

Source: ESMA.

## Conclusions

51. The evidence presented above suggests that the SSR temporary short-selling restrictions do not have a statistically significant impact on stock price returns. Although the positive sign of mean abnormal returns during the short-selling bans is in line with findings in the economic literature, the mean is not significantly different from 0. This result holds across countries and benchmarks. Similarly, the lifting of the bans does not seem to have a significant impact on stock price returns.
52. The volatility analysis based on two different measures shows that volatility declines when the ban is introduced, and continues to do so after it is lifted, therefore the existence of a causality is unclear and needs to be further investigated.
53. The analysis of bid-ask spreads suggests that the introduction and lifting of a temporary short-selling ban do not have an impact on the liquidity of the shares affected by the ban.
54. These preliminary results may reflect the specificities of SSR bans. The weakness of the constraint imposed on short-selling activities, due to the short-term and temporary nature of the bans, the market making exemption, and the ability to take short positions in securities covered by the prohibition using derivative instruments, may explain their limited effects. However, the analysis presents some caveats, given the nature of the events tested using statistical methods that are usually better suited to long-term policy changes.
55. Short-selling bans also vary in their use and applications. Only two competent authorities have made use so far of this instrument since the end of 2012, and bans are not systematically imposed when the relevant threshold for significant price falls is crossed.

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